## CHAPTER VI : DEFENCE RESEARCH AND DEVELOPMENT ORGANISATION

## 6.1 Blockage of public money due to take over of unusable land

Imprudent decision to acquire forest land by DRDO at a cost of  $\mathbb{Z}$  73.26 crore which could not be used for other than forest purpose not only delayed the completion of project but also blocked Government money as land was not used for the project.

The Ministry of Defence in June 2003 sanctioned a project for 'Development of Vehicle Mounted Energy System' by Defence Research and Development Organisation (DRDO) at a cost of ₹ 97.40 crore. The project was to be completed by June 2010. An 'Integration and Test Facility' was to be created under the project in a vast area of approximately 700 acres of land for testing purpose.

DRDO initiated action in February 2004 for acquisition of 700 acres of land at Faridabad for the facility. The requirement was increased to 1100 acres in August 2005. The identified land belonging to Faridabad Municipal Corporation was covered under the Forest Conservation Act, 1980 and notified as such by Haryana Government in August 1992 under Section 4 of Punjab Land Preservation Act, 1900 (PLPA) which prohibited erection of buildings on the land. DRDO enquired from the Conservator of Forests, Haryana regarding the formalities to be completed for diversion of forest land for nonforest use and compensatory afforestation charges to be paid under Forest Conservation Act, 1980.

Conservator of Forests, Haryana informed in November 2005 that out of the total 1104 acre of proposed land, 1091 acres of land was forest land. He also informed that Hon'ble Supreme Court in its order dated 18.3.2004 clarified that land notified under Section 4 & 5 of PLPA 1900 would be treated as forest and diversion of this land for non-forestry use would invoke Forest Conservation Act, 1980 under which this land cannot be put to use for non-forestry purpose without obtaining permission from the Government of India.

Despite this, the Haryana Government in August 2006 on reconsideration offered 1100 acres of Forest land at Faridabad to the DRDO at the rate of ₹ 18 lakh per acre. DRDO in May 2007 reduced their requirement to 407 acres of land. In July 2007, the Commissioner, Faridabad Municipal Corporation informed DRDO that the Haryana Government had approved the proposal for allotment of 407 acres land at the rate of ₹ 18 lakh per acre to DRDO on the condition that DRDO will take necessary action for de-notification of land from the purview of PLPA 1900 from the Forest Department.

Pending clearance of Forest Department, DRDO paid ₹ 73.26 crore in three instalments from October 2007 to April 2008 to State Government and took

possession of land in April 2008. In June 2008 the Forest Department, Haryana informed DRDO to seek prior permission of Central Empowered Committee (CEC) for use of land.

On an application filed by M/s R.D. Consultants on behalf of DRDO for seeking permission for non-forestry use of 407 acres of land allotted to the DRDO, the CEC filed a report in August 2009 in Hon'ble Supreme Court in pursuant to the Hon'ble Court order. The CEC recommended that the permission for use of land for setting up of the Centre by the DRDO may not be accepted. CEC also recommended that an alternative site jointly identified by the DRDO with Haryana Government may be used by DRDO and State Government should take immediate steps for acquiring the alternative identified land. However DRDO is yet to get the alternative land.

Meanwhile, the Apex Review Board for the Project in December 2008 directed to use Terminal Ballistics Research Laboratory (TBRL) Ramgarh range by creating infrastructure at a cost of ₹ 38 crore, as Faridabad test range was not ready. The PDC of the main project was extended from June 2010 to June 2013.

DRDO HQ stated that the test range to test the system was planned at Faridabad but the acquired land could not be utilized in view of non-clearance by CEC. TBRL Ramgarh has been identified as alternative site and development cost on this land for carrying out permanent facility for testing would be around ₹ 38 crore for which sanction was under process as of April 2010.

The fact that subject land was under Punjab Land Preservation Act, and also that Supreme Court judgement prohibited use of forest land for non-forest purpose was well known. Hence decision of DRDO to acquire the subject land from State Government which could not be used for creating facility as CEC refused permission to use the land for other than forest purpose was imprudent and resulted in blockage of Government money to the tune of ₹73.26 crore.

The Ministry stated in December 2010 that with the past experience, DRDO was confident and sure to get forest clearance for carrying out construction on the said land. But case for diversion for non-forest use was not accepted by the CEC as the area falls in the catchment area of two lakes posing serious environmental impact on ground water and flow of water to lake and Aravalli range. The case for refund of ₹ 73.26 crore had already been recommended by CEC and forwarded to Hon'ble Supreme Court of India on 22 September 2010. The fact, however, is that an amount of ₹ 73.26 crore paid from Defence Grants during October 2007 − April 2008 remained blocked with the State Government and this could have been avoided had the DRDO examined the likely legal implications beforehand.

## 6.2 Procurement/receipt of equipments after the closure or at the fag end of a project

Defence Materials and Stores Research & Development Establishment (DMSRDE) procured equipments worth ₹ 1.52 crore after technical completion of the project or at the fag end of a project. The project was completed with the facilities available in DMSRDE and other Labs implying that the procurement was avoidable.

Ministry of Defence in February 2005 sanctioned a project on "Development of New Generation Polymers" (DRM 546) at an estimated cost of ₹ 8.50 crore for completion by February 2010. The project was technically completed in December 2009 and closure report was submitted in February 2010 with completion cost of ₹ 6.13 crore which included procurement of machinery and equipments worth ₹ 2.83 crore.

Audit scrutiny indicated that the DMSRDE procured/received equipments worth ₹ 1.15 crore after technical completion of the project, i.e. December 2009 and equipment worth ₹ 0.37 crore at the fag end of the project. This was in contravention of DRDO Headquarters instructions to DMSRDE Kanpur in October 2004 to procure equipments at least six months before probable date of completion of the project to utilise these for production of some data or results which was expected from them. The time taken in procurement of five equipment i.e. from user demand to supply order ranged from 72 weeks to 142 weeks against the prescribed time of 26 weeks stipulated in Defence Procurement Manual 2005.

In response to the audit query DMSRDE clarified that the facilities available in the Lab (DMSRDE), IIT Kanpur and other R&D Labs were used for the project and hence the project could be completed without the equipments. The said equipments procured under the project were being utilised even after the completion of the project for other ongoing projects and are essential for future projects.

The Ministry in reply stated that most of the procurement delay in these specific cases were circumstantial, viz couple of cases were refloated twice, cases converting to resultant single tenders etc. These are the basic equipments having life span of around 15 years required for regular research work and were being utilised even after completion of the project. The value for money was partially achieved during the project. In order to overcome delays in procurement, a new schedule of delegation of financial power was issued in July 2010 which had bestowed higher power for procurement for the project Directors/Lab Directors.

The fact that equipments can be used for regular R&D activities being basic equipment is no justification to procure them for this project after it was completed. It could be procured from build up grant when required. It would appear that the cost estimates for the project was highly exaggerated as the project could be completed even without equipments worth ₹1.52 crore. To

overcome abnormal delay in procurement, inherent weakness in the system of procurement also needs to be looked into.

## 6.3 Development of a Modular Bridge below requisite specification

A feasibility study on Modular Bridge was carried out by Defence Research and Development Establishment (Engineers) (R&DE) (E) in August 2002. The study was based on the requirement projected by Army in General Staff Policy Statement (GSPS) of 1993. The salient feature of the bridge was single span up to 46 metre with Military Load Class 70 (MLC 70). Based on the recommendations given in statement of case for Modular Bridge 46 metre with MLC 70, the Ministry of Defence accorded sanction in October 2002 for execution of the project at a total cost ₹ 24.25 crore. The work was to be completed by R&DE(E) within 4 years from the date of allotment of project i.e. by October 2006.

In May 2006, R&DE (E) sought extension of probable date of completion (PDC) of the project by two years, i.e. up to October 2008 due to technical difficulty in execution. Ministry accorded sanction for extension up to October 2008. In October 2007, the R&DE(E), against the 46 metre span and MLC 70 bridge, submitted Trial Report to Defence Research & Development Organisation Headquarters (DRDO) for 20 metre bridge with 40 MLC, which was not acceptable to the users and as such in March 2008 E-in-C Branch requested Directorate of Interaction with Services for Business (DISB) of DRDO HQ to accept proposal of 10 Modular Bridge 'Buy Global' at a cost of ₹ 600 crore to fill the operational voids as R&DE(E) had not developed requisite specification Bridge. Again the PDC of the project was revised in two spells upto December 2009.

During this time the R&DE (E) developed 40 metre MLC 70 Modular Bridge and technical trials were held from January 2008 to December 2009 and the bridge was found ready for traffic but the user requirement of 46 metre MLC 70 was not fulfilled. R&DE (E) confirmed that know how developed for Modular Bridge would be useful in future development.

In March 2010 R&DE(E) submitted Closure Report of the project to DRDO HQ and closed the project after having incurred an expenditure of ₹ 21.46 crore with the proposal to develop a 46 metre MLC 70 bridge to meet the requirement of General Staff Qualitative Requirement (GSQR) issued in September 2007. Hence, another project was sanctioned in January 2010 at a cost of ₹ 13.25 crore to develop 46 metre MLC 70 Bridge which is to be completed by July 2012.

Thus, instead of adhering to the specification given in the feasibility study for Modular Bridge upto 46 metre MLC 70, R&DE (E) Pune developed Modular Bridge of 40 metre MLC 70 which was not required by users. The end result of development of Modular Bridge at 40 metre MLC 70 was that after incurring expenditure of ₹ 17.89 crore excluding cost of five carrier vehicles being used in next project, the requirement of the user could not be served.

In February 2011 Ministry stated that as per feasibility study report the modular bridge was projected for MLC-70. But later on it was changed to MLC-40 on user requirement during quarterly interaction meeting held in August 2002 and clarification made by user in December 2002. The bridge can also take MLC-70 loads upto 40 M. Since the system was to be developed on an in-service high mobility vehicle which was tatra 8x8 at that time, only MLC-40 was possible due to counter weight problems during launching. While the development of MLC-40 was at an advanced stage the requirement of 46 M MLC 70 was projected in the final GSQR issued in June 2007. In the meantime tatra 10x10 vehicle got introduced in the services and DRDO is confident to develop 46 M MLC 70 system on tatra 10x10. After seeking clarification on this issue from user (E-in-C) it was stated that their requirement stands for 46 M MLC 70 but load class of bridge for spans of 46M to be MLC-40 and MLC-70 upto span of 38 M may be possible because of technology limitation. Ministry's reply and user clarification, both expressed limitation of technology for development of bridge 46M MLC-70.

The details of the case, Ministry's reply and clarification given by users reveal the fact that both the user and DRDO were aware that the bridge was being built for 40 M MLC 70 /46M MLC 40. Further DRDO had its limitations for construction of bridge 46 M MLC-70. Even though both the user and the designer were aware of the limitations of the project, neither of them took the initiative to foreclose the project. As a result even after incurring government expenditure of ₹ 17.89 crore, excluding cost of carrier vehicles to be used in next project, the users requirement of modular bridge after lapse of nine years remains unfulfilled.