

CHAPTER II

AUDIT OF TRANSACTIONS

Infructuous/wasteful expenditure and overpayment

PUBLIC WORKS DEPARTMENT

2.1 Excess expenditure

Arbitrary increase in machinery component rates resulted in an excess expenditure of Rs.26.53 lakh.

Plant & Machinery is deployed at all stages of road-construction for not only speedy completion but also for achieving the desired quality. Data book published by Indian Roads Congress (IRC) specifies the machinery component rates for standard outputs of bituminous macadam (BM) and semi dense bituminous concrete (SDBC). The basic rates mentioned in the data book are required to be enhanced periodically based on cost inflation index. This forms the basis for adoption of rates, featuring in the detailed estimate, for road works.

The Government accorded administrative and financial sanction of Rs.4.81 crore (November 2006) and Rs.2.41 crore (December 2006) for two works relating to improvement of riding quality over a length of 4 km and 1.7 km respectively in Haldwani-Kathgodam urban area of National Highway (NH)-87, Rampur-Nainital road. It also accorded administrative and financial sanction for Rs.4.69 crore (October 2006) for a work relating to general maintenance on Rudrapur-Nainital and Jeolikot-Khairna motor road.

Scrutiny of the records (March 2009) of the Executive Engineer (EE), National Highway Division, PWD, Haldwani revealed that the detailed estimates for the above mentioned works were based on an increase of machinery component rates by 75 *per cent* for plain regions and 75 + 33 *per cent* for hilly regions respectively. This was higher than the rate of enhancement in user charges of plant and machinery of 37.50 *per cent* approved (September 2006) by the Superintending Engineer, 24th Circle PWD, Dehradun.

Adoption of higher rates for machinery components for providing and laying of BM and SDBC layers led to the cost of the work being inflated which raised the floor level at which the bids were invited. As a result, the total cost of works upto which the payments have already been made to the contractors till March 2009 was escalated by Rs.26.53 lakh (*Appendix 2.1*).

On being pointed out, EE accepted (June 2009) the facts and intimated that in future the estimates would be based on the machinery component rates prescribed in data-book with an addition of 37.5 *per cent* for plain regions and 37.5 + 33 *per cent* for hilly regions.

Thus the increase in rates was unjustified and irrational, resulting in an excess expenditure of Rs.26.53 lakh.

The matter was reported to the Government (July 2009); reply is awaited (November 2009).

2.2 Financial loss due to collapse of a bridge

Failure in ascertaining and ensuring the safety of foundation structure led to the collapse of bridge entailing a financial loss of Rs.4.46 crore besides depriving smooth transport through bye-pass route.

The State Government accorded (May 2001) revised¹ administrative and financial sanction of Rs.4.06 crore for the construction of a bridge over Gola river at Haldwani in district Nainital. The bridge with a life span of 100 years was to serve as bye-pass route connecting Kathgodam-Chorgaliya road to Almora-Bareilly road. The work was entrusted to Uttar Pradesh State Bridge Corporation (UPSBC) which completed the construction work (December 2003) at a cost of Rs.4.46 crore². After completion, the bridge was handed over to Public Works Department (PWD) and opened for traffic (December 2003).

Scrutiny of the records (November 2008) of the Executive Engineer, Construction Division, PWD, Haldwani (Division) revealed that the bridge failed to withstand the heavy flow of water during the monsoon and collapsed (July 2008). A committee constituted (August 2008) under a retired Chief Engineer, PWD to investigate into the collapse, pointed out that excessive and indiscriminate mining was carried in the river-bed which resulted in a trench, eroding the pier foundations.



Damaged Bridge

Audit observed that a consultant³ engaged by the department had recommended a raft foundation, safety structures and stone cladding around the piers to avoid the effects of swift river current and scouring⁴.

However, the compliance to safety measures recommended by the consultant was left by the department to the executing agency *viz.* UPSBC. The Division, while taking over the bridge from the UPSBC, did not obtain the

drawings and design of the bridge; in absence of which, the safety of abutment and piers could not be established. Despite this, the bridge was opened for traffic without ensuring the adequacy of safety measures. It was only after this damage that the Division realized that the bridge was raised on open footing foundation

¹ Initial administrative and financial approval was granted in March 1993.

² Rs.251.35 lakh released by the Government of U.P. and Rs.194.18 lakh released by the Government of Uttarakhand.

³ By M/s Cam Engineering Pvt. Ltd. Delhi.

⁴ Piece of land being cut-off by the change of river course.

without any protection structures leaving the piers highly vulnerable to swift currents. Though the matter of excessive mining was raised by the Division with the district administration and the Divisional Forest Officer, clear breach of orders and directions regulating the extraction⁵ was not taken up at the Government level. This left the serious issue unaddressed, threatening the very existence of the bridge.

On being pointed out (November 2008), the Division replied that mining activity quarry was under the control of Forest Department and that the enforcement of stipulation was their responsibility. With regard to protection works for safety of piers, it was replied that no immediate necessity was felt for erection of protection structures as the river bed level was high.

The reply is not convincing as the Division while taking over the bridge did not ascertain the safety of foundation structure and failed to take any remedial measures for protection of the piers. Moreover, the Department did not fix any responsibility for the untimely damage to the bridge entailing a financial loss of Rs.4.46 crore.

A fresh sanction for Rs.4.58 crore has been given (October 2008) for repair and reconstruction of damaged piers and deck slabs.

The matter was reported to the Government (May 2009); reply is awaited (November 2009).

2.3 Wasteful expenditure on sub-standard road work

Reconstruction of a road at a cost of Rs.1.36 crore without adopting proper overlay design coupled with poor execution and disregard to recommended corrective measures resulted in the road getting prematurely damaged within two months of construction.

The State Government sanctioned (February 2005) Rs.1.33 crore for reconstruction and improvement of the Bajpur-Janginala Motor Road in a length of six kilometers.

Scrutiny of records (May 2008) of the Executive Engineer (EE), Construction Division, PWD, Kashipur (Udham Singh Nagar) and further information collected (April 2009) revealed that the Technical Sanction (TS) accorded (February 2005) by the Superintending Engineer (SE) for the pavement design was not in conformity with India Road Congress (IRC) specifications.

IRC specifications governing strengthening of a road require that the crust design should be determined after taking into account the nature of soil, its moisture content and traffic density to ensure a design life of 10 to 15 years.

Though the detailed estimates contained provisions for overlay⁶ thickness by laying Bituminous Macadam (BM) and Semi Dense Bituminous Concrete

⁵ Issued by Government of Uttar Pradesh in 1990.

⁶ Layer laid over the existing pavement for strengthening.

(SDBC) layers as corrective and surface courses, these were based on the visible deteriorated status of the road. No preparatory exercise relating to collection and collation of input data relating to moisture content traffic density etc. was carried out and the division embarked on reconstruction without any overlay design.

A site inspection (February 2006) by the SE, just two months after the completion (December 2005) of the work, found that cracks and depressions had developed on the road surface indicating poor quality of work. In response to this, some minor defects were rectified by the contractor and the division deducted a petty sum of Rs. 5,000 as penalty and paid the entire amount of Rs.1.36 crore to the contractor. After inspection of the rectifications carried out by the contractor, the Quality Controller, Nainital had further recommended (June 2006) the Division to take necessary corrective measures based on an assessment of the traffic volume density and make provision for adequate cross drainages etc. to check future damages to the road. However, no corrective measures as per the recommendations of the Quality Controller were taken by the Division and audit noticed that the road had got prematurely damaged.

On the above being pointed out, the division replied (April 2009) that the reconstruction work was done in accordance with specifications and the defects identified during site-inspection were rectified by the contractor at his cost. The reply is not acceptable as the rectifications carried by the contractor were short-lived as neither any corrective measures as recommended by the Quality Controller to check against future damages to the road after assessing traffic density were taken nor the provision for cross drainages was made by the Division. In the absence of these measures the road got prematurely damaged as is evident from the photographs below (April 2009).



Bajpur-Janginala road – At Km 3



Bajpur-Janginala road – At Km 4

The above shows that the division had undertaken reconstruction work without a proper overlay design. This combined with poor quality of work and subsequently ignoring the recommendations of the Quality Controller led to the reconstructed road getting prematurely damaged.

The matter was reported to the Government (July 2009); reply is awaited (November 2009).

2.4 Wasteful expenditure

Negligent execution of road works by splitting into an inordinately high number of agreements compromised the quality of works leading to their premature damage resulting in wasteful expenditure of Rs.5.15 crore.

Government sanctioned (March 2004) Rs.9.49 crore for strengthening and improvement of Sahiya-Kwanu (SK) road (in a length of 42.4 km) and Ichhadi-Kwanu-Meenus (IKM) road (in a length of 25.2 km) in Dehradun. Technical Sanction (TS) was accorded (August 2004) for Rs.7.62 crore by Chief Engineer, Garhwal Region.

Scrutiny (January 2009) of the records of Executive Engineer (EE), Temporary Division, PWD, Sahiya, Dehradun (Division) revealed that detailed estimate provided for:

- Hill-cutting and construction of breast-wall;
- Provision of 12 cm thick soling coat in marshy areas;
- Provision of two layers of Water Bound Macadam (WBM) - inter coat (12 cm) and top coat (10 cm);
- Cross drainage measures including 14 causeways and laying of 340 RCC hume pipes and
- Laying of 20 mm thick layer of premix carpet (PC)⁷ with seal coat.⁸

The division awarded the work to 68 contractors (during November 2004 to March 2006) through 43 agreements for SK road (42.4 km) and 25 agreements for IKM road (25.2 km.).

The agreements relating to SK road did not include the work of wearing course i.e. PC with seal coat. The work⁹ of laying PC with seal coat was executed after a gap of seven months to 32 months from the date of laying top coat of water bound macadam (WBM).

Though agreements executed for the IKM Road included the work upto PC layer, it was laid in only 14 km of road-length through original agreements. For the remaining length, the PC work was executed through separate agreements, after a gap of nine months to 33 months from the date of completion of laying top coat in WBM.

Also, the road structures were found deficient in cross drainage measures as against the required number of 14 causeways and 340 hume pipes, only four causeways (28.5 per cent) and 15 hume pipes (4.41 per cent) were laid. The road works entailing a cost of Rs.5.15 crore were found badly damaged during physical

⁷ This includes application of a thin layer of bitumen followed by a layer of stone chipping or coarse sand and then rolled; it prevents the removal of binding material from WBM surface.

⁸ It is provided as a final coat over premixed carpet to develop skid resistant texture; it also improves the riding quality of the road.

⁹ Except in a length of 4 km, wherein PC work was carried within two to three months.

verification (July 2009) carried out by audit, as is evident from the photographs below:



Ichhadi-Kwanu-Meenus road - Km 19



Sahiya-Kwanu road - Km 6

The reasons, as analysed in audit, responsible for the damage of the roads, disclosed significant lapses on the part of the Division.

- Due to the vertical and horizontal splitting of the road work, accountability could not be fixed for quality and timeliness.
- Laying of the PC layer after a time lapse varying seven to 33 months, had an adverse impact on the road strength. This was because the binder of the WBM gets easily removed in a very short time by fast moving vehicles. Thus, in order to prevent the WBM road from getting damaged there was a need for applying a bituminous layer in the form of PC within two months and preferably soon after drying up of WBM layer. This was, however, not done.
- The division failed to provide adequate cross-drainage measures crucial for avoiding water seepage, transfer of moisture and percolation of water, which are the prime causes for pre-mature damage to roads. In the absence of a sufficient number of causeways and culverts the stability of the roads was jeopardized leading to their getting damaged.
- Besides the rate of PC work in six agreements executed during May 2006 to June 2008, was higher by 30 to 69 *per cent* as compared to the estimated rate, resulting in an extra burden of Rs.41.80 lakh.

On the above being pointed out (January 2009), the EE replied that a penalty @ 10 *per cent* has been imposed and recovered from 11 contractors, who had left the work incomplete.

The reply was not satisfactory, as mere imposition of penalty on few contractors could not compensate for faults attributable to the Division. The fact remains that the road work was split up into an unreasonably high number, both horizontally and vertically, compromising its quality. Besides, the competence of the contractors was not assessed prior to awarding the work to them. Further, the Division was negligent in protecting the WBM road surface as it failed to provide

adequate cross-drainage structures and the protective PC layer. As a result, the roads were exposed to damage on account of vehicular traffic and the vagaries of nature.

Thus, failure to ensure quality standards; splitting of the road work into an inordinately high number and the negligent working of the division led to damage of roads resulting in wasteful expenditure of Rs.5.15 crore.

The matter was reported to the Government (August 2009); reply is awaited (November 2009).

2.5 Wasteful expenditure

Roads reconstructed at a cost of Rs.1.61 crore without proper crust design were damaged within six months of their construction, rendering the entire expenditure wasteful.

The IRC specifications governing reconstruction of a road require that the crust design should be determined after taking into account the nature of soil, ground water table, submergence level of the area and traffic density.

Government sanctioned (December 2002) the work for reconstruction of Jaspur-Thakurdwara road (from km one to five) and Kashipur-Aliganj road (from km four to eight) at a cost of Rs.68.94 lakh and Rs.59.54 lakh respectively. The technical sanction for both the works was accorded in August 2003.

Scrutiny of the records (May 2008) of the Executive Engineer (EE), Construction Division, PWD, Kashipur (Division) revealed that the detailed estimates and associated bills of quantity for reconstruction of both the roads contained the following items:

- Collection and consolidation of crushed stone ballast in the pits/pot holes/depressions on the existing surface;
- First coat of bitumen painting over the surface and
- Laying of 5 cms thick bituminous macadam (BM) layer and 2.5 cms thick semi dense bituminous concrete (SDBC) layer.

The scrutiny of Detailed Project Report (DPR) revealed that the soil contained high clay content, the water table below the road level was shallow and traffic volume was high. However, no specific measures for stabilizing the soil, provision of drainage layer and appropriate overlay thickness to cater to the vehicular traffic were taken into account while designing the road crust. As a result, while the two works were under progress, the constructed portions entailing costs of Rs.73.48 lakh and Rs.87.05 lakh respectively were prematurely damaged (January 2005) within six months.

The case of premature damage to the road was referred by the Department to the Indian Institute of Technology, Roorkee (IIT) who in its report (April 2005) indicated inadequate crust design and poor workmanship as the reasons for

premature damages. It was highlighted that due to excessive dust content in sub-grade (suggesting that sub-grade material was not washed before use) the binding between bitumen and sub-grade became ineffective, indicative of poor monitoring by the division during construction.

In reply to audit query regarding execution of work without proper crust design, the EE stated (April 2009) that the crust design was worked out and approved by the Superintending Engineer (SE).

The reply is not acceptable as the crust design for only Kashipur-Aliganj road was worked out, that too without considering the nature of soil, ground water table, submergence level of the area and traffic density.

Further information collected from the Division by Audit (March 2009) revealed that reconstruction of both the roads has been taken up afresh¹⁰. A comparison of crust design for both the stages also suggests that the earlier design lacked in soil stabilization and drainage works, with a much lower crust thickness¹¹, signifying that specifications were not followed diligently.

Thus, due to non-adherence to specifications compounded by poor monitoring during the execution, the roads reconstructed at a cost of Rs.1.61 crore were damaged within six months. Moreover, the Department showed little interest in fixing responsibility for the premature damage and resultant wasteful expenditure of public money.

The matter was reported to the Government (May 2009); reply is awaited (November 2009).

RURAL DEVELOPMENT DEPARTMENT

2.6 Wasteful expenditure

Flaws in project implementation, supervision in a rural roads project and abandoning the work by a private consultant led to the work being contracted out afresh rendering the works valued at Rs.1.02 crore futile, besides delaying the project by over five years.

Ministry of Rural Development, Government of India (GOI) accorded sanction (December 2001) for construction of Paithani-Bareth motor road of 14 kms length in district Pauri-Garhwal, connecting nine villages under Pradhan Mantri Gram Sadak Yojna (PMGSY).

The work was assigned (August 2002) to a private consultant, Uttaranchal Infrastructure Development Projects (UIDP), which had been selected as the Programme Implementation Agency (PIA) for PMGSY by the Rural Development Department of the State. As PIA, UIDP was responsible for

¹⁰ Sanction for reconstruction of Jaspur-Thakurdwara road and Kashipur-Aliganj road has been accorded for Rs.181.65 lakh in September 2006 and for Rs.999.53 lakh in October 2008 respectively.

¹¹ 18.75 cms as against 52.70 cms.

carrying out detailed investigation, preparation of detailed design, cost estimate, detailed project report and supervision of construction activities for the work. UIDP awarded the construction work of the road (February 2003) to a contractor at Rs.2.45 crore with February 2004 as the target date for completion. The contract was, however, foreclosed (December 2005) without the road work being completed. Subsequently, the State PWD was given (September 2006) the responsibility of preparing fresh Detailed Project Report (DPR) for construction of the Paithani-Bareth road. Based on the fresh DPR, the State Rural Development Department approved (July 2007) construction of the road at a cost of Rs.4.18 crore.

Scrutiny of the records (May 2009) of the Executive Engineer (EE), Construction Division, PWD, Pauri-Garwhal and the Uttarakhand Rural Road Development Agency (URRDA) disclosed the following:

- The alignment of the road underwent change (December 2004) as the proposed width of the road could not be accomplished, indicating flawed investigation at feasibility stage.
- It was the responsibility of UIDP to arrange transfer of forest land and to obtain final clearance from GOI before initiating construction works. However, the construction of Paithani-Bareth road started in February 2003, much before the transfer of forest land. The required forest land was transferred in August 2004 and felling of trees could be completed only in March 2005. The procedural delay in the above case involved cost over-run, and consequentially, the contractor declined to complete the work at the agreed costs. Finally, the contract had to be foreclosed (December 2005) even though the work remained incomplete.
- Due to delays in execution of the original contract; the subsequent foreclosure of the contract; and time taken in taking up the work afresh, the cost of the project increased from Rs.2.45 crore to Rs.4.18 crore. The fresh estimate prepared by PWD was based on new alignment and had to take into account the cost of basic works of hill-cutting and protection works in the entire length of 14 kms as it was not done by the previous agency. Hence, the whole expenditure amounting to Rs.1.02 crore incurred till December 2005 on Paithani-Bareth road proved futile.

Thus, lapses in project implementation and supervision on the part of the PIA rendered Rs.1.02 crore spent under the foreclosed contract futile. Besides, it also contributed to cost escalation of almost 68 *per cent* and time over-run of five years for which nine villages remained deprived of the benefits of a motorable road.

The matter was reported to the Government (July 2009); reply is awaited (November 2009).

Undue favour to contractors/avoidable excess expenditure

UTTARAKHAND PEYJAL NIGAM

2.7 Extra expenditure

Non-adherence to tendering procedure resulted in additional liability of expenditure to the tune of Rs.52.77 lakh in laying of pipes.

With a view to provide drinking water facilities to the people of Pauri, Government of India accorded (October 2003) technical approval for 'Pauri Water Supply Augmentation Scheme from Nanghat Gadhera' at an estimated cost of Rs.43.57 crore under National Water Supply and Sanitation Programme (Urban). The scheme involved laying of 79.15 km pipe line.

Audit scrutiny (March 2009) of the records of Executive Engineer (EE), Construction Division, Uttarakhand Peya Jal Sansadhan Vikas Evam Nirman Nigam (Nigam), Pauri revealed that EE invited (September 2006) tenders (technical bid & financial bid) at an estimated cost of Rs.2.13 crore for laying, jointing of pipes and other allied works in 14.68 km from Nanghat (water source) to Moltheadhar (junction reservoir) as part of the above mentioned scheme. In response, six tenders were received (September 2006).

Office Memorandum (January 2002) of Uttar Pradesh Jal Nigam applicable in Uttarakhand inter-alia provided that financial bids of tender value exceeding Rs.One crore shall be opened and approved by the Tender Evaluation Committee (TEC) headed by a nodal Chief Engineer, Uttarakhand Peya Jal Sansadhan Vikas Evam Nirman Nigam, Headquarters, Dehradun. The Regional Tender Evaluation Committee (RTEC) headed by a Regional Chief Engineer was only empowered to open and evaluate tenders valuing from Rs.40 lakh to Rs.One crore.

Audit scrutiny revealed that instead of sending the bids to TEC in terms of the aforesaid OM, technical bids were opened (September 2006) and subsequently evaluated (January 2007) by the RTEC headed by CE (Garhwal). The RTEC qualified two bidders and opened their financial bids in March 2007. These evaluated bids were sent to TEC including that of the shortlisted contractor (bid value: Rs.151.75 lakh) for approval. TEC rejected (May 2007) the proposal stating that evaluation of tenders exceeding Rs.One crore was made by RTEC in violation of OM concerned. The TEC instructed that retendering for the proposed work should be done and both the bids (technical and financial) should be sent to TEC for evaluation.

The work was retendered (June 2007) in which bids from the same two bidders including the earlier shortlisted contractor were received. The technical bids of both tenderers were opened (July 2007) again by RTEC despite instructions of TEC. However, financial bids of both tenders were submitted to TEC which approved the contract (August 2007) in favour of the same earlier shortlisted

contractor at a cost of Rs.209.47 lakh. The work was awarded in September 2007 and was to be completed by September 2008¹².

Audit analysis of the scope of work incorporated in both the tenders revealed that despite instructions of TEC to retender the same work, some extra items (Rs.4.95 lakh) were included in the second tender. Audit also observed that as compared to the rate (Rs.151.75 lakh) offered by the shortlisted contractor in first tender invitation, the proposal accepted through second tender invitation was in his favour at a net cost of Rs.204.52 lakh¹³ i.e. higher by Rs.52.77 lakh¹⁴ (35 per cent hike). There was nothing on record to show that responsibility was fixed by the Nigam for non-adherence to tendering procedure during the process of first tender due to which the Nigam has to bear an extra liability of Rs.52.77 lakh. An expenditure of Rs.175.92 lakh with 70 per cent physical progress of laying of pipes was, however, incurred on the work till the date of audit (March 2009).

On this being pointed out in audit, the EE admitted (March 2009) that due to non adherence to the tender procedure in the first instance the work was put to retender which resulted in cost escalation.

Thus, non-adherence to tendering procedure resulted in an additional liability of expenditure to the tune of Rs.52.77 lakh on the same work to the Nigam. The Nigam remained indifferent towards fixing responsibility of the lapses of its own officials due to which it had to bear an extra liability.

The matter was reported to Government (July 2009); reply is awaited (November 2009).

PUBLIC WORKS DEPARTMENT

2.8 Unjustifiable expenditure

Inflated rate-analysis and superfluous use of bituminous macadam and semi dense bituminous concrete led to unjustifiable expenditure of Rs.2.68 crore.

The Government accorded (December 2006) administrative and financial sanction of Rs.23.88 crore for strengthening and improvement of three roads - Mussoorie-Chakrata Road (km14 to 27), Suvakholi-Thatyur Road (km one to 22) and Almas-Bhawan-Nagun Road (km 1 to 18). The work was awarded to a contractor¹⁵ (December 2006) at Rs.19.74 crore with December 2008 as the targeted date of completion.

Scrutiny (May 2008) of the records of the Executive Engineer (EE), Temporary Division, Public Works Department (PWD), Thatyur (Tehri) and further information collected (March 2009) revealed following irregularities regarding

¹² Work completion date was extended from May 2008 to September 2008.

¹³ Gross value: Rs.209.47 lakh (-) Rs.95 lakh = Rs.204.52 lakh.

¹⁴ Rs.204.52 lakh (-) Rs.151.75 lakh = Rs.52.77 lakh.

¹⁵ M/s RG Buildwell Engineers Ltd.

bituminous macadam (BM)¹⁶ and semi dense bituminous concrete (SDBC)¹⁷ works, carried for all three roads:

- I. Analysis of rates contained in the detailed estimates revealed that job mix formula (indicating proportions and gradings of all ingredients) for BM and SDBC layers was formulated in conformity to the MORTH specifications. The density was kept as 2.20 tonne/cum¹⁸ and 2.31 tonne/ cum¹⁹ for BM and SDBC mix respectively.

Scrutiny of measurement book pertaining to the three roads revealed that the actual density of the mix used for BM and SDBC layers was 2.16 tonne/cum and 2.25 tonne/cum respectively, which was not in line with the specified job mix formula. The relatively low density of the mix indicated that either the contents of the mix (stone aggregates/bitumen) were of low grade or the compaction was not adequate, carrying an adverse impact on the riding quality and life expectancy of the roads. Thus undue benefit extended to the contractor by taking low density of BM and SDBC resulted in excess payment by raising the cost to Rs.31.36²⁰ lakh.

On being queried, the EE replied that the density was in accordance to the job mix formula, which was contrary to facts.

- II. As per approved estimates, a layer of 5 cm of BM and 2.5 cm of SDBC was to be laid after applying tack coat²¹ for each of the layers as tack coat prepares the existing road surface for superimposition of BM/SDBC.

Scrutiny of running bills revealed that the BM and SDBC were laid in excess as compared to the area covered by tack coat leading to injudicious expenditure of Rs.2.36 crore²² as tabulated below:

Table-2.8.1

(Rs in lakh)

Items Roads	BM				SDBC			
	Required (in cum)	Laid (in cum)	Excess		Required (in cum)	Laid (in cum)	Excess	
			Volume	Amount			Volume	Amount
Suvakholi- Thatyur	4173.47	4805.48	632.01	51.19	1814.55	2616.71	802.16	77.81
Mussoorie- Chakrata	3002.42	3275.17	272.75	22.09	1305.40	1511.65	206.25	20.00
Almas Bhawan Nagun	2565.22	3075.56	510.34	41.34	1282.61	1461.57	178.96	17.36
Total	9741.11	11156.21	1415.10	114.62	4402.56	5589.93	1187.37	115.17

¹⁶ The work consists of construction of a layer of compacted crushed aggregates premixed with bituminous binder.

¹⁷ This work consists of construction in a single or multiple layers of semi-dense bituminous concrete on a previously prepared bituminous bound surface.

¹⁸ Taking output 205 cum (450 tonne).

¹⁹ Taking output 195 cum (450 tonne).

²⁰ Including an increase of 2.8% (0.85 lakh) as per tendered cost.

²¹ This consists of application of a single coat of low viscosity liquid bituminous material.

²² Excess for BM Rs.114.62 lakh + excess for SDBC Rs.115.17 lakh + raise by 2.8% i.e. Rs.6.43 lakh as per bond (Total Rs.236.22 lakh).

On being pointed out, the EE replied that excess quantity of BM and SDBC was used for correction of undulations. The reply is not acceptable as SDBC being a wearing course is not meant for correcting undulations and the quantity of BM used was still higher after providing 15 *per cent* for correction of undulations and depression fillings (as per the detailed estimates).

Thus, the irregularities described above not only resulted in deviations from MORTH specifications but also caused an excess expenditure of Rs.2.68 crore.

The matter was reported to the Government (July 2009); reply is awaited (November 2009).

Idle investment/idle establishment/blocking of funds/delay in commissioning equipment/diversion/misutilisation.

EDUCATION DEPARTMENT

2.9 Unfruitful expenditure

Apathy resulted in non-completion of construction of Inter College building since four years after its commencement even after incurring an expenditure of Rs.52.84 lakh.

The State Government accorded administrative and financial approval (February 2005) for the construction of main (non-residential) building at Government Inter College (GIC), Mehalchauri in district Chamoli at a cost of Rs.52.84 lakh.

Scrutiny of the records (October 2008) of the Finance and Accounts Officer (FAO), Chamoli and further information collected (February 2009) from District Education Officer (DEO), Chamoli revealed that the entire amount of Rs.52.84 lakh was released²³ to the executing agency, Uttar Pradesh Rajkiya Nirmaan Nigam, Srinagar (UPRNN). The work started in May 2005 without obtaining technical sanction and fixing the date of completion.

Subsequently, UPRNN submitted (September 2005) a revised estimate of Rs.105.67 lakh at the instance of the Principal, GIC, Mehalchauri which has not been approved. The two fold increase in the cost was justified on following grounds:

- Enhancement in plinth area from 457.59 sqm to 912.90 sqm ostensibly to accommodate 800 students of the college.
- Excess cost involved in site-development works.

The progress report submitted (January 2007) by the UPRNN showed 99 *per cent* physical progress for the construction work, however the physical verification carried out (March 2009) by audit team revealed the facts contrary to this claim.

²³ The funds were released in three installments: (i) Rs.10 lakh in February 2005 (ii) Rs.22.84 lakh in July 2005 and (iii) Rs.20 lakh in December 2005.



Incomplete building-GIC Mehalchauri

Condition of rooms

The work remains stalled as of date (April 2009). The incomplete building could not be put to use; the classes are being run either in old dilapidated building or in the open. On being pointed out, the DEO could not furnish any satisfactory justification for the need to revise the estimates as the present strength (2008-09) of the college was only 386 students indicating the DEO's apathy in not examining the basis for revision of the estimate before forwarding it for approval.

Thus, failure to drive the executing agency for getting the work completed in time resulted in unfruitful expenditure of Rs.52.84 lakh. The structure was lying incomplete and vulnerable to mishaps in view of open iron grids and cracks in the walls.

The matter was reported to the Government in May 2009. In its reply, the Government stated (October 2009) that work remained incomplete in absence of sanction of administrative approval of revised estimates. Further, Director, School Education has been instructed to complete the work in question as per present requirement of school. The fact remains that despite expending the entire sanctioned amount of Rs.52.84 lakh for the work during the four years, the Department has still (December 2009) not been able to provide the students with a building for running the college.

FOREST DEPARTMENT

2.10 Deficient management of a vital forest roads project

A project meant for strengthening forest roads failed to achieve its objectives of providing all weather roads in sensitive areas despite an expenditure of Rs.53.15 crore due to deficiencies in management and monitoring.

The State Government took up strengthening of forest roads under 'Project Mode' in the year 2005-06 in *tarai*, *bhabar* and hill areas of six districts²⁴. The project was planned in backdrop of insurgent activities, with the following features:

- To improve and convert *kuchcha* (fair-weather) forest motor roads into all-weather forest roads with the objectives of better patrolling, early

²⁴ Udham Singh Nagar, Haridwar, Nainital, Dehradun, Pauri and Champawat.

detection of any illegal activity and effective check on movement of anti-social elements from across the border.

- The total fund requirement was estimated at Rs.90 crore for strengthening of 824.75 km of forest roads in the sensitive areas of above six districts. Of this, an amount of Rs.53.24 crore was sanctioned by the Government in two installments²⁵.
- Engineering Projects (India) Limited (EPI)²⁶, New Delhi was appointed (July 2005) as the Project Manager based on the satisfactory past record²⁷ and the fact that State Public Works Department was not in a position to handle the road works under 'Project Mode'.
- The Government entered (September 2005) into MOU with EPI. The services to be provided by EPI were clearly specified and this included – detailed survey for each road, preparation of detailed cost estimates & getting its approval from Technical Advisory Committee of Finance Department (TAC), to obtain clearances from Ministry of Environment & Forests (MOEF), GOI, execution through construction agency and inspection of work to ensure quality & timely completion.
- A Project Monitoring Committee (PMC) was set up (October 2005) under the Chairmanship of Additional Principal Conservator of Forests (APCF) to monitor the physical and financial progress of above project at field level in conformity with GOI guidelines and ensuring timely availability of funds for the project.

Scrutiny of the records (November 2008) of the Director, Rajaji National Park Dehradun (RNP) and further information collected from State Government and other concerned authorities (June- July-August 2009) revealed that 41 roads were selected on priority (October 2005) in the first phase. An amount of Rs.53.24 crore was provided to EPI for the purpose.

Road construction adopting Reinforced Cement Concrete (RCC) Beam method²⁸ was taken up (October 2005) on trial basis²⁹ and based on the recommendations of the Indian Institute of Technology, Roorkee (IIT) the beam method was proposed to be followed for renovation of forest roads situated in protected areas, whereas Water Bound Macadam (WBM)/ Cement Concrete (CC) method was to

²⁵ Rs.10 crore as first installment in September 2005 and Rs.43.24 crore as second installment in March 2006.

²⁶ A GOI enterprise under Ministry of Heavy Industries.

²⁷ EPI had worked as executing agency during Ardh-Kumbh and construction of residential complexes for Additional Secretaries.

²⁸ *Kuchcha* forest roads are generally made of soil and bajari which get eroded during rains; to enhance the life span of these roads, horizontal and vertical RCC beams are placed as frames around the *kuchcha* road to avoid them from getting washed away.

²⁹ For reconstructing of forest road in three kms of length falling under Motichur range.

be adopted for upgrading the forest roads in other forest lands after due approvals from GOI and National Board for Wild Life (NBWL)³⁰.

However, the technique adopted for renovating the roads falling under RNP and Corbett Tiger Reserve (CTR) were based on WBM and CC methods which involved extensive use of cement, iron grids and heavy machines carrying adverse impact on the rich bio-diversity and wild life habitats. Worse was the fact, that execution was started without taking prior permission from NBWL, flouting the GOI directions (September 2004) in this regard.

Even the inspections carried by Chief Wild Life Warden (CWLW) and Chief Conservator of Forest (CCF) in the protected areas revealed construction malpractices detrimental to wild life:

- Heavy civil construction in the form of six feet high parallel walls on either side of Ranipur –Mohand road in RNP (December 2006).
- In CTR, a detour was provided as an alternative path for vehicles, while the forest road was under strengthening. This involved cutting of local flora in a wide area (April 2007).
- Severe breaking up of the surface of forest land close to the roads (May 2007), causing disturbance to the wild life.
- Gangs of labourers were seen cooking their food over open fires (May 2007), extremely hazardous for the wildlife habitat.
- Continued presence of large number of labourers close to the streams, causing distress to wild animals during the lean season of water-availability (May 2007).
- Delays in completion of the roads, which hindered the fire management activities of the Forest Department (May 2007).

Furthermore, in terms of quality also the roads were found sub-standard on several counts – no bank protections were given, rounded aggregates were used in place of broken aggregates against the recommendations of IIT, inappropriate drainage measures; resultantly, more than 20 *per cent* of causeways failed to endure even the first monsoon.

Physical verification of RCC beam road by audit (September 2009) also disclosed construction defects and serious damage. In the same areas, however, traditionally built forest roads had survived the monsoon rains. Besides, roads parallel to the RCC beam roads were built using traditional methods to facilitate movement.

³⁰ NBWL was established through Wild Life (Amendment) Act 2002 with specific brief of duties including - to make recommendations on management of Protected Areas & on matters relating to restriction of activities in those areas and to carryout or cause to be carried out impact assessment of various projects and activities on wild life or its habitat.



Damaged forest road - Ranipur – Mohand road



Traditionally built forest road - Ranipur – Mohand road

A complete halt was imposed by Central Empowered Committee³¹ (CEC) (May 2007) on the construction activities in the forest areas. The physical progress till such imposition was as below:

Table-2.10.1

Particulars	Number of roads	Estimated length (in km)	Estimated cost (Rs. in crore)	Completed length (in km)	Expenditure (Rs. in crore)
Permission to start the work not granted	03	45.97	14.94	0	0
Work stopped by CEC/CWLW	06	74.45	10.21	65.94	8.46
Incomplete works	15	164.54	49.75	55.17	20.92
Complete works	17	132.15	21.37	132.15	21.37
Total	41	417.11	98.67*	253.26	50.75

* Including an expenditure of Rs.2.4 crore incurred on survey work.

As evident from the table above, only 17 roads against the target of 41 were completed, with a success rate of 41.5 per cent, far behind the satisfactory status.

Therefore, despite an expenditure of Rs.53.15 crore³² the project continues to be in a limbo while its objective of providing a stable all-weather road network in sensitive forest areas remains unachieved. Further, Audit investigation revealed that:

(i) Selection of Roads:

Selection of forest roads for the first phase was not done as per the directions of the Home Department (June 2005). Though the Police Department had pointed out (June 2005) only three sensitive roads³³ falling under the protected area,

³¹ The CEC was constituted (September 2002) through a Gazette Notification in pursuance to Supreme Court's order; it's broad task is to monitor and ensure the compliance of the orders of the Supreme Court concerning the subject matter of forests and wildlife and other issues arising out of the said order.

³² Includes an expenditure of Rs.2.4 crore on survey work.

³³ Three roads viz. Chilla-Mundal, Chilla-Rwasan and Kauria-Bidyasini falling under protected area of Rajaji National Park.

despite being in the project list, the said roads were not taken up in the first phase, while six other roads³⁴ were taken up for renovation in the same protected zone. Also a road was taken up flouting the order of Hon'ble Supreme court indicating crucial faults at planning stage.

(ii) Financial Planning and Management:

There was a huge variance between costs estimated at project approval stage and costs worked out at execution stage. The initial financial estimate for the project with coverage of 824.75 km of roads was Rs.90 crore at the project approval stage, but the approved detailed financial estimates for 41 roads covering 417 kilometers itself amounted to Rs.98.11 crore.

The MOU with EPI stipulated that the Department would release Rs.10 crore to EPI as initial deposit within 15 days of signing of the MOU. This initial deposit was to be recouped by the Department upon submission of expenditure statement and work progress report by EPI. It was seen that whereas an initial deposit was released in September 2005 as stipulated, a sum of Rs.43.24 crore was released to EPI in March 2006. The second release was irregular and violated the terms of the MOU as by March 2006 neither any expenditure was incurred by EPI on the project out of the initial deposit, nor a single work under the project had been approved by the Government. In fact the first lot of works was approved only in May 2006. Against the deposit of Rs.53.24 crore, EPI reported an expenditure of only Rs.19.70 crore by January 2007. It is thus evident that substantial funds were irregularly placed with EPI much in advance of requirement, without any security and at no charge leading to blockade of Government funds.

Later by December 2006, approvals for works given by the Government exceeded the funds provided to EPI and by February 2007 the total approvals accorded amounted to Rs.98.11 crore as against Rs.53.24 crore provided to EPI. No additional funds were, however, made available to EPI to cover the additional amounts sanctioned for the project, by the Government. EPI, however, stopped work on the project (July 2007) once funds available with it were exhausted. Consequently, work on 15 roads remains incomplete while work on one road could not be taken up at all, for want of funds. The expenditure incurred on incomplete roads was Rs.20.92 crore. Due to the stoppage of work these roads face a heightened risk of deterioration which will render the expenditure on the roads unproductive. Funds were not released despite requests made by EPI and the fact that Rs.79 crore and Rs.15 crore were provided in the grants of the department for the project in the financial year 2006-07 and 2007-08 respectively. These funds were not utilized and surrendered at the end of the year.

The financial management of the project was thus deficient, with fund releases being made in a haphazard and ad-hoc manner, without being aligned with the requirements of the project. This has caused the project to get stalled and has also

³⁴ Asharodi to Fandowala, Fandowala to Cherring Cross, Cherring Cross to Amsoth Beet, Amsoth Beet to Jhabrawals, Ranipur to Mohand and Kimsaur to Kaudiya.

increased the risk of expenditure of Rs.20.92 crore incurred on incomplete roads, being rendered wasteful.

(iii) Project Management:

Though EPI was mandated to obtain clearances from the MOEF, GOI it undertook several works without obtaining the requisite clearances. It also did not ensure that works being undertaken, especially in protected forest areas, complied with requirements of the Forest (Conservation) Act, 1980 and the Wildlife (Protection) Act, 1972 and directives of the Hon'ble Supreme Court.

Instead of restricting work only to those roads that it could complete with funds available to it, EPI started work on all projects forcing it to leave roads incomplete after having incurred substantial expenditure on these roads. This not only opened the project to risk of legal disputes but also made the incomplete roads susceptible to deterioration.

(iv) Project Coordination:

This project required the involvement of several agencies, various units and levels of the Forest Department and the Government. However, audit scrutiny revealed shortcomings in coordination between all these entities. Field level units of the Forest Department and regulatory agencies such as the State Chief Wildlife Warden (CWLW) were not consulted by EPI while framing DPRs and estimates. Consequently, impact on wild life could not be assessed before hand.

Communication channels between decision-makers and field officers of Forest Department were found to be choked. As such despite clarifying in a review meeting (January 2006) that the renovation works should be planned in an eco-friendly manner with no harm to local flora and fauna; field officers failed to carry out given directions during the execution phase.

(v) Project Monitoring:

EPI took up tasks such as tendering for works, award of contracts, measurement of work done and contract payments without any supervision by the department. Audit scrutiny revealed that EPI had adopted a system of tendering involving putting the tender notices on its website only, irrespective of the value of work. None of the agencies and units of the Forest Department-including park authorities- monitored compliance with conservation and wildlife protection norms by EPI which was allowed to initiate work without requisite approvals from NBWL and employ work methods involving use of heavy machines and eco-damaging practices until the CEC stepped in to stop work.

The Project Monitoring committee met infrequently and held only three review meetings during the duration of the project. There is no evidence of the committee critically analyzing project performance or undertaking periodical comprehensive field inspections and quality checks. The committee had specific responsibility for ensuring availability of funds for the project which it failed to achieve. Monitoring at higher levels was similarly weak with the Principal Chief Conservator of Forest (PCCF) and the Principal Secretary, Department of Forest reviewing the project only once each till date.

On this being pointed out in Audit (November 2008), Director of RNP replied (February 2009) that the RNP authorities were not consulted in preparation of DPR and that the work was done on the directions of Government. The reply is not acceptable as it is the prime responsibility of forest officials to object the adverse activities carried in the protected areas, which was not done. When queried (August 2009), the Forest Department, Government of Uttarakhand regarding above irregularities, the fact of not taking prior approvals from MOEF, GOI was accepted.

As of now, work is under halt; verification and evaluation of the works carried by EPI have been ordered (March 2009).

Thus critical flaws at the stage of road selection, weak financial management and deficiencies in project management, execution, coordination and monitoring, combined with gross violation of forest and environmental regulations has led to this important forest roads project remaining stalled for over two years with only 41.5 *per cent* of the roads being completed. Besides, 21 of the 41 roads which are in an incomplete state face a heightened risk of deterioration and damage which could render the expenditure of Rs.29.32 crore incurred on them unproductive. Thus, the objective of the project of providing a network of all weather roads in sensitive roads remains unattained despite an expenditure of Rs.53.15 crore.

The matter was reported to the Government (September 2009); reply is awaited (November 2009).

MEDICAL, HEALTH AND FAMILY WELFARE DEPARTMENT

2.11 Non-achievement of objective of providing emergency facilities to road accident victims

The trauma care unit, constructed at a cost of Rs.1.49 crore was non-functional in an area prone to road accidents; as a result, accident victims had to be referred to considerably distant places like Srinagar and Dehradun.

Government of India provided (March 2004) financial assistance of Rs.1.50 crore to Government of Uttarakhand for upgradation and strengthening of emergency facilities at District Hospital, Gopeshwar in district Chamoli under the Pilot Project meant for augmenting emergency facilities in Government hospitals located on national highways. The State Government released (September 2005) Rs.58.60 lakh for construction of 'Trauma care unit' (building)³⁵ and Rs.90 lakh (December 2005) for purchase of equipment to the Chief Medical Superintendent, District Hospital, Gopeshwar (CMS). The proposed trauma care unit was to give proper and timely medical treatment within the first hour of accident crucial in saving victim's life.

³⁵ Uttarakhand Peyjal Nigam was nominated as the executing agency.

Scrutiny of the records (March 2009) of CMS, revealed that the construction of the trauma care unit took more than three years against the stipulated one year. The delay was attributable to the inability of the department in handing over the site for the work and slow progress of work by the executing agency (Uttarakhand Peyjal Nigam). Contrary to the State Government directives (April 2005), no provision for fixing accountability of the executing agency for ensuring timely completion of work was made.

As per the conditions of the Central grant, the State Government was to provide specialist man power and supporting staff for the trauma centre. Audit noticed that, the proposal for creation of 23 posts³⁶ was awaiting approval from the Director General, Medical Health as of March 2009.

The trauma care unit also lacked in critical infrastructure for emergencies such as CAT scan to diagnose head injury, diagnostic laboratory and intensive care unit for critical victims. However, the procurement of equipment was still under process (July 2009). The two available ambulances for shifting patients were not equipped with life saving equipments. The control room and communication system to facilitate quick relay of information regarding accidents and other major emergencies was not established.



Non-functional Trauma Care Unit

Due to the apparent debilities, the trauma care unit could not be made functional; yet it was inaugurated (February 2009) by the Chief Minister for public use.

On being pointed out in Audit, CMS admitted (March 2009) that the trauma care unit could not be made operational and accident cases were being referred to Srinagar and Dehradun. Regarding deficiencies in basic infrastructure, it was stated

that the Management Committee is making purchases to fill the gaps.

The reply reflects the lack of concern and urgency of the Department in providing timely medical facilities to save the lives of road accident victims.

Thus, delayed construction of trauma care unit without specialist care defeated the very purpose of providing immediate treatment to accident victims. As a result, 1072 accident victims had to be referred to Srinagar (four hours drive) and Dehradun (seven hours drive), putting them at high risk.

The matter was reported to the Government (May 2009). The Government accepted (July 2009) that the construction of trauma care unit was delayed and penal action was being taken against the executing agency. The proposal for creation of posts of specialists was pending and the installation of equipment in

³⁶ Neuro-Surgeon, 2; Orthopaedic-Surgeon, 2; Anesthetists, General Surgeon, 2; OT Technician, 15 Supporting staff.

ICU/ambulances and purchase of equipment for trauma care unit was still in process.

2.12 Unfruitful expenditure

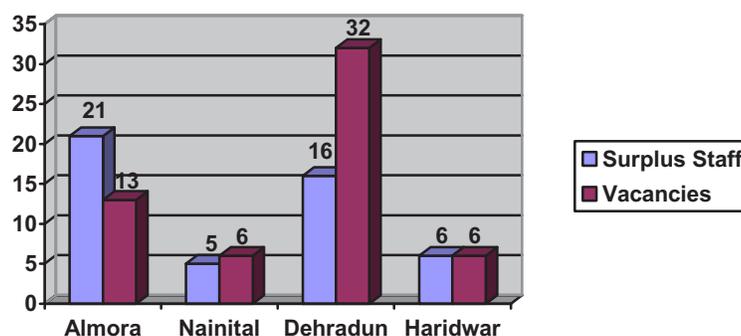
Failure to redeploy surplus staff following outsourcing of services, led to unfruitful expenditure of Rs.1.51 crore.

The State Government issued orders (December 2001 & August 2005) for outsourcing the work relating to sweeping, washing of clothes and cooking in certain big hospitals³⁷ of the State. The staff rendered surplus on account of outsourcing, were to be redeployed against vacancies in the respective districts.

Scrutiny (May 2008 & September 2008) of records of Chief Medical Superintendent (CMS), Female Hospital, Almora and Medical Superintendent (MS), Female Hospital, Haldwani (Nainital) and further information collected (May 2009) from six other hospitals³⁸ revealed that the above mentioned jobs in these hospitals were outsourced to private agencies from January 2002 at a cost of Rs.3.82 crore.

However, 48 employees³⁹ (as shown in chart below) who were rendered surplus on account of outsourcing in these hospitals could not be redeployed against vacancies available in the respective districts. An amount of Rs.1.51 crore was incurred on their pay and allowances up to March 2009.

Chart-2.12.1



On this being pointed out in audit, it was intimated (September 2008) that the matter regarding redeployment of surplus staff has been taken up with the Director General, Medical, Health & Family Welfare.

The reply indicates the lax approach of the Department in the matter of redeployment of surplus staff. No action was initiated to redeploy the staff in

³⁷ 18 hospitals in 10 districts of the State

³⁸ In three districts of Almora, Dehradun and Haridwar

³⁹ Initially, it was 59 which has reduced to 48 as of July-August 2009.

those health facilities, which are in need of their services, even after a lapse of over three years.

Thus, partial implementation of the Government order on outsourcing has not only led to unfruitful expenditure of Rs.1.51 crore (*Appendix-2.2*) but also deprived other health facilities of the badly needed services of staff rendered surplus due to outsourcing.

The matter was reported to Government (August 2009); reply is awaited (November 2009).

UTTARAKHAND PEYJAL NIGAM

2.13 Non-achievement of objective of the scheme

Failure to plan and formulate specifications accurately and execution of work with altered specifications without the prior approval of the Government, led to Rs.5.35 crore remaining blocked for over three years and non-achievement of the objective of the sewage treatment and utilization scheme.

State Government accorded (March 2003) administrative and financial approval for Rs.5.37 crore and released⁴⁰ for 'Integrated Sewerage and Sewage Utilization Scheme for Irrigation Purposes' for Veer Chandra Singh Garhwali Horticulture College (College), Bharsar, Pauri (GB Pant University of Agriculture and Technology). The scheme included construction of sewer lines, pipe lines, irrigation channels, Sewage Treatment Plant and Facultative Stabilization Pond (STPFSP) and 25 Maturation Ponds/Impounding Reservoirs (MPs/IRs). Clause 5 of the Government approval provided that funds allocated for a particular item should not be diverted to other items of work. The work was entrusted to Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Pauri (Nigam) with a scheduled completion date of December 2004.

Scrutiny (March 2009) of records of the Executive Engineer (EE), Construction Division, Nigam, Pauri (Division) revealed the following:

- For the construction of the two main components of the scheme (STPFSP and 25 MPs/IRs), the approved allocation was Rs.99.22 lakh and Rs.45 lakh respectively. However, an expenditure of Rs.2.15 crore had been incurred as of July 2009 on the construction of STPFSP and Rs.1.02 crore on the construction of 14 MPs (@ Rs.7.32 lakh each instead of Rs.1.80 lakh each). The excess expenditure was met by diversion of Rs.1.93 crore allocated for other items of work. Despite the diversion of funds, the work relating to these two items remained incomplete.
- In July 2004, the Division submitted a revised estimate (RE) of Rs.9.60 crore for the scheme which was yet (July 2009) to be sanctioned by the

⁴⁰ In 2003-04:Rs.322 lakh, 2004-05:Rs.175 lakh and 2005-06:Rs.40.03 lakh.

Government. Both the revision of costs and the substantial excess expenditure incurred on the two main components of the work were primarily due to belated changes made in the specifications by college authorities without approval of Government for construction of STPFSP and MPs/IRs, from structures with polysheet lining to reinforced cement concrete (RCC) structures. Due to these changes the estimated cost of construction of the STPFSP increased from Rs.99.22 lakh to Rs.4.27 crore (an increase of 330 *per cent*) and that of MPs/IRs increased from Rs.45 lakh to Rs.1.58 crore (an increase of 251 *per cent*). The total estimate for the entire work also increased by 79 *per cent*.

- The Division exhausted the funds allocated for the scheme and had to stop work in June 2006. As a result, not only did the construction of the STPFSP and MPs/IRs remain incomplete, other items of work like laying of sewer lines, irrigation laterals and channels could also not be completed by the Division till date.

The prolonged cessation of work extending over three years has opened the scheme to the risks of further cost escalation and deterioration of works already undertaken. In addition, a sum of Rs.5.35 crore⁴¹ expended on the scheme has remained blocked since 2006 with none of the intended benefits of the scheme flowing to the client.

On the above being pointed out in audit (March 2009), the EE stated that the change in specifications was made with the consent of the client.

The reply is not acceptable as execution of the work with changed specifications, without the prior approval of the Government was irregular as it involved considerable upward revision of costs. Further, diversion of funds to meet extra expenditure on two items of work from amount allocated to other items violated express conditions of the Government approval. The belated changes in specifications with considerable financial implication, is in itself a reflection of shortcomings on the part of both the client and the Division in planning the scheme.

Thus, failure to plan and formulate specifications accurately and in time and execution of the work with altered specifications without the prior approval of the Government, led to Rs.5.35 crore remaining blocked for over three years on an incomplete scheme for sewage treatment and utilization.

The matter was reported to the Government (August 2009); reply is awaited (November 2009).

⁴¹ Sewer line: Rs.40.34 lakh, S.T.P.: Rs.215.51 lakh, Impounding Reservoir: Rs.102.41 lakh, Irrigation pipelines: Rs.19.41 lakh, Irrigation channels: Rs.12.91 lakh, B.F.G.: Rs.4.70 lakh, S.S.C:Rs.0.20 lakh, Centage on material: Rs.22.19 lakh, W.C.Establishment; Rs.0.52 lakh, Other consume material: Rs.57.66 lakh, Centage: Rs.59.48 lakh.

PUBLIC WORKS DEPARTMENT

2.14 Blocking of funds

Poor planning resulted in avoidable blocking of funds worth Rs.1.37 crore and denial of benefits to the local populace.

Director, Rehabilitation Directorate, Tehri Dam Project accorded (August 2006) administrative and financial sanction of Rs.4.69 crore for the construction of a pedestrian suspension bridge over river Bhilangna at Ghonti in district Tehri. The bridge was to provide transportation facility to the local populace of 30-40 villages, having a population of 30,000.

Scrutiny (May 2008) of the records of the Executive Engineer (EE), Construction Division, PWD, New Tehri revealed that in the past, on several occasions cited below, a demand for a Light Motor Vehicle (LMV)/Heavy Motor Vehicle (HMV) suspension bridge in place of a pedestrian suspension bridge had been made:

- In November 2005, the demand for HMV Bridge was raised before District Administration/Director, Rehabilitation, Tehri Dam Project, New Tehri.
- In December 2005, a demand was raised in the meeting of Executive Committee, Bhagirathi River Valley Development Authority, New Tehri.
- Again in April 2007, a demand for HMV Bridge was raised by local people before the Chief Minister and Irrigation Minister of the State.

Further, as the bridge was meant to connect areas, approachable by motor roads; it appeared illogical to have a pedestrian suspension bridge which could not have served the purpose of enabling movement of vehicles across the river.

However, despite being aware of the need for construction of a motorable bridge, construction of a pedestrian suspension bridge was undertaken by the Division. The work was awarded (September 2006) to a contractor at a cost of Rs.3.99 crore which was scheduled to be completed by February 2008.

Audit scrutiny further revealed that an amount of Rs.39.92 lakh was given as mobilisation advance (MA) and Rs.107.45 lakh was paid against supply of steel wire ropes in March 2007.

Subsequently during a visit of Additional Chief Secretary to the area (April 2007) the demand for construction of LMV suspension bridge was finally acceded too. By this time the work of hill side cutting and excavation for foundation had already commenced. Pursuant to this, a revised estimate for Rs.13.82 crore for construction of LMV suspension bridge at Ghonti was submitted (July 2007) to the Government. This was again revised upwards (September 2008) to Rs.19.89 crore following escalation of labour and material costs. Approval for the estimates is still awaited as of June 2009.

On the issue related to outstanding MA and procurement of steel ropes the EE stated (June 2009) that an amount of Rs.10 lakh against the outstanding MA has been recovered. The balance MA would either be adjusted against the new contract if given to the same contractor or recovered from some other project of the same contractor. Regarding the payment made for purchase of steel wire ropes it was stated that the design of LMV suspension bridge has been prepared in a manner that will enable utilization of the ropes already procured.

The reply of the Division is not convincing as the amount given as MA more than two years ago is yet to be recovered. Further the quality of steel ropes already procured will require re-assessment before a decision on its use for the LMV suspension bridge is taken due to the likelihood of deterioration during its prolonged storage following receipt.

Thus, due to poor planning in selection of type of bridge and commencing its construction, public funds of Rs.1.37 crore remained blocked for more than two years. Further, this has also led to delays in implementation of the project which has not only resulted in considerable cost escalation but also denied the local population the benefits for almost three years.

The matter was reported to the Government (July 2009); reply is awaited (November 2009).

2.15 Defective road work

Flouting of IRC specifications, indicative of loose controls, resulted in damage to the road strengthened at a cost of Rs.4.28 crore.

The Government accorded (January 2004) administrative and financial sanction of Rs.5.64 crore for strengthening and widening (from 3 metres to 5.5 metres) in the length of 8.14 km and new construction in 5.36 km of Bhagwanpur-Hakimpur-Turra-Piran Kaliyar road including the provision for two bridges at km eight and km 11. The road work was awarded to a contractor⁴² (February 2005) at Rs.3.50 crore with February 2006 as the targeted date of completion.

Scrutiny (July 2008) of the records of the Executive Engineer (EE), Provincial Division, PWD, Haridwar revealed that the technical sanction (TS) given (January 2005) by Superintending Engineer (SE) contained the provisions for:

- Laying of water bound macadam (WBM) base course⁴³ in the new area;
- First coat bitumen painting on the complete road surface;
- Laying of bituminous macadam (BM) of 50 mm thickness on the complete road surface after application of tack coat⁴⁴ and
- Laying of 25 mm thick semi dense bituminous macadam (SDBC) layer on the complete road surface after application of tack coat.

⁴² M/s MG Contractors Pvt. Ltd.

⁴³ This included three layers of WBM – soling coat, inter coat and top coat.

⁴⁴ Tack coat prepares the existing road surface for superimposition of BM/SDBC.

However, soon after the contract agreement, a change in the pavement design was proposed (February 2005) through variation statement; by which, BM layer was said to be replaced by two layers of WBM (WBM Gr II and WBM Gr III). The division embarked on the execution with the changed design without getting due approval from the competent authority (SE).

It was further noticed that the contractor failed to execute the complete road work and left mid way⁴⁵ after laying WBM layer. The SDBC work was got executed (September 2006) through another contractor⁴⁶ under separate agreement at a much higher rate carrying a financial impact of Rs.23.57 lakh.

The road work was found substandard on several counts as listed below:

- Ministry of Road Transport and Highways (MORTH) specifies that laying of WBM over an existing bituminous layer may be avoided since it will cause problem of internal drainage of the pavement at the interface of two courses. As the above work was an extension of the existing road, the strengthening was to be done by laying BM on the complete surface, as per the TS. But, during the execution, based on variation statement, BM was substituted by WBM, contrary to the guidelines.
- The Indian Road Congress (IRC) specifications provide for the appropriate wearing course in relation to the binder/base course. It is clearly mentioned that it will not be appropriate to adopt SDBC on WBM base course; yet, going against the specifications, the wearing course of SDBC was laid over WBM base course.
- The coarse aggregates used for WBM should conform to the physical and grading requirements laid by MORTH and should essentially be of cubical shape. Still, rounded river bed material was used for the WBM layering. The division despite being aware of the fact satisfied itself with a paltry penalty of Rs.1.24 lakh.
- Physical verification by the Audit team (June 2009) showed that the road was badly damaged as is evident from the photographs below:



Bhagwanpur-Hakimpur-Piran Kaliyar road at km. 8



Bhagwanpur-Hakimpur-Piran Kaliyar road at km. 5

⁴⁵ For which an amount of Rs.2.99 lakh was recovered from the final bill.

⁴⁶ M/s Shivalik Associates Pvt. Ltd.

On this being pointed out (June 2009) by audit, the EE accepted the facts on laying WBM layer over existing bituminous surface and using SDBC as wearing course. Regarding, use of rounded river bed material, it was replied that the percentile of such material was less than 1 *per cent*, well within the permissible limits. The reply is factually wrong, as the test report of IIT Roorkee indicated the presence of 5-6 *per cent* rounded river bed aggregates in each layer, inadmissible for the construction of roads.

Thus, the division acted contrary to the approval accorded by the competent authority and against IRC specifications. Further the Division also overlooked the impermissible extra use of rounded river bed material by the contractor which was non-standard material. This caused the damaged to the road strengthened at a cost of Rs.4.28 crore. Besides, causing disruption to smooth movement of traffic.

The matter was reported to the Government (July 2009); reply is awaited (November 2009).

RURAL DEVELOPMENT DEPARTMENT

2.16 Non-achievement of project objectives

Failure on the part of the project authorities to mobilize institutional credit led to foreclosure of a special self employment project leaving it only partially complete; the sustainability of the project to the extent it was completed, is also undermined despite incurring an expenditure of Rs. 3.92 crore.

Government of India (GOI) sanctioned (April 2005) a special project under Swarna Jayanti Gram Swarajgar Yojna (SGSY) for creating self-employment opportunities for Rural Poor/SC/ST and BPL families through plantation of 'Jatropha'⁴⁷ in Uttarakhand. The total approved cost of the project was Rs.14.25 crore⁴⁸, against which GOI released Rs.2.36 crore (October 2005) and State Government Rs.0.79 crore (January 2006) to District Rural Development Agency, Almora (DRDA). The project involved undertaking Jatropha plantation on 4,280 hectare of degraded Van Panchayat and forest land within a period of three years. 2,250 families (*Swarajgaris*) were estimated to be directly provided self employment under the project. The State Government was required to furnish a letter of bank commitment for credit to GOI before release of funds as it was necessary to evolve a bankable model of jatropha plantation. From the 4th year onwards, the seeds were to be sold by the beneficiaries to a company for production of bio-diesel through Uttarkhand Van Vikas Nigam.

⁴⁷ Jatropha curcas is a perennial poisonous shrub which is an uncultivated non-food wild species. The seeds contain 27-40 *per cent* oil that can be processed to produce a high quality bio-diesel fuel, usable in a standard diesel engine.

⁴⁸ GOI: Rs.5.90 crore, State Government: Rs.1.97 crore, Bank Credit: Rs.4.24 crore and Beneficiary Contribution: Rs.2.14 crore in the form of labour only.

DRDA initiated (December 2005) the project by releasing Rs. Three crore to Uttaranchal Biofuel Board (UBB) without ensuring bank credit and beneficiary contribution and planted 71,07,500 plants (2,500 plants per hectare) on 2,843 hectare (66.42 *per cent* of the target) through 1,633 *swarojgaris* for the first year of the project at a cost of Rs.3.92 crore. Further no work was executed in subsequent years for want of funds and the State Government had already recommended foreclosure of the project (February 2009).

Scrutiny (February 2009) of the records of the Project Director, DRDA and other information and documents obtained from the UBB revealed the following:

- GOI released (October 2005) first installment of Rs.2.36 crore on the basis of intimation obtained from the two banks which contained no firm commitment to make bank credit available for the project. The State Government had not obtained the consent of *swarojgaris* for repayment of bank credit. So the banks had not given any commitment letter due to non assurance of guarantee or other collateral securities by the State Government.
- The survival rate of plantation was neither worked out nor verified by DFO/UBB/RDD⁴⁹. During physical verification (November 2009) conducted by Audit team with the officials of Forest Department, the beneficiaries informed that the survival of plantation ranged between 'nil' to 40 *per cent*. Since no funds for maintenance of the plantation were made available, the probability of production of seeds from survived plants was very low. Further, beneficiaries confirmed that no contact was established with them about bank credit for maintenance of plantation under the project. Thus, objective to generate the income to *swarojgaris* was defeated due to non- production of seeds after lapse of three years of completion of the project.
- The UBB admitted that the *swarojgaris* were showing disinterest in maintaining the plants due to non-payment of their dues of Rs.12.10 lakh as funds were not being provided.
- Monitoring and evaluation activities could not be continued in the subsequent years due to non availability of funds.

On this being pointed out in audit, the Government merely forwarded a note received from the UBB (June 2009) and gave no comments. The UBB, however, accepted that plant protection and maintenance had not been undertaken as these were primarily to be funded through bank credit which could not be arranged. Due to paucity of funds, monitoring and evaluation activities were also discontinued from the second year.

Thus, the project authorities took up the project and released Rs. Three crore to the UBB, without tying up bank credit in advance. The project was abandoned without achieving the coverage targeted; even critical plant protection and

⁴⁹ Divisional Forest Officer, Uttaranchal Bio Fuel Board, Rural Development Department.

maintenance activities could not be ensured, despite incurring an expenditure of Rs.3.92 crore.

The matter was reported to the Government (September 2009); reply is awaited (November 2009).

TECHNICAL EDUCATION DEPARTMENT

2.17 Blocking of funds

Rs.47.25 lakh was blocked for four years due to inaction of college authorities, as a result the intended benefits of World Bank Project could not be availed of so far.

Under Technical Education Quality Improvement Programme (a World Bank Project launched in April 2004) various educational institutions and national engineering colleges were to be linked with computer networking. Kumaon Engineering College, Dwarahat, Almora (College) was selected as one of the networking institutions.

Scrutiny of records (April 2008) of the College revealed that the Principal of the College demanded (July 2004) Rs.40 lakh for campus wide networking alongwith Rs.30 lakh for purchase of Software from the State Government. Government sanctioned the fund in August 2004. The entire fund of Rs.70 lakh was drawn from the treasury in 2004-05 and was kept in the personal ledger account (PLA) by the Principal. Later on in August 2005, Rs.40 lakh was drawn from the PLA for the networking and purchase of software; out of which, only an expenditure of Rs.22.75 lakh was incurred on purchase of software and the balance amount of Rs.17.25 lakh is lying in the College account. The work relating to networking of the institution still remains to be taken up (April 2009).

On this being pointed out, the Registrar of the College intimated (April 2008) that although there was a dire need for networking in the College, the working plan could not be finalised due to the absence of a regular Principal. The reply is not acceptable, since two regular Principals chaired the post between the periods – March 2004 to March 2005 and July 2006 to July 2007, yet no concrete steps to prepare a working plan for networking the institution were taken and Rs.47.25 lakh drawn from Government account is lying idle since 2004-05.

Thus, due to lack of concern shown by the college authorities in networking the institution even after a lapse of five years deprived the students from the intended benefits of the project despite availability of adequate funds. Moreover, neither the department nor the Government fixed any responsibility for the inaction of the college authorities.

The matter was reported to the Government (May 2009); reply is awaited (November 2009).

Regularity issues and other points

FOREST DEPARTMENT

2.18 Threat to Wildlife

Threat to wildlife in the Rajaji National Park continued due to non-evacuation of 147 families belonging to a semi-nomadic tribe, despite arrangements for their rehabilitation involving land and other facilities valued at Rs.9.01 crore.

With a view to conserve flora and fauna and to preserve ecological balance, entry of and grazing by cattle in national parks is prohibited under Section 35 (6) and (7) of Wildlife (Protection) Act, 1972. Therefore, the State Government decided⁵⁰ to relocate families of a certain semi-nomadic tribe, inhabiting the area falling under the Rajaji National Park (RNP). Government of India (GOI) gave its consent (July 2000) for the rehabilitation of families belonging to the tribe, in the forest blocks of Pathari and Sabalgarh in district Haridwar.

1,390 families of the aforesaid tribe were identified for shifting outside the National Park area and rehabilitation in the aforesaid forest blocks. Out of these, 878 families were to be rehabilitated at Gindikhatta in Sabalgarh block (755 hectare) and 512 families in Pathari block (448 hectare)⁵¹. With the objective of conservation of forests and upgradation of economic and social status of these tribes, each family was to be provided with a land holding of two acres (8,200 sq metre⁵²) along with basic community facilities in the rehabilitated colonies.

Scrutiny of records (March 2009) of Director, RNP revealed that status report (October 2008) on the rehabilitation plan showed successful rehabilitation of 1,297 families (512 in Pathari and 785 in Gindikhatta). Of the remaining 93 families, plots had also been allotted (February 2009) to 13 families.

However, it was found in audit that a total of 147 families (134 families in Chillawali and 13 families in Gohri ranges) despite taking hold of allotted plots in Gindikhatta, had not vacated the park area. As a result, during grazing, buffaloes belonging to these families, continued to cause damage to forest vegetation, causing enormous pressure on the forest resources. Besides, direct rehabilitation efforts made for these families, which had a financial implication of Rs.9.01

⁵⁰ After the creation of the Rajaji national Park in 1983 through amalgamation of Motichur and Chilla forests.

⁵¹ The matter was also highlighted in the review on 'Management of National Parks & Sanctuaries', which appeared in the State Audit Report for the year 2005-06.

⁵² 8000 sq metres for cultivation and 200 sq metres for housing.

crore⁵³ were going futile. The families that did not move constituted about 19 *per cent* of the families rehabilitated at Gindikhatta. The benefit from several community projects⁵⁴ with an outlay of Rs.6.48 crore, planned and executed by the Government at the rehabilitation site, was also not tapped by these families.

On the above being pointed out in audit, Director, RNP replied that the families from aforesaid tribe are being motivated to vacate the park area. However, the fact remains that 147 families, despite being rehabilitated at Gindikhatta have yet to vacate (June 2009) the restricted forest zone in defiance of the provisions of the Wildlife (Protection) Act, 1972 (May 2009). The damage to RNP's fragile ecosystem⁵⁵ and rich wildlife continued.

The matter was reported to the Government (July 2009); reply is awaited (November 2009).

General

MISCELLANEOUS DEPARTMENTS

2.19 Lack of responsiveness to audit findings and observations resulting in erosion of accountability

Inadequate response to Audit findings and observations resulted in erosion of accountability.

The Accountant General (Audit) conducts periodical inspection of the Government departments to test check the transactions and verify the maintenance of important accounting and other records as per prescribed rules and procedures. These inspections are followed up with Inspection Reports (IRs) to the Heads of offices inspected with a copy to the next higher authorities. The Heads of offices and the next higher authorities are required to report their compliance to the Accountant General (Audit) within four weeks of receipt of IRs.

At the end of March 2009, 3,720 IRs and 10,270 paragraphs issued during the period 1990-91 to 2008-09 were outstanding for settlement. The department-wise break-up of these outstanding IRs and paragraphs are given below:

⁵³ Direct Cost components: (i) Land value 147x0.82 hectarex6.25 lakh=Rs.753.38 lakh (ii) Leveling cost 147x0.82 hectarex0.90 lakh= Rs.108.49 lakh (iii) Shifting charges 147x0.02 lakh= Rs.2.94 lakh (iv) Direct Expenses on erecting hand-pumps, construction of cattle shed and toilets 147x0.25 lakh=Rs.36.67 lakh.

⁵⁴ These included strengthening of 8 km long main road, construction of approach roads, toilets, cattle sheds, solar fencing, electrification, construction of Primary Health Centre, Veterinary hospital and Aanganwadi Kendra.

⁵⁵ The forest is home to approximately 23 species of mammals and 315 species of birds.

Table:2.19.1

Sl. No.	Name of Department	Number of IRs	Number of paragraphs	Period of pendency
1.	Agriculture	83	228	1996-97
2.	Education	111	390	1991-92
3.	Irrigation	323	668	1990-91
4.	Medical, Health & Family Welfare	186	672	1994-95
5.	Minor Irrigation	48	109	1992-93
6.	Police	23	108	1990-91
7.	Public Works	707	1,736	1990-91
8.	Rural Development	79	272	1997-98
9.	Rural Engineering Services	103	251	1990-91
10.	Social Welfare	54	243	1999-00
11.	State Autonomous Bodies	993	3,843	1990-91
12.	Others	1,010	1,750	1990-91
Total		3,720	10,270	

The departmental officers failed to take action on observations in IRs within the prescribed period resulting in erosion of accountability. The Government should look into the matter and ensure that procedures exist for (a) action against the officials who failed to send replies to IRs / paragraphs as per time schedule, (b) action to recover loss / outstanding advances / overpayment in a time bound manner and (c) revamping the system to ensure prompt and proper response to audit observations.