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REPORT OF THE COMPTROLLER AND AUDITOR GENERAL OF INDIA

FOR THE YEAR ENDED 31 MARCH 1993
NO 8 OF 1994

UNION GOVERNMENT-DEFENCE SERVICES
(ARMY AND ORDNANCE FACTORIES)

REPORT OF THE
COMPTROLLER AND AUDITOR GENERAL
OF INDIA

FOR THE YEAR ENDED 31 MARCH 1993
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UNION GOVERNMENT-DEFENCE SERVICES
(ARMY AND ORDNANCE FACTORIES)

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PREFATORY REMARKS

This Report for the year ended 31 March 1993 has been prepared for submission to the President under Article 151 of the Constitution. It relates mainly to matters arising from the Appropriation Accounts of the Defence Services for 1992-93 together with other points arising from the test audit of the financial transactions of the Ministry of Defence, Army and Ordnance Factories including Research and Development.

2. The Report includes reviews on

Army

Remounts in the Army

Ordnance Factory Organisation

(a) Vehicle Factory, Jabalpur

(b) Opto Electronic Project

(c) Interim Anti-Tank Ammunition Project

3. The cases mentioned in this Report are among those which came to notice in the course of audit during the year 1992-93 as well as those which came to notice in earlier years but could not be included in the previous Reports.

OVERVIEW

The Audit Report for the year ended 31 March 1993 contains 92 paragraphs including four reviews. The points highlighted in the Report are given below:

I Accounts of the Defence Services

The total grant for the Defence Services for the year 1992-93 was Rs19019.64 crores while the actual expenditure was Rs19035.84 crores as against Rs17080.78 crores in 1991-92. The supplementary grant of Rs788.66 crores was obtained for all the five grants of Defence Services. The grant for Army and Capital Outlay proved inadequate to the extent of Rs53.23 crores and Rs21.29 crores respectively. A sum of Rs52.18 crores remained unutilised in Defence Ordnance Factories. Despite obtaining supplementary grants reappropriations were made and in a few cases these were wholly or partially unnecessary.

(Chapter I)

MINISTRY OF DEFENCE

II Import of life expired ammunition

Shelf life expired ammunition valued at Rs19.06 crores was received in 1990 from a foreign supplier. As a result the ammunition had to be utilised within a limited period to avoid deterioration. Ammunition valuing Rs3.72 crores is still held in stock.

(Paragraph 9)

III Establishment of a National War Museum

For establishing a National War Museum, Ministry of Defence sanctioned purchase of 'Hall of States' from Trade Fair Authority of India (TFAI) for Rupees six crores in March 1987. In addition Rs1.10 crores on account of ground rent had also been paid to TFAI. The 'Hall of States' had not been taken over so far as the space available was inadequate.

(Paragraph 10)

IV Non-utilisation of an imported equipment

Receipt/acceptance inspection of an imported equipment costing Rs54.40 lakhs could not be carried out even after three years of its receipt in an Ordnance Depot in May 1990 due to delay in making available the English translation of foreign literature received alongwith the equipment. Meanwhile, the guarantee period provided for in the contract had expired in February 1990.

(Paragraph 11)

V Avoidable expenditure due to delay in issue of corrigendum

A Zonal Chief Engineer (CE)had initiated a draft corrigendum to a Government sanction in August 1990 to include the increased cost of work which was approved by the Ministry in April 1991 and was received by the Zonal CE in July 1991. However, as the validity of the tender was upto 13 May 1991, the tender could not be accepted resulting in re-tendering and acceptance of higher rates by Rs14 lakhs which was avoidable.

(Paragraph 12)

VI Import of defective image intensifier tubes

Thirty two image intensifier tubes imported during June-September 1990 at a cost of Rs7.80 lakhs were lying in defective condition in a Central Ordnance Depot without any use (December 1993).

(Paragraph 13)

ARMY

REVIEW

VII Removnts in the Army

The employment of riders in Remount Training School and Depots (RTSD) and syces and safaiwalas in equine breeding studs (EBS) was in excess of scales laid down resulting in extra expenditure of Rs3.82 crores during 1988-93.

Though the basic military training was transferred from Remount and Veterinary Corps (RVC) Centre to another training centre in June 1991, the staff sanctioned continued to be held in RVC Centre resulting in extra expenditure of Rs11.52 lakhs.

Excess employment of certain other categories of staff in EBS Babugarh resulted in avoidable expenditure of Rs30 lakhs.

Against the training capacity of 3364 animals in two RTSDs only 177 to 576 animals had been trained during the last five years. In RVC centre and school also the training capacity in two wings remained under utilised to the extent of 28 to 48 per cent and 48 to 57 per cent.

Accumulation of 915 trained mules in two depots due to lack of demand from user formations caused avoidable recurring expenditure of Rs4.40 lakhs per month. In one of these depots trained mules had been accumulating for over five years resulting in avoidable expenditure of Rs1.04 crores on their maintenance.

The expenditure incurred on surplus animals in two depots amounted to Rs68.32 lakhs during 1991-92 to 1992-93.

Shortfall in production of green fodder in RTSD Saharanpur was 62257 tonnes in addition to shortfall in production of seeds worth Rs4.09 crores.

Due to delay in implementation of cheaper and suitable substitute in animal ration, savings of Rupees two crores per annum could not be achieved.

(Paragraph 14)

VIII Weaponry and allied equipment

A Tankodrome to provide operational training facility in firing from tank guns, to be commissioned by December 1986, could not be made operational till September 1993, even after spending Rs7.86 crores.

Further, a firm who had supplied electronic equipments costing Rs273.39 lakhs between April 1987 and June 1989 had not been able to demonstrate the system due to persisting defects.

(Paragraph 15)

Twenty seven degreasing plants costing Rs13.26 lakhs were received in base workshop/ordnance depot during August-November 1988. As the contract did not specify the places at which the plants were to be commissioned, only two plants were commissioned by the supplier, sixteen plants were erected and commissioned through the resources of various units/depots and nine plants are still held by an ordnance depot. Annual Provisioning Review of October 1990 revealed that 24 degreasing plants were surplus. Thus unrealistic assessment of the requirement resulted in unfruitful expenditure of Rs11.78 lakhs on procurement of these plants.

(Paragraph 16)

A computerised automatic calibration system costing Rs13.02 lakhs was imported in November 1987 on operational basis without ensuring adequate arrangements for its installation. The system was lying in defective condition as of December 1993. Claim for free replacement of defective parts raised after expiry of the warranty period was consequently rejected by the foreign supplier.

(Paragraph 17)

IX Logistics and transport

Fifteen lorries mounted with Control Repair Station (CRS) and attached with trailers fitted with power plants costing Rs3.18 crores were received ex-import in 1984 in a Central Armoured Fighting Vehicle Depot (CAFVD). CAFVD issued CRS without power plants to workshops. As a result 14 trailers fitted with power plants were lying unutilised with CAFVD for the last eight years and the expenditure of Rs2.97 crores on their import failed to achieve its objectives.

(Paragraph 19)

X Ordnance Stores

A Supply Order (SO) was placed by Central Ordnance Depot Agra on a firm in November 1990 for supply of 7.84 lakh batteries at Rs22.50 each. The SO had to be short closed in April 1992 without any financial repercussion, due to issue of an amendment to the SO in April 1991 reducing the quantity to 1.55 lakh batteries as desired by the firm. The amendment was issued without obtaining any prior legal opinion. This resulted in an avoidable expenditure of Rs20 lakhs and also undue benefit to the firm as four lakh batteries had to be procured from the same firm at a higher rate.

(Paragraph 20)

XI Defence estates

A proposal for acquisition of land for an armed brigade was initiated by Army Headquarters in March 1983 at an estimated cost of Rs7.73 lakhs. Government sanction was however accorded after eight years in January 1991 at an estimated cost of Rs59.53 lakhs entailing a cost escalation of Rs51.80 lakhs. The land has not been acquired as of November 1993 and therefore the cost of land is likely to exceed further when it is actually acquired.

(Paragraph 22)

XII Other cases

In two cases, delay in furnishing of duty exemption and not manufactured in India certificates by the consignees to the Embarkation Headquarters resulted in payment of customs duty of Rs20.97 lakhs which was avoidable.

(Paragraph 23)

A Precision Universal Grinder Machine imported at a cost of Rs18.02 lakhs for an Ordnance Factory was received in February 1991 in damaged condition. It was noticed that the machine was severely damaged and was beyond repairs. The supplier refused to repair the machine as the contract was on FOB basis. The claim for Rs26.15 lakhs preferred on the carrier was rejected as it was not preferred within the statutory time limit.

(Paragraph 24)

ORDNANCE FACTORY ORGANISATION

XIII Performance of the Ordnance Factory Organisation

The Ordnance Factories Organisation consists of 39 Ordnance Factories, with a manpower of 1.72 lakhs, which produce more than 1,500 items of arms, ammunition, equipments and components. The Ordnance Factory Organisation is under the administrative control of the Ordnance Factory Board (OFB).

While there has been a steady increase in the average value of fixed capital assets, the value of production has come down over the last three years. The budget grant under Capital head has a declining trend since 1991-92.

The progress of achievement of targets in respect of several items remained behind schedule.The percentage of capacity utilisation in terms of standard man hours has a declining trend since 1987-88 when it came down from 105.25 in 1987-88 to 68.11 in 1992-93. Capacity utilisation in terms of machine hours ranged from 77.07 per cent in 1987-88 to 82.73 per cent in 1989-90. Notwithstanding the fact that there was reduction in utilisation of the capacity of the Ordnance Factories the average holdings in terms of number of days exceeded the prescribed norm of 180 days' consumption in each year. There has also been steady increase in the holdings of finished stock and finished components.

21380 warrants were more than one year old as of 31 March 1992 against the prescribed life of six months of a warrant. Rejections in excess of permissible limits increased from Rs4.40 crores in 1988-89 to Rs8.09 crores in 1991-92.

Stores worth Rs1998.88 lakhs had been issued to various indentors as of June 1992 without obtaining pre-payment in contravention of the instructions of the OFB .

Rs55.20 crores was outstanding as of 31 March 1993 on account of Spot Payment made to suppliers by 32 Ordnance Factories till 1991-92.

(Paragraph 25)

XIV Vehicle Factory, Jabalpur

In order to meet the Army's requirement of transport and patrol vehicles, the Vehicle Factory, Jabalpur (VFJ) was set up in 1969-70 at a cost of Rs50.94 crores. The factory produces a 3 ton truck (Shaktiman), a 1 ton truck (Nissan Truck) and a patrol vehicle (Nissan Patrol). Even eight years after commencement of production, the factory never attained its desired capacity of 13200 vehicles per year. Despite installation of additional facilities during 1980 to 1985 (at a total cost of Rs22.61 crores), the capacity was reduced to 9000 from 10000 vehicles per year, and even this was never actually attained.

The Army was of the view that existing models of vehicles were no longer useful in view of their technical deficiencies and quality. It was decided in October 1992 that no fresh orders would be placed for existing models.

Although in 1970, a Study Team to select new generations of vehicles was appointed, a decision on only one type of vehicle was taken in February 1993. As a result of this abnormal delay in selecting the vehicles, VFJ continued production of vehicles with 1950's technology. As VFJ is not equipped to take up the manufacture of modern series of vehicles, it has resulted in a situation where labour force and present machineries would be kept idle/under utilised. Obviously this mismatch between phasing out of existing line of production and commencement of production of new types of vehicles is the result of bad planning. While the production was coming down in VFJ the Army procured 10481 vehicles from trade at a total price of Rs294.66 crores during 1986-87 to 1990-91.

(Paragraph 26)

XV Opto-Electronic Project

Ministry of Defence sanctioned setting up of opto-electronic factory for indigenous production of opto electronic instruments to be fitted in Ajeya Tank and Sarath Vehicle in June 1984 with an investment of Rs102.85 crores. This was one of the four factories that were set up to build up indigenous capacity to produce armoured vehicles.

The project scheduled for completion by June 1987 was yet to be completed (March 1993). There was delay in execution of civil works and ordering of receipt and commissioning of plant and machinery by more than 3 1/2 years.

The planned production of instruments was reduced from 250/625 for Ajeya Tanks/Sarath Vehicles to 80 sets in 1992-93.

Thus the capacities created with an investment of Rs102.85 crores would remain largely under utilised. The diversification activities were also insignificant.

The indigenisation of all the instruments was to be completed by 1990-91. However, till August 1993, only eight items were fully indigenised resulting in import of assemblies/ components of instruments.

(Paragraph 27)

XVI Interim Anti-Tank Ammunition Project

Defence Research and Development Organisation (DRDO) claimed to have developed a new anti-tank ammunition in two of its laboratories. This type of ammunition was urgently required by the Army. Despite the fact that no user's trials had been carried out as per the existing procedure, the ammunition was introduced into service by the Army in April 1982 and drawings were accepted by the competent technical authorities in July 1982. It was reported that in subsequent trials held by the Army in November/December 1982, the ammunition was successful.

In view of the urgency projected by the Army, it was decided to set up interim production of the ammunition at an ordnance factory with inputs from two DRDO laboratories at a cost of Rs4.30 crores.

The ammunition repeatedly failed in proof trials, indicating that the development of products/processes in the laboratories were not adequate for transfer of technology for bulk production. Rs123 lakhs were spent in producing unsuccessful rounds/shots and gun barrels costing Rs32.22 lakhs were damaged in trials.

Machinery ordered in view of the need for upgrading the facilities available in the factory could be installed only after the production of this ammunition had been transferred to another factory. The delays in procurement caused the price of machines to escalate by Rs137 lakhs. The urgent requirements of the Army were not met.

(Paragraph 28)

XVII Production and Planning

Short closure of orders by the Army for 48935 shells of a weapon resulted in financial repercussion of Rs8.43 crores in five factories.

In another case the discontinuation of production of an ammunition as a result of phasing out of a tank resulted in huge financial repercussion which has not yet been worked out.

(Paragraph 29)

Proposed cancellation of indents for bodies of a bomb, placed by the Director General of Ordnance Stores, led to financial repercussion of Rs2.13 crores at Ordnance Factory Kanpur.

(Paragraph 30)

Due to short closure of an order for forged steel shells of an ammunition by the Director General of Ordnance Stores, Ordnance Factory Kanpur was holding an idle inventory of Rs3.77 crores.

(Paragraph 31)

Manufacture of 400 tonnes of billets by Metal and Steel Factory Ishapore, inspite of the discontinuation of production of the shell for which the billets were required resulted in adverse financial implication of Rs2.19 crores.

(Paragraph 32)

As a result of suspension of production programme of an ammunition in Ordnance Factory Dehu Road, components valuing Rs2.82 crores were accumulated without any prospect of future use.

(Paragraph 33)

Manufacture of brass cups with metallurgical defects at Metal and Steel Factory, Ishapore necessitated further processing at Ordnance Factory, Ambernath instead of direct processing at Ordnance Factory, Khamaria. Cups valued at Rs2.01 crores produced by MSF are lying unutilised.

(Paragraph 35)

Failure on the part of the Naval Inspection Wing and Ordnance Factory Organisation to detect the design defects of a rocket resulted in cancellation of indents by Navy after 30 years with financial repercussion of Rs79.67 lakhs in four ordnance factories.

(Paragraph 36)

Placement of indent by Director General of Ordnance Stores for an item without assessing its requirement led to cancellation of the indent and financial repercussion of Rs55.48 lakhs at Ordnance Factory, Dehra Dun.

(Paragraph 38)

XVIII Provisioning of stores and machineries

Expenditure of Rs24.42 lakhs in foreign exchange on procurement of a moulding in large numbers in anticipation of further orders from the Army proved wasteful since no orders were placed and the stores could not be used for any other purpose.

(Paragraph 43)

Acceptance of defective fabrics by Ordnance Clothing Factory Shahjahanpur led to a loss of Rs17.07 lakhs.

(Paragraph 44)

There was a loss of Rs44.17 lakhs as a result of incorrect decision taken by Vehicle Factory Jabalpur in shortclosing an order before the date of expiry of the contract.

(Paragraph 45)

Procurement of 136.6 tonnes of billets from Metal and Steel Factory Ishapore by Rifle Factory Ishapore proved to be uneconomical to the extent of Rs40.76 lakhs in comparison to cost of procurement from trade.

(Paragraph 46)

Procurement of 1674.33 tonnes of alloy steel bars by Ordnance Factory Kanpur from Metal and Steel Factory Ishapore during 1991-93 proved uneconomical to the tune of Rs3.33 crores in comparison to the cost of procurement from a Public Sector Undertaking.

(Paragraph 47)

A robotic welding machine procured at a cost of Rs60.96 lakhs in June 1990 for Heavy Vehicle Factory Avadi could not be commissioned and welding is still being done by conventional method.

(Paragraph 49)

XIX Inspection

Acceptance of 6064 defective assemblies in inspection resulted in a loss of Rs71.98 lakhs.

(Paragraph 54)

Failure of the inspection authority to detect defects in a fuze during inspection at firms premises and also design deficiency of the fuze resulted in a loss of Rs32.42 lakhs.

(Paragraph 55)

Acceptance of unsuitable cloth in inspection by the authorised inspector resulted in blocking of funds to the tune of Rs36.97 lakhs at Ordnance Clothing Factory Shahjahanpur. 150000 bags manufactured at a cost of Rs37.02 lakhs (manufacturing cost only) were lying unutilised at High Explosive Factory Kirkee.

(Paragraph 56)

XX Other cases

Due to non-production and non-issue of matching numbers of igniters, 14.62 lakh grenades valued at Rs27.94 crores are held by the Army. These cannot be utilised even in case of operational necessity.

(Paragraph 57)

XXI Works and Military Engineer Services

Despite issue of instructions and time schedule by Engineer-in-Chief's Branch in April 1988 for initiating and processing of financial concurrence (FC) cases, seven cases were noticed where failure to obtain FC of the competent financial authority within the validity period of tenders resulted in retendering and consequential extra expenditure to the extent of Rs361.23 lakhs.

(Paragraph 63)

Two technical buildings of a project of an ordnance factory completed at a cost of Rs14.29 crores in March 1988 and February 1989, were found defective due to inadequacy of design and lapses in execution. A contract was concluded in May 1992 for Rs1.79 crores for rectification of defects. The work was yet to be completed (December 1993).

(Paragraph 64)

Government accepted the necessity of shifting the Army Receiver Station from Delhi to Meerut in 1985. Although an expenditure of Rs236.94 lakhs has been incurred till March 1993 assets created have not been taken over by the users as of February 1994.

Construction of technical accommodation and works of roads, paths and culverts were found sub-standard and had not been rectified so far.

(Paragraph 65)

Due to defective planning, designing, poor workmanship and supervision of work during execution of a swimming pool, the investment of Rs82.52 lakhs became unfruitful as it remained unutilised for more than five years of its completion. Administrative/disciplinary action against the executives and the firm is yet to be finalised.

(Paragraph 66)

Fourteen quarters constructed for married Havildars in March 1990 at a cost of Rs59.36 lakhs at a station were re-appropriated with retrospective effect for purposes other than for which these were sanctioned/constructed and the Havildars in the meantime, continued to be paid compensation in lieu of quarters.

(Paragraph 67)

Delay in sanction of a water supply scheme at Mathura by the Ministry of Defence in July 1992 though recommended by a Board in November 1986, resulted in cost escalation by Rs57 lakhs. As a result of delay in execution, there was a recurring loss of Rs8 to 10 lakhs per annum due to effect of brackish water on Military Engineer Services equipment and installations. In addition, army formations were also incurring recurring avoidable expenditure of Rs18 lakhs per annum on supply of water to troops by trucks.

(Paragraph 68)

An advance of Rs50 lakhs was deposited with the Railways in 1986 for construction of Sainik Aramgah at New Delhi Railway Station. The refund of advance has not been claimed by the Defence authorities even after receipt of clarification in December 1986 from Railways that there was no possibility of construction of a Aramgah.

(Paragraph 69)

Cast iron pipes valued at Rs47.53 lakhs were procured during 1981-83 without clearance of the water supply project. The pipes were still lying in stock.

(Paragraph 70)

Central Public Works Department (CPWD) was providing maintenance cover till 1981 to an Army Inspection Bungalow (IB) for which maintenance charges were being re-imbursed by a Controller of Defence Accounts (CDA). Though, Military Engineer Services started providing maintenance cover from 1982, CDA continued to reimburse maintenance charges to CPWD till May 1992. In addition, rental charges of Rs46.40 lakhs were also re-imbursed to CPWD even though the IB was on Defence land. Recovery/adjustment of these irregular payments is yet to be effected.

(Paragraph 71)

Director General of Supplies and Disposals concluded agreements with the agents of a firm on the recommendation of the Department for the supply of an item (chokes) at abnormally higher rates as compared to existing rate contract rates resulting in extra expenditure of Rs39.13 lakhs.

(Paragraph 72)

The initial estimates of a work had to be revised due to non-inclusion of certain essential items. This resulted in increase in cost of work by Rs36.39 lakhs.

(Paragraph 73)

Construction of 53 quarters was sanctioned in August 1988 at Rs66.79 lakhs at a site which was not available as it belonged to Military Farms Organisation. Selection of a new site and issue of revised sanction was delayed by almost three years causing avoidable cost escalation of Rs30.98 lakhs.

(Paragraph 75)

Ignoring the recommendations of a Board regarding air-conditioning (A/C) of one of the three sheds proposed for construction, Air Headquarters issued in December 1987 sanction for construction of four explosive storage sheds at Rs90.07 lakhs without catering for A/C for one of these sheds.

The Ministry issued a revised sanction in December 1992 for Rs150.07 lakhs, this included Rs23.54 lakhs on account of escalation which was avoidable. An expenditure of Rs3.75 lakhs was also incurred for storage of the sophisticated weapons during the intervening period.

(Paragraph 77)

Arrears of electricity charges from November 1967 to March 1985 of Rs15.23 lakhs have not been paid by Defence Services Officers Institute (DSOI), though Ministry of Defence had intimated the Public Accounts Committee in September 1987 that efforts were on to recover the amount.

Further, against the authorised load of 250 KVA, connected load of DSOI for the last eight years was 600 KVA, and the revised agreement for enhancing the load was yet to be finalised. Total arrears of Rs35.72 lakhs on account of electricity charges are recoverable from DSOI.

(Paragraph 78)

Sub-standard furniture not conforming to the contract specifications costing Rs21.25 lakhs was accepted by Military Engineer Services for an office and Court of Inquiry ordered in January 1991 tc investigate into the matter had not been finalised so far.

(Paragraph 79)

A contract for Rs45.03 lakhs concluded for water supply scheme for certain buildings at a station catered for construction of an overhead (OH) reservoir also. The work did not progress satisfactorily and was terminated in August 1986. During execution of left over work major defects in the work were noticed and therefore it was also foreclosed. Laxity of engineers in the construction of OH reservoir and the use of sub-standard material was noticed. Construction of OH reservoir involved expenditure of Rs10.54 lakhs. Rectification work has not been taken up and recovery of Rs21.49 lakhs from the defaulting contractor is also awaited.

(Paragraph 80)

The work services sanctioned under three sanctions were cancelled/reduced at the instance of Audit resulting in savings to the extent of Rs21.18 lakhs.

(Paragraph 81)

A contract for external electrification and water supply at Rs21.01 lakhs was incorrectly awarded to a contractor enlisted for tendering upto Rs4.00 lakhs. The work, to be completed by January 1990, has not been completed so far. As a result, 104 type II quarters could not be handed over to the users even after three years of their completion.

(Paragraph 82)

Due to choking in a portion of sewage pipe line (SPL) at a station in July 1983, Military Engineer Services (MES) connected it direct to a manhole belonging to the Municipal Committee (MC) as a temporary measure. Instead of getting choked SPL repaired at an estimated cost of Rs0.65 lakh, MES paid sewerage charges to MC amounting to Rs18.18 lakhs during 1983-93.

(Paragraph 83)

Although pile foundation and allied works for construction of a building were completed between October 1984 and July 1988 at a cost of Rs39.68 lakhs, the estimates for super-structure were yet to be finalised. This has resulted in blocking up of public money and the Army formation had to function in old building for which Rs16.57 lakhs were spent during the period 1986 to 1991.

(Paragraph 84)

Fire alarm system to the technical building of an Air Force Station installed at Rs9.12 lakhs in February 1990 was found defective. The defects were yet to be rectified.

(Paragraph 87)

XXII Research and Development Organisation

A standby generator procured and commissioned in August 1987 at a cost of Rs12.78 lakhs for a research laboratory could not be utilised due to non-receipt of an item of equipment.

(Paragraph 91)

A liquid nitrogen plant (plant) imported by the Institute of Armament Technology, Pune at a cost of Rs8.21 lakhs was received in March 1988 in damaged condition and was repaired in 1993. It was noticed that the import of the plant was also not justified as actual requirement of the liquid nitrogen purchased during the last four years was to the extent of Rs0.39 lakh only.

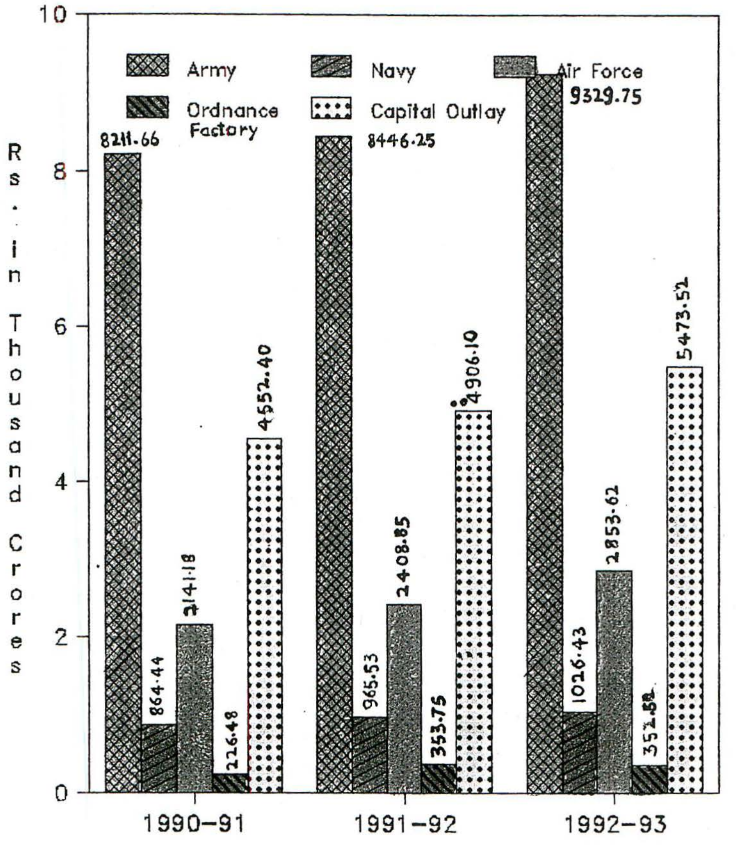
(Paragraph 92)

CHAPTER I

ACCOUNTS OF THE DEFENCE SERVICES

1. Defence Expenditure

The expenditure on different major components of defence activities during 1990-93 was as under :



(Rs in crores)

	1990-91	1991-92	1992-93
Army	8211.66	8446.25	9329.75
Navy	864.44	965.83	1026.43
Air Force	2141.18	2408.85	2853.62
Ordnance Factories	226.48	353.75	352.52
Capital outlay	4552.40	4906.10	5473.52
	15996.16	17080.78	19035.84

2. Budget and actuals

The summarised position of expenditure during 1992-93 against grants/appropriations was as follows :

(Rs in crores)

	Original grant/ appropriation	Supplementary	Total	Actual expenditure	Variation Excess (+) Saving (-)
Revenue:					
Army:					
Voted	8937.23	336.42	9273.65	9326.88	(+)53.23
Charged	2.94	0.61	3.55	2.86	(-) 0.69
Navy:					
Voted	1020.05	6.35	1026.40	1026.18	(-) 0.22
Charged	0.16	0.35	0.51	0.26	(-) 0.25
Air Force					
Voted	2526.50	327.61	2854.11	2853.45	(-) 0.66
Charged	0.29	-	0.29	0.17	(-) 0.12
Defence Ordnance Factories					
Voted	396.12	8.55	404.67	352.49	(-)52.18
Charged	1.00	0.20	1.20	0.04	(-) 1.16
Capital:					
Capital outlay on defence services					
Voted	5340.89	108.57	5449.46	5470.75	(+)21.29
Charged	5.80	-	5.80	2.76	(-) 3.04
Total :	18230.98	788.66	19019.64	19035.84	(+)16.20

While the supplementary grants obtained for Navy, Air Force and Defence Ordnance Factories proved to be surplus to the requirements, supplementary grants obtained under 'Army' and Defence Capital outlay were inadequate.

There were persistent savings under Defence Ordnance Factories from 1989-90 (both under Capital and Revenue); savings amounted to Rs52.18 crores during 1992-93 was under revenue. Despite reappropriating Rs7.91 crores and Rs10.00 crores there were saving of Rs30.91 crores and Rs5.86 crores under minor head 110-Stores and minor head 106-Renewal and Replacement respectively of Defence Ordnance Factories.

3. Excess over voted grant

The table below shows an excess expenditure under two grants which requires regularisation under Article 115 of the constitution.

(Rs in crores)

Grant No.	Original	Supplementary	Total	Actual Expenditure	Excess
18-Army	8937.23	336.42	9273.65	9326.88	53.23 (532342 thousands)
22-Capital outlay	5340.89	108.57	5449.46	5470.75	21.29 (212909 thousands)

Despite obtaining supplementary Grants, excess expenditure reveals that the requirement of funds was not assessed properly.

The excess under Army was mainly in :

(a) 'Transportation' on account of enhancement of fares under Rail charges for movement of personnel.

(b) 'Military Farms' due to bonus being declared at higher rates than anticipated as well as higher production cost because of increased cost of farm products.

(c) 'Research and Development Organisation' due to carry over liabilities of the previous year, exchange rate variation, shortfall in customs duty refund, payment of bonus and steep hike in tariff rates for water and electricity charges.

(d) 'Inspection Organisation' due to higher expenditure under pay and allowances than anticipated and debit of expenditure to this head on account of proofing by other organisations.

(e) 'Stores' due to increase in rates of fuel, oil and lubricants and increase in prices of provisions.

(f) 'Works' due to higher increase in tariff rates of electricity and water than anticipated and higher outgo on maintenance of buildings and special repairs.

(g) 'NCC' due to payment of bills of Director General of Supply and Disposal for stores and under expenditure on Training due to payment to States on account of delayed claims for camp expenditure at the fag end of the year.

(h) 'Other expenditure' due to higher expenditure on pay and allowances, conservancy charges and on account of payment of arrears in respect of printing and stationery bills and provision of liveries.

The excess under capital outlay was mainly in :

(a) 'Army' due to finalisation of more land acquisition, booking of certain expenditure pertaining to Air-craft and aero engines to capital head instead of Revenue head, payment of certain committed contractual liabilities under Heavy and Medium Vehicles and good progress under construction works.

(b) 'Navy' due to higher payment on account of revised Government decision in respect of certain projects under Aircraft and Aero-engines, exchange rate variation as well as contractual payments of imported equipment, speeding up of progress of carry over works by Military Engineer Services at the end of the year and payment to Directorate General Border Roads for certain project pertaining to Naval Dockyards.

(c) 'Air Force' due to higher payment under land acquisition than anticipated and higher materialisation of supplies under Special projects.

(d) 'Ordnance Factories' due to booking of some expenditure on account of 'Renewal and Replacement' under the head 'Machinery and Equipment'.

4. Control over expenditure

Some instances of defective budgetary control are indicated below:

(a) In the following cases supplementary grant and reappropriation of funds obtained, were wholly or partially not utilised resulting in savings and excesses and proved injudicious.

i) Supplementary Grant (Voted)

(Rs in crores)

Grant No.	Original Grant	Supplementary Grant	Final Grant	Actual expenditure	Saving (-) Excess (+)
18-Army	8937.23	336.42	9273.65	9326.88	(+)53.23
21-Defence Ordnance Factories	396.12	8.55	404.67	352.49	(-)52.18
22-Capital outlay on Defence Services	5340.89	108.57	5449.46	5470.75	(+)21.29

ii) Supplementary grant (charged)

Grant No.	Original	Supplementary	Total	Actual expenditure	Savings
18-Army	2.94	0.61	3.55	2.86	0.69
19-Navy	0.16	0.35	0.51	0.26	0.25
21-Defence Ordnance Factories	1.00	0.20	1.20	0.04	1.16

b) Reappropriation of funds

In the remedial/corrective action taken note of 20 October 1993 in regard to para 3 of the report of the Comptroller and Auditor General of India for the year ended 31 March 1992 (No.8 of 1993) the Ministry stated that in order to monitor the requirement and progress of expenditure Inter Departmental monitoring Groups were constituted in 1991-92. These Groups were advised to review the projection of the requirements and the actual expenditure of 1992-93 to pin point any defects in the present system of estimation and expenditure control. Despite this no headway in eliminating the cases of the nature mentioned below could be achieved.

(Rs in crores)

Grant No.	Sanctioned Grant	Reappropriation	Final Grant	Actual expenditure	Excess (+) Savings(-)
1	2	3	4	5	6
18-Army-Transportation	224.17	(-)14.01	210.16	218.91	(+) 8.75
Military Farm	61.21	(+) 4.50	65.71	72.27	(+) 6.56
Research and Development	563.48	(+) 0.03	563.51	572.91	(+) 9.40
Works	552.05	(+)31.03	583.08	600.09	(+)17.01
NCC	75.68	(+) 4.64	80.32	88.62	(+) 8.30
Other expenditure	174.11	(+) 3.29	177.40	187.43	(+)10.03
19-Navy Pay & Allowances of civilians	161.52	(-) 0.30	161.22	167.94	(+) 6.72
Transportation	47.16	(-)14.65	32.51	33.73	(+) 1.22
Stores	419.21	(+) 2.79	422.00	417.97	(-) 4.03
Other expenditure	62.78	(+) 0.81	63.59	70.24	(+) 6.65
20-Air Force					
Stores	1832.42	(+) 1.39	1833.81	1825.00	(-) 8.81
Works	205.36	(+) 1.11	206.47	211.90	(+) 5.43
21-Defence Ordnance Factories Manufacture	630.95	(+)16.65	647.60	645.49	(-) 2.11
Renewal and Replacement	100.00	(-)10.00	90.00	84.14	(-) 5.86
Stores	1083.65	(-) 7.91	1075.74	1044.83	(-)30.91
Other expenditure	131.40	(+)18.45	149.85	141.60	(-) 8.25

22-Capital outlay on defence services					
sub major head					
01- Army Lands	30.00	(-)10.00	20.00	22.17	(+) 2.17
Medium and heavy vehicle	41.40	(+) 3.26	44.66	49.60	(+) 4.94
Construction works	205.78	(-)15.00	190.78	200.62	(+) 9.84
sub major head					
02 - Navy					
Aircraft and Aero engines	312.31	(-)162.76	149.55	161.88	(+)12.33
Other equip-ment	16.77	(+)12.75	29.52	32.51	(+) 2.99
Naval fleet	786.12	(-)44.14	741.98	727.52	(-)14.46
Naval dock-yard	55.44	(-)23.19	32.25	33.39	(+) 1.14
sub major head					
03 - Air Force					
Lands	5.79	(-) 2.85	2.94	3.83	(+) 0.89
Other equip-ment	230.21	(-)12.91	217.30	218.76	(+) 1.46
206-Special pro-jects	39.56	(-) 5.42	34.14	35.57	(+) 1.43
sub major head					
04 - Defence Ordnance Factories					
052-Machinery and Equip-ment	174.00	(-)60.00	114.00	119.41	(+) 5.41
111-Works	103.80	(-)49.02	54.78	52.26	(-) 2.52
sub major head - 05 - Research & Development					
111-Works	206.61	(+) 9.07	215.68	219.09	(+) 3.41

5. Persistent savings

Despite mention made in paragraph 5 of the Report of the Comptroller and Auditor General of India (Army and Ordnance Factories) for the year ended 31 March 1992 (No.8 of 1993) regarding persistent savings it has been observed that there are still persistent savings under these heads inspite of the committee constituted during 1991-92 to review and remove the lacunae in the realistic assessment of requirement and Budgetary Control as stated by the Ministry in their action taken note.

(Rs in crores)

Grant No Minor head	1990-91 Final Grant	Actual	Saving	1991-92 Final Grant	Actual	Saving	1992-93 Final Grant	Actual	Saving
1	2	3	4	5	6	7	8	9	10
20. Air Force Minor Head Stores	1294.13	1290.58	3.55	1514.35	1494.20	20.15	1833.81	1824.99	8.82
21-Defence Ordnance Factories Maintenance Machinery and Equipment	4.50	3.32	1.18	5.50	4.69	0.81	4.60	3.44	1.16
22-Capital outlay on Defence Services Sub Major Head-02-Navy Naval fleet	701.17	680.34	20.83	800.00	793.36	6.64	741.98	727.52	14.46
Sub Major Head- 04-Defence Ordnance Factories Works	82.18	82.00	0.18	98.75	93.63	5.12	54.78	52.26	2.52

6. Incorrect classification of expenditure

Scrutiny of the explanations furnished by the Ministry revealed that savings and excesses in the following cases occurred as a result of wrong classification which would lead to the incorrect presentation of accounts. Steps to prevent the occurrence of such cases, would need to be taken.

i) Major Head 2079, Minor Head - 053 - Maintenance - Machinery and Equipment — The saving of Rs116 lakhs was due to improper adjustment of booking and inter budget head transfer as certain items of "stores" were also utilised under this head.

ii) Major Head 2079, Minor Head 106 - Renewal and Replacement	The savings of Rs586 lakhs was due to booking of expenditure for some machines against old supply order to Capital head of Machinery and Equipment.
iii) Major Head 4076 - Sub Major Head 01 - Minor Head - 101 - Aircraft and Aeroengines	The excess of Rs200 lakhs in this head was due to booking of certain expenditure to this head instead of Revenue head.
iv) Minor head 052 - Machinery and equipment	The excess of Rs541 lakhs in the final grant was due to booking of some expenditure on account of Renewal and Replacement to this head.

7. Outstanding claims/dues

Mention was made in paragraphs 3 and 11 of the Report of Comptroller and Auditor General of India, Union Government, Defence Services (Army and Ordnance Factories) for the year ended 31 March 1991 (No.8 of 1992) and 31 March 1992 (No.8 of 1993) respectively regarding increasing trend of outstanding dues for the services rendered by the Defence Services including Ordnance Factories to various non defence departments and outstanding dues on account of licence fee and allied charges. Despite this there was still increasing trend from year to year which is alarming and requires speedy action. The position of the outstanding dues as indicated below shows an increasing trend :

i) The outstanding dues for the services rendered on payment by the Defence Services (other than Ordnance Factories) to various non defence departments as on 30 June 1992 rose from Rs60.45 crores to Rs85.36 crores as on 30 June 1993 showing an increase of 41 per cent.

ii) Outstanding dues for the services rendered by Ordnance Factories to other non-defence departments had increased from Rs5.92 crores as on 30 June 1992 to Rs20.12 crores as on 30 June 1993, showing an increase of 240 per cent.

iii) The outstanding dues on account of licence fee and allied charges from Central Ministries and State Governments, Private Bodies, Messes, Clubs and individual officers etc. had increased from Rs5.72 crores as on 30 June 1992 to Rs6.35 crores as on 30 June 1993.

8. Losses awaiting regularisation

Despite mention made in paragraph 10 of the Report of Comptroller and Auditor General of India, Union Government, Defence Services (Army and Ordnance Factory) for the year ended 31 March 1992 (No.8 of 1993) regarding losses awaiting regularisation, there is no progress as indicated below:-

(Rs in crores)

Year	No. of cases	Amount
1990-91	1114	70.86
1991-92	1185	71.48
1992-93	1225	117.01

Losses awaiting regularisation rose from 0.87 per cent in 1991-92 to 65.13 per cent in 1992-93 in comparison to the amount pertaining to 1990-91.

CHAPTER II

MINISTRY OF DEFENCE

9. Import of life expired ammunition

Mention was made in Paragraph 9 of the Report of the Comptroller and Auditor General of India, Union Government, Defence Services - Army and Ordnance Factories (No.8 of 1992) about import of old vintage ammunition with short shelf life as the contract for its import concluded in September 1987 did not stipulate any minimum residual shelf life for the ammunition to be supplied 'ex-stock'.

Based on two contracts concluded in September 1987, with the same foreign supplier, 18900 rounds of ammunition 'A' (cost: Rs19.06 crores) were received in a Central Ammunition Depot (CAD) between May and November 1990. It was noticed by the CAD that the ammunition lots were manufactured between 1973 and 1979. As the normal shelf life of the ammunition was 10 years, the ammunition received in India was shelf life expired.

On check proof of the ammunition, the Quality Assurance Establishment (QAE) recommended in May 1991,rejection of the entire quantity and advised the Directorate General of Ordnance Services (DGOS) to pursue quality claim already raised by that Establishment. In the meantime, DGOS intimated (February 1991) the CAD that the item had been recommended by Director General of Quality Assurance (DGQA) for early utilisation within three years being of old vintage and as its quality claim had not been accepted by the supplier. In view of the restriction in the usage of the ammunition in training to the extent of 75 per cent, DGOS directed CAD to consider the ammunition for issue to the user units in such a manner that they were expended by 1992-93. Accordingly, 15215 rounds of ammunition were issued during 1990-92 to various ammunition depots/units/formations leaving a balance quantity of 3685 rounds (value: Rs3.72 crores) which was still held by CAD as of December 1993.

In May 1991, DGOS informed CAD that the performance of the ammunition was satisfactory in dynamic proof and based on chemical analysis, a residual shelf life of three years could be assigned to the ammunition. However, due to paucity of stores/inadequate reserves, DGOS approached the DGQA in August 1991 to review their sentence to 'serviceable to be re-tested after three years'. QAE accordingly revised the shelf life of the ammunition as under:

(a)	For lots manufactured between 1973-75	To be re-tested after three years
(b)	For lots manufactured between 1976-81	To be re-tested after five years

In October 1991, DGOS imposed 100 per cent training restriction on the use of the ammunition in training to keep as reserve.

While accepting the facts as correct, Ministry of Defence (Ministry) stated in December 1993 that:

- the contracts were negotiated/concluded keeping in view the criticality of the item and various pertinent factors involving operational necessities;

- the foreign supplier had informed the Ministry that the ammunition lots of the same manufacturing period were in use in the Army of that country and as such they did not agree wit the technical views of DGQA.

The Ministry, however, did not elaborate as to whether the said ammunition whose shelf life had already expired before its receipt and which had been rejected by the QAE and recommended by DGQA for early utilisation, would serve the intended purpose in future operations.

The case reveals that:

(i) 18900 rounds of ammunition imported at a cost of Rs19.06 crores were received in 1990 with shelf life already expired.

(ii) Due to expiry of shelf life, the users were compelled to utilise the ammunition within a limited period to avoid de terioration.

(iii)A quantity of 3685 rounds valued at Rs3.72 crores were still (December 1993) held in stock.

10. Establishment of a National War Museum

Ministry of Defence (Ministry), in April/May 1984, decided to locate an Armed Forces Museum at Pragati Maidan, New Delhi. During negotiations, the Trade Fair Authority of India (TFAI) had indicated in May 1984 that the Ministry would have to pay either the entire cost of construction of the building or pay in advance three years rentals which were in the range of Rs5 to 6 lakhs per month. Considering the economics of the proposal, outright purchase of the building was considered advantageous by the Ministry of Defence (Finance).

Government sanction was issued in August 1986 for outright purchase of the 'Hall of States' at a cost of Rs6 crores and the amount was paid to the TFAI in March 1987.

In addition, TFAI were also to be paid annual ground rent at Rs200 per sq m for land measuring 17980 sq m. Accordingly though the Ministry has paid Rs1.10 crores between March 1989 and March 1993 on account of ground rent for 14,200 sq m for the period 1987-93 and the balance of Rs0.21 lakh was yet to be paid (June 1993), the National War Museum had not been set up so far due to high recurring cost, acute shortage of space and unsuitability of location.

The Ministry stated in February 1993 that although the 'Hall of States' had not been utilised for the setting up of the National War Museum because of problems of space, economy and location, there was no loss in this deal.

Ministry further stated in July 1993 that

- it was planned to construct an additional first and second floor area of 5140 sq m but as Ministry of Urban Development imposed restriction on any additional construction in the area they had fallen short of space;

- Ministry was the dejure owners of the building but the same has not been taken over so far as the space available was not adequate for establishment of a composite museum for all the three services; and

- the matter was further considered in consultation with Ministry of Urban Development and Delhi Development Authority and the Chiefs of Staff Committee were directed to take decision regarding the location of Museum at any of the three suggested sites including 'Hall of States' which was awaited.

The case reveals that:

- the 'Hall of States' was purchased without considering adequacy of its space with reference to the details of exhibits and their sizes etc. and Ministry did not indicate whether these details have been worked out by July 1993 even nine years after initiation of the proposal;

- the aim of establishment of a museum of National eminence has not been achieved even after more than six years (July 1993) of the payment of Rs6 crores. In addition, avoidable payment of Rs1.10 crores on account of ground rent has also been made; and

- the 'Hall of States' purchased in 1987 had not been physically taken over so far (July 1993).

11. Non-utilisation of an imported equipment

A vital equipment imported at a cost of Rs54.40 lakhs against a contract concluded in September 1987 was received at an Embarkation Headquarters (HQ) in February 1989 and was sent to a Central Ordance Depot instead of an Advance Base Ordnance Depot (Depot), the actual consignee, who ultimately received it in May 1990. The contract provided the guarantee period of twelve months from the date of delivery viz. upto February 1990 and the quality claims could also be presented within the guarantee period.

The inspection, however, could not be completed due to non-availability of literature in English language as the literature received alongwith equipment was in Russian language. The literature was made available to the Russian Language Translation Cell (RLTC) by Army HQ in April 1991 for translation and translation could be completed only in December 1993 by RLTC and was being despatched to the depot.

As a result, inspection of the equipment was also yet to be carried out (December 1993).

Ministry of Defence stated in December 1993 that :

- this equipment could not be inspected due to non-availability of literature in English language and the receipt/acceptance inspection was likely to be completed shortly; and

- there had been lack of co-ordination between some of the Organisations involved in receipt, storage and inspection of this equipment due to which there was undue delay in receipt and its inspection.

Thus, the receipt/acceptance inspection of an imported equipment costing Rs54.40 lakhs could not be carried out even after three years of its receipt in the depot in May 1990 and the guarantee period provided for in the contract had also already expired in February 1990.

12. Avoidable expenditure due to delay in issue of corrigendum

In February 1990, Ministry of Defence (Ministry) accorded sanction for the construction of married accommodation for Junior Commissioned Officers/Other Ranks of an Infantry Battalion at station 'A' at an estimated cost of Rs155.93 lakhs.

In August 1990, the Zonal Chief Engineer (CE) initiated a draft corrigendum amending the cost of work to Rs193.42 lakhs due to cost escalation and change in the scope of work.

The tenders for the main building work and external services were issued by the Zonal CE in December 1990 and were received back in February 1991. The lowest tenderer, who had quoted an amount of Rs1.84 crores, had kept the validity of his offer open upto 13 May 1991.

The amount available in the sanction accorded in February 1990 was not sufficient to accept the lowest tender. The Zonal CE, therefore, requested (16 February 1991) Engineer-in-Chief's (E-in-C) Branch to expedite the approval of corrigendum by the Ministry. The corrigendum was, formally issued by the Ministry only on 10 May 1991 and which was received by the Zonal CE on 21 July 1991. Meanwhile the contractor was asked to extend the validity date but he refused to do so. The contract, therefore, could not be concluded.

Ministry admitted (October 1993) that the scrutiny and the final issue of the corrigendum took considerable time but attributed the delay to multilevel appraisal system of such cases. This contention is not tenable as an abnormal time of thirty five days was taken to issue a formal corrigendum even after its approval by Ministry on 4 April 1991 and also despite the knowledge that the validity of the tender was only upto 13 May 1991.

Consequently, Zonal CE re-issued tenders in June 1991 and the contract was finalised for a sum of Rs1.98 crores in March 1992.

The case reveals that delay in issue of corrigendum by the Ministry resulted in an avoidable expenditure of Rs14 lakhs.

13. Import of defective image intensifier tubes

Mention was made in Paragraph 16 of the Report of the Comptroller & Auditor General of India, for the year ended 31 March 1989 No.12 of 1990, Union Government, Defence Services (Army and Ordnance Factories) about procurement of passive night vision device (PNVD) for tanks under modernisation scheme in excess of the approved quantity during the sixth army plan (1980-85). Fulfilment of the scheme was fully dependent on import of image intensifier tubes (tubes) for fitment in PNVD.

Ministry of Defence (Ministry) placed an order in September 1989 on a foreign firm for procurement of 1000 tubes at a cost of Rs2.44 crores. The tubes were received during June-September 1990 in four consignments in a Central Ordnance Depot (COD). On inspection carried out by Controllerate of Quality Assurance, 32 tubes costing Rs7.80 lakhs were found defective for which four discrepancy reports were raised against the foreign supplier during September - October 1990. Army HQ informed COD in November 1990 that the matter had been referred to Ministry for approval of back-loading of the defective tubes. However, despite repeated reminders Ministry did not furnish any advice/approval.

Thus 32 defective tubes imported at a cost of Rs7.80 lakhs were still lying in the COD (December 1993) for more than three years.

While accepting the facts the Ministry stated (December 1993) that relevant file was not traceable inspite of best efforts and that matter had again been taken up with the foreign firm.

CHAPTER III

ARMY

14. Remounts in the Army

14.1 Introduction

Remount and Veterinary Corps (RVC) is responsible for breeding, rearing and training of equines for the Army. It provides animals (generally mules) to the Animal Transport (AT) Units and horses to the President Body Guard as well as other Cavalry Units.

14.2 Organisational Set up

RVC is controlled by Additional Director General who functions under Quarter Master General's (QMG's) Branch. It has two Equine Breeding Studs (EBS) at Hissar and Babugarh for breeding of horses and mules and two Remount Training School and Depots (RTS&D) at Hempur and Saharanpur for rearing, training and issue of remounts. With expansion of breeding base in 1985,these depots are now performing the role of breeding also. The Corps has one RVC Centre and School at Meerut for imparting training to Officers, Junior Commissioned Officers and Other Ranks of RVC and other Arms/Services and one Record Office at the same station.

14.3 Scope of Audit

Sanction and deployment of manpower, holding of breeding stock and other animals in studs/depots, issue of animals after training to the user units, disposal of sub standard animals, cultivation of land, utilisation of training capacity were reviewed in audit. The period covered was generally 5 years from 1988-89 to 1992-93.

14.4 Highlights

- **The employment of riders in excess of the authorisation as per PEs of two training Depots resulted in extra expenditure of Rs3.22 crores.**

(Paragraph 14.5.1)

- Excess employment of syces/safaiwalas in EBS Hissar and EBS Babugargh resulted in avoidable expenditure of Rs60.40 lakhs.

(Paragraph 14.5.2)

- Excess employment of certain categories of staff in excess of the authorisation in EBS Babugarh resulted in avoidable expenditure of Rs30 lakhs.

(Paragraph 14.5.3)

- Even on transfer of basic military training from RVC Centre to another training centre the training staff sanctioned for this continued in the RVC centre resulting in extra expenditure of Rs11.52 lakhs.

(Paragraph 14.5.4)

- The training capacity in two wings in RVC Centre and School remained underutilised to the extent of 28 to 48 per cent and 48 to 57 per cent.

(Paragraphs 14.6.2 and 14.6.3)

- Against the training capacity of 196 horses and 3168 mules in the two training depots, the number of horses and mules under training was only 71 to 157 and 106 to 419 respectively indicating that training capacity was largely underutilised.

(Paragraph 14.6.4)

- In the two equine breeding studs only 78 to 79 per cent of brood mares were upto 16 years of age and 9 to 13 percent of brood mares were over 20 years of age even though the peak breeding efficiency of brood mares was between six to sixteen years. The annual expendiutre on brood mares over 21 years of age amounted to Rs 7.96 lakhs.

(Paragraph 14.7.1.1)

- In EBS Hissar 23 brood mares continued to be held evenafter they remained non productive for one year. In EBS Babugarh, the fertility of mountain artillery mule breeding mares declined from 57 per cent in 1990 to 29 per cent in 1993.

(Paragraph 14.7.1.2)

- **As of February 1994, 915 trained mules were available for issue and 183 trained mules allotted to units were awaiting collection/disposal. The accumulation was due to lack of demands from user formations. Non-issue of trained mules caused avoidable recurring expenditure of Rs4.40 lakhs per month.**

(Paragraph 14.7.2)

- **Matured mules awaiting issue in RTS&D Saharanpur rose from 92 in 1989-90 to 544 in 1992-93 involving an expenditure of Rs 1.04 crores in their maintenance and these mules had no work in the Depot.**

(Paragraph 14.7.2)

- **RTS&Ds at Hempur and Saharanpur incurred an expenditure of Rs68.32 lakhs on maintenance of surplus animals during 1991-92 and 1992-93.**

(Paragraph 14.7.3)

- **There were at present 355 animals surplus with all user units except depots and studs. Delay in their disposal was resulting in an avoidable expenditure of Rs1.70 lakhs per month.**

(Paragraph 14.7.3.2)

- **Shortfall in production of fodder in RTS&D Saharanpur was 62257 MT green fodder in addition to shortfall in production of seeds costing Rs4.09 crores.**

(Paragraph 14.8.3)

- **Due to non implementation of a cheaper and suitable substitute in animal ration a saving of Rs2.00 crores per annum could not be achieved.**

(Paragraph 14.8.5)

14.5 Manpower

14.5.1 Holding of excess riders

The Peace Establishment(PE) of RTS&Ds authorised 144 riders for the training schools. The General note of the PE provides for adjustment of riders when the number of animals held for training exceeded or fell below 1682 at the rate of one rider each for every 2 horses and 18 mules.

The number of riders actually employed was, however, in excess of the number of riders authorised as per norms in the PE of RTS&Ds. Extra expenditure on employment of excess riders in RTS&D Saharanpur during the last five years from 1989 to 1993 was Rs1.84 crores as per details shown below :

Period	No. of animals held under training as per strength returns				No. of riders autho-rised under sliding scales	No. of ride-rs post-ed	Excess riders posted	Expen-diture on ex-cess riders (Rs.)
	Horses	Mules	Young stock	Total				
March 1989	50	100	-	150	25	159	134	29,80,562
March 1990	50	100	-	150	25	159	134	34,08,826
March 1991	39	100	16	155	27	154	127	36,20,008
March 1992	-	-	46	46	23	150	127	42,08,780
March 1993	35	74	16	125	25	141	116	41,72,868
								1,83,91,044

Similarly on account of excess employment of riders in RTS&D Hempur for the last five years there was extra expenditure of Rs1.38 crores.

Army HQ stated in March 1994 that horses and mules were taken up for regular training on attaining the age of 4 and 3.5 years respectively till issued to units. They added that peace establishment did not imply that 1682 animals remain under training. This contention is not tenable as the number of animals under training as per strength returns of the Depots had been far below 1682 and peace establishment specifically provides for adjustment of riders when the number of animals held for training exceeded or fell below 1682.

14.5.2 Excess holding of syces and safaiwalas

Syces/Safaiwalas actually posted in EBS Hissar/Babugarh exceeded the authorisation based on number of animals held. This resulted in avoidable extra expendiutre of Rs31.5 lakhs and Rs28.9 lakhs respectively during the last 5 years as shown below:

(i) **Hissar**

Year	Authorisation of Syces+Safaiwala based on animal strength in March every year	Held: Regular	Held: Casual labour	Held: Total	No. of excess labour	Average wages per day (Rs)	Annual extra expenditure (Rs.in lakhs)
1988-89	271+29 = 300	190	182	372	72	18.50	4.8
1989-90	292+29 = 321	251	116	367	46	22.75	3.8
1990-91	269+29 = 298	251	112	363	65	24.93	5.9
1991-92	261+29 = 290	267	100	367	77	30.69	8.6
1992-93	256+29 = 285	260	95	355	70	33.00	8.4
					330		31.5

(ii) **Babugarh**

Year	Authorisation of Syces+Safaiwala (as intimated by Army HQ)	Held: Regular (as intimated by Army HQ)	Held: Casual labour (as per report on daily rated labour)	Held: Total	No. of excess labour	Average wages per day (Rs)	Annual extra expenditure (Rs.in lakhs)
1988-89	342	276	164	440	98	15.10	5.4
1989-90	336	270	143	413	77	16.15	4.5
1990-91	330	276	133	409	79	20.05	5.8
1991-92	330	288	130	418	88	20.05	6.4
1992-93	315	285	114	399	84	22.10	6.8
					426		28.9

EBS Hissar stated (July 1993) that if the average monthly number of animals held and syces/safaiwalas employed on daily basis were taken into account, the surplus would be 262. They added that syces were employed only for 24 days in a month as such the number actually available throughout the month would be 24/30 of total syces employed. This contention is not tenable as audit had calculated the number of casual syces/safaiwalas by dividing total mandays for a year by 365 and not by 288. As such the argument advanced in the reply is not tenable. Even if the figures of surplus syces indicated by EBS Hissar were accepted there was an extra expenditure of Rs25.76 lakhs.

Army HQ stated in March 1994 that actually less labour was employed than actual entitlement. This contention is not tenable as Army HQ did not take into account casual labour employed as "working in lines" and "chaffing of fodder with power machines in lines" by EBS Babugarh against the holding of syces. As regards EBS Hissar even if the figures given by Army HQ were accepted there was an extra expenditure of Rs25.76 lakhs as brought out in the preceding sub para.

14.5.3 Excess employment of Chowkidar/Beldar/Farrier/ Dresser in EBS Babugarh

Although there was no provision in the footnotes to the PE for employing Chowkidars and Beldars and the number of animals held in the stud during 1988-89 to 1992-93 ranged from 1112 to 1363 against the authorisation of 1488/1393 yet the posted strength of Chowkidars/Beldars/Farriers/Dressers exceeded the authorised strength during the last five years. In fact the strength of dressers and nalbands/farriers should have been less than the authorisation as provided in the foot note to the PE. An avoidable expenditure on excess of staff amounted to Rs30 lakhs as shown in annexure I.

Army HQ stated in March 1994 that :

- to guard against the valuable stock of fodder against sabotage and to meet additional requirement of chowkidars during harvesting season casual labours were employed;

- casual labours were employed to assist Beldars for operation of tube wells, harvesting, spreading manure etc.;

This contention is not tenable as there was no provision in the footnotes to the peace establishment for employing additional chowkidars and Beldars over and above the specific authorisation given therein.

Army HQ further stated in March 1994 that 14 to 16 farriers were authorised as per PE and posted strength was well within the authorisation. This contention was not tenable as according to PE 12 Nalbands/farriers are authorised for 1538 animals and the number of animals held had always been less than 1538. Army HQ added that dressers became surplus due to reduction in animal transport. This contention is not tenable as reduction in animal transport commenced in 1992 and reply was silent about the time frame for remustering them.

14.5.4 Continued holding of staff for Basic Military training in RVC Centre

RVC Centre and School, Meerut was designed to impart training to 469 recruits of which 100 were to be trained in basic military training. In December 1990, Chief of Army Staff decided that basic military training of recruits of RVC will be carried out at Jat Regimental Centre. Even after transfer of basic military training from June 1991 onwards to Jat Regimental Centre the staff allocated for basic military training in the PE of RVC Centre was not transferred elsewhere resulting in an extra expenditure of Rs11.52 lakhs on their pay and allowances from June 1991 to March 1993.

Army HQ stated in March 1994 that post commission training of young officers and all upgradation and promotion cadres for ORs were still being carried out in the centre and the services of meagre instructional staff was fully utilised. This contention is not tenable as according to PE certain staff was specifically sanctioned for basic training in addition to substantial staff sanctioned for technical training and duty squadron and there is no justification for continued holding of instructional staff without approval of Government when basic training had been transferred.

14.6 Training

14.6.1 Delays in training and posting of recruits

There were delays in commencement of basic training in respect of 61 recruits of RVC in the year 1992-93 ranging from 1 to 5 weeks in respect of 36 cases, 6 to 10 weeks in respect of 17 cases and 11 to 15 weeks in respect of balance 8 cases. The extra expenditure involved on those recruits amounted to Rs2.41 lakhs. Further there were also delays upto 6 months in despatch of 37 recruits for technical training and posting of 19 trained soldiers to units on completion of training during 1992-93 involving an expenditure of Rs3.33 lakhs and Rs1.71 lakhs respectively.

Army HQ stated in March 1994 that recruits arrived in centre singly/in twos or threes and held till a batch of 15-20 was formed and there were also delays in despatch of recruits on completion of training. No remedial measures to overcome the delays were indicated in reply.

14.6.2 Under utilisation of veterinary/Farriery troop training capacity

The annual capacity available in Veterinary/Farriery wings of the RVC centre and school was 5980 trainee weeks. However, actual utilisation of trainee weeks during 1988-89 to 1992-93 ranged from 3131 to 4328. The under utilisation was to the extent of 28 to 48 per cent. Out of 15 courses run during 1988-89, shortfall in 4 courses was to the extent of 10 to 60 per cent while during 1989-90,the shortfall in 5 courses was to the extent of 20 to 100 per cent. Similarly the shortfall in 1991-92 and 1992-93 in 8 courses was to the extent of 10 to 50 per cent and 10 to 60 per cent respectively.

Army HQ stated in March 1994 that under utilisation of capacity was due to reduction in animal transport and non availability of adequate number of individuals for promotion/upgradation courses. According to them under utilisation of capacity was 4 to 29 per cent in different years. The contention of Army HQ regarding extent of under utilisation is not tenable as available capacity was taken by Audit from the PE and the number of individuals who attended various courses as furnished by the Centre.

14.6.3 Under utilisation of training capacity for dogs

RVC Centre and School Meerut was "designed to train 50 dogs at any one time" and in addition hold another 75 dogs and pups. The dog training wing of the centre is authorised to hold 59 personnel.

The total number of dog weeks available for training worked out to 2600 (50X52) against which dog weeks actually utilised during 1988 to 1991 ranged between 1116 to 1356 which indicates under utilisation of dog training capacity to the extent of 48 to 57 per cent as shown in annexure II.

14.6.4 Under utilisation of Animal Training Capacity in Remount Depots

General Note to the PE of the two RTS&Ds provides for adjustment of riders if the horses/mules held for training exceeds or falls below 98 and 1584 respectively. Thus the two RTS&Ds were designed to train 196 horses and 3168 mules.

The number of horses and mules actually trained in the depots during the last five years ranged between 71 to 157 and 106 to 419 respectively. Thus, training capacity of Depots largely remained under utilised.

Army HQ stated in March 1994 that PE did not imply that 1682 animals would remain under training which was physically impossible. This contention is not tenable as PE caters specifically for adjustment of riders when the number of animals held for training exceed or fell below 1682.

14.7 Animals

14.7.1 Breeding

In April 1985, the breeding base of RVC was expanded by the Ministry of Defence from 2700 animals to 3973 animals (3766 mares and 207 stallions) to achieve self sufficiency in production of the animals. The additional requirement of animals was met by spending a sum of Rs7.06 crores on import of breeding stock. The actual holding of brood mares in July 1993 was 2822.

Even on holding 2822 brood mares there were still surplus animals both with Army and Remount Depots as mentioned in Para 14.7.3 and 14.7.3.2. Therefore, it is felt that the existing breeding stock was more and the authorisation of 2255 brood mares, as suggested by a study group in 1991, was more realistic and should have been adopted. Holding of 567 brood mares, in excess of the number recommended by study group, is resulting in recurring extra expenditure of Rs1.80 lakhs per month.

The authorisation of breeding animals was reduced from 3973 to 3562 in 1992-93, proportionate reduction in staff on this account was not made in the PEs of the depots/studs, although QMG's Branch had requested in October 1991 for review of PEs and arrange disposal of officers rendered surplus.

Army HQ stated in March 1994 that in the absence of any executive order on extent of reduction indicated in the report of the study group, no reduction in breeding base was possible. They added that the employment of manpower was as per sliding scales permissible on the PEs and thus, no extra expenditure was incurred. This contention is not tenable as the sliding scales in the PEs do not cover all categories of staff/officers and no revision had been made. For example the authorisation of officers prior to reduction of breeding stock still continues to be kept unchanged by the Equine Breeding Studs at Hissar and Babugarh and depot at Saharanpur and actual holding had not been less than this authorisation.

14.7.1.1 Holding of overaged breeding stock

In general, the peak breeding efficiency of brood mares is six to sixteen years of age although no specific age has been laid down for culling brood mares. The percentage of productive breeding stock of upto 16 years of age held in Babugarh and Hissar as of March 1993 was 78 to 79 per cent only. Holding of overaged brood mares of 21 to over 24 years of age (223 numbers) constituting 9 to 13 per cent of the total holding lacks justification. Annual maintenance expenditure on these 223 overaged animals of 21 years and more of age worked out to Rs7.96 lakhs.

Army HQ stated in March 1994 that the brood mares were retained based on their past performance and with a view to maintain good germplasm. There was no indication in reply as to how many out of 223 mares produced foals or were pregnant.

14.7.1.2 Fertility of brood mares and stallions

The fertility of brood mares at EBS Babugarh as of January each year, during 1990 to 1993 was as under:

	Percentage of fertility			
	1990	1991	1992	1993
MAMBBM				
for Mules	57	51	31	29
for Horses	59	30	43	53
GSMBBM				
for Mules	59	58	36	50
for Horses	71	53	NA	54

The above table reveals that fertility of MAMBBM for Mules had been continuously decreasing from 57 per cent in 1990 to 29 per cent in 1993. The percentage of fertility of GSMBBM for horses had also came down from 71 per cent in 1990 to 54 per cent in 1993.

Army HQ stated in March 1994 that the decline in fertility was not alarming and remedial/control measures to plug the loop-holes were constantly being enforced.

EBS Hissar incurred an expenditure of Rs1.66 lakhs on retention of 23 overaged brood mares even after one year of their remaining unproductive. Fertility of stallions at RTS&D Saharanpur during the last 5 years was only 15 to 21 per cent.

14.7.2 Retention of trained mules available for issue in Depots

Trained GS mules awaiting issue by the RTS&D Saharanpur had been increasing during 1989-90 to 1992-93 resulting in an expendiutre of Rs1.04 crores on maintenance of trained mules which had no work in the depot during this period as shown below:

Year	Number of matured mules available for issue	Total maintenance expenditure during the year (rates as per total cost *proforma* (in Rs.)
1989-90	92	6,38,296
1990-91	357	23,99,040
1991-92	510	35,09,081
1992-93	544	38,92,037
		1,04,38,454

Army HQ stated in March 1994 that trained mules accumulated due to decline in animal transport (AT) requirements, disbandment of AT units and lack of forecast planning by general staff. They added that as on date 915 trained mules were available for issue and 183 were awaiting collection by various units or disposal by public auction. It was not clear whether simultaneous action for sale or otherwise of animals rendered surplus on disbandment of AT units was considered.

Thus, increasing accumulation require prompt action for issue/disposal as non-issue of trained mules is causing avoidable recurring expenditure of Rs4.40 lakhs per month.

14.7.2.1Delay in issue of trained animals to user units by depots

The animals were actually issued by the two Depots even after more than a year of the prescribed age for issue to units as shown in annexure III.

Percentage of the number of horses issued 1 to 3 years after the prescribed age to the total number of horses issued by the Hempur Depot during 1988-89 to 1992-93 ranged between 23 to 48 percent while the similar percentage in respect of mountain artillery mules in that Depot was as high as 81 percent during 1992-93.

The percentage of Horses, Mules GS and Mules MA issued after 1 to 3 years of the prescribed age in Saharanpur Depot ranged between 55 to 71, 19 to 37 and 34 to 100 per cent respectively.

Army HQ stated in March 1994 that requirement of animals dwindled suddenly due to development of road communications at the border and improvement in relations with adversary. They added that accumulation was due to reduced/lack of demand from users and not due to lack of will for issue on the part of RTS&Ds. No remedial measures to prevent continuance of unfruitful expenditure on production and training of animals in view of reduced demand from users were indicated in reply.

14.7.3 Holding of surplus and sub-standard animals

Overall holding of animals in the two depots had been in excess of authorisation during 1991-92 to 1992-93 which included a large number of sub-standard animals also. Sub-standard animals, however, outnumbered the surpluses. The expenditure on maintenance of sub-standard animals during the last two years was Rs87.68 lakhs which included Rs68.32 lakhs spent on maintenance of surplus animals as shown below:

Year	Animals held		Total holding	Total authorisation	Surplus	No.of substandard animals	Annual maintenance expenditure on surplus animals (Rs.)	Annual maintenance expenditure on substandard animals (Rs.)
	Hempur	Saharanpur						
1991-92	3494	3970	7464	7292	172	485	9,84,356	27,75,655
1992-93	3672	4460	8132	7119	1013	1038	58,48,049	59,92,374
							68,32,405	87,68,029

Army HQ stated in March 1994 that surpluses accumulated due to reasons mentioned against paragraph 14.7.2 and 14.7.2.1. The reply is silent about disposal of these animals.

14.7.3.1 Delay in disposal of sub-standard mules

Mention was made in paragraph 27 of the report of the Comptroller and Auditor General of India, Union Government, Defence Services (Army and Ordnance Factories) for the year ended 31 March 1989 about purchase of sub-standard mules during August 1987 to November 1988. In their Action Taken Note, the Ministry had stated in December 1991 that sub-standard mules were held against Army's authorisation of GS and maintenance reserve and instructions had been issued to RTS&D Hempur to issue them to AT coys not deployed in high altitude. In August 1993, RVC Directorate intimated that these animals could not be issued to units as the case was sub-judice and ban imposed on issue of these animals to units had been lifted in December 1991. Disposal orders for 128 mules to ASC centre (North) were, however, issued in July 1993 and 52 animals were still awaiting disposal (January 1994).

Army HQ stated in March 1994 that animals had now been issued. It did not indicate as to why were the sub-standard animals not disposed of when good quality trained mules were available.

14.7.3.2 Delay in disposal of surplus animals

In order to adjust overall surpluses in four Army commands including ASC Centre (North) and AT Units,Army HQ, in December 1992, issued policy instructions for disposal/transfer of 629 surplus including 559 overaged mules GS and 306 overaged mules MA including 55 surplus. There were 75 overaged including 12 surplus horses also.

Army HQ RV Dte stated in July 1993 that out of 559 overaged mules GS, 341 mules had been cast and remaining 218 mules will be back loaded to RTS&D Saharanpur in due course. Information regarding disposal of 306 substandard overaged mules MA and 75 substandard overaged horses was, however, not given. Delay in disposal of 355 surplus animals is resulting in avoidable expenditure of Rs1.70 lakhs per month on account of maintenance of these surplus animals.

14.7.3.3 Unauthorised attachment of horses

According to instructions of April 1982 RTS&D Saharanpur was authorised to hold reserves (General Service Reserve and

Maintenance Reserve) as shown below :

Horses	Mules MA	Mules GS
99	148	472

To enable the Officers of the department to continue with riding as and when they are posted out to units where horses are not authorised and to RVC units where horses are not specifically authorised for use by officers for essential duties or to play Polo etc. horses are issued from the convenient Remount depots as 'On Command' out of its authorised reserve holdings.

It was, however, observed that large number of horses in excess of authorised reserves was provided by RTS&D, Saharanpur to various units as shown under :

Year	Authorised reserve for horses	Total horses issued	Number of horses issued in excess of authorised reserve
1988-89	99	212	113
1989-90	99	276	177
1990-91	99	249	150
1991-92	99	218	119
1992-93	99	338	239

Thus 113 to 239 horses were issued over and above the prescribed reserves during the years 1988-89 to 1992-93. Not only the horses were issued in excess of reserve but also issues were made to units which had no RVC officers.

Army HQ stated in March 1994 that Quarter Master General had been apprised of this observation and corrective action would be taken on their orders.

14.8. Other points of interest

14.8.1 Non recovery of rent from UPSEB

In May 1978, a power sub-station and 12 residential staff quarters were constructed by Uttar Pradesh State Electricity Board (UPSEB) on defence land at EBS Babugarh. According to

EBS Babugarh (February 1988) Hydel department was permitted to commission the sub station on defence land to ensure continuous supply to the defence unit. Regarding recovery of land rent from UPSEB, RV Directorate informed Audit in September 1993 that action to recover the land rent from UPSEB was to be taken by Defence Estates Officer(DEO). The DEO, however, stated in October 1993 that no records for occupation of defence land by UPSEB were available in their office and called for these details. Thus, no land rent has been recovered from UPSEB even after 15 years of construction of staff quarters by UPSEB on defence land.

Army HQ stated in March 1994 that the EBS was again being instructed to resolve the issue at the earliest.

14.8.2 Splitting up of demands for local purchase

Commandant of RTS&D Saharanpur is empowered to resort to local purchase of stores upto Rs4000 and sanction of Additional Director General of RVC was required for local purchases upto Rs20,000. Demands exceeding Rs20,000 were to be sanctioned by Government. During 1988 it was, however, observed in Audit that demands of particular items for local purchase were being split by RTS&D Saharanpur. Commandant RTS&D stated in October 1988 that in future purchases of similar items would be grouped for obtaining sanction of competent financial authority.

It was, however, observed in August 1993 that in a large number of cases frequent local purchases of stores continued to be made in piecemeal just to bring the local purchases within the powers of commandant RTS&D Saharanpur. During 1990-93 demands amounting to Rs5.38 lakhs were split up.

Army HQ stated in March 1994 that instructions had been issued to prevent such lapses in future.

14.8.3 Cultivation - Low production of fodder/seeds

It was observed that during the last 5 years RTS&D Saharanpur could not meet the production targets fixed by Army HQ twenty years back. Besides a shortfall of 62257 MT on production of certain green fodder items, there was a shortfall of production of seeds worth Rs4.09 crores.

Army HQ stated in March 1994 that latest farming procedures and available technical knowledge were being adopted to achieve maximum production of grains and fodder. No reasons were, however, given for shortfall in production.

14.8.4 Non-accountal of wood and grains

During the last five years the depot at Saharanpur obtained wood valuing Rs37.25 lakhs from the farm land and produced grains costing Rs35.14 lakhs as per details shown below :

Year	Value of wood obtained Rs	Value of grains Rs
1988-89	11,40,552	8,59,273
1989-90	6,18,464	4,24,119
1990-91	9,26,262	4,26,717
1991-92	4,15,796	10,19,967
1992-93	6,23,516	7,84,225
Total :	37,24,590	35,14,301

However, the depot authorities were unable to furnish any records of utilisation/sale proceeds in respect of these items.

Army HQ stated in March 1994 that necessary directions were being issued to all concerned for compliance.

14.8.5 Non accrual of savings due to delay in replacement of gram by ground nut cakes in animal ration

In March 1987, Ministry of Defence sanctioned a research project for replacing gram by groundnut cakes to horses and mules in Army. The project was completed in March 1990 at a cost of Rs0.97 lakh. The effect of replacing gram with groundnut cake to the horses/mules of Army was tried out on a limited number of animals in peace and field stations and no untoward digestive disturbances by feeding groundnut cake was seen on the animals rather the weight records of animals indicated significant gains.

It was brought out in the project report that it is essential to economise on the animal ration by replacing gram with high protenous cake, the availability of which was in plenty and economical. The research report, taking into account the strength of horses and mules in Indian Army, estimated an approximate saving of Rs.2 crores per annum by introducing groundnut cake in place of gram in animal ration.

Army HQ stated in March 1994 that Government sanction for extended trials in different sectors, terrain and climatic conditions was issued in January 1993, provisioning action for requisite ingredients was initiated and further progress would be intimated in due course.

Thus, due to non-implementation of a cheaper and suitable substitute in animal ration, savings of approximately Rs2.00 crores per annum could not be achieved so far.

The review was issued to the Ministry In December 1993; their reply had not been received (February 1994).

Weaponry and allied equipment

15. Establishment of an indigenous Tankodrome

To provide operational practice facilities to the personnel of the armoured regiments in firing from tank guns on the electronically controlled moving and static targets, requirement of computerised and radio linked advanced training centre (Tankodrome) at Station 'X' was conceived in 1975. Tankodrome was to have two sub-units viz, the Tank Directric (TDX) to train a squadron in collective battle practice and the Tank Firing Ground (TFG) to train individual tank crew in stabilised shooting. Ministry of Defence (Ministry) accorded comprehensive sanction in July 1982 for the project at a cost of Rs601.00 lakhs, including the adhoc sanction of Rs 90 lakhs accorded in January 1981. The probable date of completion (PDC) of the project was fixed as December 1986.

Against Rs269 lakhs sanctioned in July 1982 for civil works an expenditure of Rs512.72 lakhs had been incurred as of June 1993.

In respect of TFG area, at the designing stage, it was noticed in December 1982 that 553 acres of land earmarked was not Defence land. Subsequently, 536.49 acres of land was acquired between May 1986 and March 1988, which was no longer required for TFG project. Ministry, however, stated (September 1993) that the land was being utilised gainfully at the ranges.

Meanwhile, on the basis of the recommendations of a board convened in October 1987, it had been decided in September 1988 that the TFG Project be done away with and co-located with TDX, in order to use the common targets and control equipment facilities thereby reducing the over-all-cost.

An order was placed on a firm for supply, installation and commissioning of electronic control and target equipment in January 1987 at a cost of Rs487.32 lakhs. Against this, the electronic equipments costing Rs374.60 lakhs were received at the site by the users during April 1987 to June 1989 and an amount of Rs273.39 lakhs was paid during January 1987 to November 1990. The balance of Rs 101.21 lakhs was to be paid on commissioning of Tankodrome. The field trial team, after conducting trial in April-May 1987, had recommended certain modifications to improve the functional efficiency of the equipment. However, when the testing out trials were conducted in August 1990, it was observed that the mechanism so far developed did not provide the users with a state-of-the-art system for quantifying gunnery standards attained. This was reiterated in January 1991 when it was observed that redesigning, sorting out and evaluating the technic aspects were necessary in order to make the automation system trust worthy.

Ministry stated (September 1993) that:

- Civil work for TFG could not be taken in hand initially as the land required for locating it was under dispute and thereafter when TFG was shelved at the original location and co-located with TDX which had resulted in a saving of Rs33.93 lakhs.

- Equipments supplied by the firm were not taken over, as they were yet to make the system functional after successful technical trials. Hence, the deprivation of training facility to troops was unavoidable.

The fact, however, remains that the co-location of TFG with TDX was decided after more than one and half year of the original PDC and Ministry did not clarify as to why this co-location was not considered earlier or at the initial planning stage.

The case revealed that:

- The Tankodrome project expected to be commissioned by December 1986 had not become operational so far (September 1993) even after incurring an expenditure of Rs786.11 lakhs.

- Non-availability of land earmarked for TFG came to notice after seven years of the first recee-cum-siting Board at the designing stage of TFG and its co-location with TDX was decided after more than one and half year of PDC.

- The electronic equipment for which an amount of Rs273.39 lakhs has already been paid to the firm between April 1987 to November 1990 had not been taken over (September 1993) as the firm had not been able to demonstrate the functionability of all the equipment as a system due to persisting defects.

- The operational training facility could not be made available to the troops even after six and half years (September 1993) of PDC.

16. Non-utilisation of degreasing plants

Army Headquarters (HQ) placed an indent in April 1985 for procurement of six degreasing plants (Plants) on Director General of Supplies and Disposals (DGSD) to be supplied by March 1986. In July 1986, another indent was placed for procurement of additional 21 plants to be delivered by March 1987. These plants were required for removing oily and greasy substances from the surface of metal articles during and after the manufacturing process.

DGSD concluded a contract in June 1987 for supply of 21 plants at a total cost of Rs 10.31 lakhs on Firm 'A' for delivery by Febraury 1988. The quantity on order was subsequently increased to 27 plants in August 1987 at the total cost of Rs13.26 lakhs. The delivery was later extended to November 1988. The consignees for the plants were 507 Army Base Workshop (ABW) and Central Ordnance Depot (COD) Delhi Cantonment. These plants were received by the COD/ABW during August to November 1988.

Two plants received at 507 ABW were commissioned in July 1989. The balance 25 plants were received by COD in August-November 1988. Of these three plants were issued to 508 ABW in February 1990 who approached the firm in April 1990 for installation and commissioning of the plant as per terms of the contract who declined to install and commission the plants free of cost at any other site except the COD. The plants were installed and commissioned by the workshop through their own resources and expertise.

Further, 13 plants costing Rs6.38 lakhs were issued by COD to various units after about three years of their receipt in April/June 1991. Ministry stated (February 1994) that these plants were installed and commissioned by them within their own resources. The balance of nine plants costing Rs4.42 lakhs are still being held by COD for more than 5 years. Ministry stated (February 1994) that efforts were now being made to identify Electrical and Mechanical Engineering (EME) units to which these remaining plants could be issued.

Thus the contract concluded in June 1987 for the supply and commissioning of the plants was not specific about their installation and commissioning at locations desired by the consignees. As a result the issue of erection and commissioning of the plants was yet to be resolved (February 1994).

Meanwhile the annual provision review (APR) of October 1990 revealed that 24 degreasing plants were surplus due to deletion of item from the entitlement of units.

The Ministry stated (February 1994) that as per clause 19(a) (ii) of the contract, erection and commissioning of the plants was to be executed by Firm 'A' free of cost and 10 per cent payment will be made only after final commissioning of plants. However, in the opinion of Ministry of Law it would be difficult to force the firm legally to erect and commission the plants at different sites.

To sum up:

- 27 plants costing Rs 13.26 lakhs were procured in August-November 1988 but the contract did not specify the places at which the plants were to be erected and commissioned. Due to this lacuna, only two plants could be commissioned by the firm, 16 plants were erected and commissioned through their own resources while 9 plants are still held by COD for the last five years;

- due to unrealistic assessment of the requirement, degreasing plants were procured in excess resulting in unfruitful expenditure of Rs11.78 lakhs.

17. Import of a defective equipment

A Central Ordnance Depot (COD) placed (December 1984) an operational indent on the Supply Wing of an Indian Mission abroad for procurement of a computerised automatic calibration system (equipment) for arranging delivery by June 1985. Based on this indent, Supply Wing placed in September 1986 a purchase order at Rs13.02 lakhs on a foreign firm for the supply of equipment by 30 January, 1987. The consignment containing the equipment was received in COD in November 1987, where it could not be installed for want of proper environment.

In March 1989 COD approached the Supply Wing informing that on inspection carried out by Senior Quality Assurance Establishment (local) in February 1989, the equipment was found defective and requested that the matter be taken up with the foreign supplier to replace the defective equipment or to make arrangements to rectify its defects free of charge. Supply Wing informed in September 1989 that this warranty claim could not be enforced as it was not lodged within the warranty period viz. before 19 March, 1988. The equipment in its defective state was delivered to an Army Base Workshop (ABW) in March 1989.

The Indian agent of the foreign firm informed ABW in June 1989 that two main parts of the equipment were defective. In June 1990, the Indian agent informed ABW that five parts needed replacement and requested to arrange those parts to enable them to proceed further with the repairs. Accordingly, Supply Wing requested in January 1991 the foreign firm to supply the requisite parts on no charge basis but they declined in February 1991 to supply the parts free of cost as warranty period had already elapsed. The equipment was lying in defective condition as of December 1993.

The Ministry stated in October 1993 that the Army Headquarters comments also confirm the conclusions of Audit that equipment was imported without ensuring adequate arrangements for its installation.

Thus an equipment although imported on operational basis for Rs13.02 lakhs could not be used for its intended purpose for over six years.

18. Non-commissioning of a plant

In August 1984 an Army Base Workshop (workshop) submitted a proposal for procurement of one Vertical Hard Chrome Plant (plant) specifically from firm 'A' for repair/overhaul of field guns during the years 1984-85 to 1988-89. Army Headquarters (HQ), however, placed the indent in December 1985 for its procurement on Director General of Supplies and Disposals (DGSD) without necessary proprietary article certificate (PAC) in favour of firm 'A'. DGSD concluded acceptance of tender (A/T) in February 1987, with firm 'B' for supply of the plant by September 1987 including its erection and commissioning at a cost of Rs6.68 lakhs.

The workshop on receipt of A/T in March and November 1987 pointed out to the HQ Technical Group, Electrical and Mechanical Engineering (TGEME) that the plant being procured from firm 'B' would not meet their end use and similar plant supplied by firm 'A' earlier was functioning very well. However, the Army HQ did not approach the DGSD for an amendment to tender keeping in view the legal implications. TGEME directed the workshop in December 1988 to accept the plant. In February 1989, the workshop informed HQ TGEME that the plant would be acceptable provided items essential for its full exploitation valuing Rs1.58 lakhs were also incorporated. DGSD gave clearance to the firm 'B' in June 1989 for supply of plant after confirmation from Army HQ.

The firm 'B' offered the plant for inspection in December 1989 and March/April/May 1990 which was rejected by Director of Inspection due to defects/deficiencies and was accepted and received in the workshop in September 1990 after rectification of the deficiencies/defects.The installation and commissioning of the plant was, however, started in June 1992 i.e. 21 months after its receipt due to non-completion of connected civil/electrical works, which had not been completed so far (January 1994). Consequently, the repair/overhaul of field guns was being got done partly through local Ordnance Factories (OFs) and partly through local Repair Contracts (LRCs) after incurring an expenditure of Rs3.72 lakhs.

Ministry of Defence while accepting the facts stated in January 1994 that:

- the objections raised by workshop after conclusion of A/T resulted in delay of two years and these should have been seen at the time of technical scrutiny of the offer before placement of A/T;

- the delay to supply the plant after clearance in June 1989 was on the part of firm; and

- extra expenditure of Rs1.60 lakhs was incurred on account of extra stores/fitments required to make the plant suitable to meet the end use.

Thus, due to placing of an indent without PAC, A/T had been concluded with a firm whose manufacturing potential of the requisite plant was not established resulting in the procurement of a plant costing Rs6.68 lakhs, which did not meet the workshop requirement and defects in it still persist (January 1994), although an extra expenditure of Rs1.60 lakhs had been incurred to make the plant suitable to meet the end use. The plant has not been installed and commissioned even after more than three years of its procurement (January 1994) due to delay in completion of necessary civil works by the user formation. As a result, an avoidable expenditure of Rs3.72 lakhs had to be incurred to get the repair/overhaul of field guns done through OFs/LRCs from May 1987 to June 1993.

Logistics and transport

19. Nugatory expenditure due to non-utilisation of workshop equipment

An agreement was executed in August 1982 with a foreign supplier for supply of fifteen 3.5 tonne lorry each mounted with a Control Repair Station (CRS) and a 2.5 tonne four wheeled Trailer fitted with generator set (Power Plant) at a cost of Rs3.18 crores.

Thirteen lorries mounted with CRS and equal number of trailers fitted with power plants were received between February and May 1984 in a Central Armoured Fighting Vehicle Depot (CAFVD). The balance of two lorries mounted with CRS and two trailers fitted with power plants were received in August 1984. Out of thirteen trailers received with power plants, one was not accepted as the fuel injection pump and starter were found deficient. Controllerate of Quality Assurance (CQA) were responsible for raising a claim against the supplier in this regard but they did not do so. CAFVD, therefore, raised a claim for free replacement in April 1990 but the same was rejected being time-barred.

Weapons and Equipment Directorate (WE Dte) of Army Headquarters (AHQ) issued release orders (RO) in October 1985 and February 1986 based on which CAFVD issued fifteen lorries mounted with CRS to seven workshops between November 1985 and March 1986. The trailers with power plants were, however, not issued.

WE Dte informed in April 1986 the Master General of Ordnance (MGO's) Branch that the power plants which had been procured alongwith lorries mounted with CRS were a complementary part of CRS. MGO's Branch, therefore, directed CAFVD in May 1986 that the power plants be issued forthwith to the concerned workshops to whom the CRS had been issued earlier without these power plants. MGO's Branch clarified again in April 1989 that power plants formed an integral part of CRS. CAFVD, however, issued a trailer with power plant to one workshop only in May 1989.

In February 1992, the CAFVD pointed out to AHQ that since ROs were generated only for vehicles (lorries mounted with CRS) they left the power plants behind. They also pointed out that the units did not complain about the non-availability of power plants for operation of the CRS and therefore, power plants were not essential for operation of the CRS. Since the Ministry could not establish that the CRS are being utilised without power plants by the respective workshops, the reasons put forth by the CAFVD were not tenable.

The case reveals that:

- fifteen lorries mounted with CRS and trailers fitted with power plants were received ex-import in 1984 at a cost of Rs3.18 crores;

- inspite of the clarifications given by the AHQ that CRS was a complete repair unit with power plants, the CAFVD issued CRS without power plants;

- fourteen trailers imported fitted with power plants were lying unutilised with the CAFVD for the last eight years;

- the non-availability of the power plants imposed restriction on the utilisation of the CRS's in the workshops and defeated the purpose for which these were imported. The expenditure of Rs2.97 crores on the import of the fourteen CRS and trailers failed to achieve its objectives;

- though a trailer with power plant was found to be deficient of two items on its receipt in 1984, a claim for free replacement was raised in April 1990 which was rejected as time-barred.

Ministry intimated (February 1994) that AHQ had been advised to ensure that a similar lack of communciation or lapse in implementation did not recur.

20. Avoidable expenditure due to short-closure of a supply order

In March and July 1990, Government accorded sanction for procurement of 3.00 lakhs and 4.84 lakhs batteries inert (batteries) respectively at Rs.25 each (total cost: Rs1.96 crores). In November 1990, Central Ordnance Depot (COD), Agra placed a Supply order (SO) on firm 'X' for supply of these batteries at Rs2250 per hundred (total cost: Rs1.76 crores) against a rate contract (R/C) concluded by the Director General of Supplies and Disposals (DGSD) in July 1990. The terms and conditions of the R/C stipulated that the firm 'X' was committed to supply 37,500 batteries per month against the orders placed, without any monetary limit, between 4 May 1990 and 15 April 1991 and orders received during the closing days would be complied within due course though in some cases supplies could not be arranged within the last date of R/C. On receipt of SO, firm was, however, to intimate within seven days the quantity which could be supplied from the stock and time required for the balance for acceptance of the purchaser. Accordingly, the SO provided a delivery schedule of 37,500 batteries per month from January 1991 to August 1992 and 34,000 in September 1992 and that short fall, if any, exceeding 50 per cent of the earmarked quantity for supply in a particular month would be made good by tendering that quantity separately within 60 days in subsequent months.

In response to the SO firm 'X' informed COD in December 1990 that due to some production problems they would be in a position to supply only 1.55 lakh batteries from February 1991 to July 1991 and requested COD to give their acceptance of this. Although the firm was contractually liable to supply full quantity placed before expiry of the R/C viz. 15 April 1991, COD accepted the request of Firm 'X' by issuing an amendment to the SO on 2 Febraury 1991 reducing the quantity to 1.55 lakh batteries by mentioning that the proposal of firm 'X' had been provisionally accepted and that the offer would remain open for negotiation.

In March 1991, a negotiation meeting among representatives of DGSD, COD and firm 'X' was held wherein it was held that the SO was rightly placed as per the terms and conditions of the R/C and firm 'X' was told clearly to consider the same in the right perspective and act accordingly to continue the supplies.However, in July 1991 firm 'X' informed COD that they would be completing their committed supply of 1.55 lakh batteries and requested to convert provisional acceptance into final acceptance.

In February 1992, Ministry of Law opined that as per provisions of the R/C firm 'X' was required to receive all orders placed upto 15 April 1991 for compliance within due course,though it could demand refixation of delivery period (DP). COD by issuing amendment had not only accepted the revised DP but also accepted the proposal for reduction in quantity provisionally. Acceptance of some quantity tendered for inspection after issue of amendment also amounted to categorical acceptance of the amendment by the COD and therefore no legal issue was involved.

In view of above, DGSD advised COD in February 1992 to shortclose this SO. On 20 April 1992 COD finally short-closed the SO for 1.55 lakhs batteries without any financial repercussion and on 21 April 1992, placed an SO for supply of four lakh batteries at Rs2750 per hundred (total cost : Rs1.10 crores) on the same firm 'X' against the fresh R/C having delivery schedule of 50,000 batteries per month from May 1992 to December 1992. Firm 'X' completed the supplies as per this schedule.

Ministry of Defence stated (December 1993) that :

- the contractual liability of the firm 'X' to supply entire quantity was not established as the contract became binding only when accepted by both parties;

- second SO at a higher rate was placed due to urgency to procure the batteries and instructions have been issued to check recurrance of such cases; and

- there being no other supplier for the batteries, risk purchase action was not feasible.

Thus COD by agreeing to their proposal for reduction in the quantity to 1.55 lakh batteries without obtaining prior legal opinion led to procurement of four lakh batteries at higher rate of Rs2750 per hundred against Rs2250 per hundred as per earlier contract, involving an avoidable expenditure of Rs20 lakhs and also undue benefit to firm 'X'.

21. Extra expenditure on procurement of batteries

A Central Ordnance Depot (COD) placed three supply orders (SOs) between July 1990 and April 1991 on firm 'A' for supply of 3984 batteries of different specifications at a cost of Rs36.37

lakhs against rate contracts (RCs) concluded by the Directorate General of Supplies and Disposals (DGSD). The firm supplied 2492 batteries upto the extended delivery period (DP) of August/ September 1991, leaving balance of 1492 batteries.

In November 1991, COD approached DGSD for cancellation of SOs at the risk and expense of the defaulting firm. DGSD in February/March 1992 called for certain information by 31 March 1992 so that the risk purchase action could be taken by them within the prescribed period of six months from the expiry of DP. COD initiated action to get information required by DGSD but held the view that by the time it was collected and transmitted to DGSD,dead line of six months would expire and therefore cancelled all the above SOs in March 1992 without financial repercussion.

In March 1992, COD placed five SOs for supply of balance of 1492 batteries on five firms against RCs concluded by DGSD at higher rates which resulted in extra expenditure of Rs3.96 lakhs. The batteries were received during May to July 1992.

Further, inspite of poor performance of firm 'A' in respect of a previously concluded RC, the COD, in July 1991, had placed another SO for supply of 2500 batteries at a cost of Rs21.50 lakhs against DGSD new RCs. The firm could supply only 815 batteries upto DP of March 1992, leaving balance of 1685 batteries. In May 1992, the firm informed COD that they were not in a position to supply the remaining batteries and requested for cancellation of their SO. In June 1992, the COD referred the matter to Army Headquarters (HQ) and sought their advice. Despite repeated reminders Army HQ did not communicate its decision and ultimately COD cancelled the SO in November 1992 without financial repercussions.

In November 1992, COD placed a SO for balance of 1685 batteries on another firm at higher rates which resulted in extra expenditure of Rs3.56 lakhs.

The COD stated in December 1993 that as a result of delay user units would invariably have had a large fleet of vehicles off-road.

Ministry of Defence stated (December 1993) that :

- it was logical that prices of batteries in RCs of 1990 were cheaper than prices in 1992. Therefore extra expenditure of Rs3.96 lakhs was notional;

- even though performance of the firm 'A' had not been good, the fact that their rates were cheapest, another SO was placed in July 1991 on them. In November 1992 SO was cancelled and balance quantity was off-loaded on other firms keeping in view the urgent requirement of the item; and

- Army HQ had felt that time-frame of six months for initiation of risk and purchase action was too limited and that instructions had been issued to review the need for increasing this time-frame.

The fact, however, remains that an extra expenditure of Rs7.52 lakhs has been caused due to non-supply of 3177 batteries (1492 batteries + 1685 batteries) by firm 'A' within the DP in contravention of the provisons of RCs/SOs. Further, keeping in view the existing time-frame action should have been taken to get these SOs cancelled at the risk and cost of the defaulting firm within six months of the expiry of DP.

Defence estates

22. Cost escalation due to abnormal delay in acquisition of land

Based on the recommendation of a Board of Officers (Board) held in February 1980, the Army Headquarters (HQ) submitted a proposal in March 1983 for according approval for acquisition of 227.625 acres of land for an ammunition dump for an Armed Brigade at an estimated cost of Rs7.73 lakhs. In October 1983, the case was submitted to Ministry of Defence (Ministry) for approval. The land requirement for this Armed Brigade was merged with the Key location plan (KLP) of the station 'A' in November 1983 when the KLP of station 'A' was finalised. Since there had been escalation in land value, Army HQ was in correspondence with field offices on obtaining upto-date cost during the period 1984 to 1986.

The case, remained under protracted correspondence among various branches of the Ministry and Army HQ between October 1986 and March 1988.

In December 1989, the Ministry asked the Quarter Master General's (QMG's) Branch to confirm whether the Armed Brigade was located at the Station and if so, what was its land requirement. The QMG's Branch clarified in March 1990 that the Armed Brigade was now a part of the cantonment and that the identity of the Armed Brigade had been merged into other formations in the Station. In view of this, the Ministry of Defence (Finance) stated that it was not necessary to acquire further land. The QMG's Branch, however, stated that though the land was not specifically required for the Armed Brigade in question, yet the same would now be used to make up the overall shortfall in the station.

The Ministry of Defence (Finance) therefore agreed to the acquisition of 190.83 acres of land at an estimated cost of Rs59.53 lakhs. Government sanction was accordingly issued in January 1991. However, the land has not yet been acquired (November 1993).

The Ministry stated (December 1993) that the land was required for dumping of ammunition and was not included in the land working sheet while revising the KLP, as such the matter remained under protracted and lengthy correspondence between various branches of the Army HQ and the Ministry. The views expressed by Ministry would indicate that a prolonged delay in taking a decision has resulted in additional expenditure of Rs51.80 lakhs even without taking into account the reduction of land to be acquired.

The case reveals that:

- though the Board had recommended for acquisition of land in February 1980, a final decision could be taken by the Government after eleven years in January 1991 only, thereby entailing a cost escalation of Rs51.80 lakhs to the State; and

- though the sanction for the acquisition of land has already been accorded in January 1991,the land has not been acquired so far (November 1993). The cost of the land is therefore likely to exceed when the land is actually acquired.

Other cases

23. Avoidable payment of customs duty

Certain defence items are exempted from payment of customs duty if duty exemption certificate (DEC) and not manufactured in India (NMI) certificate issued by the competent authorities and received from consignee are furnished to the customs authorities by the Embarkation Headquarters (EHQ). EHQs are also entrusted with the responsibility of preferring claims for refund of customs duty paid in excess within the specified time limit, its speedy recovery and finalisation of the claims.

Mention was made in paragraph 15.09 of the Report of the Comptroller and Auditor General of India, Union Government Defence Services (Army and Ordnance Factories) for the year ended 31 March 1988 regarding rejection of claims on account of refund of customs duty due to non-production of requisite documents. In the action taken note Ministry stated in May 1993 that instructions had been issued in August 1988 to ensure that DEC/NMI certificates are sent to EHQ well in advance of arrival of cargo. Inspite of these instructions in the following two cases avoidable payment of customs duty due to delay in producing DEC certificates was noticed:

Case I

A precision grinding machine costing Rs 19.49 lakhs imported for the factory 'A' reached Bombay in April 1990. The machine was cleared after payment of customs duty amounting to Rs11.66 lakhs in May 1990. As per procedure consignee is required to produce DEC/NMI certificate well in time in order to enable EHQ to clear the cargo without paying customs duty. The DEC was, however, issued only in April 1992 much after the receipt of the stores and after expiry of time limit of one year from the date of final assessment of customs duty for preferring refund claim. Though EHQ took up the matter in June 1992 for refund, the claim was rejected in June 1992 itself by customs authorities on the grounds that the time limit for claiming refund had already expired on 21 May 1991 and also the DEC was invalid. The claim was again taken up by the factory with the customs authorities in February 1993 but the amount is yet to be refunded (January 1994).

Case II

Precision Universal Tool and cutter grinding machine valued at Rs15.52 lakhs imported from foreign country was cleared in January 1991 by paying customs duty amounting to Rs9.31 lakhs. In May 1992 the factory authorities forwarded the DEC issued by the Ministry in April 1992 to EHQ. EHQ took up the matter for the refund of payment made on account of duty with customs authorities in June 1992 who in turn rejected the case as it was time barred. The factory authorities referred the case to Collector of Customs in September 1992.

In February 1993, the case was again referred to Collector of Customs but the refund of customs duty paid was yet to be obtained (January 1994).

The above cases revealed that due to delay in furnishing the DEC in time by the consignee resulted in avoidable payment of Rs20.97 lakhs on account of customs duty.

The matter was referred to the Ministry in August 1993 and their reply is still awaited (February 1994).

24. Procurement of a damaged machine

In January 1989, Ordnance Factory Board, Calcutta placed an indent on Director General of Supplies and Disposals (DGSD) for the procurement of a Precision Universal Grinder Machine required for an Ordnance Factory (factory). Based on the indent DGSD concluded a contract in December 1989 with an Indian agent of a foreign firm for the supply of the machine at a cost of Rs18.02 lakhs including Indian agent's commission.

The equipment was received in India in February 1991. During the survey inspection carried out in March 1991, it was found that the machine was severely damaged.

As the equipment was not insured, Embarkation Headquarters (EHQ) in their communication to the factory in May 1991 felt that there was little possibility of realising the cost of damage from the Insurance Company. EHQ also stated that as the survey inspection could not be conducted within the stipulated period due to late receipt of manifest a claim on the Port Trust Authority would not be tenable. The factory authorities proposed to take the machine to the factory premises in May 1991 to assess the damage before it was back-loaded to the supplier for repairs. Accordingly, the equipment was brought to the factory in June 1991 by incurring an expenditure of Rs0.03 lakh.

In July 1991, the factory authorities requested the supplier to get the machine repaired at latter's cost but the supplier refused to repair at their cost as the contract was on FOB basis. Therefore in November 1991, the factory authorities informed EHQ that the damages to the machine were severe and the machine was beyond repairs. The factory authorities, therefore, suggested to EHQ to prefer a claim on the supplier for the full value though the firm requested to send back the machine to the manufacturer to assess the total damages. As necessary documents were not received from the factory authorities, an initial claim for Rs5000 was preferred by EHQ on the carriers in November 1991 to avoid rejection of claim as time-barred. On receipt of the required documents the claim amount was amended to Rs18.40 lakhs in January 1992 and to Rs26.15 lakhs in December 1992. The claim was rejected by the carriers in January 1993 on the ground that the firm figured claim was not preferred within the statutory time limit of 12 months.

The case thus reveals that:

- the machine costing Rs18.02 lakhs received in damaged condition was yet to be repaired and used evenafter more than two and a half years of its receipt;

- no claim could be lodged on the Port Trust Authority as the survey inspection could not be conducted within the stipulated period; and

- the claim preferred on the carriers was rejected as firm figured claim was not preferred within the time limit.

The case was referred to the Ministry in June 1993 and their reply has not yet been received (February 1994).

CHAPTER - IV

ORDNANCE FACTORY ORGANISATION

25. Performance of the Ordnance Factory Organisation

25.1 Introduction

The Ordnance Factories (OFs) Organisation consists of 39 Ordnance Factories, with a manpower of 1.72 lakhs, which produce more than 1500 items of arms, ammunitions, equipments and components. At the apex level, the OF Organisation has a Board, titled Ordnance Factory Board (OFB). The Director General of Ordnance Factories (DGOF) is the ex-officio Chairman of the Ordnance Factory Board, and is assisted by nine Members who are in charge of various staff and line functions.

The broad distribution of the divisions is as follows:

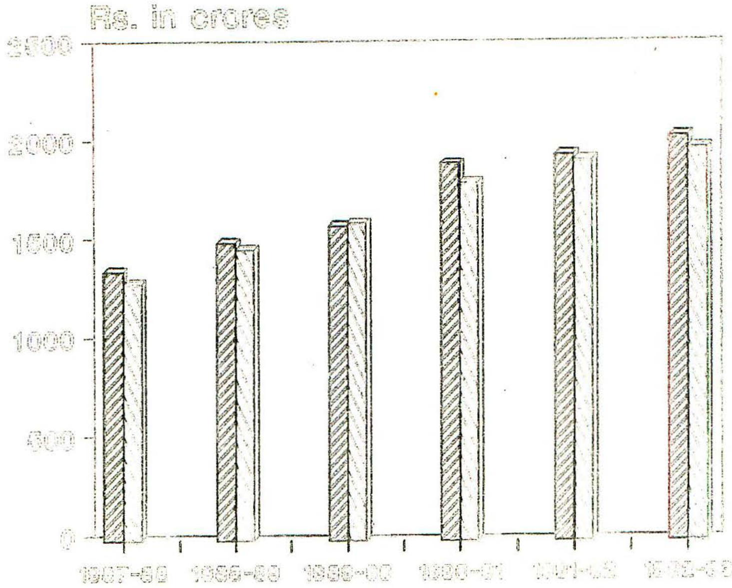
Divisions	No of factories
(i) Materials and Components	10
(ii) Weapons, Vehicles and Equipments	10
(iii) Ammunition and Explosives	10
(iv) Armoured Vehicles	4
(v) Ordnance Equipment Factory Group	5

The factories are also classified as Metallurgical (6), Engineering (16), Filling (5), Chemical (4), Ordnance Equipment (6) and Miscellaneous Group of factories (2).

25.2 Budget grants and expenditure

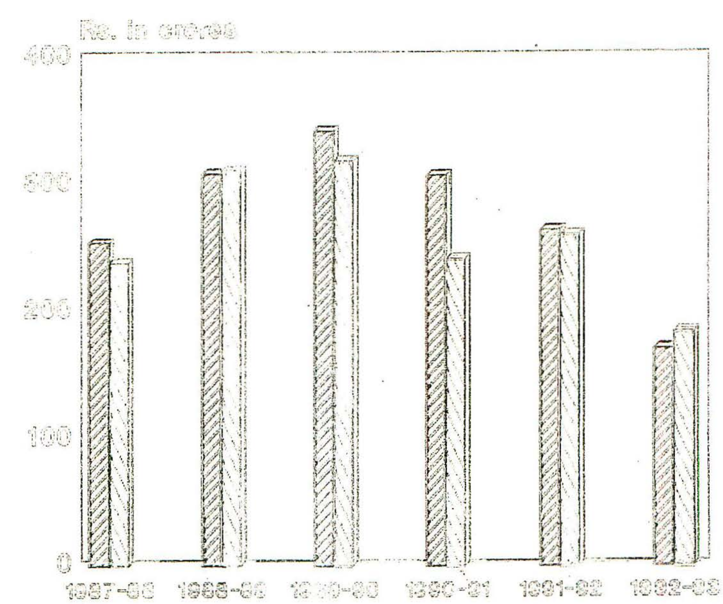
Budget-grants and actual expenditure for the period 1987-88 to 1992-93 are given in the following graph :

REVENUE BUDGET & EXPENDITURE



	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93
BUDGET GRANT	1355.8	1504.65	1586.87	1902.5	1947.87	2067.58
EXPENDITURE	1298.8	1471.46	1605.7	1805.23	1919.7	1990.99

CAPITAL BUDGET & EXPENDITURE



	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93
BUDGET GRANT	253.85	307.88	342	306.65	264	170
EXPENDITURE	237.96	310.38	317.68	240.77	260.18	183.83

While the Budget Grant under Revenue head gradually increased since 1988-89, the same under capital head had a declining trend since 1991-92 .

25.3 Analysis of performance of OFB

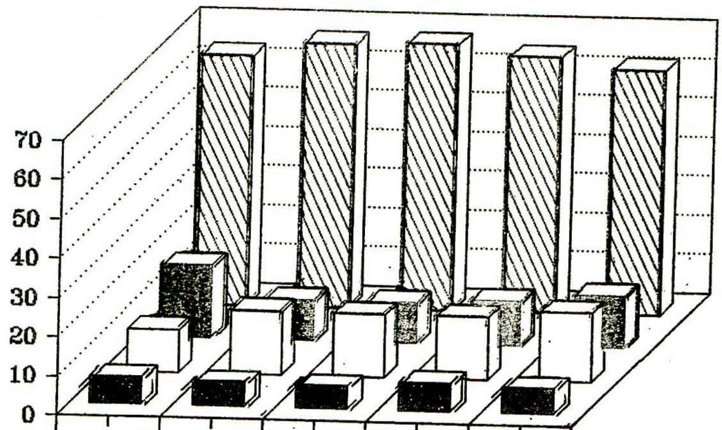
25.3.1 General

25.3.1.1 Table below indicates element-wise production for the last 5 years ended 31.3.1992

Element	Value of production				
	1987-88	1988-89	1989-90	1990-91	1991-92
					Rupees in crores
Direct material	1175.55	1509.21	1586.33	1728.13	1438.12
Direct labour	130.30	139.87	138.90	197.13	153.13
Variable overhead charges levied	199.27	360.15	373.43	424.03	405.73
Fixed overhead charges levied	341.13	233.21	239.68	302.05	305.12
	1846.25	2242.44	2338.34	2651.34	2302.10

25.3.1.2 The graph below indicates the contribution of each unit of cost to the value of production (as percentages) for the five years upto 31st March 1992 :

ANALYSIS OF COST OF PRODUCTION
(PERCENTAGE TO TOTAL)



	1987-88	1988-89	1989-90	1990-91	1991-92
DIR.MATERIAL	63.68	67.3	67.84	65.18	62.47
FIX.OVERHEADS	18.48	10.4	10.25	11.39	13.25
VAR.OVERHEADS	10.79	16.06	15.97	15.99	17.63
DIR.LABOUR	7.05	6.24	5.94	7.44	6.65

When production of new items are undertaken as a result of foreign collaboration, complete knocked down (CKD) assemblies are initially used. As this requires much less labour than regular production, the inclusion of the values of CKD assembled products distorts the overall picture by increasing the Direct Material component while suppressing the Direct Labour component on total cost.

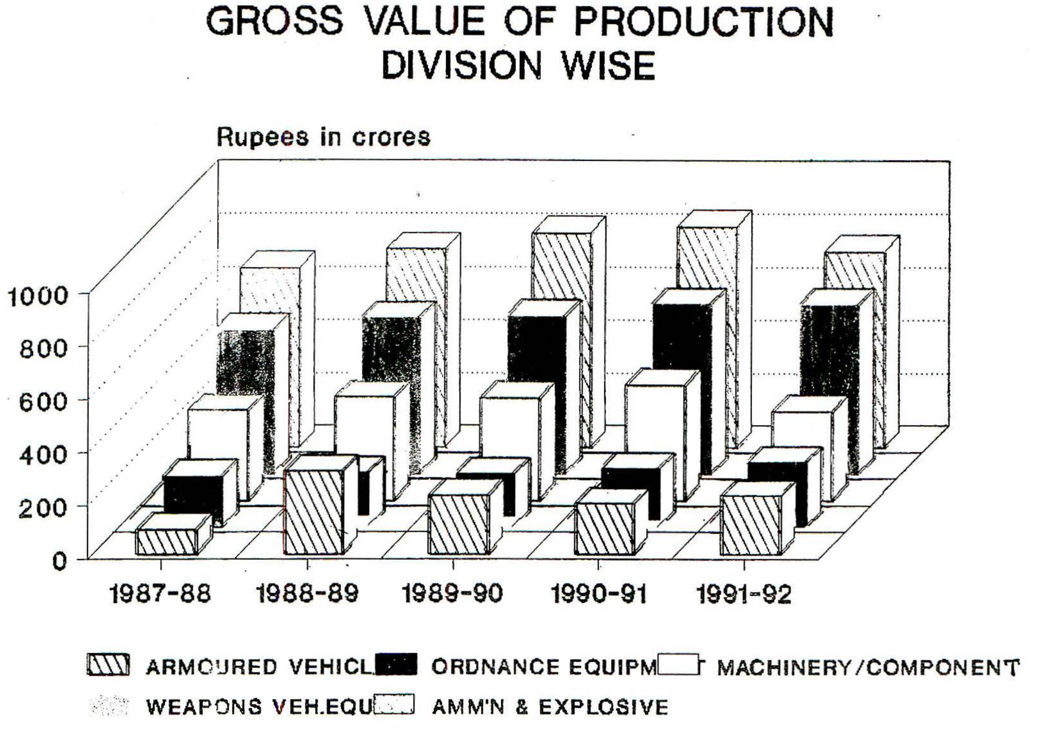
25.3.1.3 The following table illustrates that due to exclusion of CKD from value of production the percentage of growth rate has come down over the last three years, while there is a steady increase in the average value of fixed capital assets.

Year	Value of production (in crores of rupees)	Average value of fixed capital assets (in crores of rupees)	Ratio of value of production and average value of fixed capital assets	Percentage of growth of value of production over previous year
1986-87	1609.36	584.62	2.75	(+) 18.39
1987-88	1846.25	623.69	2.96	(+) 14.72
1988-89	2242.44	660.92	3.39	(+) 21.46
1989-90	2211.64	749.34	2.95	(-) 1.38
1990-91	2318.89	959.70	2.42	(+) 4.84
1991-92	2178.06	1274.75	1.71	(-) 6.08

25.3.1.4 The Divisions-wise gross value of production for last five years were as follows :-

Division	Gross value of production (excluding CKD packs)				
	1987-88	1988-89	1989-90	1990-91	1991-92
					in crores of rupees
i) Ammunition and Explosives	675.75	748.10	807.82	831.96	739.[illegible]
ii) Weapons, Vehicles and Equipments	541.44	587.45	594.20	640.39	6[illegible]
iii) Material and Components	341.90	388.81	387.90	435.60	338.[illegible]
iv) Ordnance Equipment Group	194.46	205.97	201.12	221.48	244.25
v) Armoured Vehicles	92.70	312.11	220.61	189.46	216.85
Grand total	1846.25	2243.44	2211.64	2318.89	2178.06

This is depicted graphically below :



25.3.1.5 The ratio of gross value of production to average value of fixed capital assets in the factories under the M&C Division came down during the last 3 years ended 1991-92 as below:

	1987-88	1988-89	1989-90	1990-91	1991-92
(i) Gross value of Production (in crores of rupees)	341.90	388.81	387.90	435.60	338.60
(ii) Average value of fixed capital assets (in crores of rupees)	134.77	127.71	133.91	234.92	247.85
(iii) Ratio of 1 to 2	2.54	3.04	2.90	1.85	1.37

25.3.2 Issue to users

The indentor wise issues for last 5 years were as under :

	1987-88	1988-89	1989-90	1990-91	1991-92
				In crores of rupees	
Army	1102.10	1411.41	[illegible]	[illegible]	1299.30
Navy	10.21	11.19	11.43	15.19	18.43
Air Force	19.19	19.60	[illegible]	[illegible]	35.81
MES and Research and Development (Other than Defence Department)	22.07	[illegible]	[illegible]	[illegible]	48.55
Civil Trade	[illegible]	[illegible]	[illegible]	[illegible]	174.25
Other Factories	[illegible]	[illegible]	[illegible]	[illegible]	587.08
Own stock	[illegible]	[illegible]	[illegible]	[illegible]	15.84
Capital work	[illegible]	[illegible]	[illegible]	[illegible]	1.33
Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Though Army was the major purchaser, it is observed that the demand from Army, in terms of quantities, is decreasing from 1989-90.

25.3.3 Production planning and performance

25.3.3.1 Raising of indents

The services normally raise indents on the OFB four years in advance which is the lead time required for production planning.

The position of supplies against outstanding indents as of 31 December 1992 was as under :

Period of placing of Indents	Indents outstanding due to incomplete supplies				
	Nil supply	1 per cent to below 25 per cent supply	25 percent and above but below 50 per cent supply	50 per cent and above	Total
From 1958-59 to 1978-79	19	7	5	16	47
1979-80	58	7	3	12	80
1980-81	25	10	9	17	61
1981-82	44	5	9	30	88
1982-83	87	16	24	39	166
1983-84	72	12	27	113	224
1984-85	79	39	35	87	240
1985-86	134	40	58	116	348
1986-87	155	37	36	121	349
1987-88	156	49	44	92	341
1988-89	454	79	107	210	850
1989-90	417	84	82	109	692
1990-91	100	18	23	12	153
1991-92	1	1	-	-	2
Total	1801	404	462	974	3641

:t would be seen from the above table that after considering
ead time of four years, 1944 indents were outstanding start-
rom 1958-59.

3.2 Production programme vis-a-vis progress

OFB fixes targets for manufacture of items every year. s noticed that progress of achievement in respect of several remained well behind schedule. Though orders for manufac- and supply of some more items existed manufacture of these had not been undertaken by the factories in the absence of duction programme (targets) for these items by OFB. During ear 1992-93, though orders existed for 284 items, no targets fixed for 37 items. Out of 247 items for which programme was , 27 items were behind schedule. Details for 5 years ended March 1992 are given in Annexure I.

The slow progress in production of these items was attri- l by the OFB to non-availability of stores/parts, technical .ems, waiting for proof clearance, etc.

.4 Capacity utilisation

OFB assesses capacity utilisation of a factory in terms tandard man hours (SMH) and machine hours. The following ta- indicate the extent to which the capacity had been utilised, d on the above two parameters.

Table - I

(Capacity utilisation in terms of SMH)

	De/re rated capacity in SMH	Capacity utili-sation in SMH	Percentage of capacity utilisation
			In lakh hours
7-88	2123	2235	105.25
3-89	2123	2127	100.16
9-90	2257	2259	100.09
0-91	2257	2240	99.28
1-92	2257	1722	76.30
2-93	2139	1461	68.11

Table-II

Capacity utilisation in terms of machine hours

Year	Machine hours available	Machine hours utilised	Percentage utilisation
1987-88	1551.40	1195.59	77.07
1988-89	1142.31	930.55	81.46
1989-90	1200.40	993.05	82.73
1990-91	1308.64	1062.40	81.18
1991-92	1187.36	941.87	79.32
1992-93	1114.68	871.70	78.20

OFB intimated in September 1993 that the reason for lower percentage of capacity utilisation was mainly due to diminishing off take by Army due to resource crunch. However, efforts were on for diversification by supplying to Ministry of Home Affairs and civil sector including export.

25.3.4.1 Normally the Ordnance Factories are geared up to work two shifts of 8/10 hours each. As of 31st March 1993, 83 per cent of employees worked on day shifts while 17 per cent on night shifts.

25.3.5 Utilisation of manpower

25.3.5.1 Employees of the OF Organisation are classified as (i) "Officers", who man senior supervisory levels, (ii) "Non-Gazetted" or "Non-Industrial" employees who man junior supervisory levels and clerical establishment and (iii) "Industrial Employees", who are engaged in the production and maintenance operations. The number of employees of various categories during the last 5 years is given in the following table:

No. of employees	1987-88	1988-89	1989-90	1990-91	1991-92
Officers	1,416	1,453	1,555	1,640	1,681
NGOs/NIEs	43,843	44,199	43,946	43,445	44,285
IEs	1,32,924	1,30,938	1,29,370	1,28,255	1,26,188
Total	1,78,183	1,76,590	1,74,871	1,73,340	1,72,154

It is observed that there is a steady growth in the number of officers/NGO,NIEs even though work load has come down and there is gradual decrease in the number of industrial employees.

25.3.5.2 The ratio of direct to indirect labour for the above 5 years was as under :

Year	1987-88	1988-89	1989-90	1990-91	1991-92
Ratio	1:0.65	1:0.63	1:0.64	1:0.66	1:0.66

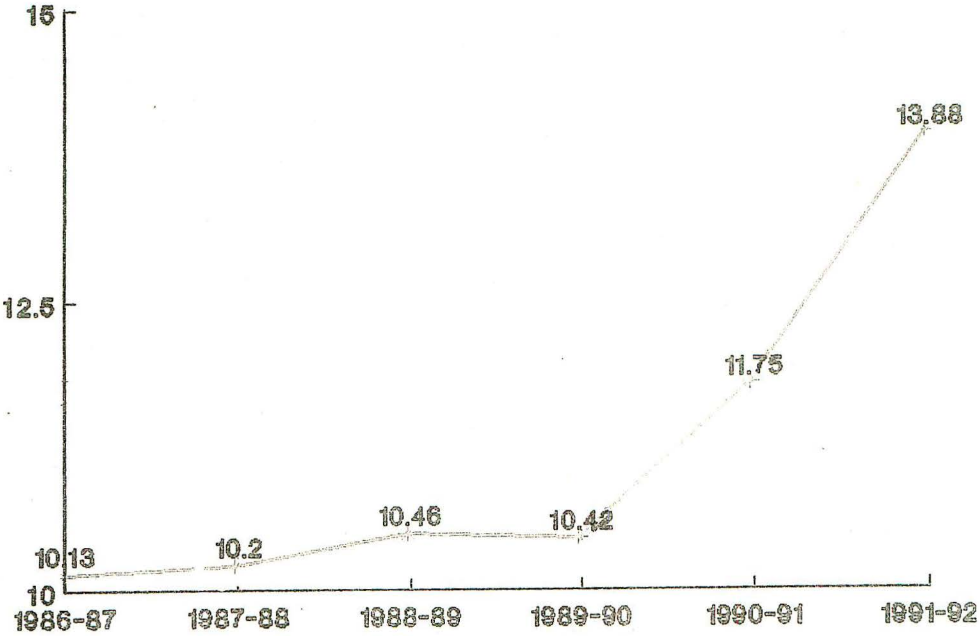
25.3.5.3 In Ordnance Factories there are two types of industrial workers viz. "Piece Workers" who are directly engaged in production and paid for the work turned out by them and "Day Workers" who are engaged in maintenance jobs and paid for the actual number of days and hours they work without any regard to their output. Day workers are also called General Shop Labour (GSL).

25.3.5.4 There is increasing trend in the expenditure on General Shop Labour as shown in graph as under :

In crores of rupees

	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92
General Shop Labour	16.48	20.03	21.01	22.98	25.75	31.77
Total indirect labour	162.67	196.37	200.84	220.50	219.20	228.86
Total direct labour	121.04	141.16	147.72	152.94	157.27	168.24

GENERAL SHOP LABOUR
AS A PERCENTAGE OF
TOTAL INDIRECT LABOUR



25.3.5.5 There has been a gradual decline of the number of employees on piece work indicating that the production activities in Ordnance Factories were decreasing as the following table would show:

Year	Average number of piece workers	Piece work earning	Incentive Bonus paid to maintenance workers	Total cost of production
			In crores of Rupees	
1986-87	77,164	46.09	2.73	1609.36
1987-88	78,441	45.31	2.35	1846.25
1988-89	78,381	41.11	2.28	2242.44
1989-90	74,586	39.78	2.24	2211.64
1990-91	73,857	35.45	2.06	2318.89
1991-92	71,101	91.00	4.09	2178.06

The sudden increase (almost 100 per cent) of Incentive Bonus paid to maintenance workers during 1991-92 in comparison to 1990-91 was attributed by the OFB (January 1994) to the issue of Government orders relating to revised correlation of piece work rate based on the Fourth Pay Commission pay scales and payment of consequent arrears to maintenance workers as well as piece workers.

The position of overtime payment for the last three years in segregated form was as under :

Overtime payments made

Year	Production	Service	Administration
			In crores of rupees
1989-90	37.56	32.28	8.51
1990-91	38.45	31.21	8.20
1991-92	28.22	22.08	8.63

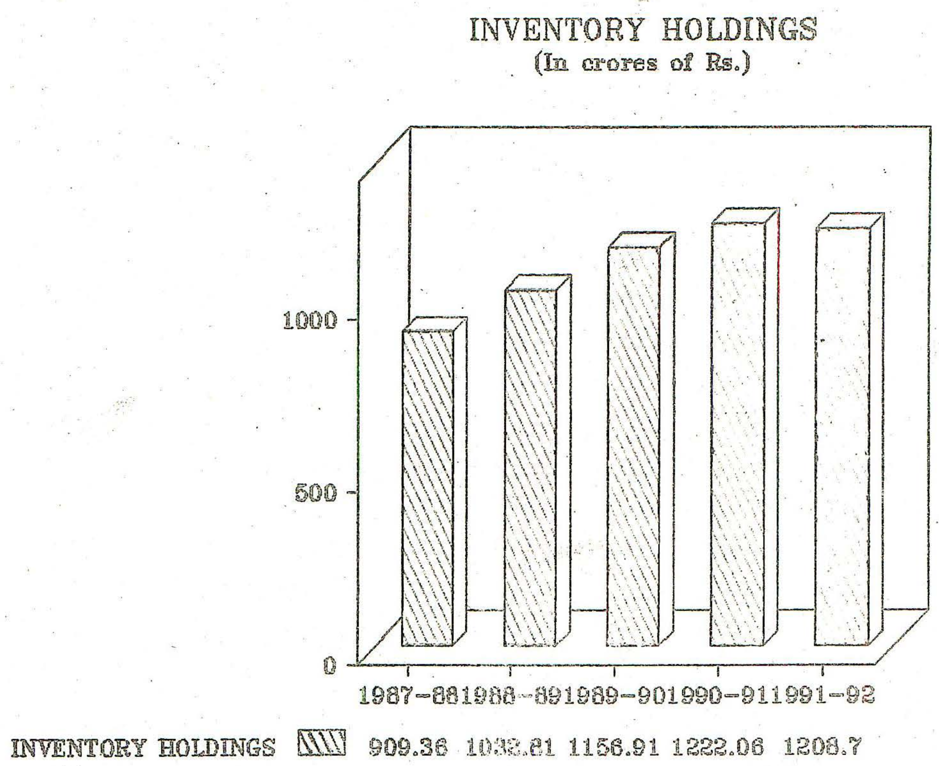
25.3.6 Inventory Management

25.3.6.1 Stores (Raw materials and spares)

In para 3.14 of the fifty fourth Report of the Estimates Committee (Seventh Lok Sabha), it was stated that inventory holdings in ordnance factories were under constant review and were generally kept within the limits laid down in Government instructions. It was, however, noticed that while there was reduction in utilisation of capacity of the ordnance factories, there was increase in inventory holdings. The average holdings in terms of number of days exceeded in each year the prescribed norm of 180 days. There was considerable increase in the holding of non-moving, slow moving and maintenance stores over the years. There was sharp increase in holding of waste and obsolete stores during 1991-92 vide graph given below :

Sl No.	Particulars	Years				
		1987-88	1988-89	1989-90	1990-91	1991-92
						In crores of rupees
1.	Working stock :					
	a. Active	732.57	816.38	922.21	952.71	905.25
	b. Non-moving	42.04	39.32	38.80	51.82	55.30
	c. Slow moving	33.13	64.80	64.79	77.36	95.00
2.	Waste and obsolete	14.30	2.86	6.35	4.93	17.79
3.	Surplus	10.30	33.36	43.65	44.26	41.57
4.	Maintenance Stores	77.02	76.09	80.91	90.98	93.78
	Total	909.36	1032.81	1156.91	1222.06	1208.70
	Average holding in terms of number of days	243	212	256	276	314

The graph given below shows the summarised position:



As of 31st March 1992 the following factories accounted for major holding of non-moving and slow-moving items as below :

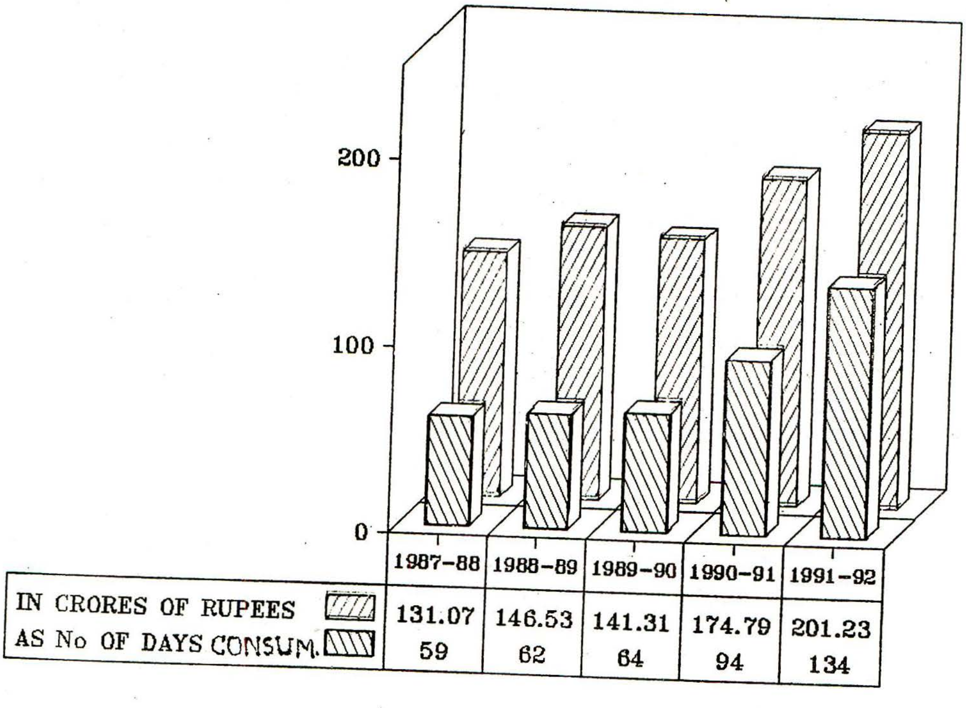
Factory	Non-moving	Slow-moving
		In crores of rupees
HVF Avadi	9.83	34.86
GSF Cossipore	2.58	5.63
RFI Ishapore	1.37	0.92

25.3.6.2 Finished stock

There was a steady increase in the total holdings of finished stock and finished components, as the following graph would show.

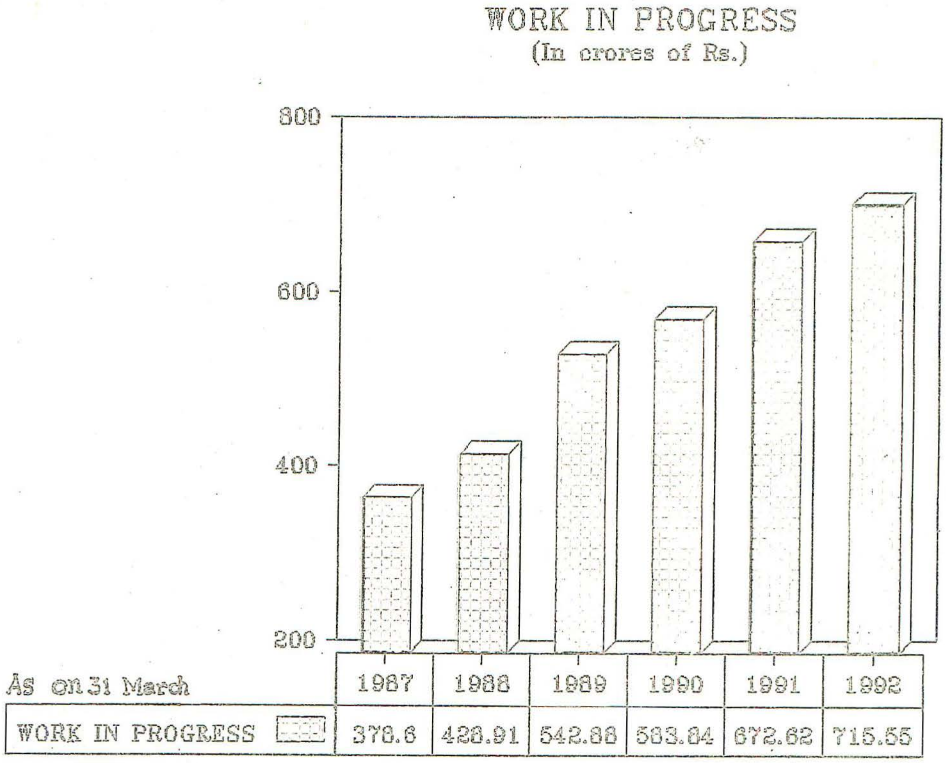
	1987-88	1988-89	1989-90	1990-91	1991-92
Finished Stock					
Holding in crores of rupees	21.99	24.89	22.49	26.48	44.52
Holding in terms of No. of days consumption	4 days	4 days	4 days	4 days	7 days
Finished components					
Holding in crores of rupees	131.07	146.53	141.31	174.79	201.23
Holdings in terms of No. of days consumption	59 days	62 days	64 days	94 days	134 days

HOLDINGS OF FINISHED STOCK



25.3.6.3 Work in progress

There was increase in the value of work-in-progress, as the following graph would show :



As on 31st March 1992, 21380 warrants were more than one to thirty two years old against the normal life of six months of a warrant. The value of such outstanding warrants was Rs229.70 crores constituting 32.10 per cent of the total work-in-progress. It is felt that the old warrants need to be reviewed at a regular interval so that the items under production may not become obsolete by the time they are completed and the expenditure rendered infructuous.

25.3.7 Manufacture

25.3.7.1 Rejections in manufacturing processes

Total value of production (including permissible rejections) vis-a-vis value of rejections beyond permissible limits (excluded from the total value of production) during the last 5 years were as under :

Year	Total value of production (including permissible rejection)	Value of rejections (beyond permissible limit)
		In crores of rupees
1987-88	1846.25	8.34
1988-89	2242.44	4.40
1989-90	2211.64	4.81
1990-91	2318.89	7.74
1991-92	2178.06	8.09

The value of production decreased during 1991-92 but the value of rejections increased in comparison to previous years (1990-91) as mentioned above. An amount of Rs8.09 crores has been kept out of production during 1991-92 being abnormal losses which occurred during manufacture.

Major losses occurred in five factories as under :

	Rupees in lakhs
(i) Ammunition Factory, Kirkee	423.90
(ii) Vehicle Factory, Jabalpur	127.77
(iii) Field Gun Factory, Kanpur	104.73
(iv) Ordnance Factory, Chanda	48.27
(v) Heavy Vehicle Factory, Avadi	47.82

It was observed that avoidable rejections continue over the years in the following factories :

Value of avoidable rejections

Name of the factory	1987-88	1988-89	1989-90	1990-91	1991-92
		Rupees in lakhs			
Ammunition Factory, Kirkee	-	43.48	-	388.28	423.90
Vehicle Factory, Jabalpur	100.26	108.22	117.16	134.90	127.77
O.F. Chanda	-	-	-	39.47	48.27
Heavy Vehicle Factory, Avadi	97.74	90.46	75.84	55.79	47.82

(-) indicates negligible figures

Such repeated avoidable rejections in manufacture particularly in the above four factories, call for close attention.

25.3.7.2 Losses written off

The table below depicts the particulars of losses written off by competent financial authorities:

(including manufacturing losses)

Sl. No.	Particulars	1989-90	1990-91	1991-92
		In lakhs of rupees		
1	Over issue of pay and allowances and claims abandoned	8.18	8.33	8.25
2	Losses due to theft, fraud or neglect	0.95	1.29	0.11
3	Losses due to deficiencies in actual balance not caused by theft, fraud or neglect	0.52	0.24	1.92
4	Losses in transit	15.29	884.41	25.43
5	Other causes (e.g conditioning of stores not caused by defective storage, stores scrapped due to obsolecence, etc)	2.31	6.11	1.12
6	Manufacturing losses	614.42	360.30	199.03
	Total	641.47	1260.68	235.86

During 1991-92, the following factories registered large amount of manufacturing losses as below:

	In lakhs of rupees
VF Jabalpur	97.67
OF Tiruchirapalli	23.45
MSF Ishapore	18.58
RF Ishapore	17.03
HVF Avadi	16.85

25.3.7.3 Services rendered on payment

The outstanding dues on account of stores supplied and services rendered on payment upto March 1993 by the Ordnance Factories to outside organisations, including other departments, State Governments, Railways, private parties etc. amounted to Rs2012.15 lakhs at the end of June 1993. It was seen in audit that stores worth Rs1998.88 lakhs had been issued to various indentors without obtaining pre-payment, as required under the instructions given by the OFB in March 1986. During 1992-93 stores worth Rs1528.44 lakhs had been issued in addition to the existing outstanding amount of Rs470.44 lakhs in contravention of the existing instructions and irregularity having been pointed out by Audit in previous year.

25.3.8 Other topics

25.3.8.1 Outstanding Spot Payments

As on 31 March 1993 outstanding amount in the OF Organisation on account of spot payments made to suppliers by 32 ordnance factories increased to Rs55.20 crores from Rs18.20 crores as on 31 March 1992. The reasons for the outstandings were stated by OFB as under:

(i) Non-submission of adjustment claims
(ii) Non-preparation of receipt vouchers
(iii) Short receipt or non-receipt of stores
(iv) Stores rejected after spot payments

25.3.8.2 Non-accounting of stores supplied ex-India

Defence stores worth Rs289.32 lakhs were supplied by Heavy Vehicle Factory, Avadi to a foriegn Government between 1983 and 1986. The foreign Government had paid Rs243.03 lakhs and the balance amount of Rs46.29 lakhs was still due (August 1993). The amount was, however, not reflected in the Annual Accounts of OFB resulting in understatement of sundry debtors to the extent of Rs46.29 lakhs.

Controller General of Defence Accounts stated in April 1993 that claims were to be preferred by them based on issue vouchers received from the Ministry but no such vouchers had been received. The matter was taken up with Ministry of Defence (D/EPC) and their reply was awaited as of December 1993.

26. Vehicle Factory Jabalpur

26.1 Introduction

In November 1965 Government sanctioned setting up a vehicle factory at Jabalpur at an estimated cost of Rs32.06 crores which was increased to Rs46.84 crores in January 1973, for production of three types of vehicles, viz. Shaktiman(SM) 3 ton trucks, Nissan (NC) 1 ton trucks and Nissan patrol(NP) Jonga vehicles. The factory was established in 1969-70 at a cost of Rs50.94 crores and the planned production capacity was 13200 vehicles per year (6000 SM, 4200 NC, and 3000 NP).

The factory commenced production of NP patrol vehicles in June 1970, NC 1 ton trucks in November 1970 and SM 3 ton trucks in March 1972. The production could not reach more than 8576 vehicles per year even 8 years after commencement of production.

As the achievable capacity of 13200 vehicles was not possible, it was decided in 1979 to augment the level of production to 10000 vehicles per annum with the existing infrastructure. Certain inputs were sanctioned between January 1980 and July 1985 at a cost of Rs21.31 crores. These were completed by 1988 at an expenditure of Rs22.61 crores. Thus the total capital outlay on the factory became Rs73.55 crores.

Even with this investment, the factory never achieved production beyond 8758 vehicles per annum. Since 1988-89 the demands as well as production started falling due to non-placement of orders by the Army and during 1992-93 it was 46.31 per cent of the capacity deemed to be achievable (10000 vehicles).

Army's view was that the existing models of vehicles were no longer required in view of their technical deficiencies and quality. Hence it was decided in October 1992 that no fresh orders would be placed for the existing models and the question of further orders had to be linked to the acceptance of futuristic vehicles by the Ministry. When the production of existing vehicles had just commenced during 1970, a work study was ordered to rationalise the vehicle fleet for Army by replacement of existing load carrying vehicles. The decision on a new generation vehicles could not be taken even though 20 years had elapsed. In place of three types of existing models,a decision to manufacture one type of new generation vehicle was taken only in February 1993. The production continued with 1950's technology without incorporating any modern technologies that have been effected by other manufacturers.

26.2 Scope of audit

The production activities of the factory were commented upon in paragraph 10 of the Report of the Comptroller and Auditor General of India for the year 1976-77. The paragraph was taken up for discussion by Public Accounts Committee (PAC) who made certain recommendations in their 109th Report (1978-79) (Sixth Lok Sabha). Pursuant to the above recommendations, Government took steps to make the factory viable as a production unit for production of 9000-10000 vehicles per annum by sanctioning additional manpower,certain backup facilities (Rs11.39 crores) and balancing plants and machineries (Rs9.92 crores) during 1980 to 1985.

Mention was made in para 45 of the Report of the Comptroller and Auditor General of India for the year ended 31 March 1988 regarding four years delay in commissioning of balancing plants and machineries. During 1992-93, Audit reviewed the entire activities of the factory considering the steps taken to make the factory a viable unit of production and the major findings regarding utilisation of capacities,positioning of manpower and consequence of shortfall in production are discussed in subsequent paragraphs.

26.3 Highlights

- **The production capacity of the Vehicle Factory, Jabalpur was derated resulting in 45.15 per cent decrease since 1987-88 due to non- availability of orders from the Army. Although the capacity of the factory remained under utilised, Army purchased 10481 vehicles at a cost of Rs294.66 crores from trade during 1986-87 to 1990-91. The purchase price of 1 ton Vehicle was more than the cost of the vehicle produced at the factory, involving extra payment of Rs11.50 crores.**

Instead of 3 ton Shaktiman, 4 ton Vehicles were purchased at an additional expenditure of Rs17.45 crores.

(Paragraph 26.4.1 and 26.6.1)

No action to introduce modern technology in vehicle production was undertaken as the Army could not indicate the precise specifications of new generation vehicles to be manufactured.

(Paragraph 26.7)

Although a study team was set up in 1970 to design future generation vehicles, Government accepted a new generation vehicle in February 1993 and decisions on the other two types were still pending. The delay in decision led not only to under utilisation of vehicle factory's capacity but of other ordnance factories also like Grey Iron Foundry (90 per cent), Machine Prototype Factory (85 per cent) and Gun Carriage Factory (15 per cent).

(Paragraph 26.6.2)

Due to reduction in working hours, the machines were not utilised to the optimum level.

(Paragraph 26.5.1)

There was a decrease in production of vehicles by 47.12 per cent in 1992-93 as compared to 1987-88, whereas labour strength decreased by just 5.77 per cent involving under utilisation of labour.

(Paragraph 26.5.2)

During 1992-93 while the working hours per week were reduced to 48, the factory worked for 15.82 lakh hours on over time involving payment of Rs119.39 lakhs.

(Paragraph 26.8.1)

There was unavoidable rejection of Rs3.79 crores during 1989-92 even after allowing 27 to 32 per cent rejection in the estimates during machining process.

(Paragraph 26.8.3)

The value of non-moving stores had increased from Rs11.81 crores in 1989-90 to Rs18.56 crores in October 1993 indicating an inflated inventory during past years.

(Paragraph 26.5.3)

- **Till such time facilities for new series of vehicles are established and further order placed, the financial implication of idle/surplus labour would be of the order of Rs50.00 crores per annum including that of Grey Iron Foundry. The factory was planning to diversify its activities in other areas.**

(Paragraph 26.5.2 and 26.8.2)

26.4 Ordering and perception of future vehicles by Army

26.4.1 Perception of future vehicles

As soon as the production of vehicles commenced in 1970, a need was felt to rationalise the vehicles fleet for the Army with a view to reducing the varieties of vehicles held.

A Study Team appointed in 1970 for this purpose which recommended in April 1972:

(i) 1/2 ton vehicles to replace existing 1/4 ton vehicles(Nissan Jonga)

(ii) 2.5 ton 4 x 4 vehicles to replace existing 1 ton Nissan 4x 4 vehicles

(iii) 5 ton/7.5 ton vehicle to replace existing 3 ton 4 X 4 Shaktiman vehicles.

The General Staff Qualitative Requirements (GSQR) for above three categories of vehicles were proposed in 1975-76 and issued to Vehicle Research and Development Establishment (VRDE) Ahmednagar as well as to civil sector to enable them to offer their vehicles to the Army for users' trials. In 1980 a team visited West European countries to identify vehicles for evaluation in India. During 1982-85, extensive trials in different terrain were conducted involving the vehicles tendered by both Indian and Foreign firms viz. Benz, West Germany, Nismo Japan, TELCO, Ashok Leyland, Ex VRDE. After trial and evaluation, a revised GSQR incorporating certain changes in basic parameters and a few additional features was released in March 1986. On the basis of revised

GSQR Army recommended certain vehicles of BENZ/TATA for introduction in services.

Government, however, appointed another Study Team in December 1988 which in its report in October 1989 recommended the following vehicles on various considerations:

(1) 2.5 T x 4 x 4
TELCO vehicle-
for production in the factory

(2) (i) BENZ 1/2 T x 4 x 4

(ii) MARUTI Gypsy 413 4 x4

(3) 5/7.5 T 4 x 4/4 x 2
for fresh trials.

Army in November 1990 again invited indigenous automobile manufacturers to submit fresh samples for three types of vehicles for evaluation/trials/selection but samples of 2.5 ton and 1/2 ton vehicles submitted were not accepted (December 1993) and sample for 5/7.5 ton vehicle was stated to be under evaluation/trial. Finally in February 1993, Government decided to productionise 2.5 ton 4 x 4 TELCO vehicle at the factory in collaboration with M/s TELCO. Vehicles of 1/2 ton class and 5/7.5 ton class were still (December 1993) to be decided. Although Memorandum of Understanding (MOU) with M/s TELCO was signed in July 1993, collaboration agreement was under discussion with M/s TELCO. The detailed project report was stated to be under preparation (November 1993).

Thus, future generation of vehicles could not be selected after 20 years' of perspective planning. The delay in decision making led to the present situation where the factory is faced with a sudden decrease in orders, leading to under-utilisation of the factorys' capacity, as also in the ancilliary ordnance factories like Grey Iron Factory (90 per cent), Machine Prototype Factory (85 per cent) and Gun Carriage Factory (15 per cent).

26.4.2 Process of modernisation for future vehicles

The vehicles (Shaktiman, Nissan 1 Ton and Nissan Jonga) that are produced by the factory in 1980's were of 1950's design. The technology to produce these vehicles was obtained in collaboration with MAN of West Germany in September 1958 and Nissan Motor Company, Japan in February 1960 continued without being updated, as OFB did not have any procedure for updating the models of vehicles developed by the collaborators.

Moreover OFB were to manufacture the models of vehicle needed, tried out and selected by the Army according to GSQR. As brought out in earlier paragraphs, selection for new generation of vehicles could not be decided till date by Ministry of Defence, except for one type of vehicle which was only decided in February 1993, after 20 years of planning. Army's view point is that the existing vehicles are no longer adequate in view of their technical deficiencies and quality. Ordnance Factory Organisation was, however, never supplied with technical specifications of the type of vehicles required by the Army. Since introduction of futuristic vehicles had been on the anvil for more than 20 years, OFB could not plan for investment on such account as specifications and the GSQR had not been finalised.

26.4.3 Order position

The demand profile of the Army for the present series of vehicles was quite large. As on 1 April 1987 the total orders outstanding on the factory were 34071 which increased to 37777 during 1988. This came down sharply to just 7316 vehicles in April 1993. The downward trend in ordering is graphically represented in paragraph 5.1. The requirement of Army for three types of vehicles ranged between 41601 and 26290 during October 1986 to 1992, but number of vehicles ordered on OFB was negligible. The yearwise requirement and indents placed on OFB are shown in Table II of Annexure A.

Although the requirement of vehicles of the Army worked out to 33348 Vehicles as of October 1992 the order position dwindled during these years due to non-placement of orders on the factory. The outstanding orders would cover the production period upto June 1993 utilising the optimum capacity. The tapering off of the production was accepted in December 1991 to cover the production period upto 1994-95. Finally the Army decided in October 1992 that no fresh orders would be placed for existing models as it would be counter to the concept of futuristic vehicle induction policy. The manufacture of existing series of vehicles was to be continued at the factory upto December 1996 as decided by Ministry of Defence in July 1993. The Army also planned in 1993-94 to divert funds available due to tapering off of activity by the factory for procurement of vehicles ex-trade. During 1992-93, though production targets were accepted for 6000 vehicles, targets were reduced to 4600 vehicles which led to surplus in the Army's budget of Rs56.77 crores on this account.

In the meantime, the Army purchased 10481 vehicles at a cost of Rs294.66 crores from civil trade against supply orders placed during 1986-87 to 1990-91. Between May 1986 and 1988, 5278 4 ton 4x4 TELCO vehicles were purchased against 3 ton Shaktiman involving extra expenditure of Rs17.45 crores. 1141 TATA 1 ton 4 x 4 vehicles were purchased at higher cost as compared to Nissan (NC) 1 ton trucks, which involved extra expenditure of Rs11.50 crores. The purchase price and cost of vehicles produced at factory are indicated in Table III of Annexure A. It could not be ascertained whether TATA 1 ton vehicles were of superior specification than Nissan 1 ton manufactured by the factory as per GSQR. Similarly the necessity for purchase of 4 ton TATA vehicle in lieu of 3 ton Shaktiman according to existing GSQR was not clear.

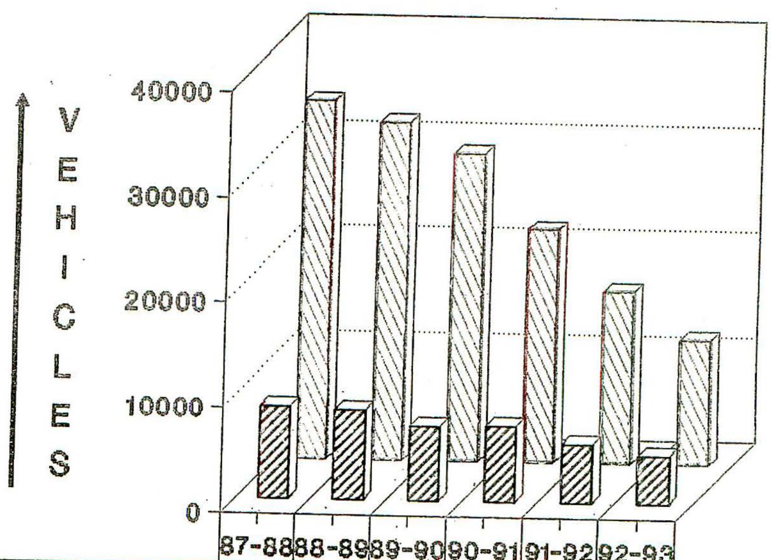
26.5 Effectiveness

26.5.1 Production and capacity utilisation

The factory was to produce 9000 vehicles (4500 SM, 2500 NC, 2000 NP Jonga) and 15600 spare engines (SE) working 54 hours per week or 10000 vehicles by working 60 hours per week in two shifts.

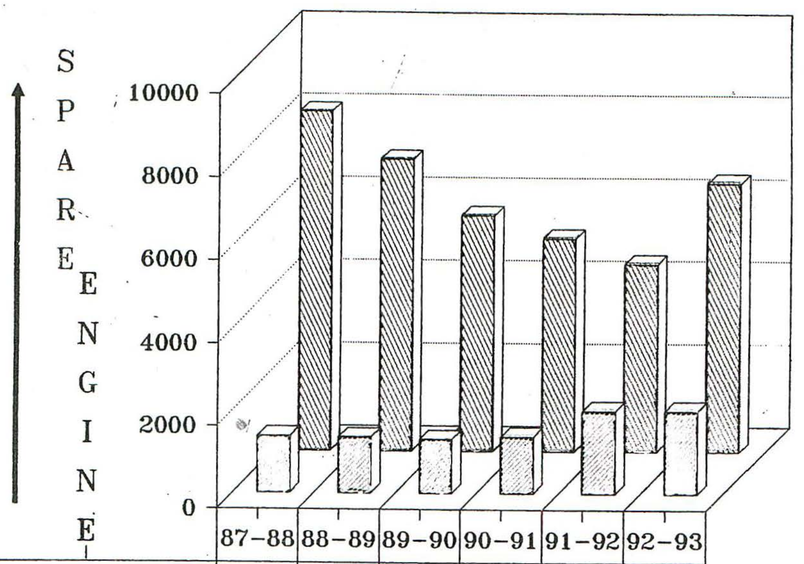
During 1987-88 to 1992-93, the total production was 41745 vehicles and 9398 SE. The graphic representation of yearwise vehicles produced vis-a-vis outstanding orders is as under :

VEHICLES PRODUCED Vs. OUTSTANDING ORDERS
(ALL CATEGORIES)



	87-88	88-89	89-90	90-91	91-92	92-93
OUTSTANDING ORDERS	34071	32177	29276	22180	16475	11936
PRODUCTION	8758	8504	7100	7201	5551	4631

SPARE ENGINE PRODUCTION Vs.
OUTSTANDING ORDERS



	87-88	88-89	89-90	90-91	91-92	92-93
OUTSTANDING ORDERS	8200	7051	5701	5151	4539	6508
PRODUCTION	1375	1350	1300	1373	2000	2002

In order to manufacture 9000 vehicle per annum (4500 SM, 3400 NC and 1100 NP Jonga) 183.79 lakh standard man hours(SMH) were estimated based on two shifts of 54 hour working week. Against this,SMH utilised on production of vehicles was as under:

Year	SMH utilised (in lakhs)
1987-88	189.66
1988-89	171.73
1989-90	145.01
1990-91	146.36
1991-92	119.50
1992-93	100.80

The capacity was derated to 5900 vehicles and 2000 SE based on 2 shifts of 51 hour working weeks amounting to 126.15 lakh SMH during 1991-92. The capacity was further reduced to 4600 vehicles and 2000 SE based on 2 shifts of 48 hours working week amounting to 100.80 lakh SMH from April 1992.

Thus against 183.79 lakh SMH available in 1987-88, activity was gradually tapered down to 100.80 lakh SMH in 1992-93, a reduction to 45.15 per cent of that in 1987-88. The main reason for tapering off of production was due to non-availability of orders from the Army.

26.6 Efficiency

26.6.1 Utilisation of machinery

The utilisation of optimum capacity of machines depends on the availability of adequate manpower and production load. The manpower sanctioned by Government in March 1979 was 12576, of these 9500 were classified as industrial employees (direct and indirect labour). The actual deployment of industrial employees ranged between 8730 to 8236. The factory had 3842 items of plant and machinery as of March 1993. The percentage of machine hour utilisation and manpower available during last six years was as under :

	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93
Percentage of machine hours utilisation	92.94	95.01	82.96	82.47	70.69	...
Direct and indirect labour	8730	8675	8607	8591	8526	8236

The yearly details of machine hour utilisation is shown in Table I of Annexure A.

With the induction of manpower the utilisation of machine capacity increased, it then showed a downward trend since 1989-90 because of reduction in working hours of the factory related to reduced production. Thus the capacity created was under utilised.

The normal replacement of machines due from 1980 onwards could not be carried out due to delay in taking decisions on the new generation of vehicles. The factory had 3842 items of plant and machinery as on March 1993, and about 2500 machines reached nil book value/residual value (5 per cent), 61.6 per cent (2388) of the holding were 16-20 years old and 11.1 per cent (343) were 20 years old.

26.6.2 Utilisation of manpower

In March 1979 Government sanctioned 12576 staff to be inducted gradually so that the factory could raise production to 10000 vehicles per annum. The break-up was as under :

Industrial Employees (IEs) (Direct and Indirect Labour)	9500
Non-Industrial Employees (NIEs)	2390
Non-Gazetted Officers(NGO)	597
Gazetted Officers (GO)	89

Against the above sanctioned strength of IEs, the posted strength on average was as follows:

	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93
IEs (Direct and indirect Labour)	8730	8675	8607	8591	8526	8236

The peak strength of 8730 IE was in 1987-88 with the peak production of 8758 vehicles. There was decrease in production of vehicles by 47.12 per cent in 1992-93 from 1987-88 production whereas the labour strength was decreased by 5.77 per cent only and therefore a considerable amount of labour remained idle. This indicated that labour/manpower utilisation was not optimum.

OFB stated (November 1993) although labour strength was reduced by 5.77 per cent, there was substantial reduction in the capacity in terms of SMH as with the reduction of OT hours the absenteeism of IE work force increased to the extent of about 25 per cent.

Till such time facilities are created for new series of vehicles, OFB proposed (January 1992) to obtain orders for 5000 Shaktiman vehicles from Army so as to provide some work load upto 1994. In case labour were laid off, it would involve financial implications of Rs28.00 crores per annum (including GIF). The Army contended (February 1992) that by providing orders for 5000 Shaktiman the exchequer would suffer a loss of Rs49.71 crore (i.e. after liquidating loss of Rs28 crores) by way of initial cost, running fuel cost, life cycle cost af overhauls etc, and it would put back the progress of replacement of existing fleet by future vehicles. Government, however, took a decision (February 1993) to place an order for 3000 Shaktiman vehicles on the factory but the picture of placement of order for 3000 Shaktiman vehicles by Army was not clear during the meeting taken by Secretary (DP/S) on 31 July 1993 to implement the above decision.

The adverse impact of inducting 3000 Shaktiman Vehicles in comparison to buy more fuel efficient vehicles from trade was still under examination as of October 1993.

Master General of Ordnance (MGO) stated in the above meeting that requirement of vehicle was expected to remain at the present level of off take i.e. about 4100 nos. (3/5/7.5 Ton : 2000 Nos., 1/2.5 Ton : 1300 Nos. and 1/4 or 1/2 Ton : 300 Nos.) keeping in view the likely budget availability in ensuing years. It was also decided that manufacture of the existing series of vehicles was to be continued at the factory upto December 1996.

In case factory's capacity is kept idle (including GIF) exchequer would have to spend Rs50.00 crores every year on account of salary and fixed overheads.

Although it was planned to produce 650 Telco 2.5 ton trucks using with CKD by March 1995, in view of dwindling position of off take either of existing/new generation vehicles, the utilisation of the labour force as also factory's production capacity (after tapering down) beyond January 1995 was not clear.

26.6.3 Inventory levels

There was reduction in inventory carrying cost from Rs170.13 crores as on 30 March 1990 to Rs 96.99 crores as on 31 October 1993 and stock holding in terms of days holding was reduced from 263 to 134 days during last 3 years. However, value of non-moving stores had increased from Rs 11.81 crores as of 31 March 1990 to Rs18.56 crores as of 31 October 1993. This indicates that some items of inventory may not have any future use.

A test check of non-moving stores had revealed that 2599 number of assembly tube rear axles valued at Rs19.85 lakhs which were procured between April 1978 and January 1982 could not be utilised in production as of 31 October 1993 and were lying as non-moving items.

Although inventory level was reduced, there was an increase in value of semi wrought inventory from Rs1.27 crores in 1990-91 to Rs39.99 crores in 1991-92. It thus appeared that manufacture of semi wrought items was undertaken to bring down the inventory level.

26.7 Other activities of the factory

26.7.1 Research and development work

The R & D facilities at the factory created in 1983-84 with an investment of Rs69.00 lakhs were basically meant for design product improvement, particularly to meet the Army's requirement from time to time on the existing version of the vehicle, derived out of feed back from the field.

With a view to improving and meeting the revised requirements of the Army, the factory manufactured a prototype model of a new version of Shaktiman - MATANG in 1989. This prototype had a more fuel efficient engine and synchronous gear box but the prototype was not accepted for users' trial on the grounds that it was of hybrid design.

26.7.2 Diversification

The Factory started supply of spares and spare engines to Ministry of Home Affairs (MHA) Indo-Tibetian Border Police (ITBP), Director General Border Roads (DGBR) and Civil Organisations. The factory received orders amounting to Rs421.53 lakhs during 1992-93.

Besides the above, the work load from the new generation vehicles by itself being inadequate for effective utilisation of the existing manpower, the factory was planning to diversify its activities in other areas.

26.8 Miscellaneous

26.8.1 Overtime

During 1992-93 when the hours per working week were reduced to 48, and output hours were less than available manhours, the factory worked for 15.82 lakh hours on OT (including IEs, NIEs and NGO's) and Rs119.39 lakhs were paid.

26.8.2 Conversion of Piece Worker to Day Worker

Out of two categories of workers, Piece workers (PW) are paid on the basis of their output whereas Day workers (DW) are paid on time basis without regard to output. As per rules PW's may be shifted to DW, but DW cards are to be issued indicating therein nature of work to be performed by them.

A test check of such shifting of PW workers for DW during

May to October 1992 (6 months) revealed that 349 PW were deployed as DW for 52363 man days involving payment of Rs29.00 lakhs without indicating the specific nature of work in DW cards. Audit, therefore, was not satisfied that there was no idle time payment. On being pointed by Audit, OFB stated that the system has since been corrected.

26.8.3 Unavoidable rejection (UAR)

Machining rejection percentage provided in factory estimates (12 per cent) were revised to 27 and 32 per cent in 1987-88. While a comment on rejection of castings (Shaktiman Crank case, Shaktiman cylinder head, Nissan cylinder head) manufactured by GIF Jabalpur due to bad material during 1984-85 to 1988-89 was made in the Audit Report for the year ended 31 March 1990 (Para 25),it was further observed that the factory continued to receive defective castings over and above the percentage of rejection allowed which were subsequently rejected their total value being Rs3.79 crores during 1989-90 to 1991-92. Existing instructions stipulate that all abnormal rejections beyond UAR are to be kept out of production accounts and the value of such rejections is to be regularised by competent financial authority. OFB stated (November 1993) that the regularisation action is in progress and an amount of Rs1.20 crores has been regularised.

26.8.4 Maintenance of stores accounts

26.8.4.1 Discrepancy persisted between computerised accounting and manual accounting of Store balances as shown below :

	Inventory holding as shown in Annual Accounts	Computerised figures	Difference
			(Rupees in crores)
1989-90	170.13	153.18	16.95
1990-91	148.98	146.60	2.38
1991-92	121.87	136.81	14.96
1992-93	100.98	Under compilation	

The difference in store balance between computerised accounts and priced store ledger maintained manually by Accounts office was still to be reconciled and adjusted.

26.8.4.2 Audit observed that 10400 units of imported casting valued at Rs21.44 crores were not reflected in the bin cards and no details about the receipts of those castings were made available. This was accounted for as surplus in stock-taking during 1990-91. There were shortages in respect of 32 items valuing Rs100.25 lakhs during stock verification from 1981-82 to 1984-85 and 1986-87 to 1988-89. Of these, 12 items valuing Rs11.62 lakhs were under investigation by different Boards of Enquiry and 15 items valued at Rs64.18 lakhs were issued from stock to the user section against free replacement orders which were not shown in regular bin cards. The discrepancy remained un-settled and OFB stated in November 1993 that action to regularise the discrepancy is in hand.

26.8.4.3 In respect of materials issued from one factory to another factory, inter factory issue vouchers are prepared by the storeholder. When the stores are received, the vouchers are to be linked with inter-factory demand and receipt vouchers. Otherwise the stores would be shown in the accounts as being in transit. During 1991-92, an amount of Rs20.19 crores was shown in Annual Accounts as value of stores in transit between factories. This indicated that vouchers for Rs20.19 crores remained outstanding due to non-linking with factory's inter-factory demand and receipt vouchers. The stores shown under transit were casting assemblies, fabrication-items, gear boxes, etc. received from various sister factories during 1971 to 1984.

A Board of Enquiry ordered to investigate the causes for outstanding vouchers had stated in November 1991 that the linking was not possible due to negligence and poor record keeping of Inter Factory Demand Group of the stores section during 1971 to 1984. The Board could not fix responsibility for the lapses as the records and staff concerned were not available.

The case was referred to the Ministry in August 1993, their reply has not been received as of January 1994.

Annexure A

Table-I

Machine hour utilisation

		1987-88	88-89	89-90	90-91	91-92
A.	Available Machine Hours (in lakhs)	183.98	183.98	183.98	183.98	183.98
B.	Output Hours (in lakhs)	170.99	174.80	152.64	151.73	130.06
C.	Percentage of Machine hour utilisation	92.94	95.01	82.96	82.47	70.69

Table II

Statement showing requirement of vehicle as on 1st October of each year and indents placed on DGOF

Year	3 Ton Shaktiman		Nissan I Ton		NSN Petrol/Jonga	
	Requirement	Indent placed for	Requirement	Indent placed for	Requirement	Indent placed for
	(In nos.)		(In nos.)		(In nos.)	
1986	25463	478	6793	481 162	9345	52 16 152
1987	17706	6800	8284	#	11406	57
1988	13179	#	4406	3600	8705	#
1989	15652	#	4750	#	8385	#
1990	22070	#	9961	#	14810	#
1991	18672	#	6246	#	9601	#
1992	15533	#	7410	#	10405	#

No indent placed

Table-III

Extra Expenditure on purchase of vehicle from Civil trade

For 3 Ton Shaktiman
4 Ton 4 x 4 vehicles

Date of S.O	Qty.ordered	Purchased Rate	Cost of production at Factory	Diffe-rence	Total differ-ence in cost
	No	Rs	Rs	Rs	Rs
May 1986	1000	335231	286137	49094	49094000
March 1987	2080	336823	286137	50686	105426880
Feb.1988	128	339387	316422	22965	2939520
	55	33104	316422	14592	802560
May 1988	2015	341489	333406	8083	16287245
	5278				174550205

1 Ton NSN 4 x 4

May 1986	1000	285657	179885	105772	105772000
July 1990	141	346030	280565	65465	9230565
	1141				115002565

27. Opto Electronic Project

27.1 Introduction

The Defence plan for the period 1980 to 2000 envisaged the induction of a new type of tank together with Infantry Combat Vehicles (ICV's) so as to increase the mobility and fire power of the Armed Forces. The new tank was to replace in a phased manner, two existing types of tank already in service.

In line with this change, the Ordnance Factory Board (OFB) was required to set up the following facilities :

1) a factory to produce a type of Tank at an estimated cost of Rs605.75 crores (July 1984 modified in April 1987);

2) a factory to produce ICV's at a cost of Rs421.48 crores (June 1984)

3) a factory to produce engines for Tank and ICVs at a cost of Rs166.44 crores (July 1984 modified in April 1987)

4) a factory to produce opto electronic devices to facilitate night/low light fighting capabilities of Tanks and ICVs at a cost of Rs111.11 crores* (June 1984).

The Comptroller and Auditor General of India in his reports presented before the Parliament in 1991 and 1992 had reviewed the first 3 projects. This indicated that due to financial constraints the philosophy as envisaged had to be severely curtailed leading to gross under utilisation of installed capacities. The reports highlighted, amongst other matters, the inability of the Director General Supplies and Disposals (DGSD) and of certain Public Sector Undertakings to handle the procurement of plant and machinery in a timely and efficient manner.

This review is thus a logical sequel which examines critically the fourth interlinked project viz. the Opto electronic Factory Dehra Dun.

Ministry of Defence had accorded sanction for setting up this factory for indigenous production of a certain number of opto electronic instruments in June 1984 at an investment of Rs102.85 crores (FE : Rs28.53 crores). This was increased to Rs108.74 crores in February 1987 (Civil works : Rs44.26 crores and plant and machinery Rs64.48 crores). The setting up of this factory was a corollary to the sanctioning of the projects for Tanks (Ajeya) and Vehicles (Sarath) which are fitted with sophisticated opto-electronic vision instruments.

The project was to be completed within 36 months of issuance of Ministry's sanction.

27.2 Organisational set up

The work of construction of the new factory (project) was organised on three principal activities viz. execution of civil works, procurement of plant and machinery and induction of manpower. The execution of civil works was entrusted to the Military Engineer Services (MES). The existing structure of the delegation of financial powers was liberalised for procurement of plant and

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* This includes Rs8.26 crores as deferred revenue expenditure.

machinery enhancing the powers of Ordnance Factory Board (OFB) from January 1986. It was decided that the actual induction of manpower was to be made in accordance with the requirement of the project from time to time.

27.3 Scope of Audit

A review of the implementation of the project was conducted by Audit during 1992-93 with a view to assessing the capacities created and their utilization in the area of sophisticated technology of opto-electronic instruments.

27.4 Highlights

- **The project initially scheduled for completion by June 1987 was yet to be completed although most of the activities had been completed by March 1992.**

  (Paragraph 27.5)

- **There was a cost over run in the execution of civil works to the extent of Rs6.94 crores.**

  (Paragraph 27.6.1)

- **Construction of production building was delayed by more than two years and as a consequence 120 machines valued at Rs184 lakhs could not be installed during warranty period.**

  (Paragraph 27.6.1)

- **Against 995 residential quarters to be completed by September 1989, 21 quarters are still to be taken over. Delay in taking over quarters was stated to be due to litigation with the contractor from whom an amount of Rs70 lakhs was to be recovered.**

  (Paragraph 27.6.1)

- **Though the project was sanctioned in June 1984 for Rs102.85 crores revised to Rs108.74 crores in February 1987, the detailed project report (DPR) indicating requirement of Rs183.15 crores to make it technically viable was submitted only in July 1988. In August 1991, Government revised the sanction restricting the amount to Rs108.74 crores by reducing the number of machines from 1926 to 1593 without affecting the viability of the project. This indicates that DPR was not framed with adequate technical inputs leading to** over estimation of financial requirements. Changes in the requirement of machines is also indicative of a need to update knowledge of available technology on an ongoing basis.

(Paragraph 27.6.2)

- The overall delays in ordering, receipt and commissioning of plant and machinery was more than three and half years and cost over run was of Rs4.47 crores.

(Paragraph 27.6.2)

- The projected production has been reduced to 50 - 62.5 per cent from the planned level since 1990-91. This was again reduced to 72 - 84 per cent in 1992-93, from planned level. However, the manpower was increased from 50 per cent in 1990-91 to 58 per cent in 1992-93. This is likely to result in under utilisation of manpower.

(Paragraph 27.6.3)

- Reduction in production programme from 1990-91 for Ajeya Tanks and Sarath Vehicles resulted in the reduction in the requirement of opto-instruments from 250/625 sets to 125/150 sets from 1990-91 onwards. This was further reduced to 30 sets in 1992-93. Thus the capacities created with an outlay of Rs120.85 crores would remain greatly under utilised. Diversification activities were insignificant.

(Paragraph 27.7)

- The indigenisation of all the instruments was to be completed by 1990-91. Till August 1993, only 8 items were fully indigenised (20 per cent),resulting in import of assemblies/ components of instruments. The value of such assemblies/ components lying with the factory as of 1st April 1993 was Rs88.00 crores.

(Paragraph 27.8)

27.5 Project parameters

The new factory was to produce and assemble opto electronic instruments while existing facilities at ordnance factory D would be fully utilized for conventional opto-mechanical instruments, the requirements of which would continue even with the introduction of Ajeya Tank and Sarath Vehicle.

The details of plant and machinery and civil works were based on the Preliminary Project Report (PPR) furnished by the foreign collaborator. However, the project parameters were subsequently changed as there was change in the instruments to be manufactured due to changes in the type of Sarath Vehicles (Sarath Vehicle II was being introduced in the place of Sarath I Vehicle) and the scope of civil works was also changed. The requirement of plant and machinery was also revised and a Detailed Project Report (DPR) was submitted in July 1988. However, even these changed requirements were based entirely on the details of plant and machinery used by the collaborator country. There was no process of evaluating whether such machinery had been rendered obsolete in the light of advances made in machine technology. The revised amount for capital investment was estimated as Rs183.15 crores against Rs108.74 crores sanctioned. However, the Ministry decided in August 1991 to complete the project within the sanctioned cost of Rs108.74 cores without altering the original scope of the project.

The instruments were planned to be manufactured in sets. The total number of devices in each set required to be manufactured for an Ajeya Tank is 22 and for a Sarath is 20. However,2 devices were deleted in February 1988. Out of this, 11 devices for each were to be manufactured at the new factory and facory D and the rest at public sector undertakings.

Production was to be established for all types of instruments by 1987-88 and 1988-89 and peak production capacity was to be achieved by March 1992 (250 sets) and March 1994 (625 sets) for Ajeya and Sarath Vehicles respectively. The annual output was expected to Rs100.00 crores as per original plan.

The cost of plant and machinery and civil works, dates of completion and current status are indicated below :

	Approved cost	Expenditure incurred including committed (March 1993)	Approved date of completion	Status as of March 1992 (Per cent)	Status as of March 1993 (Per cent)
	(Rs in crores)				
Civil works	44.26	51.20	June 1987 Changed as per DPR (July 1988)	99	100
Plant & Machinery	64.48	56.39	Ajeya Tank March 1992 Sarath Vehicle March 1993	97	99.5

27.6 Execution of the Project

The project was organised on three principal activities viz. execution of civil works, procurement of plant and machinery and induction of manpower.

27.6.1 Civil works

The approved amount for civil works was Rs44.26 crores. For taking up preliminary items of civil works immediately, a go-ahead sanction for Rs3.21 crores was accorded in August 1984.

To complete the project within the scheduled time frame of 36 months, it was planned in July 1984 to complete the production buildings with services between March 1986 and March 1987. For this, two administrative approvals (AA) for connstruction of production buildings and other civil works were issued in November 1984 for Rs36.46 crores as amended in July and December 1985 for a total sum of Rs40.18 crores.

The construction work of main production buildings (mechanical and optical shop) without services commenced in 1985 and other production buildings in August 1986 with the completion date envisaged as March-December 1987 respectively. The main production buildings could only be completed in August 1987 and the other buildings in April-September 1989. Although it was known in July 1984 that a special type of air conditioning and surgically clean atmosphere would be needed in respect of the production buildings, the work for air-conditioning of the buildings commenced only in March 1987. The delay in commencement of air-conditioning was due to covering of additional area under air-conditioning as per recommendation of the collaborator at a late stage in January 1986. Against the scheduled date of completion of March 1988, the work was physically completed without testing in June 1989, the testing and rectification work was completed only in March 1992.

As engineering services to the buildings could not be completed, these were not ready for installation of production facicilities. Thus against the plan to complete the production buildings by March 1987, the delay was more than 2 years and the overall completion date for all production buildings including engineering services could not be maintained by MES as per schedule.

The specific delays in respect of certain important production buildings are tabulated below :

Building	Planned completion date	Date of completion as per contract	Actually completed	Delay with reference to planned (in months)
Machine Shop	July 1986	March 1987	August 1987	13
Optical Shop	October 1986	March 1987	August 1987	10
Electro Plating and Painting	March 1987	June 1987	August 1989	29
Electronic Assembly	March 1987	June 1987	August 1989	29
Assembly II	March 1987	September 1987	August 1989	29
Electro Optical Shop	March 1987	December 1987	August 1989	29
Assembly I	March 1987	November 1987	June 1989	27
Optical Shop	March 1987	December 1987	June 1989	27

As a result of delay in completion of civil works 120 machines (value: Rs1.84 crores) received between 1986 and 1988 could not be commissioned within the warranty period.

The committed expenditure on civil works upto March 1993 was Rs51.20 crores against sanctioned amount of Rs44.26 crores indicating cost-overrun of Rs6.94 crores. The increase in the expenditure on civil works were mainly due to change in the design of the main production buildings,by providing pile foundation, additional floors and special fittings to internal electrical systems after consultation with collaborator in January 1986. Similarly, air-conditioning area was increased by 13624 sq.m resulting in an increase in the capacity of the air-conditioning plant.

It was decided in July 1984 that the requirements of residential accommodation for the personnel of the new factory would be met from out of the omnibus provision made in the plan 1980-85 for Housing in the Ordnance Factories. Government sanction was accorded in July 1985 for construction of 995 married quarters of different types at a cost of Rs9.93 crores with the probable date of completion being July 1988. The date of completion of residential quarters was not linked up with the completion of project facilities which was to be ready by June 1987.

The contracts for construction of married quarters were concluded in 1985-86 and 1986-87 and all 988 married quarters were to be completed by September 1989. However, only 667 quarters were ready by July 1989. Out of 568 type C (III) quarters, 257 quarters could not be completed within the scheduled time due to litigation with the contractor.An extra expenditure to the extent of Rs70 lakhs was incurred in completing the work. The question of recovery of the extra amount from the contractor is subjudice/ under arbitration. While handing over of the completed quarters to OFB commenced from March 1988, 967 quarters were taken over by OFB upto March 1993, 21 quarters were still under construction (November 1993) and there was no planning for the remaining 7 quarters. Out of this, 364 quarters were occupied by the employees of the new factory and 44 by foreign specialists as of August 1993. The remaining quarters (544) were occupied by employees of factory D, 59 quarters were vacant. This indicates that occupancy by personnel of new factory was only 38 per cent and quarters were not occupied by persons for whom these were constructed.

Till February 1993, an expenditure of Rs11.39 crores was incurred, which was 14.70 percent more than the approved amount.

The 24 months allowed in administrative approval by Government for construction of 995 quarters was found unrealistic against 41 months allowed by Engineers, and actually it took more than 66 months from the scheduled date of completion to finish the work. This indicates that execution of work was not properly planned.

27.6.2 Plant and Machinery

The Government sanction of June 1984 included an amount of Rs64.48 crores (FE: Rs28.53 crores) for procurement and commissioning of plant and machinery (P & M) for the project. The OFB finalised a list of 2453 machines (value: Rs64.48 crores) for the entire project in June 1985. At the time of preparation of DPR the quantity of machines was reduced to 1926 with the intention of procuring better quality machines within the sanctioned amount.

Against 1926 machines, only 1593 machines valued at Rs57.54 crores were procured by March 1993 through a contract entered with a public sector undertaking in September 1986 for Rs98.00 lakhs. The reduction in the requirement of number of machines was done to take advantage of upgradation of facilities available in trade during the intervening period without altering the technical viability of the project. Had the Ministry/OFB possessed updated technological know how, the delay in commissioning could have been reduced.

Although the cost of P & M was reduced from the original sanction, in fact the foreign exchange component was increased by Rs4.47 crores due to import of certain machines in lieu of indigenous machines.

As per DPR, installation/commissioning of all plants and machinery in shop buildings were scheduled to be completed between October 1988 and August 1989, but only 939 machines were commissioned upto August 1989 and 653 by August 1993. Out of a total of 1593 machines,one machine was yet to be received (November 1993). The overall delay in commissioning of machines with reference to plannning was more than three and a half years inclduing delays in construction of civil works in respect of these machines.

Customs duty was totally exempted for this project, but an amount of Rs90.77 lakhs paid on this account was still to be recovered from customs authorities as of March 1993.

The reasons for delay in procurement/commissioning of plant and machinery as attributed by OFB were as under :

(a) The change in the production of instruments for Sarath Vehicle-I to II had resulted in reformulation/reorganisation of machines.

(b) There was necessity for in depth discussion with collaborator's specialists while finalising specification of machines;

(c) There was an embargo in dealing with Indian agents for imported machines and consequent long correspondence with foreign vendors for direct order placement .

(d) Embargo imposed by foreign governments;

(e) There was delay in deputation of foreign specialists/indigenous suppliers for erection and commissioning of plant and machinery.

27.6.3 Manpower

Government accorded sanction in June 1984 to the creation of 4039 posts in different grades and actual induction was to be made in accordance with the requirements of the project from time to time. 2359 posts were filled up as on April 1993. The year-wise break-up of deployment was as under:

As on 30 April	No. of posts filled up	No. of machines (commissioned) As on 30 Sept.
1986	227	
1987	818	39
1988	841	320
1989	1381	969
1990	2029	1360
1991	2218	1480
1992	2364	1583
1993	2359	1592

From 1990-91 the projected production of instruments for tanks and vehicles had been reduced to 37.5/50 per cent and 62.5 per cent of that planned. This was further reduced by 72 and 84 percent in 1992-93 though the manpower was increased from 50 per cent of authorised posts in 1990-91 to 58 per cent in 1992-93. OFB stated (October 1993) that vacancies had been filled up keeping in view requirements of completness of infrastructure and projected production load and there had not been increase in manpower from April 1992 onward in view of modified plan of production.

Even though there was no increase in manpower after April 1992, in view of the drastic reduction in production programme in 1992-93, there is likelihood of under-utilisation of the labour force which constitutes 58 per cent of the total authorised posts.

27.7 Production and capacity utilisation

Initial production of instruments for 1987-88 and 1988-89 were to be from imported assemblies and sub-assemblies from collaborators. The production thereafter was to be gradually indigenised. The instruments were planned to be manufactured in sets, each set comprising of 22 devices for an Ajeya Tank and 20 devices for a Sarath Vehicle.

e original production plan, modified [illegible]
n are as under :

Year	Ajeya Tanks (instruments in Sets)			Sarath Vehicles (instruments in Sets)		
	Production plan as per DPR	Modified plan	Further modified	Production plan as per DPR	Modified plan	Further modified
1987-88	25	-				
1988-89	100	-		100	-	-
1989-90	150	-		150	-	-
1990-91	200	125		220	231	-
1991-92	250	125		400	150	-
1992-93	250	125	80	500	150	80

Thus production programme of instruments for Sarath Vehicles been reduced from 500 to 80 and for Ajeya Tanks from 250 to nos. in 1992-93. This was due to financial constraints and nward revision in supply programme of instruments on account reduction in the main item.

The production schedule of instruments to be supplied were ed on the requirements of sister factories producing the Ajeya k and Sarath Vehicle and the production target from 1987-88 l 1992-93 had been met in full. Although the production target s met, this was much less than the number of sets for which the ctory was set up.

There was no production of four instruments developed by DO due to non-receipt of any order.

As per original plan, the annual output was expected to be s100 crores (against an investment of Rs108.74 crores) but on ccount of modified plan, the value of production even taking nto consideration escalation in prices was reduced by 71 to 76 er cent during 1991-92 to 1992-93 as tabulated below:

Year	Value of production (including cost of CKDs)	Investment Output ratio
		(Rupees in crores)
1988-89	5.42	1:0.54
1989-90	30.78	1:0.30
1990-91	35.27	1:0.35
1991-92	28.58	1:0.28
1992-93	24.61	1:0.25

Keeping in view the production capacity of 250 sets of instruments for Ajeya Tanks and 625 sets for Sarath Vehicles per annum, all the civil works have been completed and the essential plant and machinery procured. The factory was thus equipped to achieve its full capacity by 1991-92 and 1993-94. However there was a drastic reduction in production programme of instruments as a result capacity created at a cost of Rs108.74 crores would remain largely under utilised.

In an attempt to diversify, orders for 20 laser safety devices and 3 types of mirrors have been received from other agencies till March 1993 and possibility of export of optical systems and elements was being explored. So far gainful utilisation of the capacities already created by diversification activities remained insignificant.

27.8 Indigenisation and import product support

The execution of production programme was planned in different stages viz from imported assemblies/sub-assemblies, imported components, imported materials and indigenous materials. Depending upon the availability of production facilities, out of 22 and 18 types of instruments, manufacturing/indigenisation responsibility of 11 types of instruments for Ajeya Tanks and 7 types of Sarath Vehicles were assigned to public sector undertakings (PSUs) and the balance were to be developed by the factory (project) and the factory D. Against a target of complete indigenisation of all types of instruments by 1990-91, 8 instruments were indigenised till August 1993 when the percentages of indigenisation of the remaining instruments ranged between 20 and 93. Out of 18 items indigenisation of which was entrusted to PSUs, only one item could be indigenised till August 1993.

The initial production was based on import, and contracts for supply of assemblies/components/materials of the value of Rs175 crores was concluded with the collaborator/other countries till March 1992. However, till March 1993 assemblies of instruments have been established with the help of some imported components/CKDs as product support. The value of unutilised CKDs lying with the factory as on 1 April 1993 was Rs88.00 lakhs.

Thus complete indigenisation could not be achieved except for 8 items since production commenced in 1987-88/1988-89.

27.9 Monitoring of the project

In order to monitor the progress of the project, Government their sanction of June 1984 had constituted two committees viz:

i) Inter-departmental Management Board and

ii) Steering Committee.

Between 1984 and March 1992, 6 Project Management Board meetings and 13 Steering Committee meetings were held to review the technical and financial progress of the project.

In addition, Government in October 1984 sanctioned Rs 75 lakhs for consultancy services for system development as well as furnishing data for project monitoring. The basic idea for consultancy service was to render advice on slippage of the project so that civil works, procurement of plant and machinery and monitoring of the project could be done within the time and funds available and production could start within the time bound programme.

Accordingly a contract with a firm was concluded by factory 'D' in December 1986 for a period of 2 years for rendering consultancy services at a total cost of Rs18.50 lakhs. The contract with the firm was to evolve project monitoring systems based on the overall parameters. However, the master control net work developed by the firm was frozen although Rs18.50 lakhs was paid to them.

Thus the coordination steps could not be monitored effectively.

27.10 Other topics

27.10.1 Training Institute

Government sanctioned in August 1983 construction of a Training Institute for imparting training to 200 workmen per year in optical production and assembly technology at a cost of Rs1.38 crores increased to Rs1.76 crores in May 1984.

The training facilities were created for 1000 trainees over a period of 5 years by inducting 200 trainees qualified from Industrial Training Institutes every year.

The Institute was ready by June 1987 after incurring an expenditure of Rs1.85 crores. The construction of technicians' hostel sanctioned in September 1984 at a cost of Rs82.52 lakhs was completed in December 1986 and 14 instructors were recruited between June 1985 and January 1987. The training commenced in February 1987 and 390 workmen were trained till December 1991 against 200 workmen per year, thus, utilizing the capacity of the training facilities only partially. Ministry stated (February 1993) that available capacity is being utilised for training needs of all categories of employees as well as re-orientation of workmen of various trades.

27.10.2 Loss of stores due to fire in transit

746 boxes containing imported knocked down components (CKD) in respect of opto instruments were booked by Embarkation Headquarters (HQ), Bombay for transportation by passenger train on 2nd September 1988 to factory 'D'. The wagon caught fire en-route on 8th September 1988 and as a result 466 boxes were damaged and out of the balance 280 boxes, contents of 105 were found unusable. A claim for Rs.3.33 crores was lodged with the Railways in December 1988 which was rejected in April 1989 mainly on the grounds that :

(i) the loading was done by Embarkation HQ Bombay inside in a private siding without being supervised by railway staff;and

(ii) the wagon was loaded in excess of carrying capacity.

The factory refuted the above and stated that the stores were loaded from Embarkation HQ Bombay siding and weight of store was 26.7 tonnes against a capacity of 40 MT, for which a clear Railway Receipt was obtained. The factory, therefore, lodged an appeal in May 1989 to the General Manager, Northern Railway, New Delhi against the rejection of the claim by office of Chief Commercial Superintendent (CCS),Varanasi. The Chairman Railway Board, with whom the matter was ultimately taken up also upheld the decision taken earlier by CCS Varanasi. A decision was sought through Permanent Machinery for Arbitration (PMA). The final outcome is awaited (March 1993).

28. Interim Anti-Tank ammunition project

28.1 Introduction

To develop a new anti-tank ammunition 'X', a project was sanctioned in June 1976 for a cost of Rs1.30 crores. Two Laboratories 'A' and 'B' under the Defence Research and Development Organisation (DRDO) were entrusted with this work.

The design of the ammunition was finalised by April 1982 and the amount spent was Rs1.23 crores. The drawings of the ammunition were accepted in July 1982 by the competent technical authorities although no trials of the developed ammunition were carried out by the Army till then. This was stated to be necessitated by the urgent need to start bulk production immediately. The trials of the newly designed ammunition were subsequently held by the Army in November/December 1982 and were reported by Laboratory 'A' as successful.

However, the ammunition 'X' was accepted by the Army for introduction in service in April 1982 even before the trials were conducted.

The development work on the above project was completed by April 1983, when another project was sanctioned for Rs1.82 crores in which Laboratory 'A' was to establish the free flow production of ammunition 'X' in Ordnance Factory 'C' and Laboratory 'B' was to manufacture the penetrator blanks.

28.2 Sanction of the project

To meet the sustained requirement of the Army for ammunition 'X', on a long term basis a proposal was under consideration to set up a new factory, but to meet the requirements in the intervening period, Government accorded sanction of Rs4.30 crores in January 1983 for creation of facilities i.e. plant and equipment to undertake manufacture/machining of the additional components required to make 6000 units of ammunition per annum at Factory 'C'. This was in addition to the facilities already existing at Factory 'C' for production of ammunition 'Y' which was to be replaced by 'X'. The facilities were to be created by June-August 1983.

While the production of empty shots,machining of penetrators and other components as well as final assembly would be done at Factory 'C', Laboratory 'B' was to produce and supply penetrators to Factory 'C' for assembly. The filling of empty shots into rounds was planned at Factory 'D'. Production of empty shots at Factory 'C' was to be carried out in close association with Laboratory 'A'.

However, the enhanced facilities at Factory 'C' could not be completed as planned and clearance was given by Laboratory 'A' for manufacture of regular lots of empty shots with the existing facilities in June 1983.

28.3 Production and rejection

When regular lots were made, it was observed that proof samples started failing right from first lot. Lot No. 01 to 05 having a total quantity of 1147 units valued at Rs83.45 lakhs failed in proof due to malfunctioning and were rejected. While firing these shots for proof, 14 gun barrels costing Rs32.22 lakhs were also damaged.

An investigation was undertaken by Laboratory 'A' and swaging of penetrators was introduced. Lots were assembled with swaged penetrators but these were also rejected at proof. The persistent failure at proof stage was discussed at various forums and their analysis conclusively revealed that these high technology items could not be manufactured to the required precision with the facilities available at Factory 'C' and would require a Computerised Numerically Control (CNC) machine. There was delay in procuring a CNC machine at Factory 'C'. The DRDO and Ordnance Factory Board (OFB) jointly approached a Public Sector Undertaking (PSU) for manufacture of the component to the desired precision. 12,100 components were machined by the PSU at a cost of Rs84.03 lakhs.

Certain new measures in manufacture and acceptance criteria were introduced by Laboratory 'A'. Lot Nos. 06 to 15 (3903 Nos.) were manufactured during 1986-87 and cleared as they showed satisfactory functioning at proof.

Although the above lots were cleared at empty proof stage, malfunctioning of lot 13 was noticed at filled proof. Subsequent lots also started malfunctioning at different stages of proof such as empty stage, filled stage or subsequent proof like propellant proof. Irrespective of the defects, ammunition made out of those lots were not rejected finally. The task force comprising of Laboratory 'A' & 'B' and Factory 'C' & 'D' identified several abnormalities during the manufacture of this ammunition. The production was stopped after 2051 shots (Lot 16 to 20) were manufactured at a cost of Rs1.64 crores. Out of these lots, lots 17 and 20 (value: Rs36.80 lakhs) were rejected.

Due to concerted efforts made by all the agencies viz. production, design and quality assurance since the commencement of bulk production, initial rate of failure of rounds (ammunition 'X') were brought down from ten to one per cent, but it was not possible to pin-point the causes which were responsible for malfunctioning. Thus to accept the design as developed and ready for productionisation was premature, and transfer of technology for bulk production in June 1983 was not a sound decision. This resulted in huge losses by way of rejection of lots (Rs122.34 lakhs) and damage to barrels (Rs32.22 lakhs). Also the ammunition failed to meet the users' requirement.

Out of 7101 shots produced during 1983-88 at a cost of Rs531.44 lakhs, 1620 shots valuing Rs122.34 lakhs were rejected. 1160 rejected shots costing Rs85.54 lakhs were supplied to Factory D and Laboratories 'A' and 'B' and 460 shots costing Rs36.80 lakhs were lying with Factory 'C' since 1988-89 with no possibility of their utilisation. More significantly the need to fulfil the Army's urgent need for 6000 rounds of the ammunition per year could not be fulfilled.

According to the Ministry (February 1989) the production was retarded due to (i) failure of shots in proof and (ii) inadequate supply of good quality penetrator by Laboratory 'B'. This reveals that there was premature transfer of technology by DRDO to the ordnance factory for bulk production. The inadequate supply of penetrators by Laboratory 'B' had not caused much effect on production of shots as material specification of the component could only be finalised by Laboratory 'A' in July 1985, when machining of the component through a PSU was decided.

28.4 Work services of the project

(1) Civil Work :

No civil works for housing machines were involved as such. The administrative approval(AA) for civil works relating to power and water supply was issued in 1985 for Rs41.91 lakhs, of which power was to be completed by January 1986, and water by August 1987. The work could not be completed as the site for construction of overhead tank was changed due to poor soil conditions involving changes in quantities of pipe line and escalation in cost. The water works were ultimately completed in October 1990 and power by February 1991 by which time production of shots had been stopped. An expenditure of Rs56.21 lakhs was booked upto September 1989.

(2) Procurement/commissioning of Plant and Machinery

The sanction provided procurement of 73 machines at a cost of Rs3.63 crores and planned date of their commissioning was July-August 1983. The requirement of machines was reduced by 5 machines valuing Rs52.44 lakhs and 4 items were of non plant and machinery categories. Total 64 machines costing Rs4.59 crores were commissioned by January 1989. Thus the delay in procurement/commissioning of machines was more than 60 months. The main reason was that vital machines had to be procured through Director General Supplies and Disposals (DGSD) who took procurement action for 11 machines including CNC machine between 1984 and December 1987. In respect of one CNC machine valuing Rs48.87 lakhs for which indent was placed by OFB in May 1983, order was placed on a foreign firm by DGSD in December 1987. This was received in July 1990 and could be commissioned in July 1992 after certain rectifications by the supplier. Meanwhile production of Ammunition 'X' had been stopped since 1988-89.

(3) Cost/time over run :

The expenditure upto September 1989 worked out to Rs5.14 crores. The sanctioned cost was Rs4.30 crores. It was decided not to procure machines valuing Rs52.44 lakhs thus bringing down the approved cost to Rs3.77 crores. The cost over run of Rs1.37 crores was mainly due to increase in cost of plant and machinery.

Against the expected date of completion of July-August 1983, the project was almost complete in March 1989 after a delay of 65 months mainly due to delay in procurement of machinery by DGSD.

28.5 Stoppage of production

While the facilities were nearly ready only by March 1989, the production of shots was stopped from 1988-89 and it was off loaded in June 1989 to Factory E, a new factory set up for production of ammunition 'X' on a long term basis. Thus justification for creating the facilities for immediate supply of ammunition 'X' at factory 'C' were defeated and the plant and machinery installed under the project also remained grossly under-utilised even though the production line was enhanced in terms of quality and capacity.

28.6 To sum up :

(1) The design for bulk production was passed before having fully developed. 1,602 shots valued at Rs1.23 crores were rejected in proof trials and 14 gun barrels costing Rs32.22 lakhs were damaged in firing these defective shots.

(2) For production of ammunition-'X', a new factory was to be set up and to meet ammunition requirement in the intervening period certain facilities at Factory 'C' were sanctioned in

January 1983 at a cost of Rs4.30 crores to be completed by August 1983. However, most of plant and machinery could be procured and commissioned only by January 1989 by which time production of the shots had been stopped. The civil works of the project were completed only by February 1991.

The delay in establishment of the project by more than 5 years resulted in cost over run of Rs1.37 crores.

(3) Against an annual target of 6000 shots of ammunition 'X' the average production per year (1983-84 to 1987-88) was 787 only.

(4) Procurement of CNC machine was delayed and as a consequence machining of 12,100 components had to be got done from a PSU at a cost of Rs84.03 lakhs.

(5) The facilities created for interim production under the project could not serve the intended purpose, and would remain under-utilised as the new factory had reportedly commenced production since March 1989.

The case has been referred to Ministry of Defence in July 1993. Their reply has not been received as of January 1994.

Production

Planning

29. Faulty production planning

At present planning by the Army which incorporates modernisation schemes as also weapon induction programmes cover a time span of five years. On this basis, services raise indents on Ordnance Factory Board (OFB) four years in advance. The annual targets for all important items are fixed in a joint meeting taken by the Department of Defence Production with OFB and the Service Headquarters (HQ). Taking into consideration the yearly requirements of the services, the capacities available vis-a-vis the product mix, programmes for the subsequent three years are also fixed/modified at the same time.

It thus becomes imperative that the Army should inform the production agency (OFB) well in advance about any reduction in the requirements of items.

While examining the slippages on achievement of targets of production during 1989-91 two cases came to light.

The details of the cases are as under:

Case I

In July 1986 the Ministry decided to de-induct the regiments of weapon 'X'. Army HQ was asked to examine the feasibility of short closing the orders for ammunition used by weapon 'X' in order to avoid overstocking. OFB intimated in August 1986 that by 1988-89 they planned to liquidate the orders that remained outstanding as on 1 April 1986.

At an in-house production review meeting in February 1988 however, the Director General of Ordnance Services(DGOS), gave an indication that there would be a placement of a further order of 2.44 lakh shells. It was brought out by OFB that earlier in 1986-87 Army HQ had intimated that there was no further requirement of this ammunition as weapon 'X' was being discarded. Since DGOS had given an indication that there would be further orders, the production line was not discontinued and OFB supplied 2,53,629 shells during 1986-89. In March 1988 DGOS intimated that non-placing of further indent was due to phasing out of the weapon and in August 1989, DGOS refused to accept any further quantity beyond the delivery period. However, 16261 shells were supplied during 1989-90 as pipe line stock which were accepted by DGOS. The order outstanding as on 1 September 1989 was 48,935 shells for which all provisioning action had been taken by OFB. As a result of non-acceptance of any further quantity, by the DGOS and suspension of production,the financial repercussion (FR) on account of surplus shells/components/materials was worked out to the tune of Rs8.43 crores, including five feeder factories.

Ministry stated (February 1994) that though the decision to phase out the ammunition was known to OFB in 1986 itself, it was mutually agreed by OFB and Army that outstanding orders would b liquidated by March 1989. They further stated that as a result of reduced off-take by the Army,there were still some outstanding orders in March 1989.

Case II

The feasibility of modernisation of Tank 'Z' was under consideration by Government in January 1986. It was indicated that Tank 'Z' were likely to remain in service upto 2007 AD and its manufacture would be discontinued by 1986. The different types of ammunition required for Tank 'Z' were also produced in factories under the OFB. The phasing out of Tank 'Z' was first mooted by DGOS in the target fixation meeting with OFB held in December 1989 and consequently no production programme for ammunition 'M', one of the types of ammunition, was envisaged for 1990-91. DGOS advised OFB to work out the financial repercussion in the event of cancellation of outstanding orders for this item.

As on 1 April 1990 the outstanding order of ammunition 'M' was 88,931 rounds. The OFB had taken provision action as the production line had to be continuously worked without any break. The cost of material for 88,931 rounds works out to Rs4.35 crores.

As a result of immediate stoppage of production from April 1990, materials procured/manufactured or under procurement/manufacture became surplus to requirement. An assessment of financial loss due to short closing of the outstanding order of 88,931 rounds was still under finalisation (October 1993).

The indents were raised by DGOS on OFB four years in advance, but the reduction in the requirement of ammunition was intimated to the production agency only in 1990-91 although it was decided to stop production of weapon in 1986. Thus due to faulty planning and co-ordination,there was an avoidable loss the extent of which is under finalisation by the concerned factories.

30. Short closure of an order for empty bodies of a bomb

During 1991-92 Ordnance Factory Kanpur (OFC) manufactured and supplied 1006 empty bodies of a bomb (empties) to Ordnance Factory, Chanda (OFCH) to cover the demand placed by the latter in May 1991. Further supply was stopped in view of directives of OFCH in March 1992. No production programme for these empties was fixed for 1992-93.

In October 1992 the Ordnance Factory Board (OFB) intimated the concerned factories that the Director General of Ordnance Stores (DGOS) had proposed cancellation of their indents for this bomb. OFC, however, manufactured 4824 empties at a cost of Rs107 lakhs to liquidate the semis and kept them in stock.

Besides above 600 tonnes of shell bars valuing Rs106 lakhs procured for production of the empties by OFC are also lying in stock.

Thus due to short closure of the demand by OFCH and proposed cancellation of indents by DGOS total financial repercussion worked out to Rs213 lakhs.

Ordnance Factory Board stated in September 1993 that no formal decision for short closure of the indents for the bomb was received from the DGOS and components likely to be utilised in case programme of production of the bomb is allocated.

The case was sent to the Ministry in July 1993, their reply is awaited as of December 1993.

31. Short closure of an order

Till November 1990, Ordnance Factory Kanpur (OFC) regularly manufactured and supplied forged steel shells of an ammunition (empty) to Ordnance Factory Khamaria (OFK) and Ordnance Factory Chanda (OFCH) against Ordnance Factory Board's (OFB) central demands and OFK's and OFCH's demands placed between 1972-88.

In November 1990, OFB instructed OFC to stop production of empties with immediate effect and stated that production could be done to the extent forgings were available. In reply, OFC stated in December 1990 that against the target of 1,10,000 empties the position of semis and forgings available in stock would be enough to produce 85,000 empties, in addition to which 950 tonnes of shell bars were available in stock which were sufficient for about 30,000 shells and 377 tonnes of shell bars were due from Metal and Steel Factory, Ishapore. The target for manufacture of empties, fixed by OFB for 1991-92 was 20,000 numbers. OFC, however, manufactured 16,759 empties till March 1992.

In May 1992, OFC in reply to an audit query stated that although OFK had reduced their demand for further supplies, to avoid deterioration of forgings and semis in pipeline production was continued during 1991-92 and 8,000 empties had been despatched to OFK and that out of these, 2000 empties had been back loaded by OFK and no further issues had been made thereafter. Thus OFC was holding 10,759 finished empties valuing Rs221.66 lakhs as of November 1993.

In addition, 838.96 tonnes of raw material valuing Rs154.99 lakhs procured for production of empties by OFC are also lying in stock as of September 1992.

Thus due to cancellation of indents by DGOS, adverse financial repercussion worked out to Rs376.65 lakhs in the shape of inventories including finished empties and raw materials.

The case was referred to the Ministry in July 1993, their reply has not been received as of December 1993.

32. Excess manufacture of steel billets

Mention was made interalia about excess supply of 121.74 tonnes Steel billets by Metal and Steel Factory, Ishapore (MSF) to Ordnance Factory Ambajhari (OFAJ) in Paragraph 40 of the Report of the Comptroller and Auditor General of India for the year 1990-91, No. 8 of 1992, Union Government-Defence Services (Army and Ordnance Factories).

Ministry in their Action Taken Note stated in March 1993 that the quantity on order against two demands had been amended to 1921.55 tonnes whereas MSF supplied 1521.74 tonnes only.

Further examination by Audit revealed that in May 1991 OFAJ short closed its demands on MSF at 1521.74 tonnes of billets supplied till January 1991.

In November 1990 Ordnance Factory Kanpur intimated MSF that production of shells for which the billets were required would be discontinued in 1991-92 and hence there was no requirement of billets.

Despite this MSF manufactured 400 tonnes of billets in semifinished condition (value: Rs218.68 lakhs) from October 1988 to March 1990. All these semifinished billets are lying in the stock of MSF resulting in adverse financial implications to the tune of Rs218.68 lakhs.

Ministry stated in February 1994 that efforts are being made for gainful utilisation of the item to protect the interest of the Government.

33. Unplanned reduction in production programme-blocking of funds

In order to manufacture 62,000 rounds of an ammunition ordered by Ordnance Factory Board (OFB) through four extracts placed during May 1987 to January 1990, Ordnance Factory Dehu Road (OFDR) placed eight demands on five factories for supply of 81,020 components between February 1987 and June 1990. The quantity on order was subsequently reduced by OFB to 46,000 numbers of the ammunition by diversion of 16,000 rounds on order to Ordnance Factory Khamaria (OFK) in March and June 1991.

OFDR received 64,135 components during December 1988 to August 1992 and utilised 34,655 in production. 12,951 were transferred in 1991-92 to OFK to meet the production needs arising out of the diverted portion of the order. This left a balance of 16,529 components with OFDR.

Since there is no production programme for the ammunition during 1992-93 and 1993-94, OFDR sought disposal instructions for 16,529 components valued at Rs282.37 lakhs (at Rs1708.32 each) from OFB in March 1992. Instructions from OFB are awaited as of October 1993.

Thus lack of proper planning and co-ordination between users and manufacturer led to accumulation of unused components at OFDR of the value of Rs282.37 lakhs.

Ministry stated in December 1993 that the Director General Ordnance Stores (DGOS) changed their requirement schedule for the ammunition to only 1,000 for 1993-94 without alerting OFB in advance. The matter is being taken up with the DGOS to avoid the financial repercussion.

Manufacturing

34. Manufacture of defective cartridge cases

Based on a demand placed by Ordnance Factory Board (OFB) in August 1986 for manufacture and supply of 20,000 cartridge cases which was amended to 13,250 in August 1989. Ordnance Factory, Katni (OFKAT) supplied 12,000 cartridge cases to Ordnance Factory Chanda (OFCH) till discontinuation of manufacture of this item from June 1988. Of these, four lots consisting of 4104 cartridge cases valued at Rs25.10 lakhs were issued in anticipation of proof, but rejected at OFCH due to failure in proof for 'Hard Extraction'. As one lot failed in reproof in February 1991 and the other one in special proof conducted by Controllerate of Quality Assurance (Ammunition) Kirkee (CQA) in December 1991, all the four lots were finally sentenced as rejected in December 1991.

Ministry stated in July 1993 that 3890 of the 4104 rejected cartridge cases were converted to another type, and gainfully utilised after conversion. The cost of conversion as intimated by OFB in September 1993 was Rs13.24 lakhs.

Thus defective manufacture of 4104 cartridge cases resulted in a loss of Rs14.55 lakhs, on account of cost of conversion and cartridge cases that were used up in reproof etc.

35. Manufacture of brass cups with metallurgical defects

Metal and Steel Factory (MSF), Ishapore manufactured and issued 2,63,339 brass cups between July 1986 and March 1992 after due inspection and with surveillance certificate of Senior Quality Assurance-Metal (SQA Met) to Ordnance Factory, Khamaria (OFK) against two demands for 6,38,454 cups placed by the latter in April 1986 and April 1990. Of the supplies made, OFK rejected 86,034 cups valuing Rs201.24 lakhs (70,000 cups pertained to demand of April 1986 and 16,034 cups pertained to demand of April 1990) due to dimensional and metallurgical defects. OFK returned 85,100 rejected cups valued at Rs198.80 lakhs to MSF during April to November 1991. MSF did not accept the rejection and sent 516 cups to Ordnance Factory, Ambernath (OFA) for trial processing. OFA intimated 47 per cent rejection in January 1992 and asked MSF to forward further lot of bulk quantity for determining exact percentages of rejection. This was still awaited as of December 1993.

Ordnance Factory Board stated in December 1993 that in the present case process rejections were more and not acceptable to the consignee and it has now been decided that instead of adopting OFK process lay out, these cups would be processed into a cartridge case at OFA and then supplied to OFK.

From this it is clear that the quality of cups manufactured at MSF did not satisfy the technological processes intended and that they would have to be processed partially in OFA and in OFK instead of wholly at OFK. Furthermore, due to the defective quality these cups valued at Rs201.24 lakhs are currently lying unutilised.

This case was sent to the Ministry in June 1993, their reply has not been received till December 1993.

36. Failure in inspection to locate design defects

Directorate of Armament Supply, Naval Headquarters (Navy) placed five indents during July 1970 to July 1984 for the supply of 9,240 2" Rocket Motor flare/target (item 'A') and five indents during January 1959 to July 1984 for the supply of 8162 numbers of 2" Rocket Head flare (item 'B') on Director General of Ordnance Factories (DGOF). For item 'A' DGOF placed five extracts on Ordnance Factory Khamaria (OFK) during November 1971 to November 1984. Accordingly, OFK placed six inter factory demands (IFDs) between July 1972 to May 1985 for 10,425 empty body of the item 'A' on Gun and Shell Factory Cossipore (GSF). To cover the demands of OFK, GSF in turn placed four demands during July 1974 to September 1985 on Metal and Steel Factory, Ishapore (MSF) for supply of 10,827 venturi tubes (a component of the empty body of item 'A'). MSF supplied 10,669 venturi tubes to GSF between March 1981 and February 1989 and GSF supplied 7,479 empty bodies of the item 'A' between January 1986 and August 1989 to OFK.

OFK in all manufactured 1,126 item 'A' between January 1986 and August 1989 of which 1,037 were supplied to the Navy, 33 to other factories and 56 were expended in proof.

Naval Inspection Wing, however, intimated in March 1987 that during firing item 'A' caused damage to the Launcher. The Inspection Wing also opined that welded joints of venturi to body tube of rocket was suspected to be weak and could not withstand the thrust developed inside the venturi. Ordnance Factory Board (OFB), however, stated in March 1993 that GSF had done the work as per drawing forwarded to them and after Senior Inspector of Naval Armaments (Cossipore)'s acceptance these were issued to OFK and concluded that it was a design fault for which failure had taken place.

OFB intimated GSF in June 1989 to shortclose the orders as desired by the Director of Arms Services due to inherent defects in design. The value of the surplus inventories worked out Rs17.64 lakhs at GSF and Rs27.15 lakhs at OFK due to cancellation/short closure of the order.

For item 'B' DGOF placed three extracts during January 1961 to October 1973 on Ammunition Factory Kirkee (AFK). AFK in turn placed 24 IFDs on GSF for 60,054 numbers of various components. GSF could produce 12,851 components and supplied 12,361 components by April 1988. Navy shortclosed their indents for this item in March 1988 i.e. ranging from 4 to 29 years of their placement. Due to the short closure the value of surplus inventories worked out to Rs24.83 lakhs at AFK, Rs9.84 lakhs at GSF and Rs0.21 lakh at Ordnance Factory, Dum Dum.

Thus, failure on the part of the Naval Inspection Wing and OFB to detect the design defects of items 'A' and 'B', the orders had to be short closed in 1988 after being placed leading to financial repercussion to the tune of Rs79.67 lakhs. The disposal of 1037 rockets valuing Rs3.42 lakhs manufactured with the defective design and supplied to the Navy is not known.

The case was referred to the Ministry in June 1993, their reply has not been received as of December 1993.

37. Rejection of a propellant

Two lots of 10 tonnes each of a propellant, used in the ammunition of a gun, manufactured by Ordnance Factory Bhandara (OFBa) during 1990-91 were rejected by the Quality Assurance Officer (Military Explosives) Bhandara (QAO).

QAO advised OFBa in December 1990 to take disposal action for the entire quantity of propellant of one lot. Nevertheless, OFBa undertook rectification of the lot by blending with 5 tonnes of fresh material valued at Rs14.09 lakhs. The other lot was given additional water treatment to improve stability. The rectified lots were resubmitted in June and November 1991 to the QAO who rejected these again as "not recommended for proof". As such 25 tonnes of rejected propellant valued at Rs61.10 lakhs was still lying in OFBa for disposal (January 1994).

Out of 25 tonnes of rejected propellant, 5 tonnes of fresh propellant valued at Rs11.75 lakhs used for blending with already rejected propellant could have been saved had the factory heeded the advice of the QAO and not undertaken rectification. The loss was yet to be regularised as of January 1994.

Ministry stated in September 1993 that the 25 tonnes of rejected propellant cannot be categorised as 'rejected' as the climatic hut trials (CHT) for the propellants for two years commenced in February 1992 were still in progress. The Controller of Quality Assurance (Military Explosives) intimated in February 1994 that stability of the propellant has been found further lowered after 18 months CHT and therefore sentenced the lots as chemically unsuitable and unserviceable.

38. Infructuous expenditure due to placement of orders without approval of an item

In response to an indent placed by Director General of Ordnance Services (DGOS) in January 1988, Ordnance Factory Board (OFB) placed an Extract on Ordnance Factory, DehraDun (OFD) in February 1988, for manufacture and supply of 456 sets Periscope Armoured Vehicle Night Vision Passive (instrument). Target for manufacture of the instrument fixed by OFB for 1988-89 was 150 sets.

In a meeting held in September 1988, the Ministry stated that Vijayanta Modernisation plan had not been approved and due to financial constraints and that 700 instruments already held by Army would be sufficient. The Army, therefore, proposed cancellation of their indent of 456 instruments. The representative of Ordnance Factories stated in that meeting that if the order for the entire quantity of 456 sets was cancelled, financial implications would be between Rs80 lakhs and Rs100 lakhs and in case the order was cancelled after supply of 150 sets the amount of financial implications would be Rs10 lakhs.

Army in September 1989 mentioned that the Vijayanta Modernisation programme had not been approved so far. Hence orders placed on OFD for 456 sets and a firm for supply of 500 sets by the Defence Supply Wing be short closed.

In January 1994 the Ministry stated that order for 500 sets of instruments placed on the firm had been completed and indent placed on OFB for 456 instruments had been reduced to 150. Against the indent of January 1988 OFD supplied two instruments valued at Rs2.89 lakhs. Financial repercussion due to short closure of the indent, as worked out by OFD was Rs55.48 lakhs.

Thus placement of indents for an item required for modernisation programme without the approval of Government led to infructuous expenditure of Rs55.48 lakhs by OFD.

Examination of the relevant papers in audit also revealed that the Army already holds a stock of 1200 such instruments and therefore placement of indent on Ordnance Factories for 150 instruments was not justified.

39. Bulk production of an ammunition before its establishment

Ammunition Factory Kirkee (AFK) in 1990-91 discontinued production of 'A' version of an ammunition which was an established item of manufacture and commenced production of 'B' version of that ammunition which was till then manufactured by Ordnance Factory, Varangaon (OFV).

The bulk production of 'B' version of the ammunition was commenced as per the decision of a Task Force convened at AFK in March 1991. Against three warrants issued during 1990-92 AFK manufactured 299.99 lakhs of 'B' version ammunition. Of these 232.12 lakhs were issued to the indentors and 67.87 lakhs valued at Rs440.30 lakhs were rejected, after recovery of scrap beyond the normal rejection percentage of 25 per cent provided for in the estimate. In addition to this 49.51 lakh cartridge cases valued at Rs63.17 lakhs were also rejected in 1991-92 after recovery of scrap beyond the normal rejection percentage due to failure in test.

On being pointed out by Audit, the Ministry stated in November 1993 that due to productionisation of the ammunition version 'B' for the first time in AFK, rejections were more and instead of seeking a development extract to cater for all the rejections, regular production estimate was operated.

The Manual of Procedure of the Director General Ordnance Factories stipulates that to avoid losses due to rejection in inspection of large quantities on account of faulty material or faulty technique, bulk production of a new item should not normally commence until a pilot batch/batches of a suitable size depending on the quantity of order have passed inspection. Failure to adhere to this procedure by AFK led to a loss of Rs503.47 lakhs which could have been minimised by undertaking pilot production.

40. Rejection of ammunition assemblies

Ordnance Factory Kanpur (OFC) issued (July 1986 and January 1988) two lots of 1000 numbers each of an ammunition assembly (assemblies), manufactured at a cost of Rs74.25 lakhs, to Ordnance Factory Khamaria duly passed in inspection.

The lot of July 1986 was first proved in September 1986 wherein it was rejected due to defects. After reinspection (as insisted upon by OFC) and segregation of defective assemblies, these were tested again in December 1987 and sentenced as rejected. OFC dismantled the components of assemblies, reassembled them and renumbered the lot. The renumbered lot was proved in

June 1988 during which, a barrel valued at Rs2.55 lakhs was damaged and the lot was again rejected in November 1988. The lot was again rectified and proved in September 1989 in which it was once again rejected in November 1989.

Similarly the lot of January 1988 was first proved in February 1988 during which a barrel valued at Rs2.55 lakhs was severely damaged and the lot was rejected. Assemblies of the lot were repaired/rectified but the same were rejected again in November 1989.

Cost of dismantling, reassembling and rectifying these two lots was Rs1.89 lakhs and during these processes, 512 assemblies manufactured at a cost of Rs18.93 lakhs were wasted. The two damaged barrels valued at Rs5.10 lakhs were sentenced as beyond repair.

According to the instructions issued by the Controllerate of Quality Assurance (Armament) Pune in April and July 1989 all assemblies were to be broken down upto subprojectile stage only, which has since been completed.

Thus due to defects in manufacture of the assemblies loss amounting to Rs18.93 lakhs had to be incurred on wastage of 512 assemblies besides cost of rectification/reassembling amounting to Rs1.89 lakhs and cost of damaged barrels amounting to Rs5.10 lakhs and blockage of Government money to the tune of Rs55.32 lakhs (Rs74.25 lakhs-Rs18.93 lakhs) for more than five years in the shape of assemblies.

Ministry stated in February 1994 that the shots were manufactured strictly as per design requirements. Ministry further stated that OFC was not able to arrive at a clear reason for such failure.

Provisioning of stores and machinery

Stores

41. Import of indigenously available spares

In May 1988, Ordnance Factory Board (OFB) placed an operational indent on Director General, Supply Wing, London (DGSW) for procurement of three separate items of spares conforming to three different designs, from a foreign firm. The total cost envisaged was Rs5.1 lakhs. These were meant for High Explosives Factory, Kirkee (HEF) which had placed a demand in January 1987 alongwith a proprietary certificate. While placing the indent, OFB certified that the spares were not available from indigenous trade sources and procurement of the same from abroad was absolutely necessary.

In December 1989, DGSW informed HEF that the foreign firm revised their rates upward and sought their advice about reasonableness of the revised rates. HEF confirmed in January 1990 the reasonableness of the same and recommended early conclusion of contract on grounds of urgency. DGSW concluded a contract with the foreign firm in January 1990 for supply of spares at a cost of Rs6.99 lakhs. The spares were received in February 1991 and taken on charge in March 1991.

It was observed by Audit that in July and November 1986 HEF placed two orders on two indigenous firms for supply of 2 spares of one design and one each of the other two designs at a total cost of Rs1.96 lakhs plus duties and taxes. Supplies against these two orders were received in May 1988, July 1988 and April 1989.

Ministry stated in September 1993 that although spare coils from indigenous fabricators had been received, in view of the previous unsatisfactory performance of indigenously fabricated coils in terms of longevity, it was felt that reliable coil from the original plant suppliers were essential for continuity of production. Ministry further stated that it was decided to procure indigenously fabricated coils as a stop gap measure.

The issue of a proprietary certificate in favour of a foreign firm by the HEF in 1987 for an item which was procured from indigenous firm in 1986 was unjustified and led to an outflow of Rs6.99 lakhs in foreign exchange, at a time when there was an acute shortage of foreign exchange. Moreover no proof of unsatisfactory performance of the indigenous coils was furnished by the Ministry.

42. Loss due to procurement and use of defective bandoliers

In February 1991 Ordnance Factory, Varangaon (OFV) placed an order on a firm for supply of one lakh bandoliers at a total cost of Rs9.40 lakhs required for packing an ammunition.

During June to August 1991, 65000 bandoliers were received from the firm and of these 15000 received in August 1991 were found to deviate from required dimensions and to have other defects. In September 1991 the firm was asked to arrange replacement of store valued at Rs6.04 lakhs paid to them in June and August 1991 for supplies made by them. On the failure of the firm to arrange replacement of the defective stores, OFV asked the firm in October 1991 to refund the amount paid to them.

The firm, however, did not pay back the money on the ground that the bandoliers were delivered after inspection by the Inspecting Authority and requested in November 1991 to allow them to rectify the bandoliers. In December 1991 the case was referred to the Department of Legal Affairs who opined that value of stores might be adjusted against security deposit or by encashing bank guarantee, if any and otherwise the matter referred to arbitration. The matter was not referred to arbitration as the firm had agreed to rectify the store.

In the meantime, OFV has incurred an expenditure of Rs7.92 lakhs for unpacking and separating 28.05 lakh rounds of ammunition from the bandoliers and also from charger clips and for cleaning, reassembling and rectification of 27.14 lakh rounds of corroded ammunition.

In September 1992 OFV constituted a committee to ascertain the circumstances leading to rejection of bandoliers, possibility of repair/replacement and quantification of loss suffered and submit its report within a week. The report was yet to be submitted as of October 1993.

Ministry stated in January 1994 that the firm rectified all the bandoliers in consultation with Area Inspector and hence OFV did not feel it necessary to pursue the matter further.

The fact, however, remains that due to acceptance of defective bandoliers in inspection there was an infructuous expenditure of Rs7.92 lakhs towards unpacking, separating, cleaning, reassembling and rectification of ammunition from the bandoliers.

43. Procurement of a store in anticipation of an order

In response to an indent placed by Ordnance Factory Board (OFB) in May 1979, Director General Supply Wing, London (DGSW) concluded a contract with a foreign firm in September 1979 for supply of 19,944 Vulcanised Grey Fibre Mouldings (moulding) to Ordnance Factory Kanpur (OFC) at Rs38.70 each. These were needed for manufacture of an ammunition. By exercising the option clause of the contract, the quantity on order was first increased in December 1979 to 93,966 moulds and thereafter in March 1980 to 1,39,418 mouldings pending formal indents from the services. The foreign firm supplied 1,16,523 mouldings valuing Rs66.42 lakhs till March 1981.

Orders for manufacture and supply of the ammunition were completed in 1988-89 and thereafter the manufacture of this ammunition was discontinued as no orders were received from the services. As a result of discontinuation of manufacture of the ammunition, 42,840 mouldings valued at Rs24.42 lakhs are lying in the factory without any prospect of utilization.

Ministry stated in October 1993 that there was change of technology in ammunition and the factory switched over to manufacture of another ammunition. This change of technology led to surplus stock. Ministry also stated that the item being product specific, no alternative use is possible.

Thus increase of quantity covered in the contract in anticipation of orders from the services rendered the expenditure of Rs24.42 lakhs in foreign exchange unproductive.

44. Supply of defective cotton fabric by a firm

Ordnance Clothing Factory, Shahjahanpur (OCFS) placed an order in March 1991, on a firm for supply of 35,000 metres of Fabric Cotton CW 170 Gm Blue Grey (VAT DYED) 91 cm (fabric) at Rs63 per metre with an option clause to increase the quantity by a further 30,000 metres at the same rate and terms and conditions. In April 1992 OCFS exercised the option clause and the quantity on order was increased to 65,000 metres. However, the rate for supply of the additional quantity of 30,000 metres was increased to Rs65.65 per metre in August 1992 due to increase in excise duty.

Four consignments containing 63,549.40 metres duly inspected by authorised inspector were received by OCFS from the firm between September and November 1992. An amount of Rs39.31 lakhs was paid to the firm towards 95 per cent of the cost of the store supplied by them. On receipt inspection, these consignments were rejected either due to wet and deteriorated condition or shade variation.

Ministry stated in November 1993 that of the 63,599.10 metres (including 49.70 metres flag allowance) of rejected fabric, 35,954.10 metres were subsequently accepted during re-inspection by CQA(T&C) and the total quantity thus rejected was 27,645 metres valuing Rs17.07 lakhs. Ministry added that a Board of Enquiry had been constituted by the factory to determine the extent of loss.

Thus due to the initial acceptance of defective fabrics the Government suffered a loss of Rs17.07 lakhs.

45. Non recovery of risk purchase compensation from defaulting firm

Vehicle Factory, Jabalpur (VFJ) placed a supply order in October 1988 on M/s Sankey Wheels Ltd. (firm 'A') for the supply of 16,868 Shaktiman Disc wheels (wheels) at Rs935 per wheel. The delivery schedule was for supply at the rate of 1,500 wheels per month from January to December 1989. Firm 'A' requested in June 1989 for refixation of the delivery schedule at 3,000 wheels every alternate month due to delayed receipt of imported rim bar materials. In July 1989 VFJ accordingly refixed the delivery schedule from August 1989 so as to complete supplies by August 1990. Firm 'A' supplied 5,245 wheels till January 1990.

In March 1990, VFJ served a performance-cum-extension notice on firm 'A' for completion of supply of the balance quantity of 11,623 wheels by June 1990 keeping in view the production requirement even though the refixed delivery period was by August 1990.

Since no supply was expected, VFJ shortclosed the order in July 1990 at the quantity of 5,245 wheels. For procurement of the balance quantity of 11,623 wheels, VFJ floated a risk purchas tender enquiry in June 1990. The date of tender enquiry was extended to July, August and finally opened in September 1990 and received quotations from firm 'A' and M/s Wheels India Ltd. (firm 'B') Firm 'A' quoted Rs1308 and firm 'B' quoted Rs1182 per wheel.

The quotations were considered by Tender Purchase Committee who referred the case to Ordnance Factory Board in October 1990. In May 1991 OFB sought legal advice on the application of risk purchase clause on the order of October 1988. The legal adviser opined in May 1991 that the purchaser ought not to have issued the performance notice for complete supply by June 1990 when the delivery period (August 31 1990) had not expired, and that the risk purchase action was untenable under law.

In June 1991 OFB conveyed the sanction for purchase of 11,623 wheels at Rs1,315 each from firm 'B'. Accordingly a supply order was placed in July 1991 on firm 'B' for supply of 11,623 wheels at Rs1,315 each. Firm 'B' completed the supplies by August 1992 at a total cost of Rs1.59 crores. In procuring 11,623 wheels, VFJ had to incur an extra expenditure of Rs44.17 lakhs.

Ministry of Defence stated in November 1993 that firm 'A' was declared as a sick unit by the Board of Industrial and Financial Reconstruction (BIFR) and appointed Industrial Reconstruction Board of India for preparing a rehabilitation scheme on whom a claim for Rs45.93 lakhs was lodged in October 1991. The BIFR in their award suggested that the Goverment waive damages of about Rs45 lakhs.

The fact, however, is that firm 'A' had become sick at the end of 1987, while the order was placed on it by VFJ in October 1988 and delivery schedule refixed in July 1989. Hence, there was a failure in assessing the financial soundness of the firm before placing supply order on them and subsequently in assessing the firm's ability to deliver the stores even on a rescheduled order.

Once the firm's inability to deliver even according to the refixed schedule became apparent, short closure should have been invoked only after the refixed period had expired so as to make the legal claim for risk purchase more sound.

Thus due to incorrect decision taken by VFJ to short close the order before the date of expiry of the contract, no risk purchase compensation could be claimed from the defaulting firm 'A' resulting in extra expenditure of Rs44.17 lakhs.

Inter factory demands

46. Uneconomical procurement of steel from a sister factory

Rifle Factory Ishapore (RFI) procured steel square billets of size 89-90 mm RCS (billets) from Metal and Steel Factory

Ishapore (MSF) as well as from trade sources for production of Slide Butt and Body forgings of an item. During 1989-91 RFI received 136.6 tonnes of billets from MSF at a total cost of Rs80.67 lakhs and 105.7 tonnes of billets from trade sources at a total cost of Rs33.45 lakhs plus taxes etc. It was observed in audit that while cost of procurement from trade was just Rs28 and Rs32.53 per kilogram in 1989-90 and 1990-91 respectively, MSF's cost of production during those two years was as high as Rs55.26 and Rs69.38 per kilogram.

Thus procurement of 136.6 tonnes of billets from MSF was uneconomic to the extent of Rs40.76 lakhs.

On this being pointed out by Audit, Ordnance Factory Board (OFB) stated in September 1992 that although material might be obtained at lower rate from trade sources, the quality of material supplied by MSF was much better. OFB also stated that as RFI was a leading Small Arms manufacturing factory, it could not compromise its established reputation. As the billets supplied by trade sources were accepted in inspection and were utilised in manufacture of Slide Butt and Body which were also accepted in inspection by an independent Quality Assurance Organisation, reasons adduced by OFB for procurement of billets from MSF are not tenable.

In reply Ministry stated in September 1993 that a policy decision has been taken that while placing IFDs, factories should examine details of cost aspects of sister factories as well as trade taking into consideration the capacity available, overheads, cost of materials and other related details so that economy is achieved.

47. Uneconomical procurement of alloy steel from a sister factory

Ordnance Factory Kanpur (OFC) procures from Metal and Steel Factory Ishapore (MSF), alloy steel bars of a particular specification (material) for manufacture of two kinds of ammunition. During 1991-92 MSF supplied only 145 tonnes of material as against a commitment of 150 tonnes per month. To continue manufacture of the ammunition, OFC resorted to local purchase of 500 tonnes of material from trade in 1991-92 and as per recommendations of Tender Purchase Committee of August 1991 OFC placed an order in September 1991 on M/s Steel Authority of India Limited (SAIL) Calcutta for supply of 250 tonnes of the material at

Rs21,500 per tonne plus duties and taxes. The quantity on order was increased in March 1992 to 500 tonnes and the rate was amended to Rs21,500 per tonne for 468 tonnes and Rs19,350 per tonne for 32 tonnes supplied in short length. SAIL supplied 521.110 tonnes by March 1992.

In 1991-93 MSF supplied 1674.33 tonnes of material to OFC at a total cost of Rs718.26 lakhs i.e. at Rs42,898.40 per tonne.

An analysis in audit revealed that while the trade cost of the material was just Rs23,015.20 per tonne (including duties and taxes) MSF supplied the same at Rs42,898.40 per tonne. Thus procurement of the material from MSF was uneconomical to the extent of Rs332.91 lakhs.

Ministry stated in November 1993 that as a policy matter to utilise the capacity of sister factory, OFC placed demand on MSF inspite of their cost of production being high.

48. Uneconomical production of rifle chest

Ordnance Factory Trichy (OFT) procures chests type 'A' (which hold 10 rifles) from trade, and type 'B' (which hold 15 rifles) from Rifle Factory Ishapore (RFI) for packing 7.62 mm IAI rifles. Thus three chests 'A' are equivalent to two chests 'B'.

During 1990-91 OFT received 350 chests 'B' from RFI at Rs2212 each. During the same period it received 354 chests 'A' at Rs519 each from trade. Since 525 chests 'A' would have served the same purpose as 350 chests 'B', the procurement of the latter was uneconomical to the extent of Rs5.02 lakhs.

Similarly during 1991-92 OFT procured 360 chests 'B' from RFI at Rs.2558 each when the same purpose could have been served by procuring 540 chests 'A' from trade, 2091 of which were purchased during the same year at Rs519 and Rs655 each. Thus during 1991-92 there was uneconomical procurement on this account to the extent of Rs5.67 lakhs.

The total loss on this account works out to Rs10.69 lakhs.

On this being pointed out by Audit, OFT stated that the cost comparison between trade and RFI supplies was not applicable since the item was procured from RFI as per policy guidelines.

Ministry stated in February 1994 that these type of chests were not easily available from trade.

Ministry's contention is not tenable as these items were/are being procured in large numbers by OFT from trade and are being utilised for the purpose. Hence procurement of the item from RFI when it is available from trade sources is not financially justifiable.

Machinery

49. Procurement of a Robotic welding station

The Additional Director General of Ordnance Factories, Armoured Vehicles Headquarters, Avadi (AV HQ) placed an order in September 1989 on a firm for supply, erection, commissioning etc., of a Computer Controlled Robotic CO2 welding station (machine) for Heavy Vehicles Factory, Avadi (HVF) at a cost of Rs54.34 lakhs exclusive of duties and taxes. This was later amended to Rs54.29 lakhs. The machine was to carry out welding jobs on sub-assemblies of a combat vehicle.

The machine was received by HVF in June 1990 and an amount of Rs60.96 lakhs (Rs47.42 lakhs towards 90 per cent payment and Rs13.34 lakhs towards duties and taxes) was paid to the firm in the same month. The machine could not be successfully commissioned and is lying unutilised.

The Ministry stated in November 1993 that the matter has been reviewed again in May 1993 and the firm as well as the factory are jointly studying the possibilities for welding the components for which the machine was procured by reviewing the CNC programming.

The case thus revealed that a machine procured at a cost of Rs60.96 lakhs in June 1990 is lying unutilised and welding of sub assemblies is being carried out in time consuming conventional method.

50. Infructuous expenditure on procurement of a defective testing machine

In response to an indent placed by the Director General of Ordnance Factories Calcutta in January 1978, the Director General of Supplies and Disposals New Delhi (DGSD) placed an order on a firm in December 1978 for supply, installation and demonstration of a foreign made Instron Testing machine to Field Gun Factory, Kanpur (FGK) by May 1979 at a cost of Rs10.24 lakhs including agency commission of Rs0.35 lakh payable in Indian currency.

The machine was received by FGK in December 1979. Though the machine was erected in January 1980, it could not be commissioned successfully. Meanwhile, a chilled water cooling system for hydraulic power pack of the machine was installed and commissioned in May 1983 at the recommendation of the installation team at a cost of Rs1.85 lakhs. Despite this, the machine could not be commissioned and put to use since its data analyser was found defective. Although the defective data analyser was replaced by the foreign supplier in October 1986, the machine still could not be commissioned. Director of Inspection Kanpur rejected the machine in September 1990.

The firm then replaced the data analyser by a computer free of cost in December 1992. The firm's engineers fitted the computer to the machine in March 1993 but failed to commission the machine.

Meanwhile a total amount of Rs22.47 lakhs (Rs9.88 lakhs to the foreign firm for FOB cost of the machine, Rs0.35 lakh to the firm for agency commission, Rs0.63 lakh for freight, Rs9.76 lakhs for customs duty and Rs1.85 lakhs being the cost of chilled cooling water system) has been spent. An amount of Rs0.55 lakh had been recovered from the firm towards liquidated damages.

Ministry stated in January 1994 that in February 1991 FGK had taken up the matter with DGSD for recovery of cost as recovery rests with them.

Thus expenditure of Rs21.92 lakhs on procurement of a defective machine proved infructuous as the intended purpose of its acquisition was never satisfied.

51. Procurement of a grinding machine not serving desired purpose

Additional Directorate General Ordnance Factories, Avadi placed an order on a foreign firm in May 1988 for supply, erection and commissioning of a Computerised Numerically Controlled (CNC) Creep feed grinding machine in tooled up condition with accessories and spares (machine) at a total cost of Rs43.23 lakhs. The machine was for Heavy Vehicles Factory Avadi (HVF) for grinding of two components.

The machine was received by HVF in October 1989 and Rs57.60 lakhs were paid in September 1989 to the firm towards 95 per cent payment, besides, customs duty of Rs8.63 lakhs was paid for the spares of the machine. The machine was commissioned in September 1991, as the firm's Engineers arrived at site in September 1990. During proving trials, it was observed that the desired accuracy in finishing was not obtained. The firm's experts recommended in October 1991 procurement of grinding wheels and rollers with certain specifications which was subsequently modified in November 1991 and HVF came to know the modification only in June 1992.

Based on the firm's recommendations of October 1991, HVF placed two orders for 2 rollers and 3 wheels in October and November 1991 respectively at a total cost of Rs1.89 lakhs. On receipt of these items, trials were conducted in April/May 1992 but the machine did not give the desired surface finish for one of the components. Ordnance Factory Board stated in October 199. that the machine is now being used for rough grinding only of the component and surface finishing is done by processing on a different machine. HVF placed another two orders for the wheel and dresser with changed specification in December 1992 at a cost of Rs2.41 lakhs and Rs2.50 lakhs respectively and these were received in March 1993. Due to non-availability of the machine HVF imported 150 finished components valuing Rs22.20 lakhs during May 1993.

The case revealed that a machine imported at a cost of Rs66.25 lakhs in October 1989 was commissioned in September 1991 i.e. after a delay of nearly two years and did not serve the intended purpose as a result, 150 finished components valuing Rs22.20 lakhs had to be imported and the expenditure of Rs1.89 lakhs on the procurement of grinding wheels and rollers in October/November 1991 also proved infructuous.

The case was referred to the Ministry in August 1993, their reply has not been received as of December 1993.

52. Infructuous expenditure on procurement of Closed Circuit Television

Pursuant to the suggestion of Ordnance Factory Board (OFB) in November 1986 and the recommendation of Industrial Safety Inspectorate (ISI) of Ministry of Home Affairs of March 1988, Ordnance Factory, Varangaon (OFV) decided to procure two closed circuit television (CCTV) systems in order to monitor the performance of workers in production areas. Accordingly two supply orders were placed on M/s. Electronic Corporation of India Ltd. Hyderabad in March 1988 for the CCTV system on single tender basis being items of a proprietory nature. The total cost was Rs13.18 lakhs plus taxes. Although a sum of Rs9.17 lakhs was paid to the firm against the two supply orders in October/ November 1988, the firm completed the supply only by March 1990 against the scheduled date of delivery of 31st December 1988. The CCTV system was installed and commissioned in January 1991 but broke down due to certain defects which developed within two to three weeks. The firm's representatives carried out repairs in July 1992 but the system did not work. Meanwhile the warranty period expired in September 1991.

The Ministry stated in November 1993 that the firm was still attending to the defects.

Thus a system which was required expeditiously for security reasons and installed in January 1991 could not be utilised due to its inherent defects, although a sum of Rs9.17 lakhs was already paid to the supplying firm.The prospects of rectification of the system by the firm were also remote since period of three years have lapsed and warranty period has also expired.

53. Procurement of a defective hydraulic ingot stripper

In September 1983, the Ordnance Factory Board (OFB) placed an indent on the Directorate General of Supplies and Disposals, New Delhi (DGSD) for a stationary hydraulic ingot stripper for Field Gun Factory, Kanpur (FGF) to be supplied by December 1984. In June 1986 DGSD placed an order on a firm for supply, erection and commissioning of the machine with normal spares at a cost of Rs28.99 lakhs exclusive of duties and taxes.

While the machine was received by FGF in December 1987, foundation work was completed by FGF only in September 1988 at a cost of Rs2.55 lakhs. The machine was erected in December 1989. Ninety per cent of the payment amounting to Rs26.09 lakhs was made in October 1987. However, the machine could not be commissioned successfully despite repeated trials and was rejected by FGF in June 1991. DGSD asked the firm in November 1991 to complete the commissioning and directed the Chief Controller of Accounts (CCA), Calcutta, to withhold Rs26.09 lakhs, being 90 per cent of the cost of the machine already paid to the firm from pending bills relating to other supplies. CCA intimated in April 1993 that the actual amount paid to the firm in October 1987 was Rs30.63 lakhs. However, this amount could not be withheld by CCA as no bills were pending as of July 1993.

The Ministry of Defence (Ministry) stated in February 1993 that the machine had not yet been finally rejected and the manufacture of required ingots was no longer in FGF's regular production since April 1992. The Ministry of supplies in January 1993 attributed the delay in coverage of indent to inadequate response from trade and delay on the part of indentor and consignee to provide names of likely source of supply, sufficient copies of drawing, technical recommendation and confirmation of adequate funds. They also stated that the delay in initial erection and commissioning was due to FGF's failure to provide foundation and services as per contract.

The case reveals delay in placing the order for the machine and getting the necessary infrastructure ready in time. Moreover, the machine procured was defective resulting in its non-commissioning. Meanwhile,manufacture of ingots for which the machine has been procured is no longer in FGF's regular production. This resulted in an infructuous expenditure of Rs33.18 lakhs on cost paid for the machine (Rs30.63 lakhs) and preparation of its foundation (Rs2.55 lakhs).

OFB stated in November 1993 that the machine could not be commissioned so far and the case was being pursued at the highest level.

The case was referred to the Ministry in August 1993, their reply has not been received as of December 1993.

Inspection

54. Acceptance of defective cone and funnel assemblies in inspection

Ordnance Factory, Kanpur (OFC) placed an order on a firm in September 1990 for supply of 8000 sets of cone and funnel assemblies (assembly) at Rs961 per set (less 3 per cent discount) plus xes etc. As the firm was the only source of supply, necessary nction for placement of order on single tender basis was obined from Ordnance Factory Board (OFB) in August 1990.

8000 sets duly inspected by Senior Quality Assurance Estabishment (Armament) (SQAE Armt) Secundrabad were received by OFC etween February and July 1991. On receipt inspection, certain ssemblies were found opened at the solder joint and all the assmblies were reinspected/segregated at Kanpur in October 1991 by he firm under the supervision of SQAE (Armt) Secundrabad and anpur. 176 sets were finally rejected and the balance after ectification were accepted by SQAE (Armt) and the amount of the ejected assemblies were deducted from the firm's bill.

Rectified and re-accepted assemblies were sent to Ordnance actory, Chanda (OFCh). On receipt of an intimation from OFCh, FC detailed a team to OFCh, investigation by which revealed that ssemblies had a black stain on the outside tin surface of funnel ncluding pitting in stray cases. The team, in consultation with FCh and Quality Assurance Establishment, Chanda found that appximately 50 per cent were not acceptable. Subsequently during ectification of the unaccepted assemblies the team found that arlier accepted assemblies had also developed black stains which as not acceptable to SQAE Chanda.

In December 1992 Controllerate of Quality Assurance (Armament) Kirkee rejected SQAE (Armt) Kanpur's proposal for rectification of the assemblies and suggested 100 per cent reinspection. 6,064 sets valued at Rs71.98 lakhs were finally rejected in December 1992 and the firm was asked either to rectify/replace the rejected sets or to refund the cost. Till October 1993 the firm had neither replaced the rejected assemblies nor refunded the cost thereof. OFC also requested all the Ordnance Factories and Department of Defence Production and Supplies to withhold the amount of Rs71.98 lakhs against any supply order that might be nding against the firm.

Ministry stated in November 1993 that the actual payment withheld, if any, would be compiled and intimated.

55. Procurement of defective fuzes

During June 1980 to March 1985 Ordnance Factory Chanda (OFCH) received 13,500 Mark-I version of fuze assemblies of a rocket (fuzes) from firms 'A' (8,000) and 'B' (5,500) at a total cost of Rs51.50 lakhs against four orders placed on them by the Department of Defence Supplies (DDS) between February 1978 and December 1982. The fuzes supplied by the firms were cleared in inspection by Air Armament Inspection Wing (AAIW) Khamaria. However, all the fuzes were found to be defective and failed in proof conducted by AAIW Khamaria.

Directorate of Technical Development and Production (Air) intimated Ordnance Factory Board (OFB) in September 1985 that Mark-I version of fuzes had some design deficiency which warranted development of an improved version. In the same month Armament Research and Development Establishment Pune (ARDE) developed the improved version of the fuze called Mark-II version and proposed that the fuzes procured from the two firms should be brought to Mark-II standard by modification through original suppliers. 8,000 fuzes valued at Rs32.42 lakhs belonging to firm 'A' could not pass in inspection.

Out of 8,000 fuzes received from firm 'A' 7,714 rejected fuzes valuing Rs30.88 lakhs are lying in the stock of OFCH and balance 286 fuzes valued at Rs1.54 lakhs had been utilised in various investigations and tests.

Thus failure of the inspection authority to detect the defects in the fuzes during inspection at firms premises and also design deficiency of the fuzes resulted in a loss of Rs32.42 lakhs.

56. Inadequate testing parameters resulting in inappropriate procurement and blockage of funds

Ordnance Clothing Factory, Shahjahanpur (OCFS) placed a supply order in July 1991 on a firm for supply of 2,36,300 metres of calico bleached cloth of 71 cms. width at Rs12.70 per metre. This was for manufacture and supply of 2,63,250 cotton TNT bags to High Explosive Factory, Kirkee (HEF). In August 1991, the quantity, width, and price of the cloth were amended to 1,18,150 metres, 142 cms. and Rs25.40 per metre respectively. The quantity on order was increased to 1,68,125 metres in September 1991.

OCFS received 1,68,292 metres of cloth valuing Rs41.34 lakhs between December 1991 and June 1992, duly inspected and accepted by Quality Assurance Establishment (General stores),Controllerate of Inspection (QAE (GS) CI), Kanpur. OCFS manufactured 1,50,000 bags at a total cost of Rs61.61 lakhs (Rs24.59 lakhs cost of erial + Rs37.02 lakhs other costs) of which 1,37,587 bags were plied to HEF duly accepted by Inspector of General Stores, hjahanpur, during March 1992 to June 1993. HEF, however, could t use the bags due to deficiencies observed in the fabric by ntrollerate of Quality Assurance (ME) (CQA ME) Pune, in chemical rameters.

Meanwhile, of the 1,68,292 metres of cloth received, 59840 tres costing Rs14.32 lakhs was rejected by OCFS in July/August 92 on the ground of deficiencies in chemical parameters and a m of Rs4.37 lakhs was recovered from the firm. The balance ount of Rs9.95 lakhs has not been recovered as of October 93.

Thus acceptance of unsuitable cloth in inspection by the authorised inspector resulted in blocking of funds to the tune of s36.97 lakhs towards the procurement of unsuitable cloth apart rom Rs37.02 lakhs being the cost of manufacture of 1,50,000 ags, excluding the cost of cloth.

Ministry stated in January 1994 that the material was offered to sister factories for alternate use at their end to avoid oss to the state and OCFS received demands from two sister actories for 20,653 metres of the cloth (140 cms width) and espatched 5,106 metres till January 1994.

Ministry also stated that of the bags supplied to HEF, 36,450 bags were utilised and balance would be washed in due course.

Other cases

57. Issue of Grenades without igniters

Mention was made in paragraph 35 of the Report of the Comptroller and Auditor General of India, Union Government - Defence Services (Army and Ordnance Factories) for the year ended 31 March 1991 (No. 8 of 1992), about non-utilisation of 6.40 lakh Grenades valuing Rs772.20 lakhs by the Army as the corresponding Igniter sets (Detonators) valuing Rs249.92 lakhs held by Army depots were defective. The Ministry in their Action Taken Note, stated in November 1992 that Grenades which could not be issued due to non-availability of matching quantity of igniters, could be gainfully utilised with metallic detonators being produced by

Ordnance Factories.

Further examination of the case revealed that during 1991-1993 Ammunition Factory, Kirkee issued 8.65 lakh Grenades to the Army against which only 0.43 lakh detonators had been issued, leaving a deficiency of 8.22 lakh detonators.

The total stock of Grenades issued during 1991-92 and 1992-93 that cannot be utilised by the Army was 8.22 lakhs valuing Rs2,022.12 lakhs (average cost).

The case reveals that due to failure to issue matching quantities of Grenades with detonators, the Army is holding 14.62 lakh Grenades valuing Rs2794.32 lakhs which cannot be utilised in case of operational necessity for want of matching detonators.

Ministry stated in January 1994 that apart from the above, 2.6 lakh detonators were also issued and the ordnance factories had planned supply of increased quantity of detonators from 1993-94 to make up the deficiency expeditiously.

58. Manufacture of an item without firm order

Based on a tentative requirement of a Public Sector Undertaking (PSU) for the oil refineries for 607 to 717 tonnes Isopropyl Nitrate (IPN) per year during the period 1990-91 to 2000, High Explosives Factory Kirkee (HEF) enhanced its capacity for manufacture of IPN from 25 to 75 kilolitres per month at a total cost of Rs7.59 lakhs. The PSU placed an order in March 1991 on HEF for supply of 286.5 kilolitres IPN at Rs49,050 per kilolitre exclusive of duties, taxes and cost of barrel with a price variation clause. HEF undertook manufacture of 300 kilolitres of IPN during March to October 1991 and issued 281.60 kilolitres to the PSU till October 1991 leaving a balance of 18.40 kilolitres IPN which was lying unissued.

Without obtaining a firm order in October 1991 HEF began to manufacture 50 kilolitres IPN and actually manufactured 11 kilolitres during that month in anticipation of order. Total quantity of 29.4 kilolitre of IPN valuing Rs13.14 lakhs is being held by the HEF as work-in-progress instead of finished semi as this was passed in inspection. Of this, 800 litres of IPN was issued to Hindustan Aeronautics Limited in December 1992 and thus reducing the quantity/stock to 28.6 kilolitre of IPN valuing Rs12.78 lakhs.

In addition to above, HEF is also holding raw materials val- at Rs16.84 lakhs without any prospect of further utilisation. her as one of the materials is a volatile liquid there had an evaporation loss of 14.7 kilograms of that material valu- Rs4.25 lakhs during October 1991 to September 1992.

The case reveals that :

manufacture of IPN for civil trade in anticipation of firm orders was contrary to the existing procedure laid down by OFB in June 1985;

cost of unissued IPN passed in inspection is being shown as work-in-progress instead of finished semi;

raw materials valuing Rs16.84 lakhs procured for manufacture of IPN has been held by the factory without any prospect of utilisation;

due to prolonged storage there was evaporation loss of one of the raw materials to the tune of Rs4.25 lakhs; and

28.60 kilolitres of IPN valuing Rs12.78 lakhs manufactured in anticipation of orders is being held by HEF without any immediate prospect of disposal.

In September 1993, Ministry stated that efforts to persuade C to place further orders were made but the requirement of IOC nged due to rearragement in the source of petroleum crude. istry further stated that raw materials would be utilised on ceipt of orders for IPN from a private firm, which were yet to terialise.

Unintended benefit to a Public Sector Undertaking

A Public Sector Undertaking (PSU) was identified by the Min- try of Defence in November 1981 as a single indigenous source supply of stabilizers which were then being imported. These abilizers were for use by Heavy Vehicle Factory, Avadi (HVF). ported cost of each stabilizer from country 'A' was Rs8.43 khs and from country 'B' was Rs9.65 lakhs.

In March 1986, HVF issued a letter of intent to the PSU for digenous manufacture and supply of 250 sets of stabilizers nding finalisation of the price and other terms and conditions supply to be negotiated and settled mutually. In a discussion held in February 1989 between the representatives of PSU and Ordnance Factory Board (OFB), the price payable by HVF was settled at Rs16 lakhs per set for fully indigenised stabilisers. The OFB also agreed in February 1989 to make an advance payment of 20 per cent of the cost of 250 sets which was reduced in March 1989 to 200 sets by HVF due to resource constraints and Rs640 lakhs were paid in March 1989 to the PSU. HVF placed an order for 250 sets of fully indigenous stabilizers at Rs16 lakhs per set in September 1989. The PSU supplied 20 sets in 1989-90 and between March and December 1990 supplied 50 sets against another order of November 1989.

In December 1990 the PSU inter alia indicated that out of 70 stabilizers supplied, 20 were manufactured out of systems imported from country 'B' and 35 sets contained sub units of country 'A'. As per the data available with HVF the value of 20 sets manufactured out of the materials imported from country 'B' worked out to Rs230.20 lakhs against which HVF had paid Rs.320 lakhs, resulting in an unintended benefit of Rs89.80 lakhs to the PSU.

Ministry stated in January 1994 that the matter is being re-examined with all concerned.

60. Excess payment of sales tax

In March 1981, Government of Tamil Nadu reduced to four per cent the sales tax payable by any dealer for the sale of materials to the State and Central Government Departments which were otherwise taxable at a higher rate. The above sales tax concession was not availed of by the Ordnance Factories in Tamil Nadu. When this was pointed out by Audit in May 1992, Controller of Accounts (Factories), Avadi issued instructions in August 1992 to all the Accounts Officers of the factories under his jurisdiction to restrict the sales tax paid to suppliers to four per cent, to review the past cases and to initiate action for recovery in the event of any excess payment. The results of such reviews are awaited as of November 1993.

A test check of payments made against supply orders issued by Cordite Factory Aruvankadu (CFA), Ordnance Factory Tiruchirapalli (OFT), Heavy Alloy Penetrator Project Tiruchirapalli (HAPP), Engine Factory Avadi(EF) and Heavy Vehicle Factory Avadi (HVF) by Audit during October 1992 to July 1993 revealed that the factories had admitted sales tax in excess of the prescribed rate four per cent in a large number of cases. The excess payments ...cted in test checks covering the period 1988-89 to 1992-93 ...nted to Rs27.47 lakhs for the above factories.

Ministry stated in February 1994 that the sales tax conces-...n was not availed as the intimation to this effect was recei-... from Accounts Office between August and December 1992 only.

Ministry further stated that the excess payments made in ...pect of OFT for the period 1987-93 and for HAPP for the period ...or to 1990-91 have been calculated as Rs13.09 lakhs and of ...ch Rs0.68 lakh were recovered by HAPP from the pending bills.

The total of all the excess payments made in respect of ...er factories and progress of recovery of the same is being as-...sed separately by the department as of February 1994.

Delay in payment of electricity bills

According to the terms and conditions of payment of electri-...ty charges, in the event of any bill not being paid by the due ...te specified thereon, delayed payment surcharge would be ...alised at the rate of 1/2 per cent per week or part thereof on ...e total billed amount from the date of the bill till the date ... payment, to be debited in the next bill.

It was noticed by audit that Metal and Steel Factory, Isha-...re (MSF) paid Rs4.45 lakhs during 1991-92 to M/s Calcutta Elec-...ic Supply Corporation Ltd. (CESC) due to delay in making pay-...nt of electricity bills.

MSF stated in December 1992 that cheques for payment of ...lectricity charges were not released by the Accounts Office (AO) ...thin due date of the bills and surcharges claimed by M/s CESC ...d. as per their terms and conditions, had to be paid.

An analysis for the delayed payments of the bills revealed ...hat MSF took 1 to 7 days in presenting the bills to the AO, and ...he AO took 2 to 8 days in clearing the bills which was further ...ompounded by postal delays of 7 to 14 days.

Had the payment of electricity charges been made in time to .../s CESC Ltd., payment of Rs4.45 lakhs as delayed payment sur-...harge could have been avoided.

The Ministry stated in October 1993, that to avoid such situations the factory and the Accounts Office are keeping close liaison to prepare the cheques well within due dates and cheques are being delivered to CESC Ltd. by hand to avoid postal delays.

62. Loss in execution of an order

A contract was entered into in May 1991 between a buyer and a Public Sector Undertaking (PSU) in association with Ordnance Factory Board (OFB), for supply of 57 tonnes of a store along with another store to be manufactured at Ordnance Factory, Itarsi (OFI). OFI produced 57 tonnes of store by December 1991 and issued to the buyer through the PSU in February 1992.

On receipt of the store, the buyer recorded a shortage of 5.25 tonnes in May 1992. On this being reported the representatives of the PSU and OFB visited the buyer's premises in June 1992 for investigation and observed that weights recorded on the boxes were not as per the actual weights of the net contents.

Although no Board of Inquiry was ordered to find out the reasons for the reported shortage, OFB decided in July 1992 to compensate the shortage and quantity of 5.25 tonnes of the store valuing Rs9.56 lakhs was despatched to the buyer in April 1993.

Ministry stated in January 1994 that the shortage was due to an error in the remotely controlled weighing system. At the same time, Ministry also stated that the reported shortage was made good without drawing extra material from stock. This indicates the possibility of systematic overdrawal of material against manufacturing warrants.

Thus the compensation of 5.25 tonnes of the store without convening any Board of Inquiry about the reported short receipt at buyer's end resulted in a loss of Rs9.56 lakhs to the Government which requires regularisation under rules.

CHAPTER V

WORKS AND MILITARY ENGINEER SERVICES

63. Conclusion of contracts at extra cost due to delay in obtaining financial concurrence

Mention was made in the Reports of the Comptroller and Auditor General of India, Union Government (Defence Services) for the years 1983-84 (Paragraph 22) and 1984-85 (Paragraph 21) and (Army and Ordnance Factories) for the year ended 31 March 1989 (Paragraph 98) and 1990 (Paragraph 83) about incurring of avoidable extra expenditure due to delay in according/obtaining financial concurrence (FC). In the remedial/corrective action taken notes the Ministry of Defence (Ministry) had stated (February 1991) that to avoid delays Engineer-in-Chief (E-in-C) had issued comprehensive instructions in April 1988 to all Chief Engineers (CEs). For expeditious progressing of FC cases the instructions had laid down a time schedule of eight weeks for initiating and processing of FC cases. As per these instructions CEs were required to forward, inter alia, FC cases by hand within three weeks of receipt of tenders to E-in-C, and also to send replies to the queries raised by E-in-C/Ministry by hand as minimum of five weeks were required by E-in-C.

Despite these instructions, the following cases have been noticed in audit where-in, failure in obtaining FC of the competent financial authority (CFA), within the validity period of tender, resulted in re-tendering and consequential extra expenditure to the tune of Rs 361.23 lakhs.

Case I

Tenders for the provision of deficient married accommodation for Officers and Airmen at a station were invited by a Zonal CE in February 1988 and received on 16 April 1988. The lowest offer of Rs 275.34 lakhs, valid upto 14 July 1988, involved financial liability of Rs300.72 lakhs which was beyond the amount (Rs280.09 lakhs) available in the administrative approval.

The Zonal CE forwarded on 25 May 1988 the case for obtaining FC to E-in-C who raised (9 June 1988) certain observations. On receipt of reply on 4 July 1988, the E-in-C made further observations on 5 July 1988 and FC could not be obtained within the validity of the offer.

Tenders for the second call were invited in October 1988 but due to paucity of funds, the date of receipt of tenders was extended to 21 September 1989. The amount of lowest tender, which was valid upto 5 October 1990, was Rs296.86 lakhs. A case for FC was sent to E-in-C by the Zonal CE on 27 October 1989. E-in-C's Branch raised (27 November 1989) certain observations and after protracted correspondence among Zonal CE, E-in-C and Ministry, FC was communicated after a year in October 1990 by which time the validity had already expired.

The lowest offer of third call for Rs400.84 lakhs was accepted by Zonal CE on 4 June 1991 after obtaining FC resulting in extra expenditure of Rs125.50 lakhs approximately. The extra expenditure would be more in respect of certain items of work costing Rs6.43 lakhs which were omitted in the third call.

Ministry stated in November 1993 that:

- delay had occurred because detailed scrutiny of tenders was required to be carried out before forwarding the case for FC; and

- the extra expenditure was due to uncertain market trend because of Gulf war.

This contention is not tenable because for expeditious progressing of FC cases the instructions had been issued in April 1988. While the Gulf War broke out in January 1991, cases for FC were initiated and processed much earlier during May, 1988 and October, 1989.

Case II

In August 1988, Ministry accorded sanction for the provision of other than married accommodation for an Infantry Battalion (Phase-I) at a station at an estimated cost of Rs324.19 lakhs, revised to Rs325.51 lakhs in May 1990.

Tenders for the part of the work were invited by a Zonal CE in May 1990 and received on 5 September 1990. The lowest offer of a firm for Rs349.12 lakhs, valid upto 3 December, 1990 was in excess of the prescribed tolerance limit of sanctioned amount. The Zonal CE on 6 October 1990 sent a proposal to the E-in-C for obtaining FC. The observations made by E-in-C on 30 October 1990 could not be sorted out within the validity of offer.

The lowest offer of Rs394.98 lakhs received in the second in March 1991 was considered reasonable and the contract was luded by Zonal CE in June 1991 after obtaining FC of Min-y, resulting in extra expenditure of Rs45.86 lakhs.

Ministry accepting the facts stated in December 1993 that FC e was referred back to the Zonal CE on valid observations and endering became inevitable as the contractor did not extend validity.

e III

In July 1988, Air Headquarters (HQ),sanctioned the provision hard standing and taxi track for parking of aircraft for an r Force unit at an estimated cost of Rs96.15 lakhs.

The sanction, inter alia catered for sub-surface drains on e sides of proposed link taxi track and hard standing. In March 89 the Zonal CE initiated a corrigendum for deletion of sub-rface drains and inclusions of covered storm water drains from e scope of the work. In June 1989, E-in-C communicated to Zonal that Air HQ had decided that the sub-surface drains as catered or in the sanction were acceptable and covered storm water ains were not required. Meanwhile, tenders for the work were nvited on 14 February 1989 by deleting the drainage portion of he work. The lowest offer of Rs106.28 lakhs received on 24 Oc-ober 1989 though found reasonable, could not be accepted as the mount available in the sanction was not sufficient to accept the ender. The CE sent in November 1989 a case to the E-in-C for ob-aining FC. Though the validity of the lowest offer was upto 21 anuary, 1990 which was extended upto 21 May, 1990, FC could not e obtained and E-in-C advised the Zonal CE to retender.

The provision of covered storm water drains for which draft corrigendum was initiated by the Zonal CE in March 1989 though initially not agreed to by the Air HQ in June 1989 was agreed for inclusion in November 1989 enhancing the sanctioned amount to Rs106.57 lakhs.

The lowest tender of Rs144.47 lakhs for the work taking into account the change in scope of work was received back on 17 August 1990 with date of validity upto 14 November 1990.

The Zonal CE forwarded (14 September 1990) the case to E-in-C for obtaining FC. FC was accorded on 29 November 1990 and a contract was concluded on 3 December 1990 for Rs144.47 lakhs. The accepted amount of tenders of second call included a sum of Rs18.43 lakhs due to increase in the scope of work not included in the first call. Therefore in respect of same items of works as in the first call for which the contract was concluded the amount works out to Rs126.04 lakhs (Rs144.47 lakhs - Rs18.43 lakhs). Against this, the lowest tendered amount of first call was Rs106.28 lakhs. Accordingly the extra amount of Rs19.76 lakhs (126.04 lakhs - 106.28 lakhs) was incurred.

The Ministry while accepting the facts as correct stated (November 1993) that delay in according FC occurred due to protracted correspondence with Zonal CE on observations raised by E-in-C and extra expenditure incurred due to change in specification of drains. The contention of the Ministry is not tenable as time schedule includes sufficient time for correspondence/observations etc. Further the extra amount caused due to change in speficication has not been taken into account while working out extra expenditure involved.

Case IV

The Ministry accorded (March 1991) sanction for provision of married accommodation for Junior Commissioned Officers and Other Ranks for a Regiment at an estimated cost of Rs194.88 lakhs. The work was released for execution in March 1991.

In the tenders received by a Zonal CE on 3 September 1991, the lowest tender of Rs188.53 lakhs valid upto 1 December 1991, was found to be in excess of the prescribed tolerance limit of sanctioned amount. The Zonal CE submitted the proposal for FC on 14 September 1991. The FC however could not be finalised within the validity period of tender.

The lowest offer of second call received in March 1992 for Rs204.94 lakhs was from the same firm of lowest rates of first call and was considered reasonable. The contract was concluded by the Zonal CE in August 1992 after obtaining FC,resulting in extra expenditure of Rs16.41 lakhs.

Ministry while accepting the facts stated (September 1993) that this was an exceptional case wherein the tenderer did not extend the validity period and increase in cost due to re-tendering was natural, but should be considered as deferred investment. The fact, however, remains that FC could not be obtained even though the validity period was of twelve weeks.

e V

In May 1988,Headquarters (HQ) Western Air Command (WAC) acc-
ded sanction for provision of Station Sick Quarters and Station
lth Organisation at an estimated cost of Rs71.95 lakhs revised
Rs68.42 lakhs in May 1989.

Tenders for part of building were invited by a Zonal CE in
tober 1989 to be received on 27 November 1989. The lowest ten-
r of Rs39.99 lakhs received on 15 January 1990 and valid upto
March 1990 was found in excess of the prescribed tolerance
mit of sanctioned amount. The Zonal CE approached HQ WAC on 11
bruary 1990 to obtain FC. The case remained under correspon-
nce between Zonal CE and HQ WAC upto 21 April 1990 and the low-
st tenderer did not extend his validity.

The lowest offer of second call for Rs50.31 lakhs received
n October 1990,(further reduced to Rs50.21 lakhs) was considered
easonable and the contract was concluded by Zonal CE in February
991 for Rs50.21 lakhs, resulting in extra expenditure of Rs10.22
akhs.

The Ministry while accepting the above facts stated that FC
as initiated by the Zonal CE well in time and on account of ob-
ervations raised by HQ WAC there was delay in its finalisation.

ase VI

Ministry accorded sanction in August 1987 at an estimated
ost of Rs198.54 lakhs to construct a Bomb Dump at a station.

Tenders were invited by a Zonal CE in August 1988, and re-
eived in November 1988. The lowest tender for Rs236.55 lakhs,
valid upto 12 February 1989, was beyond the prescribed tolerance
limit of sanctioned cost of work. The Zonal CE submitted a pro-
posal in December 1988 to E-in-C for obtaining FC.

Ministry's approval could not be obtained within the valid-
ity period of the tender due to E-in-C's observations.

In October 1989,the Zonal CE forwarded approximate estimates
for Rs264.25 lakhs to E-in-C for obtaining revised sanction,
which was accorded by the Ministry in February 1991 at an estima-
ted cost of Rs265.68 lakhs. Tenders based on the revised sanction
were received in November 1991. The lowest tenderer, however,
revoked his offer of Rs285.04 lakhs on 12 November 1991 and the
Zonal CE without considering the second lowest offer of Rs324.84

lakhs, reinvited tenders in January 1992. The lowest tendered rates of Rs343.73 lakhs received in the third call in January 1992 were considered reasonable and contract was concluded in September 1992 after obtaining FC of the Ministry.

Thus, as tenders during first call of August 1988 were invited by Zonal CE,without first obtaining revised sanction, the lowest offer of Rs 343.73 lakhs in the third call had to be accepted resulting in avoidable extra expenditure of Rs107.18 lakhs.

The case was reported to the Ministry in August 1993; their reply has not been received (February 1994).

Case VII

The Ministry accorded sanction in June 1986 for construction of 156 type II quarters at a Factory at an estimated cost of Rs113.49 lakhs in two storey construction.

The revised approximate estimates of the work were initiated by Zonal CE in July 1988 for Rs153.14 lakhs. The tenders for the work were invited by Zonal CE on 20 December 1988 and the lowest tender of a firm for Rs 107.16 lakhs was found reasonable. As the tendered cost exceeded the sanctioned cost by more than the prescribed tolerance limit, the case was sent by Zonal CE for FC on 24 February 1989 to the E-in-C. The validity of the offer upto 15 April 1989 was further extended upto 10 May 1989.

Although the case for FC was taken up by E-in-C, revised sanction could not be issued within the validity period of the tenders.

In respect of tenders re-issued on 23 October 1989 by Zonal CE the lowest tendered amount of Rs115.68 lakhs was found reasonable but it exceeded the approved cost by more than the prescribed tolerance limit. Zonal CE requested E-in-C in January 1990 to obtain FC. The validity of the tender was initially upto 30 January 1990 which was extended upto 30 June 1990. Since neither FC nor revised sanction could be obtained before 30 June 1990, this tender also lapsed.

Revised sanction of the Ministry for Rs175.03 lakhs was issued in September 1990 which was amended to Rs217.14 lakhs in July 1991. Tenders for the work were finally accepted by CE for Rs143.46 lakhs in February 1991 resulting in extra expenditure of Rs36.30 lakhs.

Infructuous expenditure due to inadequacies in design and execution of works

Sanctions were accorded by Ministry of Defence (Ministry) in vember 1984 (amended in September 1987) and October 1985 mended in December 1987) which inter alia catered for the cons- uction of Hull and Turret Shop and Suspension Shop for an Ord- nce Factory at an estimated cost of Rs18.41 crores and Rs13.57 rores respectively.

Based on the sanctions, Zonal Chief Engineer (CE) concluded ebruary 1985/March 1986) two contract agreements for the cons- uction of the Hull and Turret Shop (building no.2) and Suspen- ion Shop (building no.6) at a cost of Rs8.53 crores and Rs6.55 rores respectively. The works under contract agreements were ompleted in March 1988 and February 1989 at a cost of Rs7.81 rores and Rs6.48 crores respectively.

In October 1990 the factory authorities reported shifting nd buckling of the trusses in building no.6 and requested the CE o arrange for a critical inspection of the structure. In April 991, Additional Director General Ordnance Factory (Addl. DGOF) equested Engineer-in-Chief (E-in-C) to depute design experts to he factory for a critical re-examination of the structural des- gn of the building.

Based on the directions (May 1991) of E-in-C,the CE, Designs nd Consultancy of station 'A' carried out (June 1991) site crutiny of the distress analysis of the trusses and confirmed nadequacies in the bracing system which made the roof structure eak and structurally unstable and recommended immediate rectifi- ation.

In August 1988, within six months of the completion of uilding no.2, the factory authorities reported leakages through C sheets and roof extractors. The leakages were reported time nd again by the factory authorities to the CE since then. Subse- uently,in July 1991 physical deflection/tilts in the roof struc- ure and defects in gantry girders of building no.2 were reported o E-in-C's Branch by the CE. Therefore, E-in-C's Branch in July 991 accorded approval for expert consultancy to investigate the auses of the defects in building no.2 and 6. A sum of Rs2.70 akhs was paid upto May 1992 as consultancy charges.

The report submitted by one of the consultants in December 991 pointed out that the distress in trusses was the result of the accumulated errors in design, erection and fabrication of the trusses.

In the meantime, Command CE convened (November 1991) a Technical Board of Officers (Board) to investigate the circumstances leading to the defects in building nos.2 and 6. The Board poined out in May 1992 that distress observed in the roof structure in respect of both the buildings was due to inadequacy in design and detailing structure and the defects in gantry girders in building no.2 were due to lapses in execution.

In May 1992 the CE concluded a contract for strengthening of structural works in building nos.2 and 6 including replacement of damaged AC sheets in roof at a cost of Rs1.79 crores. The rectification work has not yet been completed (December 1993).

Ministry stated (December 1993) that the tilting of the trusses of building no.2 and 6 was because of inadequacy of design and detailing of structures. Ministry also stated that disciplinary action was being taken against the officials concerned by the E-in-C.

The case reveals that the buildings constructed at a cost of Rs14.29 crores were found defective due to inadequacy of design and lapses in execution. The rectification work contracted for Rs1.79 crores in May 1992 was yet to be completed (December 1993).

65. Non-utilisation of assets due to improper planning and their sub-standard execution

Ministry of Defence (Ministry) in July 1985, accepted necessity of shifting the Army Receiver Station (ARS) from Delhi to Meerut at an estimated cost of Rs500.46 lakhs and accorded sanction for phase-I of the project for Rs172.72 lakhs, revised to Rs199.72 lakhs in July 1988. According to this sanction, Phase-I of the project was to be completed by May 1990. The sanction envisaged a sum of Rs11.99 lakhs for obtaining 11 KV electric supply from the Uttar Pradesh State Electricity Board (UPSEB) against which Rs6.93 lakhs was deposited (December 1986) with the UPSEB.

For execution of Phase-I of the project, the Zonal Chief Engineer (CE), concluded four main contracts amounting to Rs150.87 lakhs during March 1987 and January 1989. Twelve other contracts re concluded by lower authorities at a sum of Rs78.68 lakhs.

Single men barracks constructed at a cost of Rs30.21 lakhs March 1988 under contract 'A' of Zonal CE, were not taken over the users due to non-completion of technical accommodation and n-availability of electric supply.

Technical accommodation constructed through contract 'B' for 59.26 lakhs and scheduled to be completed in December 1988, was mpleted in October 1991. In January 1990, the concerned Area mmander pointed out that the quality of construction was subs-ndard. A Technical Board held in May 1990 opined that as most f the wing walls had deflected, bulged and cracked due to inade-uate section,foundation and reinforcement used, wing walls would equire to be demolished and reconstructed on alternative design/rawings. In June 1990, the Area Headquarters (HQ) ordered a taff Court of Inquiry (COI) to investigate the sub-standard exe-ution of work and to pin point the persons responsible and to ubmit its findings by July 1990.

The COI pointed out (December 1991) inadequacies in the de-ign of the traverse and sub-standard execution of works and blamed Engineering officers. The COI also opined that damp patches/water oozing from the floor of technical building still persisted despite half-baked measures for rectification; and site documents/records were not given due importance by the Engineer-ing Officers, as they rarely visited the site of work.

In May 1992, the Sub-Area HQ blamed the earlier Garrison En-gineer (GE) and two Engineers-in-Charge for the defects. Without assigning any reasons, new Sub Area Commander gave his revised opinion in July 1993 and recommended disciplinary action against the latter GE and Commander Works Engineer (CWE) for issue of completion certificate without rectification of defects and also recommended administrative action against two Zonal CEs. While agreeing with these revised recommendations, the Area Commander pointed out in August 1993 that no action could be taken against the former GE and Engineer-in-Charge, as they had retired from service and directed that possibilities of recovering the damages from the contractor for the sub-standard workmanship should be explored and immediate steps initiated to recheck the structural stability of the retaining walls and rectify the defects.

Two contracts concluded in November 1988 and January 1989 by Zonal CE for Rs62.61 lakhs for air-conditioning and electrificat-ion works scheduled to be completed in December 1989 and February

1990 respectively, were held in abeyance since March 1993 at 95 and 98 per cent progress, for want of three phase electric supply from UPSEB.

In the meantime, the UPSEB in October 1991 revised their estimates to Rs26.01 lakhs and accordingly the balance amount of Rs19.08 lakhs was deposited with the UPSEB in March 1993.

To execute the work of roads, paths and culverts, CWE concluded in February 1986 a contract for Rs20.81 lakhs with contractor 'X' to be completed by March 1987. The contractor could not complete the work as scheduled, despite extension granted upto July 1988. CWE in January 1993 cancelled the contract at the risk and cost of the contractor and ordered a board to prepare a list of incomplete and defective items of works. The board observed in January 1993 that the work was defective and sub-standard. At the time of cancellation of work it was 90 per cent complete. The Zonal CE stated in July 1993 that the defects came to notice after payments of Rs16.42 lakhs had been made. Risk and cost contract had been accepted in November 1993 and disciplinary action against the defaulter officials was also being initiated by Command CE.

Thus, assets created (value: Rs236.94 lakhs) consisting of single men barracks, technical accommodation, air conditioning and electrification works, roads, paths and culverts are lying unutilised and an expenditure of Rs3.01 lakhs had been incurred till November 1993 on deployment of chowkidars for the watch and ward. Inspite of arrangements made for security cases of damage/theft to the perimeter fencing and water/electric fittings were noticed, which were under investigation by a Staff COI convened in April 1992.

Ministry stated in February 1994 that :

- rectification would be carried out after COI is finalised and accommodation taken over thereafter;
- proceedings of both COIs had not been finalised so far (February 1994); and
- three phase electric supply was yet to be made available by UPSEB.

The case reveals that :

- the necessity of shifting ARS from Delhi to Meerut was accepted by Government in 1985. Although, Rs236.94 lakhs has already been spent upto March 1993, the assets created have not been taken over by the users so far (February 1994);

technical accommodation completed at a cost of Rs74.66 lakhs is sub-standard requiring demolition of its wing walls and reconstruction on alternative designs/drawings;

air conditioning and electrification work of technical buildings has been held in abeyance since March 1993 after incurring expenditure of Rs64.41 lakhs;

single men barracks constructed at Rs30.21 lakhs in March 1988 have been lying unoccupied;

work of roads, paths and culverts executed for Rs16.42 lakhs and found sub-standard have not been completed at the risk and cost of the contractor;

- as a result of delay of four years in finalisation of a COI, action could not be taken against two Engineers held responsible for the execution of the sub-standard work as they had retired from service in the meantime; and

- findings of the COI conveyed in April 1992 to investigate the cases of damage/theft were yet to be finalised (February 1994).

66. Unfruitful expenditure on swimming pool

Administrative Approval (A/A) for an Olympic size swimming pool at an estimated cost of Rs32.10 lakhs was accorded in December 1978 by Headquarters Eastern Command to complete the work by December 1980.

The work was given low priority during December 1978 to September 1981. However, a contract was concluded in March 1983 after obtaining financial concurrence of Quarter Master General. The work order was placed in April 1983 with scheduled dates of commencement as April 1983 and completion by April 1985.

During execution of the work, firm 'A' apprehended that the design for swimming pool was not safe and requested the concerned authorities in June/November 1983 to recheck the design. Accordingly certain modifications/revisions found necessary in the design of the swimming pool were made and one set of revised drawings forwarded to the firm in February 1984 who observed that revised foundation drawings had radical changes. The contention of the firm regarding the changes in foundation design was accepted and nine deviation orders were issued to increase the plinth, height etc. of the swimming pool.

The firm intimated on 02 June 1988 that the swimming pool be taken over but it was not taken over because there were leakages and defects. The firm was asked on 27 June 1988 to rectify the leakages and defects but it did not take any action.

A technical board was assembled in December 1991 to investigate the reasons for leakages and other defects,which inter alia, observed:-

(a) that the defects/leakages etc. were primarily due to poor workmanship, lack of quality control and poor supervision of work during execution;

(b) that the firm's responsibility was yet to complete certain items of work which formed part and parcel of the contract and

(c) that works were executed under eight agencies instead of one on a turn key basis, which resulted in considerable delay and lack of co-ordination.

A notice was issued in January 1992 to the firm for rectification of defects and completion of balance items of work by February 1992;otherwise the work would be got executed at its risk and cost. But the firm filed a suit in September 1992 for restraining and prohibiting the Department from entrusting the work to any other person till the completion certificate was issued to them and final payment made.

A Court of Inquiry (CI) ordered in August 1992 stated in October 1992 that the complete CI would take considerable time for completion. CI observed that the swimming pool was neither being maintained by Military Engineer Services nor by the firm. The expenditure incurred on this work till October 1993 was Rs82.52 lakhs.

Ministry stated (October 1993) that :

- defects had accrued in the completed work due to poor workmanship and low quality control;

the contractor did not react to the various notices issued by the Department for rectification of defects. The final notice was issued in January 1992. The firm reacted to this notice by moving the court in obtaining a stay order against the Department for taking up the incomplete and rectification works through an alternative agency;

the swimming pool was yet to be completed and rectified by the original contractor; and

the entire issue was being investigated by the staff court of inquiry.

The case reveals that:

(i) there were failures on the part of the executives at all stages in planning, designing, contracting and poor supervision of work during its execution;

(ii) that the investment of Rs82.52 lakhs for the provision of a swimming pool has remained unfruitful as it has remained unutilised for more than five years (October 1993); and

(iii) the CI, based on which administrative/disciplinary actions against the executives and the firm is to be initiated has yet to be finalised as of October 1993.

67. Construction of married accommodation and its re-appropriation

A Board of Officers (Board) recommended construction of 26 Junior Commissioned Officers (JCOs) quarters and 14 Havildar's quarters (alongwith pile foundation for additional 44 quarters in the near future) as against authorisation of 48 JCOs and 108 Other Ranks quarters.

Army Headquarters (HQ) accorded sanction in July 1986 for Rs105.30 lakhs amended to Rs105.95 lakhs in July 1988 for provision of married accommodation for 26 JCOs and 14 Havildars which also catered for pile foundation/lifts/external services for the recommended future expansion of accommodation. The building work for 14 Havildar's quarters was completed in March 1990 at a cost of Rs59.36 lakhs.

The Station HQ, in November 1990, reappropriated the Havildar's quarters as 'student hostel' for the period from October

1990 which were subsequently reappropriated in May 1991 as Sainik Aramgah with retrospective effect, though this required prior Government approval. Therefore, re-appropriation of the Havildar's quarters as 'student hostel' and 'Aramgah' was not in order. Zonal Chief Engineer intimated in September 1992 that case was being projected for obtaining sanction of the Government of India.

Ministry of Defence (Ministry) stated (January 1994) that:

- a need was felt to reappropriate 14 Havildar's quarters to a youth hostel initially and thereafter on realisation that the reappropriation was not authorised the reappropriation of accommodation for Sainik Aramgah was done purely as a welfare measure for all ranks in the station as there was no Aramgah in the station. Further as the position with regard to availability of accommodation in Military Engineer Services Inspection Bunglow, messes to the transients * was *very adverse due to limited accommodation, reappropriation was made. A case was being projected for regularisation of the irregularity; and

- in the station there was a deficiency in the overall holding of the accommodation. Hence Compensation in lieu of quarter (CILQ) was being granted. Subsequently in September 1992 it was found by a Board that there was no deficiency of married accommodation. Therefore CILQ for the station was stopped.

The case reveals that married accommodation constructed for Havildars at a station for Rs59.36 lakhs was re-appropriated with retrospective effect for purposes other than for which it was sanctioned/ constructed and the Havildars in the meantime, continued to be paid CILQ uptil September 1992.

68. Extra expenditure due to delay in finalisation of a water supply scheme

In August 1981, Headquarters (HQ) Central Command initiated a proposal for a "Radial Well Scheme" for supply of sweet water to troops at Mathura at an estimated cost of Rs270 lakhs. The Ministry of Defence (Ministry) agreed to the proposal in November 1981. Thereafter the matter remained under correspondence with various agencies, as Government tried to execute the scheme as a joint venture with State Government but this did not materialise.

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* Transients - mean defence personnels and their families while in transit.

In November 1984, the necessity for having an independent ter supply scheme for the station was finally accepted by the nistry and accordingly, a Board of Officers (Board) held in Ocber 1986 observed that water supply scheme at Mathura would relt in saving of Rs50 to 60 lakhs per annum on the following ems:

due to corrosive effect of brackish water of Mathura, the life of vehicles and equipment was shortened by 15 to 20 per cent and Mathura being an equipment intensive Army Station, the effect of brackish water in terms of maintenance and replenishment was very high and the financial loss in terms of vehicles alone was about Rs16 lakhs a year;

due to corrosive effect of brackish water on MES equipment and installation, there was a recurring loss of Rs8 to 10 lakhs a year; and

the existing system of supply of water through water trucks by deploying 20 vehicles solely for this purpose had been entailing an approximate expenditure of Rs16 to 18 lakhs a year.

As per Board, the approximate cost of the scheme was Rs7.86 rores which was scrutinised by Engineer-in-Chief's (E-in-C's) ranch and amended to Rs5.84 crores in June 1988 and forwarded to uarter Master General's Branch.

The Ministry accorded sanction for the scheme in July 1992 t an estimated cost of Rs6.41 crores to be completed within 1/2 years from the date of release. The work was released for xecution in July 1992. The present progress of work as of January 1994 was only 0.5 per cent and expenditure booked against he scheme so far was Rs160.61 lakhs mainly on account of cost or pipes.

The Ministry stated in December 1993 that on acceptance of ecessity in November 1984, the detailed study including survey ork and feasibility report was carried out and the Board proceedings were finalised. The Ministry added that the Board estimated he cost of project as Rs7.72 crores whereas it was sanctioned or Rs6.41 crores which was much lower. This is not tenable as he amount recommended by the Board in 1986 was reduced by -in-C's Branch to Rs5.84 crores while scrutinising the approximate estimates in 1988 whereas the sanction was accorded in 1992 as for Rs6.41 crores.

The case reveals that due to delay in sanction and implementation of the scheme evenafter it was recommended by Board in November 1986, there was cost escalation of Rs57 lakhs and Army authorities had to incur recurring expenditure of Rs18 lakhs per annum on supply of sweet water to troops by trucks which could have been avoided had the scheme been implemented expeditiously.

69. Delay in construction of Sainik Aramgah

The Ministry of Defence (Ministry) accorded sanction in August 1985 for construction of a building for Sainik Aramgah at New Delhi Railway station at an estimated cost of Rs116.65 lakhs. The work was to be executed by the Railways and completed in thirty months after the sanction of the estimates and receipt of the amount from the Defence authorities. The sanction provided for payemnt of advance of Rs50 lakhs to Railways and the balance amount as and when required by them. The advance was paid to Railways in 1986 (Rs10 lakhs in March 1986 and Rs40 lakhs in September 1986).

In a meeting held in December 1986, the Railways clarified to the Army officials that the location of Sainik Aramgah on the Ajmeri Gate side in the circulating area to the Railway station, as decided earlier, was not possible as the same would conflict with the Railways future requirements. The Defence authorities were, therefore, asked to indicate whether they would like to have the refund of the advance deposited.

The Controller of Defence Accounts had advised the Zonal Chief Engineer (CE) in March 1988 for taking refund of the advance deposited with the Railways as no progress had been made on the project due to non- finalisation of site.

On the request of the Garrison Engineer, the CE of the Railways requested in June 1988 their Financial Adviser and Chief Accounts Officer to refund the amount deposited by the Defence Department after deducting Rs2.33 lakhs on account of survey and planning charges at two per cent. The Defence authorities, however, decided in December 1988 not to pursue the question of refund pending finalisation of revised site.

After meeting the Railway engineers, the Zonal CE, inter alia, informed in January 1990 the Command Headquarters that:

- the previous proposal of construction of multistoreyed building meant for Postal Department and Sainik Aramgah would not be cleared by the Delhi Development Authority;

- the remodelling scheme of the Railway station on the Ajmeri Gate side recommended more rail lines and remodelling of station building and no other construction; and

- the construction of Sainik Aramgah at the New Delhi Railway station did not arise and therefore the advance could be taken back.

Ministry stated in October 1993 that they were waiting for finalisation of remodelling plans for the Railway Station by the Railways and were expecting feasibility of incorporation of their proposal in the overall remodelling plan.

Ministry also contended that this transaction should not be viewed as a financial irregularity since the amount has been deposited with a Department of Central Government. This is not tenable as the Railways are a Commercial Department and money remained with them for seven years and there was consequent loss of interest which worked out to Rs35 lakhs (approximately) as of October 1993.

The case revealed that though there was no possibility of the construction of the Sainik Aramgah at the Railway station as clarified by the Railways in December 1986, the Defence authorities did not take timely action to get the refund of the advance resulting in blocking up of funds to the extent of Rs50 lakhs for seven years.

70. Non-utilisation of stores purchased without sanction

A Zonal Chief Engineer (CE) without receiving any sanction or formal release of work/funds or go-ahead sanction, procured 7285.50 running metres (RM) of cast iron (CI) pipes ('A' class) of 450 mm dia valued at Rs47.53 lakhs during October 1981-January 1983 against two supply orders placed in July 1981 on two firms. In the absence of availability of funds against any specific job, the expenditure of Rs47.53 lakhs was booked to another sanctioned job.

Further, out of 7285.50 RM of pipes procured, 11 RM of pipes were issued (May 1992) locally for minor/maintenance work(s) leaving a balance of 7274.50 RM still in stock.

In July 1992, Zonal CE stated that in the revised estimates projected to Engineer-in-Chief's Branch, pipes 'B' class (450 mm), instead of 'A' class, as already procured, had been incorporated. However, sanction of the competent authority was still awaited (June 1993).

Ministry of Defence (Ministry) stated (November 1993) that:

- Advance procurement action was taken to avoid delay after sanction/release of project.

- The advance procurement action in retrospect was not an appropriate action. However, this investment in the ultimate analysis would be to the advantage of State since these pipes had been procured at much lesser cost and would be utilised in the work for augmentation of water supply at Station 'Q' sanctioned in June 1993, which is expected to be released for execution very soon.

- Departmental instructions had been issued (November 1993) to avoid recurrence of such cases in future.

Thus, 7285.50 RM of pipes 'A' class (valued at Rs47.53 lakhs) were procured without receipt of sanction against laid down works procedure while the actual requirement of the project was of pipes of 'B' class. 7274.50 RM of pipes valued at Rs47.45 lakhs were still lying in stock as of November 1993.

71. Avoidable payments made to Central Public Works Department

An Inspection Bungalow (IB) at Shimla and used by the Army was housed in a building constructed on Defence land by Central Public Works Department (CPWD) in 1857 as Military Engineer Services Department (MES) did not exist at that time. CPWD provided maintenance cover to the IB till 1981 and Controller of Defence Accounts, Western Command (CDA) reimbursed the maintenance charges to CPWD. Although MES started providing maintenance cover to IB since 1982, yet CDA continued to reimburse maintenance charges to CPWD till May 1992 when it was decided to discontinue this practice. The charges so paid are yet to be ascertained and recovered from CPWD.

MES came to know in October 1991 that the IB was actually on the Defence land. However, CDA continued to reimburse rental charges to CPWD till May 1992. The amount of rental charges reimbursed for the period 1982 to May 1992 works out to Rs46.40 lakhs (approximately).

Ministry stated (October 1993) that the reimbursement of rental charges to CPWD by the CDA had been made in perpetuation of the practice in vogue since 1857 and these payments were discontinued once the land status was confirmed and that the CDA had been approached to ascertain excess maintenance charges paid to CPWD to initiate measures to recover the same.

72. Procurement of an item at higher rate

Regulations provide that items of general stores for which rate/running contracts have been arranged by the Director General of supplies and Disposals (DGSD) will not be obtained from any other source. The Direct Demanding Officers are required to place supply orders direct on the supplier. A rate contract, for supply of various items of flourescent/decorative electrical fittings and their accessories for the period 1991-92, was concluded by DGSD with firm 'X' in April 1991. Item 'A' of 20 and 40 watts conforming to Indian Standards Institute (ISI) mark of any manufacturer was available in this rate contract at Rs45.40 each.

Chief Engineer, Bareilly Zone (CEBZ) and Commander Works Engineer (CWE) Agra in contravention of the regulations placed indents for item 'A' on DGSD instead of placing supply orders against existing rate contract. These indents were supported with proprietary article certificates (PACs) in favour of M/s Genelec Ltd. for item A even though all other makes which conform to ISI were found upto the mark by Military Engineer Services (MES) and were being used by them throughout the country. DGSD accordingly procured the indented quantities of item 'A' through Acceptance of Tenders (AT) at abnormally higher rates.

Details of cases are given below:-

Case I

CEBZ placed five separate indents on 27 January, 1992 on DGSD for arranging procurement of 9200 pieces of 40 watts and 3645 pieces of 20 watts of item 'A' at an estimated rate of Rs110 each to be delivered to five different consignees. One of the consignees was CWE, Bareilly who was having a copy of the rate contract which was received by them from firm 'X' in May 1991 as per which the rate of item 'A' was Rs 45.40 each. PAC certifying that equipment manufactured by M/s Genelec Ltd. and no other make was acceptable was furnished in respect of each of these indents. As per indents, 50 per cent delivery was to be completed by March 1992 and balance by June 1992. The PACs were deleted from the indents and CEBZ intimated DGSD in February 1992 that the items might be procured "as per ISI or any of standard/reputed makes like Genelec/Philips/GEC". Meanwhile tender inquiry had been issued and DGSD pointed out on 24 February, 1992 that deletion of PAC was not in order. DGSD, therefore, asked CEBZ to confirm whether PAC still held good.

CEBZ, in March 1992, confirmed the PAC against the indents without indicating any reasons. DGSD accordingly placed five separate ATs on an authorised agent of M/s Genelec Ltd. at station 'Y' on 26 March 1992 for the supply of indented quantity at Rs183 each. The delivery was to commence in 25 days and completed by October 1992. Supply against the ATs was completed as per this schedule.

In June 1992, two out of the five CsWE on receipt of items indented for by them without receipt of a copy of the ATs,pointed out to DGSD and CEBZ that the rates of Rs183 given in AT was abnormally high as the rate as per manufacturer's price list was Rs110, each. One of these CsWE also stated that the same make of item was available from local authorised dealers at the rate of Rs103.45 each. The CEBZ requested DGSD to review the rates or cancel the ATs.CEBZ also clarified the position to DGSD in August 1992 that non-endorsing of copies of the ATs by them was not a mere oversight but indicated malafide intentions which needed thorough investigation.

Meanwhile, DGSD informed the CEBZ in July 1992 that it was not legally/contractually possible to cancel the ATs. However, in the general conditions of the contract forming part of the ATs, there is a provision that in case the prices charged by the contractor were found to be higher than the lowest price charged by the contractor for the same item from any other customer, it shall be lawful for DGSD to revise the price at any stage or to terminate the contract at the risk and cost. CEBZ, however, instead of insisting upon the DGSD to invoke this provision of AT, directed in August 1992 all the consignees to accept the stores.

Ministry of Defence (Ministry) stated (December 1993) that:

- CEBZ was not aware of the existing rate contract as they had not received their copies;

- DGSD had not concluded AT with main manufacturer but with its authorised agent at an exorbitant rate causing loss to the State;

- DGSD was requested by CEBZ to cancel the ATs concluded at higher rates; and

- one of the ATs had been cancelled by the DGSD in July 1993 without any financial repercussions on either side and 2800 pieces of 40 watts and 1000 pieces of 20 watts of item 'A' received against this AT in June 1992 had been returned to the firm 'X' in August 1993.

The fact, however, remains that initial indents placed by CEBZ were supported with PAC without any justification resulting in conclusion of ATs at higher rates by DGSD. Keeping in view the regular feature that DGSD concludes such rate contracts every year, CEBZ could have easily obtained a copy of the existing rate contract locally. This has resulted in an extra expenditure of Rs12.45 lakhs.

Case II

To cover the quantities of two indents for item 'A' of 40/20 watts manufactured by M/s Genelec Ltd. placed by CWE Agra on 31 December 1991 on PAC basis, DGSD placed two ATs on the same authorised agent in February 1992 for supply of 11,500 numbers of the above items by August 1992 at Rs176.65 each. The stores were received by the consignees in September 1992. This caused avoidable expenditure of Rs15.09 lakhs in comparison to the rates in the rate contract in this case.

Ministry agreed that the extra expenditure could have been avoided by the DGSD provided the supply orders were materialised on the existing rate contract rather than concluding ATs at exorbitant rates. The contention of the Ministry is not correct. It is evident that this course could have been possible for DGSD, had the indents been without PAC.

The information regarding total quantities of item 'A' procured by other MES formations was also called for from the Ministry which supplied (December 1993) the details of similar cases of procurement of the item at higher rates by two more formations. The details of these two cases are as given below:

Case III

CWE Delhi Cantonment was aware that a rate running contract existed for the item 'A' with firm 'X' and he was required to place supply order against it but he instead ascertained the feasibility of supply of the item from firm 'X' and when it showed its inability, an indent for supply of 4000 pieces of 40 watts and 600 pieces of 20 watts of item 'A' was placed by them on DGSD in January 1992. This indent was also supported with PAC in favour of M/s Genelec Ltd. and no other make was acceptable. DGSD covered this quantity by placing an AT on the same authorised agent of M/s Genelec Ltd. at Rs180 each. Quantity of 40 watts and 20 watts on order was increased in June 1992 to 5000 pieces and 750 pieces, respectively by invoking the tolerance claus of the AT. Delivery was to be completed by October 1992. Complete supply was made during March-June 1992. Extra expenditure in comparison to the rates prescribed in rate contract of April 1991 worked out to Rs7.74 lakhs.

Case IV

Chief Engineer Delhi Zone placed an indent on DGSD in December 1991 for procurement of 2000 pieces of 40 watts and 1000 pieces of 20 watts of item 'A' manufactured by M/s Genelec Ltd. on PAC basis indicating that no other make was acceptable. Accordingly, DGSD concluded an AT with the same authorised agent of M/s Genelec Ltd in February 1992 for supply of the entire quantity by August 1992 at the rate of Rs173.65 each. Supply was made in March 1992. Extra expenditure on the procurement in comparison to the rates in the rate contract of April 1991 amounted to Rs3.85 lakhs.

To conclude,

The indents for item 'A' were placed alongwith PACs on DGSD without confirming the existence of rate/running contracts even though all other makes which conform to ISI were being used by MES throughout the country and even after having come to know about existence of rate contract, action to cancel the ATs was not taken. Procurement of item 'A' at abnormally higher rates as compared to the rates of the rate contracts resulted in an extra expenditure of Rs3[illegible].13 lakhs.

73. Extra expenditure due to failure in timely submission of revised estimates

In September 1987, the Army Headquarters (HQ) accorded Administrative Approval (A/A) for provision of married accommodation for Junior Commissioned Officers and Other Ranks at a station, at an estimated cost of Rs103.26 lakhs. The work was scheduled to be completed by May 1990. In November 1988, the cost of the A/A was revised to Rs109.02 lakhs as estimates for certain works were either not included or not properly assessed.

In order to get more competitive offers the job was split up into four groups and tenders were issued during March-May 1989 and received back in August 1989. The lowest offers were for a total sum of Rs118.14 lakhs.

The offers were valid upto April 1990. As the amount of lowest offers (Rs118.14 lakhs) including liability worked out to Rs123.75 lakhs exceeded the A/A amount the Chief Engineer (CE) sent in October 1989 a case for financial concurrence (FC) for Rs123.75 lakhs to the Engineer-in-Chief (E-in-C). In March 1990, the CE intimated the E-in-C that the amount of anticipated over-all liability for the job would be Rs132.53 lakhs as certain items of work relating to external electrification were not inc-luded in the tenders under consideration.

The E-in-C advised in April 1990 to revise the approximate estimates for issue of a Revised A/A. The CE sent the revised approximate estimates (RAEs) in January 1991 for Rs159.66 lakhs. The Ministry of Defence (Ministry) issued the revised A/A for Rs165.47 lakhs in November 1992. The CE concluded two contracts in November 1992 one with firm 'A' and another with firm 'B' at a total cost of Rs.154.53 lakhs. The work on both the contracts commenced in January 1993 and was scheduled to be completed by October 1993. The progress of work was 17.5 per cent (October 1993).

Ministry stated (November 1993) that the E-in-C branch re-turned the FC case due to late processing of FC case, delayed tender action and change of competent financial authority (CFA) from Chief of Army Staff to Government of India.

The fact, however, remains that instead of sending the case for obtaining FC to E-in-C's branch, RAEs to obtain Government sanction should have been initiated. Further E-in-C's branch also took six months in informing the above facts to the CE in April 1990. Moreover omission to include certain items relating to ex-ternal electrification and improper estimation of the work had resulted in avoidable delay in commencement of work resulting in increase in cost of the work by Rs36.39 lakhs.

74. Unauthorised construction of auditorium-cum-conference hall

The scales of accommodation (SOA) for Defence Services authorises the provision of auditorium-cum-cinema halls of various sizes on station basis, at the stations with strength of troops above 1000 only.

In October 1989, Headquarters Western Air Command (HQ WAC) accorded sanction for works services for a Technical Training School at an Air Force (AF) station at Rs63.82 lakhs, which included the provision of auditorium-cum-conference hall for Rs27.50 lakhs. The sanction was revised in August 1990 to Rs74.96 lakhs having the provision of auditorium-cum-conference hall for Rs33.12 lakhs. Against the provision of auditorium-cum-conference hall, the authority of SOA quoted in the sanctions was, however, for the provision of auditorium-cum-cinema hall.

The Zonal Chief Engineer concluded (January 1992) a contract for Rs56.39 lakhs to execute the works services for the AF school which included auditorium-cum-conference hall at a cost of Rs19.76 lakhs to be completed by January 1993 and was completed by 62 per cent as of November 1993. Ministry of Defence (Ministry) stated in November 1993 that the auditorium-cum-conference hall was sanctioned to meet the requirement of the AF School to impart training and it was not an auditorium-cum-cinema hall. Suitable instructions with regard to sanctioning of authorised works had been issued.

Thus, an auditorium-cum-conference hall in a Training Establishment has been sanctioned for Rs33.12 lakhs and is being constructed in contravention of SOA and therefore expenditure incurred on its construction requires to be regularised by the Government of India.

75. Avoidable expenditure due to wrong selection of site

On the recommendations of a Board of Officers (Board) Headquarters (HQ) Central Command (CC) accorded sanction in August 1988 for the construction of 8 Type 'C' and 45 Type 'B' quarters for Military Engineer Services (MES) key personnel at Bareilly at an estimated cost of Rs66.52 lakhs, amended in October 1988 to Rs66.74 lakhs. The work was released for execution in February 1989 and was to be completed in 100 weeks by December 1990.

In May 1989 Military Farm (MF), Bareilly informed the local station HQ that the land on which Type 'B' quarters were to be constructed belonged to them and no construction work could be carried out till the land was permanently transferred. The matter regarding this land remained under correspondence between MES, Defence Estates Officer (DEO) and staff authorities. Station HQ ordered a fresh board for the resiting of said accommodation which recommended (January 1990) another land adjoining the old site for construction of Type 'B' quarters.

The Zonal Chief Engineer (CE) issued tenders for building work and external services in October 1990 and the contract was concluded in July 1991 for Rs81.08 lakhs after obtaining Financial Concurrence (FC). Another contract for the overhead reservoir alongwith fencing and gates was also concluded in July 1991 for Rs10.15 lakhs after obtaining FC. The entire work was completed in September 1993 at a cost of Rs121.89 lakhs.

In November 1991, Army HQ issued corrigendum increasing the amount of sanction to Rs109.78 lakhs which included Rs30.98 lakhs due to escalation in the cost of project.

HQ Meerut Sub Area ordered a Staff Court of Inquiry (CI) in August 1991 to investigate the lapses that had occurred in planning of the work and delay resulting in tremendous increase in the cost of project. The finalised proceedings of CI were submitted to local station HQ in April 1992. The CI opined that:

- the representative of DEO did not object to the initial board of December 1987 regarding part of land belonging to MF where MES construction should not have been undertaken which resulted in a delay of 26 months. CI held the representative of DEO negligent in performing his duty and blamed him for the enormous delay;

- the then Officer Commanding of MF was blamed for intimating the station HQ regarding his objection as late as one year and four months from the date of completion of siting by the initial board of December 1987;

- local station HQ was blamed for not keeping themselves abreast with the rules and regulations, which resulted in the wrong siting by the board;

- the Zonal CE had contributed to delay of approximately four months for not issuing the tender within the stipulated time; and

- Engineer-in-Chief's Branch had added to a delay of appproximately five months for according the sanction for FC.

In June 1992 the General-Officer-Commanding (GOC) of concerned HQ Area recommended on the proceedings of CI that no one was to be blamed and the case be closed. However, after more than one year, in August 1993, the GOC revised his earlier recommendations and held that the Presiding Officer of the initial board of December 1987 and representative of the HQ Sub-Area were also partially responsible and directed that a written warning be issued to these officers and also recommended that suitable and exemplary departmental action be taken against the representative of DEO for performing his assigned task in a perfunctory manner. These recommendations were agreed to (September 1993) by the GOC-in-Chief, CC.

Ministry of Defence (Ministry) stated (September 1993) that:

- the original site had to be changed because the same was required by MF and consequent time lag in completion of work and increase in the cost of project was because of the processes and channels involved in the departmental functioning; and

- the corrigendum was accepted and issued by Quarter Master General's Branch after analysing all the reasons for delay as well as escalation in cost, as such there was no excess expenditure.

The fact remains that the project could not be commenced in February 1989 solely due to its sanction on improper site belonging to MF. Thus, sanction for 53 quarters for key personnel of MES on MF land in August 1988 was erroneous and the approval of work on an alternate site took further 18 months. There was also delay in inviting tender and according FC. As a result, the work targetted to be completed in December 1990 was completed in September 1993 at an extra expenditure of Rs30.98 lakhs on account of escalation.

76. Establishment of an Army Public School

As per scales of accommodation for Defence Services 1983, the accommodation for children's school may be provided at military stations where such facilities were not available and when it had not been found feasible by the concerned educational authority to establish the children's school. This provision shall be at the discretion of the General Officer Commanding (GOC), Area or equivalent authority.

However, under the above provisions, an Army Public School (APS) was opened in May 1985 at Dagshai Cantonment, for which approval was accorded by Army Headquarters (HQ) in August 1985, though it required prior Government approval as APS is not covered by the above scales.

The APS was being run in military buildings with book value of Rs26.47 lakhs, vacated on move out of an Infantry Battallion. Special repairs to these buildings, inter alia with other buildings, were also carried out at a total cost of Rs82.00 lakhs between 1985 and 1988.

The concerned station HQ had in December 1986, initiated a case for temporary re-appropriation of the buildings occupied by the APS on no cost basis, without taking into account the expenditure incurred/to be incurred subsequently on their repairs/ modifications. While according sanction in February 1987, for temporary re-appropriation, GOC Area also recommended that case be taken up with Army HQ for permanent re-appropriation of buildings to APS. The HQ Western Command (WC) projected the case to Army HQ in June 1987 for transfer of the existing assets to APS on permanent basis who further took up the matter to obtain Government sanction.

HQ WC stated (January 1994) that:

- the Chief of Army Staff had already set aside adequate funds from the Adjutant General's Welfare funds to pay the cost of re-appropriation of the buildings; and

- Government sanction for the transfer of assets was still awaited.

The case reveals that:

- in contravention of scales of accommodation, an APS is being run at Dagshai in military accommodation having book value of Rs26.47 lakhs, without prior Government sanction; and

- the book value of Rs26.47 lakhs of military accommodation being used by APS plus expenditure incurred on its repairs and additions/alterations has not been adjusted/paid so far.

The case was referred to the Ministry of Defence in September 1993; their reply has not been received as of February 1994.

77. Extra expenditure due to delay in execution of work

In July 1985, a Board of Officers (Board) convened to assess the requirement of work services at an Air Force (AF) station, recommended the construction of three explosive storage sheds (sheds). The Air Command, however, recommended construction of four sheds without mentioning any reasons. Subsequently, in February 1986 another Board recommended the air-conditioning (A/C) of one of these sheds.

Air Headquarters (HQ) accorded sanction for construction of four sheds with allied services in December 1987 at a cost of Rs90.07 lakhs. It did not include A/C in one of the sheds. The time required for the work was two years.

In April 1988, the Air Command intimated the Zonal Chief Engineer (CE) that A/C of one of the sheds was a vital requirement without which the users requirement would not be met. The Zonal CE concluded a contract in October 1989 for construction of three sheds with allied services for a lump sum of Rs77.05 lakhs. The work was completed in October 1992.

Meanwhile corrigendum for provision of fourth shed with A/C was issued by Air HQ in November 1990, revising the original sanction to Rs119.70 lakhs which included Rs7.36 lakhs for provision of A/C plant. In February 1992, the Zonal CE concluded another contract for the construction of fourth shed for Rs41.44 lakhs which was completed in June 1993.

Based on the cost as per accepted contracts, Ministry of Defence (Ministry) issued (December 1992) a revised sanction for Rs150.07 lakhs which included the amount of Rs23.54 lakhs approximately on account of additional escalation due to market variations and difference in cost of stores, as compared with the revised sanction of November 1990. In the absence of A/C storage accommodation, alternative arrangements for storage of explosive stores received between December 1989 and June 1990 were made by providing four window type A/Cs, sixteen desert coolers and eight air circulators at a cost of Rs3.75 lakhs.

Ministry stated (November 1993) that :

- while preparing Approximate Estimates the Engineers did not cater for A/C work for one shed and as a result it was not included in the sanction accorded in December 1987; and

- the additional expenditure is due to increase in the scope of work by users from the original sanction and was not avoidable as entire cost was borne for additional work services provided.

The contention of the Ministry that the additional expenditure was due to increase in the scope of work is not tenable as the additional expenditure of approximately Rs23.54 lakhs had been caused due to escalation over and above incorporated in the revised sanction of November 1990, which was avoidable had the work been completed as scheduled.

Thus, due to non-provision of A/C for one of the sheds in the original sanction as recommended by the Board, the project scheduled to be completed by December 1989 was completed in June 1993 resulting in avoidable expenditure of Rs23.54 lakhs approximately on the construction of four sheds. Further, in the absence of availability of an A/C shed, alternative arrangements for storage of the sophisticated weapons had to be made by incurring an avoidable expenditure of Rs3.75 lakhs on the provision of window type air conditioners, room coolers and air circulators etc.

78. Short recovery of electricity charges

Mention was made in paragraph 18 of the Report of the Comptroller and Auditor General of India, Union Government, Defence Services for the year 1985-86 about short recovery of Rs15.23 lakhs from the Defence Services Officers' Institute (DSOI) at station 'A' on account of electricity charges for the period September 1975 to March 1985. In the Action Taken Note, the Ministry of Defence (Ministry) stated in September 1987 that efforts were on to recover the amount from the Institute and that from April 1985 onwards, payment was being made at revised all-in-cost rates and instructions had been issued to all concerned to monitor recoveries correctly.

Further examination revealed that Military Engineer Services (MES) issued arrear bills in November 1987 for Rs21.68 lakhs for the period from November 1967 to March 1985 and also issued notice to DSOI in January 1988 and November 1990 that if arrears were not paid, electricity supply would be disconnected without any further notice. The Quarter Master General (QMG) Branch advised in November 1990 the MES that as the case for waiving the arrears of electric charges was being taken up with the authorities, action for disconnection of the electricity to the DSOI should be deferred.

Although a proposal to appoint an Arbitrator to settle dispute of payment was initiated in QMG Branch in July 1991, the Arbitrator had been appointed after approximately two years in May 1993 with instruction to publish his findings and award by September 1993.

Further, contract demand in the agreement of December 1969 between the MES and DSOI was 250 KVA which could be exceeded by the MES provided not less than twelve months notice was given. A joint inspection conducted in March 1987 revealed that:

- the electric meter initially installed for the original load of 250 KVA was not recording the consumption correctly either due to defect in the meter or due to tampering;

- the transformer for the additional load of 250 KVA installed during 1985-86 was without a meter; and

- the third transformer of 100 KVA installed at Pump House was also without a meter.

Further transformer of 250 KVA installed in 1985-86 by DSOI was without knowledge of MES. Revised agreement for 600 KVA in place of existing 250 KVA agreement was, however, yet to be finalised (December 1993) even after six years.

The Zonal Chief Engineer (CE) gave the decision in April 1987 that supply to DSOI will be metered by installing High Tension (HT) metering equipment at sub-station. The bulk supply meter was installed and commissioned in February 1989. The reading of the bulk supply meter was taken by the MES authorities in April 1989 and the reading was recorded as 74080 units. Thereafter for more than three years no reading had been taken due to non-working of the meter, which was made serviceable only in April 1992. The Ministry stated in December 1993 that billing from August 1992 onwards is based on HT meter, which covers the complete load of DSOI.

MES had been billing only for load of 350 KVA upto July 1992 against the actual load of 600 KVA at DSOI and out of this, billing for load of 100 KVA at pump house of DSOI had been done on average basis as meter installed there was burnt and remained unserviceable. On being pointed out by Audit, MES had raised (October 1993) bill for Rs14.04 lakhs from April 1985 to July 1992, for the remaining load of 250 KVA based on average consumption as per the recorded reading from HT meter.

The supply of electricity to DSOI through MES, though under an agreement, has not proved to be satisfactory and had resulted in arrears of Rs35.72 lakhs for the period November 1967 to July 1992.

Ministry stated (December 1993) that :

- the arrears were not cleared by DSOI being disputed claim evenafter vigorous efforts made at various levels. Finally, after deliberation at highest level at Army HQ/QMG Branch it was decided in December 1991 to refer the case to Command CE for arbitration;

- delay in appointment of Arbitrator by Command CE was due to seeking certain clarification on the issue as well as giving due notices to both parties for obtaining their concurrence.

- revised agreement for 600 KVA was under finalisation (December 1993); and

- DSOI was requested to arrange supply from Delhi Electric Supply Undertaking. However, they continued to obtain supply from MES.

The fact, however remains that there had been irregular excess electrical supply to DSOI for 350 KVA for the last eight years. Although there was specific clause in the agreement with the DSOI regarding disconnection of supply without any further notice in case of non-payment of bills it was not invoked.

To sum up:

- Despite Ministry's assurance in 1987 that efforts were on to recover the arrears of Rs 21.68 lakhs from DSOI, no recovery has been effected evenafter a lapse of six years. The case has, however, been referred for arbitration in May 1993.

- Against the authorised load of 250 KVA, connected load in DSOI for the last eight years was 600 KVA, and the revised agreement for enhancing the load was yet to be finalised (December 1993).

- DSOI had installed a transformer of 250 KVA without knowledge of MES and additional load remained unbilled/unmetered for seven years. The arrear bill of Rs14.04 lakhs for this load had been forwarded to DSOI in October 1993, after it was pointed out in Audit.

- The additonal load of 100 KVA at pump house of DSOI also remained unmetered for eight years due to defective/burnt meter and billing had to be done on average basis.

79. Acceptance of sub-standard furniture

A Commander Works Engineer (CWE) concluded an item rate contract in February 1989 with firm 'X' for manufacture and supply of steel furniture at a cost of Rs 21.25 lakhs. The items of furniture were to be supplied to a Signal Records Office (user).

The samples of each item of furniture manufactured by contractor were approved by the Garrison Engineer (GE) during August 1989 to December 1990 and supplies were also made during the same period. The furniture supplied was inspected by Boards of Officers (Boards) and taken over on charge by the GE.

Eight lots of furniture costing Rs5.28 lakhs were issued by GE to the user between September 1989 to April 1990 and taken over on charge by the user. However, in October 1990 the user reported to the GE and the Station Headquarters (HQ) that the quality of furniture was very inferior and ordered a Technical Board to check the furniture items. User further stated that pending approval of the Technical Board, no further supply would be accepted. The GE, however, continued to issue and total quantity of furniture costing Rs19.23 lakhs was issued upto June 1991. But furniture costing Rs4.17 lakhs issued to the users had not been accepted by them and the balance quantity of furniture costing Rs2.02 lakhs was lying in the stock of GE (September 1993).

A Board convened by the users to carry out qualitative checks of only one item (chairs) of furniture, assembled in January 1991 found that the material used was grossly inferior and sub-standard in quality. The defects noticed were intimated to the GE and Station HQ in January 1991. A staff Court of Inquiry (CI) was ordered on 22 January 1991 to investigate the circumstances under which such inferior quality furniture was accepted by the MES. However, the inquiry was still in progress as of September 1993.

Qualitative checks of another item of furniture (steel almirahs) were carried out on 50 per cent (approximately) of the total quantity of this item by the concerned Barrack Stores Officer (BSO), who found 27 major defects in the item which were intimated to the GE on 08 January 1992. The GE, thereupon, asked the contractor on 18 January 1992 to rectify these defects by 30 January 1992 but the contractor did not respond.

Inspite of GE being aware of the inferior quality of the furniture supplied by the contractor, final payments amounting to Rs3.34 lakhs were released to the contractor in December 1990 and March 1991.

Ministry stated in September 1993 that :

- regular notices had been issued to the contractor between July 1990 to February 1992 for rectification of the defects of furniture but he had not responded to the departmental directions; and

- final payments of Rs3.34 lakhs were released to the contractor after the Inspecting Boards approved the furniture.

Thus, due to clearance of furniture by the Inspecting Boards without exercising proper checks, failure of GE to intimate defects observed during qualitative checks to the contractor within the maintenance period of six months and releasing of final payment to the tune of Rs3.34 lakhs even though GE was aware that furniture supplied was of inferior quality, furniture costing Rs21.25 lakhs received was of sub-standard quality and not conforming to the specifications of the contract.CI ordered in January 1991 had not been finalised even after more than two and half years of its assembly.

80. Non-utilisation of an asset due to defective construction

In September 1981 Ministry of Defence (Ministry) accorded sanction for provision of other than married accommodation for certain Army units at a station at an estimated cost of Rs423.68 lakhs including Rs75.96 lakhs for external water supply.

In November 1983, Commander Works Engineer (CWE) concerned concluded a contract with firm 'A' for Rs45.03 lakhs for water supply scheme which, inter alia, catered for an overhead reservoir of two lakh gallons capacity. The firm commenced the work in December 1983 to be completed by December 1984. However, as the work did not progress satisfactorily, the contract was terminated in August 1986 after 75 per cent progress. The value of work done by the firm was Rs35.94 lakhs against which Rs28.85 lakhs had already been paid. When the final bill of the firm was prepared, a sum of Rs21.49 lakhs was found due to the Department. This was disputed by the firm and the Department appointed an arbitrator in September 1987 whose award is still awaited as of November 1993.

The CWE concluded a fresh contract with firm 'B' in February 1987 for Rs 25.80 lakhs to complete the left over work at the risk and cost of the defaulter firm. The firm commenced the work in March 1987 to be completed by December 1987. However, during the execution of the left over work, it was noticed in July 1989 that there were major defects in the work of overhead reservoir which endangered the structural stability of the reservoir. A Board held in August 1989 to assess the suitability of overhead reservoir from the quality of construction point of view, opined that (a) acceptance criteria for concrete had not been as per I.S provision (b) the concrete had honey combing and the body of the tank had dampness with little water inside, (c) the quality of work was very poor and below specifications and (d) no documents including work diary were maintained. The Department did not go in for corrective measures anticipating heavy expenditure and the work was fore-closed in March 1991 after 97 per cent progress. The total expenditure involved on the construction of overhead reservoir worked out to Rs 10.54 lakhs.

The Department stated in February 1993 that the water supply scheme was made functional by direct pumping.

Ministry stated in November 1993 that :

- the quality of work executed was poor and below specifications. For poor workmanship and lack of supervision in the construction of water tank, the matter was referred to the Area Headquarters (HQ) to order a staff court of inquiry (CI); and

- the quotations for rectification of defects were received in September 1991 from specialist firm for Rs 10.99 lakhs but pending publication of arbitration award, rectifications/ repair works, if undertaken, might have created legal complications and therefore this work was not undertaken..

The case thus reveals that :

- due to the laxity of engineers, the firm 'A' used sub-standard material which led to the poor quality of construction and it endangered the structural stability of the overhead reservoir. CI to fix the responsibility was yet to be finalised (November 1993);

- the Department did not go in for rectification of defects of the reservoir anticipating heavy expenditure for more than two years and thus expenditure of Rs10.54 lakhs already incurred has proved unfruitful; and

- recovery of Rs21.49 lakhs from the defaulting firm 'A' towards cost of left over work executed at his risk and cost is yet to be effected.

81. Savings at the instance of Audit

Works sanctions were cancelled in three cases at the instance of Audit which has resulted in savings to the extent of Rs21.18 lakhs. Details are as under:

Case I

In February 1989 a Board of Officers recommended additions/ alterations to two buildings at Coimbatore constructed in 1943 with a view to reappropriate the buildings as family welfare centre and four airmen quarters. Sanction for the work as a capital work at a cost of Rs6.39 lakhs was accorded by Air Force authorities in January 1990. In August 1990 Audit pointed out that the plinth area of the two buildings which was 860 square metre (sq m), was far in excess of the area of 360.12 sq m authorised for the welfare centre and the four quarters. Agreeing with the contention of Audit the sanction was cancelled in November 1990 resulting in savings to the extent of Rs6.39 lakhs.

Case II

Construction of an Inspection Bungalow at Tambaram, Madras at a cost of Rs4.27 lakhs was sanctioned in August 1982 by the Air Force authorities. In May 1987 the cost of the work was revised to Rs9.89 lakhs due to escalation in market rates. In May 1990 Audit pointed out that there was no justification for construction of a separate Inspection Bungalow at Tambaram as an Inspection Bungalow and an Engineer Officers mess was already existing there. The sanction was cancelled in April 1991, resulting in savings to the extent of Rs9.89 lakhs.

Ministry accepted (November 1993) the facts as correct.

Case III

Based on recommendations of a Board of Officers held in March 1980 Headquarters, Southern Naval Command, Cochin sanctioned in January 1982 construction of perimeter fencing with a gate and other services around a residential area, offices and installation at a cost of Rs9.93 lakhs. In December 1983 Audit pointed out that necessity for the work did not exist as fencing already existed around the residential accommodation and offices/installation. Agreeing with the Audit contention the Commander Works Engineer, Cochin issued a reduction statement in February 1991, reducing the cost by Rs4.90 lakhs.

Ministry accepted (January 1994) the facts as correct.

82. Loss of revenue due to non-completion of works of external electrification and water supply

Ministry of Defence (Ministry) accorded sanction for Rs77.58 lakhs in August 1985 revised to Rs132.78 lakhs in September 1988 and accordingly the Chief Engineer (CE) concerned concluded a contract in September 1988 with Firm 'X' for construction of 104 Type-II quarters (Phase I) at the Vehicle Factory at a cost of Rs93.57 lakhs. The work was scheduled to be completed in July 1990.

Another contract for providing external electrification and water supply to these quarters was concluded by the Commander Works Engineer (CWE) with Firm 'Y' at a cost of Rs21.09 lakhs though he was enlisted as 'E' class contractor with tendering capacity of Rs4.00 lakhs. The work commenced in October 1988 and was to be completed by January 1990.

Construction of quarters was completed in February 1991 and taken over by the Military Engineer Services (MES). However, the progress of work for external electrification and water supply was not smooth. In November 1989, the Garrison Engineer (GE) informed the CWE that the contractor had neither employed any qualified engineer nor produced any proof of procurement of material because of his unsound financial position and the work done by the contractor was unsafe. The GE also recommended termination of contract.

The contract was not cancelled at that stage and instead extension of time upto July 1991 was granted at the request of the contractor. The contract was however cancelled by the CWE with effect from 28 December 1991 at the risk and cost of contractor.

No risk and cost contract could, however, be finalised till January 1993 as the defaulting contractor obtained (November 1992) a stay order from the Court which was got vacated in last week of January 1993. Three contracts concluded during January to June 1993 to complete the balance items of work were in progress (January 1994).

Ministry stated (January 1994) that as per instructions issued in May 1985, the tendering officer in exceptional cases in difficult hilly areas could issue tenders to the existing enlisted contractors borne on two classes immediately below the eligible class. However, this relaxation which was applicable to difficult hilly areas was wrongly done in this case also. On noticing such lapses on the part of Zonal CE, instructions were issued in April 1991 by Engineer-in-Chief's Branch reiterating their earlier instructions.

The case reveals that:

- the contractor 'Y' was wrongly awarded contract costing Rs21.09 lakhs against his tendering capacity of Rs4.00 lakhs and

- due to non-completion of work of external electrification/ water supply, the newly constructed 104 Type-II quarters could not be handed over to the users even after more than three years of their completion since February 1991 resulting in loss of revenue on account licence fee and avoidable payment of House Rent Allowance to the tune of about Rs12.38 lakhs (January 1994).

83. Avoidable payment of sewage charges

Sewage was being discharged by means of sump-cum-pump houses direct to a drain, through a sewage pipe line (SPL) constructed before 1970 by Military Engineer Services (MES) for a portion of Patiala Cantonment. In July 1983, due to choking in a portion of SPL, beyond the last sump-cum-pump house MES diverted the sewage to a nearby manhole belonging to the local Municipal Committee

(MC) as a temporary measure without informing them.

In July 1984, the MC objected to the connection and raised a bill for Rs6.10 lakhs against MES for unauthorised use of their sewage line for 1983-84. Sewage charges were subsequently negotiated to Rs2.45 lakhs per annum in November 1985 and an agreement with a validity of five years from August 1983 was finalised in March 1986 between MES and the MC. MES has made payment of sewage charges of Rs18.18 lakhs till March 1993.

MES authorities instead of getting choked SPL of 850 running metres repaired (the repair cost of which was assessed Rs0.65 lakh) continued to pay sewage charges for use of MC sewage line. The payment of this amount could have been avoided had the choked portion of SPL repaired/restored.

The Ministry of Defence (Ministry) stated in December 1993 that:

- there was no requirement for incurring any expenditure for repair of the choked SPL because consequent to the connection to MC sewage, there had been substantial saving in pumping costs;

- the study of economics of pumping sewage by MES into the drain vis-a-vis charges paid to MC had revealed that the annual operating cost in terms of manpower deployed and energy charges for running of sewage pumping sets would be Rs4.05 lakhs approximately, against the annual payment of Rs1.48 lakhs being made to the MC; and

- MC had been discharging sewage into drain without treatment. There was a proposal to construct sewage treatment plant by them on availability of finance.

The contention of Ministry is not tenable as the expenditure of Rs4.05 lakhs would have been incurred only on introduction of sewage treatment plant since this facility was not available, the savings worked out are not relevant. Thus, payment of recurring charges since 1983 (Rs18.18 lakhs uptil March 1993) were not justified as repair of choked lines at a cost of Rs0.65 lakh would have been economical.

84. Blocking of funds due to poor planning

A siting-cum-costing Board, assembled in December 1977, recommended construction of a new four storeyed building with a plinth area of 5665 square metres for a Controllerate of Inspection (Small Arms) - (CISA) as the existing accommodation was not adequate to cope with increased responsibility. In August 1983, Government sanction was accorded at an estimated cost of Rs107.54 lakhs which included Rs78.59 lakhs for the construction of the new building. The work was to be completed by February 1987.

A contract for pile foundation of the proposed building was concluded in August 1985 with Firm 'A' for Rs27.09 lakhs. The work was completed in May 1986 for Rs29.12 lakhs. Besides the pile foundation work, an expenditure of Rs10.56 lakhs was also incurred on certain other works viz. storage shed, fencing/ perimeter wall during October 1984 to July 1988.

Meanwhile tenders for the superstructure were issued by the Chief Engineer (CE) in October 1985 and opened in January 1986. As the lowest tender amounting to Rs86.88 lakhs was in excess of the sanctioned cost,financial concurrence (FC) for Rs126.43 lakhs was sought for by the CE in February 1986, but the FC was not accorded by the Ministry and retendering was advised (July 1986) due to high cost.

In January 1991, revised estimates for Rs207.19 lakhs were submitted by the CE for issue of revised Administrative Approval which was still awaited (January 1994).

In November 1992 the concerned Garrison Engineer informed the concerned Commander Works Engineer that not a single dowel bars on the pile foundation was existing on the ground and that these were stolen, immediately after completion of foundation work in May 1986.

In addition to above due to non-completion of the proposed building the CISA continued to function in the old building after carrying out necessary repairs at a cost of Rs16.57 lakhs during 1986 to 1991.

The case reveals that taking up the work of the project in a piece meal manner led to a situation where pile foundation and allied works were completed between October 1984 and July 1988 at a cost of Rs39.68 lakhs and the estimates for superstructure were yet to be finalised.

The case was referred to the Ministry in June 1993, their reply has not been received as of February 1994.

85. Provision of defective gravent ventilation system

In September 1986, Additional Director General of Ordnance Factories accorded sanction for the provision of Foundry Complex at Station 'X' at an estimated cost of Rs22.33 crores. The sanction, inter alia, catered for the construction of foundry shop with AC sheets alongwith roof extractors and airconditioning enclosures etc. at Rs5.07 crores. The structural work was almost completed by August 1992.

In November 1986, the factory authorities revised their specifications regarding roof and requested the Chief Engineer (CE) to provide for gravent ventilation system. Accordingly the CE concluded a separate contract agreement with contractor 'A' in May 1987 for the provision of gravent ventilation system to building no.52 at a cost of Rs13.82 lakhs. The work was completed in March 1989 at a cost of Rs14.37 lakhs. While issuing certificate of satisfactory completion in March 1989, Garrison Engineer (GE) concerned asked contractor 'A' to rectify certain defects including leakage in gravent ventilation latest by 25 April 1989.

In May 1990, the GE again intimated the contractor that the gravent ventilation system was leaking badly and in case of his failure to commence rectification work by 21 May 1990, the same would be got done by other agency at his risk and cost.

As the contractor 'A' failed to rectify the defects, the CE concluded (September 1991) a risk and cost contract with contractor 'B' based on the modified design for rectification of the gravent ventilation system at a cost of Rs5.67 lakhs. As the samples of the design provided by the contractor 'B' under the provisions of the contract could not withstand the wind pressure the designs were once again changed by CE in July 1992 in consultation with Structural Engineer Research Centre (SERC). However, even the design proposed by SERC resulted in fabrication and erection problems causing delay in execution. Ministry intimated (December 1993) that the matter was being re-examined by the Engineer-in-Chief (E-in-C) in consultation with SERC and Factory authorities. The progress of work uptil December 1993 was 'NIL'.

In the meantime in November 1991 the Command CE convened a technical Board of Officers to investigate, interalia, the circumstances leading to the defects in the gravent ventilation system of building no.52. The technical board pointed out in May 1992 that the defects were basically due to poor workmanship and lack of adequate structural strength in the system. The technical board, therefore, proposed initiation of suitable action against the contractor. A show cause notice was issued to the contractor after one year in June 1993. According to the Ministry the reply furnished by the contractor on 26 June 1993 to the show-cause notice was still (December 1993) under examination of E-in-C for taking action as deemed fit.

Ministry contended that the specialist work was completed by the contractor as per contract drawings and hence completion certificate was issued. The Ministry added that the ventilation system had proved effective in the exhaust of fumes from furnaces but the system was not able to withstand extra ordinary conditions of monsoon and high wind resulting in leakages and structural weakness. The problems were noticed only at a subsequent date during severe monsoon and winds.

The case reveals that due to major structural draw-backs and poor workmanship the gravent ventilation system completed at a cost of Rs14.37 lakhs in March 1989, could not be effectively used. The proposal to get it modified and redesigned through a contract in September 1991 at a cost of Rs5.67 lakhs also could not succeed.

86. Non-occupation of single officers quarters

A Board of Officers (Board) assembled in January 1988 to recommend the construction of single officers accommodation. The Board, without considering the present state of occupation of existing single accommodation recommended the construction of 22 single officers accommodation in the station. Based on the recommendation of the Board, sanction was accorded in June 1988 by a Command Headquarters for the above work at an estimated cost of Rs23.60 lakhs, later revised (August 1990) to Rs27.50 lakhs.

The work was completed in October 1991 at a cost of Rs31.28 lakhs. As on July 1993 even after 20 months from the date of completion only 14 quarters had been occupied and the balance eight quarters were yet to be allotted. Further the quarters though completed in October 1991 were actually occupied from September 1992 onwards. Moreover out of existing 28 single officers quarters, eight quarters were re-appropriated as vocational training centre since March 1990 before the construction of newly sanctioned 22 single officers quarters. The actual occupancy rate of the quarters as well as re-appropriation of existing eight quarters indicated overestimation of accommodation required for single officers resulting in the injudicious construction of eight single officers accommodation at a cost of Rs11.37 lakhs.

Ministry of Defence (Ministry) contended in February 1994 that the Board recommended construction of accommodation after taking into account the authorisation as per scales of accommodation and the existing deficiency in single officers accommodation. The fact, however,remains that the Board had not taken into consideration the occupancy/temporary reappropriation of existing 28 quarters before recommending construction of 22 quarters. Had this been taken into consideration, eight newly constructed quarters would not have remained vacant for such a long period.

Ministry further contended that the occupation of the quarters depended upon actual strength of officers at the station which could vary from time to time. Hence some quarters might remain vacant for some time. This contention is not tenable in view of the fact that out of the existing 28 quarters eight quarters were temporarily reappropriated as vocational training centre since March 1990 and eight quarters out of new construction were vacant as of July 1993 even after 20 months of their completion.

87. Installation of defective fire alarm system

Ministry of Defence (Ministry) accorded an Administrative Approval (A/A) for setting up of overhaul facilities for an Aircraft and its rotables at a cost of Rs657.94 lakhs in December 1986, revised to Rs582.78 lakhs in June 1988. The sanction also catered for the provision of automatic fire alarm system in the technical buildings at an estimated cost of Rs8.48 lakhs.

In June 1988, Zonal Chief Engineer (CE) concluded a contract for the provision of the fire alarm system to the technical building at a cost of Rs8.75 lakhs. As per special conditions of the contract, entire installation on completion was required to be tested for satisfactory function of control panel, hooter, indicater etc. The work was completed in February 1990 at a cost of Rs9.12 lakhs and the Garrison Engineer (GE) issued the completion certificate to the contractor on 9 February 1990. The users, however, noticed in March 1990 that the system was defective.

The contractor was directed to rectify the defects in March 1990. He rectified the defects in June 1990 but the system failed again. Thereafter, he was reminded every month upto 31 January 1991.

In January 1991, a Board convened by the concerned Commander Works Engineer (CWE) to inspect the defects in respect of the fire alarm system found that the panels were malfunctioning and could not be relied upon as it did not give any audio/visual alarm when fire actually broke out on two occasions.

The CE asked the contractor to complete the rectifications in March 1991 and the contractor collected the panels for repairs in April 1991 but did not rectify the defects. A final notice for getting the defects rectified at the risk and cost of the original contractor in case of his failure to do so by 31 July 1993 was issued after two years on 28 July 1993. On having no response to this, contractor's bank guarantee of Rs1.04 lakhs and an amount of Rs0.10 lakh from his final bill were withheld.

The Ministry stated that although the system was malfunctioning and giving false alarm, it could be relied upon as it would give fire alarm in case of fire. This contention is not tenable as the system did not give any alarm when the fire actually broke out on two occasions.

The case reveals that:

completion certificate was issued by the GE in February 1990 but the users had noticed in March 1990 that the system was defective;

even after the specific directive issued by the CE in July 1991 to initiate action for getting the defects of the system rectified at the risk and cost of the original contractor, nothing has been done in this regard so far (November 1993) except witholding of bank guarantee of Rs1.04 lakhs and an amount of Rs0.10 lakh from the final bill; and

the fire alarm system installed at a cost of Rs9.12 lakhs was ineffective, thereby defeating the very purpose of the sanction of the work and the fire risk still existed.

88. Loss due to delay in handing over of site

A Zonal Chief Engineer (CE) concluded a contract in January 1985 with firm 'A' for Rs75.56 lakhs for construction of a workshop building at a station. The work commenced in February 1985 with date of completion as August 1987. The work was completed in January 1988 at a cost of Rs77.08 lakhs. Another contract to provide external services for the above work was concluded by the concerned Commander Works Engineer (CWE) in May 1985 with firm 'B' for Rs16.26 lakhs. The work was to be completed by July 1986.

Only part sites could be handed over to firm 'B' in July 1985. The balance of sites could be handed over to the firm 'B' only in October 1987 as the area remained occupied by the building contractor. Further, although the work had commenced in July 1985, the supply order for the procurement of bitumen had been placed by the CWE in February 1986. Therefore, when the contractor demanded bitumen in May 1987, it could be issued in October 1987 only. The work was, therefore, delayed and could be completed in December 1987.

Firm 'B' signed the final bill under protest and submitted a list of claims towards various items of losses/damages caused due to prolongation of the contract up to December 1987. The CE referred the matter for Arbitration in April 1991. The award of arbitrator went in favour of firm 'B' for Rs7.34 lakhs.

The Arbitrator's award was contested by the Department in a Court of Additional District Judge, who decreed the award in June 1992 and directed the Department to pay 14 per cent interest from the date of decree till the date of payment of the entire decretal amount to firm 'B'. Firm 'B' was paid Rs8.33 lakhs on 18 December 1992.

The CWE accepted in January 1993 that there were certain slippages due to unavoidable reasons resulting in non-handing over of certain portion of site/sites.

Ministry stated (November 1993) that:

- major portion of the work site was handed over to the contractor on the date of commencement of work and the remaining site was handed over in April 1986;

- procurement action for bitumen was taken as early as in February 1986 and the delay in issue of bitumen to the contractor was on account of inability to supply the same by IOC which was beyond the control of the Department; and

- the Arbitrator had not awarded any amount towards the claims due to delay in handing over of site/issue of schedule 'B' stores.

The contention of Ministry is not tenable as the awarded amount was on account of delay in completion and delay inter alia caused due to late handing over of site/issue of schedule 'B' stores.

Thus due to delay in handing over of site and also delay in issue of bitumen, the date of completion of the work with firm 'B' had to be unduly extended resulting in avoidable payment of Rs8.33 lakhs to firm 'B' awarded by Arbitrator.

89. Wasteful expenditure on the construction of compound wall

Sanction was accorded by an Air Officer Commanding in August 1988 for the provision of compound wall with two mild steel gates at a cost of Rs9.98 lakhs at an Air Force Station for preventing encroachments to Air Force land.

The Garrison Engineer (GE) informed Air Force authorities in March 1990 that due to non-demarcation of the boundary, the construction of the boundary wall was not possible.

However, while the non-availability of precise demarcation of the Air Force land was under correspondence between the GE and Air Force, the Commander Works Engineer (CWE) concluded a contract with Firm 'A' in August 1990 for provision of compound wall and gates at a cost of Rs10.19 lakhs.

Ministry of Defence (Ministry) contended (October 1993) that there was no dispute between Air Force and Military Engineer Services (MES) regarding demarcation of land for construction of boundary wall. This contention is not tenable as Ministry also stated that the demarcation of land was not marked at the site eventhough the same had been shown in the proceedings of the Board of officers.

The work commenced in September 1990 and was to be completed by September 1991. While the work was in progress, the nearby residents demolished the compound wall. The contractor could not progress the work in the portions where there was resistance from the local residents. In the meantime the residents filed a petition in the Court and obtained a stay order in June 1992 prohibiting the Department from further construction. The work was stopped in June 1992 after completing 60 per cent of the work at a cost of Rs5.82 lakhs. The contract was fore-closed with effect from March 1993.

The case reveals that an expenditure of Rs5.82 lakhs on the construction of partly completed compound wall to prevent encroachment proved wasteful as the encroachments could not be prevented. This could have been avoided had the MES authorities ensured clear availability of land free from encroachments before commencing the work.

90. Provision of shopping complex

Based on the recommendations of a Board of Officers (Board) in November 1985 that there was acute necessity of having a shopping complex, an Air Officer Commanding (AOC) of Wing 'A' accorded sanction for construction of the shopping complex at an Air Force (AF) station in December 1985 at an estimated cost of Rs5.83 lakhs.

The shopping complex comprising of eleven rooms and two lavatory blocks was completed at a cost of Rs5.36 lakhs in August 1987. The AOC, Wing 'A', however, instead of utilising the buildings as shopping complex, reappropriated in February 1988 as Unit run AF canteen (one room) and Institute shops (10 rooms) initially for two years with effect from March 1988 which was further extended upto March 1994. The Ministry stated in November 1993 that the complex was being used as AF canteen since March 1988.

The Unit run canteen was authorised concessional rent of Rs1.50 per month for the authorised area of 120 sq ft but as the area occupied by AF canteen was more, the Garrison Engineer floated licence fee (LF) bills at the rate of Rs2941.42 per month which had not been paid and had accumulated to Rs1.74 lakhs till March 1993. AOC, Wing 'A' stated in June 1991 that the LF bills would not be paid and these were required to be revised at the above indicated concessional rent, as the plinth area of 5637 sq ft occupied by AF canteen was less than the authorised area of 6480 Sq ft for all the 54 units at the station.

Controller of Defence Accounts, Southern Command (CDA) directed the concerned Accounts Officer in November 1992 to fix the special LF for the excess area and to recover the outstanding LF and allied charges accordingly and remit into treasury.

Ministry of Defence (Ministry) stated (November 1993) that:

- the complex building was being used as Unit run canteen after proper re-appropriation; and the intention till completion of work was to use it as shopping complex only. However, as the building in which AF canteen was functioning earlier had to be given to an organisation, newly raised in October 1987, the AF canteen had to be shifted to the shopping complex.

Thus, the shopping complex constructed in August 1987 at a cost of Rs5.36 lakhs was not being utilised for its intended purpose. The complex re-appropriated as AF Canteen (one room) and institute shops (10 rooms) was being utilised as AF canteen without proper re-appropriation orders and without payment of LF so far (November 1993). The outstanding LF accumulated to Rs1.74 lakhs till March 1993 had also not been paid so far (November 1993) inspite of the decisions of CDA conveyed in November 1992.

CHAPTER VI

RESEARCH AND DEVELOPMENT ORGANISATION

91. Procurement of standby generator without proper planning

The Ministry of Defence (Ministry) accorded sanction in February 1984 for the construction of Mechanical Behaviour and Structural Integrity Test Cell laboratory and scientific block building for a Research Establishment (Establishment) at an estimated cost of Rs59.18 lakhs. As this cell of the project required uninterrupted power supply so as not to render the test abortive in the event of power failure, the Ministry in December 1984 accorded revised sanction for Rs75.25 lakhs which included the provision of standby generator at a cost of Rs15.30 lakhs. The generator was procured and commissioned in August 1987 at a cost of Rs12.78 lakhs.

The generating set had not been put to use after its commissioning in August 1987 except test run for a total of four hours during January-March 1993.

On this being pointed out in September 1992 by Audit, the Establishment stated that the generator could not be utilised due to non receipt of engine gear box (EGB) test rig which was the prime unit for consuming power and further stated that subsequently the EGB's rating and specification had also got updated which was basically dictated by light combat aircraft (LCA) requirement during 1987-88 and 1989-90 and as a result, the EGB's power requirement had gone upto 775 HP. The generating set also could not be utilised for the remaining load in the test facility as the total load available was very less.

While accepting the facts as correct, Ministry admitted (November 1993) that EGB rating was being updated during this period but contended that :

non-utilisation of the generating set was solely due to the fact that there was no power shut down during the period; and

the gear box test facility was a major part of the project which was short closed due to change in priority and generating sets would be utilised for LCA project as frequent load shedding/power failures were being experienced now-a-days.

The case reveals that a standby generator procured and installed in August 1987 at a cost of Rs12.78 lakhs could not be utilised so far.

92. Unnecessary import of an equipment

In order to meet the requirement of liquid nitrogen for research work, Institute of Armament Technology, Pune (Institute) placed (March 1984) an indent on Director General of Supplies and Disposals (DGSD) who in turn placed (January 1985) an acceptance of tender (AT) for purchase of a liquid nitrogen plant on a foreign firm through their representative in India at Rs8.21 lakhs to be supplied by July 1985. The AT, inter alia, stipulated that insurance, if necessary, would be arranged by the indentor well in advance. Necessary civil works for the installation of the plant were completed in September 1987 at a cost of Rs1.39 lakhs.

The equipment was shipped in December 1987 and was received at the Institute in March 1988. It was opened by a Board of Officers (Board) in May 1988 which did not notice any damage. In July 1988, when the protective cover was opened in the presence of the representative of the firm, damages to the equipment were noticed.

As the equipment could not be used since its receipt in March 1988, the requirement of nitrogen for the research work was being met by local purchase by incurring an expenditure of Rs0.39 lakh during the last four years.

The equipment was repaired and made functional in June 1993. The output of the plant was about two litres a day which was at a reduced capacity.

To sum up :

- An equipment imported at a cost of Rs8.21 lakhs remained unutilised in damaged condition for more than five years after its receipt in India as it required expensive repairs.

- The necessity for import of the equipment was not justified as the actual requirement of the liquid nitrogen during the last four years was to the extent of Rs0.39 lakh only which was met through local purchase.

NEW DELHI
Dated the
10 MAY 1994

(S.H. MANGHANI)
Additional Deputy Comptroller and Auditor General

Countersigned

NEW DELHI
Dated the 10 MAY 1994

(C.G. SOMIAH)
Comptroller and Auditor General of India

Annexure I

(Refer to paragraph 14.5.3)

AVOIDABLE EXPENDITURE ON EXCESS STAFF

Chowkidars

Year	Authorised strength as per PE	Posted strength: Regular	Posted strength: Average casual labours employed	Posted strength: Total	Excess posted strength	Avoidable expenditure based on capitation rates(Rs)
1988-89	10	10	13	23	13	71649
1989-90	10	10	14	24	14	82526
1990-91	10	9	19	28	18	131728
1991-92	10	9	23	32	22	161002
1992-93	10	6	25	31	21	169397
					88	616302

Beldars

Year	Authorised strength as per PE	Posted strength: Regular	Posted strength: Average casual labours employed	Posted strength: Total	Excess posted strength	Avoidable expenditure (Rs.)
1988-89	42	28	34	62	20	110230
1989-90	42	27	29	56	14	82526
1990-91	42	29	32	61	19	139047
1991-92	42	27	41	68	26	190274
1992-93	42	25	43	68	26	209729
					105	731806

Nalbands/Farriers (Civilian/Other Rank)

Year	Authorised strength	Posted strength	Excess posted strength	Annual avoidable expenditure based on capitation rates (Rs)
1988-89	12	1+14	3	66729
1989-90	12	1+14	3	76317
1990-91	12	1+15	4	114016
1991-92	12	1+12	1	35973
1992-93	12	1+16	5	165700
			16	458735

Dressers (Other Ranks)

Year	Authorised strength	Posted strength	Excess posted strength	Annual avoidable expenditure based on capitation rates (Rs)
1988-89	15	21	6	133458
1989-90	15	22	7	178073
1990-91	15	26	11	313544
1991-92	15	22	7	231980
1992-93	15	24	9	323757
			40	1180812

Grand Total Rs 2987655 say 30 lakhs

Annexure II

(Refer to paragraph 14.6.3)

UNDER UTILISATION OF TRAINING CAPACITY FOR DOGS

Type of training	Number of dogs trained	Duration of training	Training weeks utilised	Training weeks available	Percentage utilised	Percentage short fall
			--1988--			
Guard	4	12	48	2600		
Infantry Patrol	14	12	168	(50X52)		
Tracker	12	36	432			
Explosive Detection	2	36	72			
Mine Detection	-	36	-			
Avalanche Rescue Operation	-	24	-			
Basic Obedience	48	12	576			
			1296	2600	50	50
			--1989--			
Guard	11	12	132			
Infantry Patrol	7	12	84			
Tracker	9	36	324			
Explosive Detection	3	36	108			
Mine Detection	7	36	252			
Avalanche Rescue Operation	-	24	-			
Basic Obedience	38	12	456			
			1356	2600	52	48

--1990--

Guard	6	12	72			
Infantry Patrol	3	12	36			
Tracker	12	36	432			
Explosive Detection	-	36	-			
Mine Detection	6	36	216			
Avalanche Rescue Operation	-	24	-			
Basic obedience	30	12	360			
			1116	2600	43	57

--1991--

Guard	6	12	72			
Infantry Patrol	2	12	24			
Tracker	16	36	576			
Explosive Detection	-	36	-			
Mine Detection	1	36	36			
Avalanche Rescue Operation	-	24	-			
Basic obedience	43	12	516			
			1224	2600	47	53

Annexure III

(Refer to paragraph 14.7.2.1)

DELAY IN ISSUE OF TRAINED ANIMALS

Horses :

Year	Name of depot	Total issued	Issued after			
			6 to 8 years		Over 8 years	
			No.	Percentage	No.	Percentage
1988-89	Hempur	100	42	42	2	2
	Saharanpur	161	88	55	2	1
	TOTAL	261	130		4	
1989-90	Hempur	69	16	23	5	7
	Saharanpur	252	155	62	5	2
	TOTAL	321	171		10	
1990-91	Hempur	5	2	40	-	-
	Saharanpur	80	56	70	1	1
	TOTAL	85	58		1	
1991-92	Hempur	53	18	34	3	6
	Saharanpur	150	107	71	2	1
	TOTAL	203	125		5	
1992-93	Hempur	62	30	48	17	27
	Saharanpur	103	58	56	1	1
	TOTAL	165	88		18	
	GRAND TOTAL	1035	572		38	

Mules GS :

Year	Name of depot	Total issued	Issued after			
			5 to 7 years		Over 7 years	
			No.	Percentage	No.	Percentage
1988-89	Hempur	171	27	16	2	1
	Saharanpur	63	12	19	2	3
	TOTAL	234	39		4	
1989-90	Hempur	343	58	17	6	2
	Saharanpur	76	28	37	1	1
	TOTAL	419	86		7	
1990-91	Hempur	-	-	-	-	-
	Saharanpur	347	115	33	8	2
	TOTAL	347	115		8	
1991-92	Hempur	98	5	51	-	-
	Saharanpur	129	28	22	6	5
	TOTAL	227	33		6	
1992-93	Hempur	-	-	-	-	-
	Saharanpur	47	12	26	1	2
	TOTAL	47	12		1	
	GRAND TOTAL	1274	285		26	

MULES MA :

Year	Name of depot	Total issued	Issued after 5 to 7 years No.	5 to 7 years Percentage	Over 7 years No.	Over 7 years Percentage
1988-89	Hempur	170	42	25	3	2
	Saharanpur	40	23	58	2	5
	TOTAL	210	65		5	
1989-90	Hempur	65	50	77	-	-
	Saharanpur	123	42	34	3	2
	TOTAL	188	92		3	
1990-91	Hempur	30	15	50	-	-
	Saharanpur	72	48	67	1	1
	TOTAL	102	63		1	
1991-92	Hempur	-	-		-	-
	Saharanpur	54	25	46	1	2
	TOTAL	54	25		1	
1992-93	Hempur	53	43	81	5	9
	Saharanpur	5	5	100	-	-
	TOTAL	58	48		5	
	GRAND TOTAL	612	293		15	