

CHAPTER VII: CONCLUSIONS AND RECOMMENDATIONS

7.1 Conclusions

- ❖ The Cabinet Committee on Security had emphasised the time bound completion of China Study Group /Indo China Border Roads due to their strategic importance. As of March 2016, an expenditure of ₹ 4536 crore against an estimated cost of ₹ 4643 crore was incurred for 61 ICBRs (total targeted road length of 3409.29 km), however, only 36 *per cent i.e.* 22 roads having a length of 707.24 km had been completed.
- ❖ Out of the 24 ICBRs selected for detailed examination by Audit, only six roads were completed by March 2016. Out of 24 selected roads, 17 roads, on which expenditure of ₹ 1797.28 crore had been incurred (March 2016), were facing problems of substandard construction. Even six roads of length 197 km which have been completed at a cost of ₹ 164 crore, were not fit for running of specialized vehicles/equipments such as Smerch, Pinaka and Bofors due to various limitations like steep gradient, less width, inadequate turning radius, defective alignment etc.
- ❖ RSTC for constructions was not carried out properly. The Annual Works Plans (AWPs) are neither prepared timely, nor the physical targets laid in the AWP achieved. There was curtailment of targets from AWP (Budget Estimate) to AWP (Revised Estimate). However, even the curtailed targets in Revised Estimate were not achieved. The plans at various levels had not been framed realistically and there were critical gaps in implementing what had been planned.
- ❖ There were numerous instances of defective construction of roads on account of unsuitable design/specifications, steep gradient, defective alignment, turning problems, improper contract management, poor riding conditions, inadequate drainage facilities, non-connectivity of roads and abandonment of executed works. This had not only resulted in delay in completion of strategic roads but also an infructuous expenditure of ₹63.20 crore on account of corrective action/realignment of roads. The non-completion/ faulty specifications of works have a serious bearing on the operational capability of the armed forces in strategically sensitive areas.

- ❖ Financial management controls were weak. In certain cases expenditure was incurred in excess of the sanctioned amount without approval of RAEs and pending financial closure of the jobs, which provided scope for booking of expenditure even after completion of the jobs.
- ❖ Deployment of General Reserve Engineering Force personnel was done in remote and hazardous working locations without adequate facilities.
- ❖ Users expressed their dissatisfaction as the road works executed by the BRO did not adequately meet the users' requirement. Users feedback indicated that there were issues like improper gradient, undulating surface, improper turning radius, minimum passing places unsatisfactory riding comfort with the 17 roads out of 24 selected for audit.

7.2 Recommendations

- Proper Reconnaissance, survey and trace cut for selection of suitable alignment and soil classification of the road should be carried out to facilitate the completion of roads timely. The Department should expeditiously implement the plan for adoption of newer technologies like LiDAR (Light Detection and Ranging) and high resolution space technology for this work.
- Realistic Annual Works Plan for execution of work should be framed taking into account the resources, terrain, climatic conditions and limited working season. MoD should also take up with the Finance Division/ Ministry of Finance about synchronizing the availability of fund with the working seasons which means that the annual outlay should be spread not uniformly throughout the year but be concentrated on the limited working season.
- The construction of roads and mid-way correction of roads as per the requirement of the users should be attended to expeditiously.
- The availability of requisite Vehicles/Equipment/ Plants like MCRD (Medium Crawler Rock Drill) needs to be ensured to carry out works as per the Plan.
- Prompt approval of RAE/ CR Part-‘A’ and ‘B’ should be ensured to avoid any improper financial adjustments.
- Since the department has been designated to function in hard conditions, action needs to be taken to sort out the problems faced by the GREF

personnel by providing them the requisite facilities to improve their working conditions and boost their morale. The statutory benefits of contractors' employees also need to be ensured by the BRO as principal employer.

- Quality Control mechanism for monitoring quality of works needs to be enforced scrupulously by deploying adequate staff and through third party inspections.
- Proper and timely action should be taken to resolve the defects/ problems pointed out in Chief Technical Examiner reports. Court of Inquiry should be concluded and acted upon expeditiously as these not only have deterrent effect on erring officials, but also help in diagnosing the deficiencies in technical design and execution of the works.

New Delhi
Date: 02 February 2017


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