CHAPTER VII : ORDNANCE FACTORY ORGANISATION

7.1 Performance of Ordnance Factory Organisation

7.1.1 Introduction

The Ordnance Factory Board (OFB) functions under the administrative control of the Department of Defence Production of the Ministry of Defence and is headed by the Director General, Ordnance Factories. There are 39 factories divided into five products based Operating Groups[18] as given below:

Sl. No.	Name of Group	Number of Factories
(i)	Ammunition & Explosives	10
(ii)	Weapons, Vehicles and Equipment	10
(iii)	Materials and Components	8
(iv)	Armoured Vehicles	6
(v)	Ordnance Equipment (Clothing & General Stores)	5

Until July 2008, Ordnance Cable Factory Chandigarh was under Material & Components Division. Ordnance Factory Board in its meeting held in July 2008 decided to change the product mix of the factory in phased manner and to entrust it with production of optoelectronic sight for the armoured vehicles for which there was an increased requirement. The factory was therefore brought under administrative control of Addl. DG/AV (Armoured Vehicles Division).

The Ministry of Defence accorded sanction in November 2001 for setting up of a new propellant factory at Rajgir in Nalanda District of Bihar for manufacture of two lakh Bi-modular charge system (BMCS) per annum required for 155 mm Ammunition at a total cost of Rs 941.13 crore. In February 2009, the project cost was revised by the Ministry to Rs 2160.51 crore excluding Customs Duty. The work on the project is under progress and Rs 698.67 crore had been spent as of September 2009.

In October 2007 Ministry of Defence accorded sanction for setting up of another Ordnance Factory at Korwa in Sultanpur District of Uttar Pradesh for manufacture of 45,000 carbines per annum at an estimated cost of Rs 408.01 crore. The time schedule for completion of the project is 36 months from the

[18] On a functional basis, the factories are grouped into Metallurgical (5 factories), Engineering (13 factories), Armoured vehicles (6 factories), Filling (5 factories), Chemical (4 factories), Equipment and clothing (6 factories).

date of issue of sanction. The work on the project is in progress and as of September 2009 Rs 13.56 crore had been spent.

7.1.2 Core activity

The core activity of OFB is production and supply of arms and ammunition, armoured vehicles, ordnance stores etc. required for Armed Forces. However, with a view to utilize the available spare capacity, the Ordnance Factories also supplies arms and ammunition to Paramilitary Forces, Civil Police, other Govt. Departments and also for Civil Indentors. Based on indents received from the Indentors, OFB fixes targets for production of the required items at the Ordnance Factories.

The product range in these Ordnance Factories covers sophisticated Anti Tank Guns, Anti-Aircraft Guns, Field Guns, Mortars, Small Arms, Sporting Arms including their Ammunitions, Bombs, Rockets, Projectiles, Grenades, Mines, Demolition Charges, Depth Charge, Pyrotechnic Stores, Transport Vehicles, Optical and Fire Control instruments, Bridges, Assault Boats, Clothing and Leather Items, Parachutes etc.

At present 959 principal items are produced in 39 Ordnance Factories, which cover nearly 86 *per cent* of the total cost of production. There were 1.03 lakh employees in the organization as of 1 April 2009.

7.1.3 Analysis of the Performance of OFB

Revenue Expenditure

The expenditure under revenue head during 2004-2005 to 2008-2009 is given in the table below:

(Rupees in crore)

Year	**Total expenditure incurred by ordnance factories**	**Receipts against products supplied to Armed Forces**	**Other receipts and recoveries** [19]	**Total receipts**	**Net receipts of ordnance factories** (5-2)
1	2	3	4	5	6
2004-05	6389.89	5330.35	1264.63	6594.98	205.09
2005-06	6847.13	5701.31	1537.81	7239.12	391.99
2006-07	6191.89	5147.77	1384.52	6532.29	340.40
2007-08	7125.63	5850.65	1464.12	7314.77	189.14
2008-09	9081.28	6123.38	1474.54	7597.92	(-) 1483.36

The total receipts and expenditure during 2008-09 had increased by 3.87 *per cent* and 27.45 *per cent* respectively as compared to the previous year. The increase in expenditure was due to increase in volume of production and increase in manpower related cost. Until 2007-08 the ordnance factories had

[19] Other receipts and recoveries includes receipt on account of transfer of RR funds, sale of surplus/obsolete stores, issues to MHA including Police, Central and State Governments, Civil trade including Public Sector Undertaking, export and other miscellaneous receipts.

generated surplus revenues. However, during 2008-09 the expenditure exceeded the receipts by Rs 1483.36 crore.

Capital Expenditure

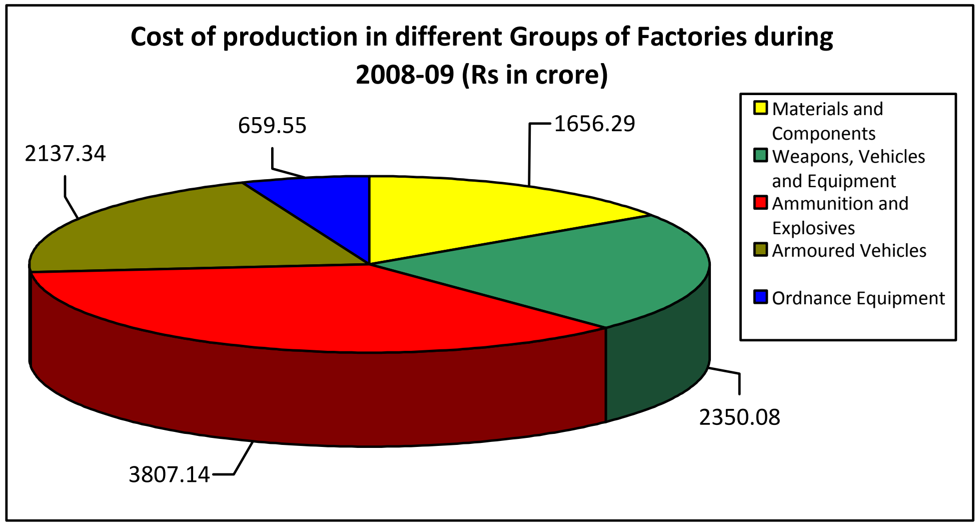
While the average total revenue expenditure was around Rs 7466 crore per annum during the last three years (2006-09), the total annual capital outlay averaged at Rs 188.24 crore. The expenditure from the capital outlay is relatively low when compared with the expenditure under revenue since the expenditure on renewal and replacement of plant and machinery is met out of the renewal and replacement fund funded out of revenue outlay of the ordnance factories.

Cost of production

The following table indicates the group-wise/element-wise expenditure incurred during the year to arrive at the cost of production for 2008-09 and the percentages of various elements to the cost of production:

Sl. No.	**Group of factories**	**Cost of production**	**Direct material and percentage to cost of production**	**Direct Labour and percentage to cost of production**	**Overhead Charges**		
					Fixed Overhead and percentage to cost of production	**Variable Overhead and percentage to cost of production**	**Total Overheads & percentage to cost of production (7+8)**
1	**2**	**3**	**4**	**6**	**7**	**8**	**9**
1	Material & Components	1656.29	818.59 **(49.42)**	131.91 **(7.96)**	403.98 **(24.39)**	301.82 **(18.22)**	705.80 **(42.61)**
2	Weapons, Vehicles and Equipment	2350.08	1243.87 **(52.93)**	213.53 **(9.09)**	636.85 **(27.10)**	238.87 **(10.16)**	875.72 **(37.26)**
3	Ammunition and Explosives	3807.14	2655.96 **(69.76)**	206.13 **(5.41)**	547.70 **(14.39)**	393.89 **(10.35)**	941.59 **(24.73)**
4	Armoured Vehicles	2137.34	1624.79 **(76.02)**	80.18 **(3.75)**	299.13 **(14.00)**	133.24 **(6.23)**	432.37 **(20.23)**
5	Ordnance Equipment	659.55	298.56 **(45.27)**	136.35 **(20.67)**	162.31 **(24.61)**	62.32 **(9.45)**	224.63 **(34.06)**
	Total	10610.40	6641.77 **(62.60)**	768.10 **(7.24)**	2049.97 **(19.32)**	1130.14 **(10.65)**	3180.11 **(29.97)**

The element of direct labour in the cost of production is higher in the ordnance equipment group of factories due to the labour intensive nature of their work. However, this component has gone up steadily during the last five years from 17.21 *per cent* during 2004-05 to 20.67 *per cent* during 2008-09.



During 2008-09, Ammunition & Explosives group of factories registered the highest cost of production of Rs 3807.14 crore amongst all the five group of factories with Material, Labour and Overheads at 69.76 *per cent***,** 5.41 *per cent* and 24.73 *per cent* respectively while Ordnance Equipment Group of factories registered the lowest cost of production of Rs 659.55 crore with material, labour and overheads at 45.27 *per cent*, 20.67 *per cent* and 34.06 *per cent* respectively. The average overhead charges of OFB were 29.97 *per cent*. While the Material and Component Group registered the highest overheads at 42.61 *per cent* and the Armoured Vehicles Group registered the lowest overheads at 20.23 *per cent*.

Ordnance Factory Board in its meeting held on 25.04.2008 had resolved to account cost of utilities and fuel consumed in production as Direct Material, if cost of utilities becomes seven *per cent* or more of cost of production. Accordingly Principal Controller of Accounts (Fys.) Kolkata issued instruction for charging cost of utilities and fuel consumed in production activities as an element of direct cost against a new nomenclature “Direct Expenses” to be shown in the Production Account. This revised accounting procedure was effective from 01.04.2008. However, Audit observed that only in respect of five factories it has been shown in the Production Account. On this being pointed out, Principal Controller of Accounts (Fys.) Kolkata stated that all the factories had once again been instructed to follow the revised procedure.

Production programme

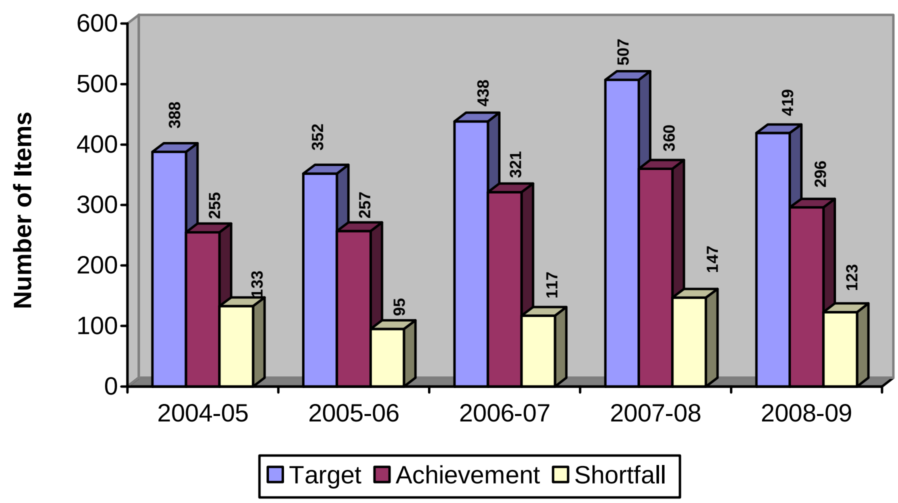
The production programme for ammunition, weapons and vehicles, materials and components and armoured vehicles was fixed for one year, while four yearly production programme was fixed for equipment items. However, there was a shortfall of nearly 29 *per cent* in meeting such targets during 2008-09.

The details of demands, targets fixed and shortfall in achievement of the targets during the last five years are shown in the table below:

Year	Number of items for which demands existed	Number of items for which target fixed	Number of items manufactured as per target	Number of items for which target were not achieved	Percentage of shortfall
2004-05	388	388	255	133	34.28
2005-06	352	352	257	95	26.99
2006-07	552	438	321	117	26.71
2007-08	628	507	360	147	28.99
2008-09	419	419	296	123	29.36

From the above table it may be seen that despite reduction in the target in 2008-09 by 17.36 *per cent* the shortfall in achieving the target increased in comparison with the previous year.

Shortfall in production



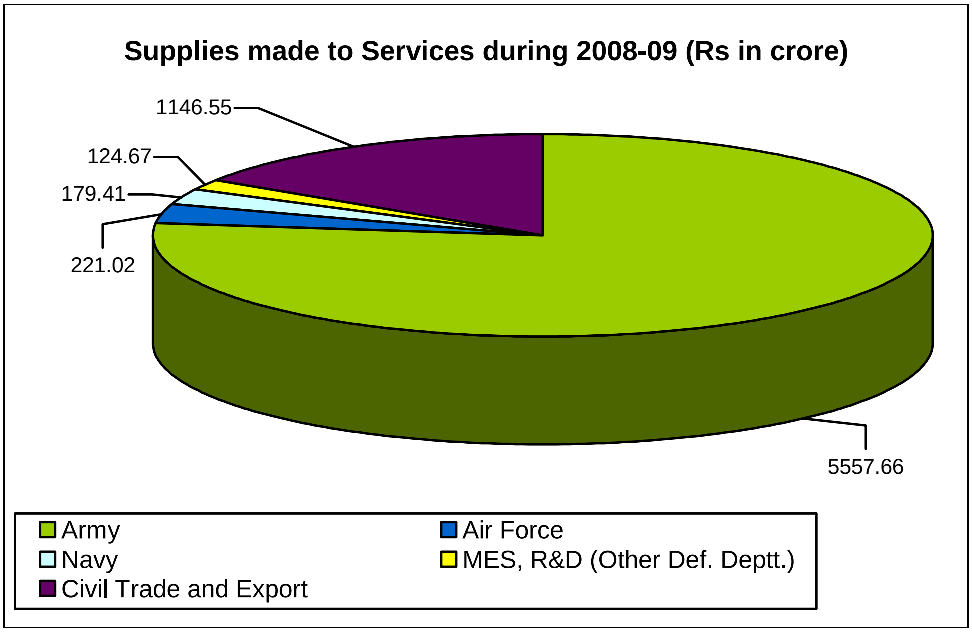
Issue to users (Indentors)

The indentor-wise value of issues during the last five years was as under:

(Rupees in crore)

Name of Indentors	2004-05	2005-06	2006-07	2007-08	2008-09
Army	4854.73	5187.25	4535.43	5252.15	5557.66
Air Force	180.96	203.44	208.09	239.53	221.02
Navy	79.87	147.49	130.76	119.39	179.41
MES, Research and Development (Other Defence Department)	93.26	106.15	143.08	145.63	124.67
Total Defence	**5208.83**	**5644.33**	**5017.36**	**5756.70**	**6082.76**
Civil Trade and Export	977.75	1247.35	1179.98	1181.11	1146.55
Total issues	**6186.58**	**6891.68**	**6197.34**	**6937.81**	**7229.31**

As evident from the chart below the Army remained the major recipient of the products of the ordnance factories, accounting for nearly 77 *per cent* during 2008-09. Total value of issues during 2008-09 has increased by 4.20 *per cent* in comparison to the previous year.



Civil Trade

The ordnance factories also supplied manufacture products to Public Sector Undertakings, private indentors, Government departments other than Ministry of Home Affairs and State Police, since July 1986 for optimal utilization of spare capacities and to lessen dependence on budgetary support. The turn-over from civil trade during 2004-2009 was as under:

(Rupees in crore)

Year	Number of factories involved	Target	Achievement	Percentage of achievement
2004-05	37	250.00	248.78	99.51
2005-06	33	266.00	312.17	117.36
2006-07	33	279.16	298.56	106.95
2007-08	32	335.01	359.56	107.33
2008-09	39	351.12	329.30	93.79

Though the achievement of civil trade in 2005-06 to 2007-08 was higher in comparison to the target, during the year 2008-09 there was short fall of 6.21 *per cent* in achieving the target. The reason for shortfall has been attributed to pending issue to indentor, shortage of industrial employees, higher demand from services, non-materialising of outsourcing, non placement of orders covering the target by the indentors etc. As on 31 March 2009 a total amount of Rs 6.7 crore was outstanding for recovery from Govt. Departments under the head Civil Trade.

Export

The following table shows the achievement with reference to target in export to friendly foreign governments during the period from 2004-2005 to 2008-2009:

(Rupees in crore)

Year	Factories involved	Target	Achievement	Shortfall (-) /Excess (+)	Percentage of achievement w.r.t. target
2004-05	17	115.00	58.00	(-) 57.00	50.43
2005-06	11	15.00	14.66	(-) 0.34	97.73
2006-07	13	25.00	15.12	(-) 9.88	60.48
2007-08	10	30.00	27.44	(-) 2.56	91.47
2008-09	11	35.00	41.07	(+) 6.07	117.34

Though during the last few years there was shortfall in achieving the export target, during the year 2008-09 the achievement was 17.34 *per cent* higher than the target. However, earnings from export were negligibly low at 0.39 *per cent* of the cost of production of Rs 10610 crore during 2008-09. The earnings from export had peaked to Rs 103 crore in 2003-04 and declined thereafter. Earlier in 2005-06, OFB had attributed the decline in export to the restrictions on export to Nepal.

Inventory Management

Stock holding

The level of store-in-hand inventory holding by a factory at any time in respect of imported stores as well as indigenous items, will depend upon the criticality of the items in maintaining the continuity of production, lead time required to procure the item, availability of alternate capacity verified and established sources, availability of storage space etc. The optimum level of store- in- hand inventory for any item may be fixed by the General Managers in such a way that overall assessed inventory holding for the factory should not normally exceed the maximum level as indicated below :

Sl. No.	Group of Factories	Authorized limit of inventory holding (maximum)
1.	Armoured Vehicles	6 months
2.	Ordnance Equipment Factories	3 months
3.	Others	4 months

However, 16 ordnance factories were holding inventory in excess of their maximum authorized limit. Necessary action needs to be taken by the factory management to reduce the excess inventory holding which have blocked Govt. money.

Status of inventory holding

The position of total inventory holdings during 2004-2005 to 2008-2009 was as under:

(Rupees in crore)

Sl. No.	Particulars	2004-05	2005-06	2006-07	2007-08	2008-09	Percentage of increase (+) / decrease (-) during 2008-09 in comparison to previous year
1.	Working stock						
a.	Active	1670.52	1649.99	1734.00	2160.00	2354.00	8.98
b.	Non-moving	219.84	253.55	256.00	333.00	322.00	-3.30
c.	Slow moving	217.43	241.48	194.00	211.00	287.00	36.02
	Total Working Stock	**2107.79**	**2145.02**	**2184.00**	**2704.00**	**2963.00**	**9.58**
2	Waste & Obsolete	11.94	10.43	14.00	14.00	26.00	85.71
3.	Surplus/ Scrap	48.61	57.88	80.00	81.00	68.00	-16.05
4.	Maintenance stores	95.58	73.28	87.00	79.00	73.00	-7.59
	Total	**2263.92**	**2286.61**	**2365.00**	**2878.00**	**3130.00**	**8.76**
5.	Average holdings in terms of number of days' consumption	147	151	169	160	149	-6.88
6.	Percentage of total slow-moving and non-moving stock to total working stock	20.75	23.08	20.60	20.12	20.55	2.14

Average holding in terms of days' consumption has decreased by 6.88 *per cent* during 2008-2009 in comparison to 2007-08. The huge accumulation of Non moving as well as Waste & Obsolete stores needs immediate review by the management with a view to explore reasons and effective utilization/disposal of the stores.

Finished stock holding

Position of Finished stock holding (completed articles and components) during the last five years was as under:

(Rs in crore)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Holding of Finished articles	90.20	121.06	125.11	332.66[20]	505.80
Total cost of production	8331.74	8811.59	7957.53	9312.61	10610.40
Holding of finished stock in terms of number of days issue	4	5	5	13	17
Holding in terms of percentage of total cost of production	1.08	1.37	1.57	3.57	4.77
Finished component holding	520.36	437.92	465.45	363.10	458.33
Holding of finished components in terms of number of days consumption	54	46	52	26	38

[20] Incorrect classification of finished articles valued at Rs 254.05 crore as finished components in the accounts for year 2007-08 has been corrected subsequently.

The value of finished (completed) articles in hand as on 31.3.2009 increased by 52.05 *per cent* compared to 31.3.2008. This was mainly on account of the non-acceptance by the Army of the MBT Arjun produced by the Heavy Vehicles Factory, Avadi. Immediate action needs to be taken for clearance of huge finished articles.

Work-in-progress

The General Manager of an Ordnance Factory authorizes a production shop to manufacture an item in the given quantity by issue of a warrant whose normal life is six months. Unfinished item pertaining to different warrants lying at the shop floor constituted the work-in-progress.

The position of the work-in-progress during the last five years was as under:

(Rupees in crore)

As on 31 March	Value of work-in-progress
2005	1637.66
2006	1270.68
2007	1179.31
2008	1265.00
2009	1961.82

The total value of work-in-progress as on 31 March 2009 has increased by 55.08 *per cent* as compared to the previous year. As on 31.03.2009 total 29306 warrants were outstanding, of which 21389 warrants pertain to the year 2008-09 and balance 7917 warrants pertain to the years prior to 2008-09. Necessary action needs to be taken by OFB for closure of the warrants outstanding for more than six months as authorized.

7.1.4 Man power

The employees of the Ordnance Factory Organization are classified as (i) “Officers” of senior supervisory level, (ii) “Non-Gazetted” (NGO) or “Non-Industrial” (NIEs) employees who are of junior supervisory level and the clerical establishment and (iii) “Industrial Employees” (IEs), who are engaged in the production and maintenance operations. The number of employees of various categories during the last five years is given in the table below:

(In number)

Category of employees	2004-05	2005-06	2006-07	2007-08	2008-09
Officers	4187	3866	3877	4036	3947
Percentage of officers to total manpower	3.51	3.31	3.47	3.77	3.84
NGO/NIEs	35105	35517	33783	32359	31105

(In number)

Category of employees	2004-05	2005-06	2006-07	2007-08	2008-09
Percentage of NGOs/NIEs to total manpower	29.43	30.38	30.20	30.22	30.27
Industrial Employees (IE)	80000	77528	74181	70666	67717
Percentage of IEs to total manpower	67.06	66.31	66.33	66.01	65.89
Total	**119292**	**116911**	**111841**	**107061**	**102769**

In 2008-09 the manpower of Ordnance Factory Organization registered an overall decline by 13.85 *per cent* compared to the manpower in 2004-05.

7.1.5 Capacity utilization

The table below indicates the extent to which the capacity had been utilized in terms of machine hours during the last five years.

(Capacity utilization in terms of Machine Hours)

(Unit in lakh hours)

Year	Machine hours available	Machine hours utilized	Percentage of Capacity utilization
2004-05	1754	1303	74.29
2005-06	1763	1392	78.96
2006-07	1472	1120	76.08
2007-08	1351	1147	84.90
2008-09	1696	1294	76.30

Though the percentage of capacity utilization had reduced during 2008-09 as compared to that of the previous year, the Machine hours available and the Machine hours utilized have increased.

7.1.6 *Overhead Charges*

The details of overheads in relation to the cost of production in respect of various ordnance factories from 2004-05 to 2008-2009 are in **Annexure IV.**

The percentage of overheads to the cost of production was more in respect of factories classified under Material and Components Division where overheads averaged at 45 *per cent* of the cost of production. The overall increase in overhead charges as percentage of cost of production was due to implementation of 6th Central Pay Commissions recommendations and consequential increase in Pay & Allowances, Supervision Charges etc.

The matter was referred to the Ministry of Defence/Ordnance Factory Board in December 2009; their replies were awaited as of April 2010.

Planning

7.2 Injudicious sanction of Ordnance Factory Korwa Project

The project for establishment of a new ordnance factory at Korwa, Amethi at an estimated investment of Rs 408.01 crore by October 2010 to meet an operationally urgent need for acquisition of new generation carbines was sanctioned without finalization of new generation carbines to be produced in the factory. This coupled with selection of inappropriate site and inadequate monitoring resulted in slow progress of the project. The project is likely to be delayed very badly, thereby delaying the supply of urgently required carbines to the Army.

Indian Army projected, in October 2005, an operationally urgent need for acquisition of new generation carbines at an approximate cost of Rs 2524 crore. Raksha Mantri accepted the necessity for acquisition of 2.18 lakh Protective carbines and 1.60 lakh Close Quarter Battle {CQB} carbines during XI Acquisition Plan 2007-12. In order to meet the requirement, Defence Acquisition Council (DAC) accorded approval in February 2006 for the induction of CQB carbines through import with Transfer of Technology (TOT) and Protective carbines through indigenous production as the OFB was already undertaking user trials of the next generation Protective carbines since January 2006. Apart from the Army, the Paramilitary forces and State Police too had the requirements for the carbines.

Based on a detailed examination of the options available with the Government, Ministry of Defence decided to set up a new factory for production of these carbines. Accordingly Raksha Mantri accorded his in-principle approval in April 2006 to set up a green field project for production of the carbines and constituted (May 2006) a site selection committee with the specific instruction that the available surplus Defence lands be used to avoid the problems associated with land acquisition /rehabilitation and to reduce overall expenditure. Based on the recommendations of the Committee, the Competent Financial Authority (CFA) sanctioned, in October 2007, the establishment of a new ordnance factory at Korwa, Amethi by October 2010 at an estimated investment of Rs 408.01 crore.

Scrutiny of records of the Ministry of Defence, Ordnance Factory Board and other subordinate offices related to the setting up of the new ordnance factory at Korwa revealed as follows:

I Selection of site

The Site Selection Committee was to be guided *inter alia* by the following terms :

(i) Guidelines issued by the Bureau of Public Enterprises;

(ii) Requests made in the past by the Chief Ministers and Members of Parliament for set up of new ordnance factories in their States;

(iii) Avoidance of problems associated with land acquisition process/ rehabilitation and reduction of overall expenditure;

(iv) Availability of land, water, electricity, etc.;

(v) Availability of industrial infrastructure;

(vi) Safety and security aspects;

(vii) Government policy regarding development of backward areas.

The Committee, constituted in June 2006, evaluated twelve sites and zeroed in on two sites viz. Field Gun Factory (FGF) Kanpur and Hindustan Aeronautics Limited (HAL) Korwa, Amethi in the state of Uttar Pradesh. Though the Committee opined that 118 acres of surplus land and residential buildings available at FGF, Kanpur were adequate, yet they did not recommend locating the new factory at Kanpur observing that the five existing factories located there suffered from militant trade unionism. The Committee therefore recommended Korwa for the new factory.

HAL had offered 34 acres land at Korwa against the requirement of 60 acres. The remaining land was therefore required to be acquired. The decision to locate the factory at Korwa was therefore flawed to this extent since the acquisition of land was still pending with the UP Government as of November 2009.

OFB stated in November 2009 that the surplus land of FGF could be utilised for augmentation of capacity for high calibre guns as there was increased requirement of the same. OFB added that addition of a factory in Armapore region of Kanpur might not be desirable from security point of view. Audit however observed that the OFB's views on the increased requirement of high calibre guns was not backed by the trends of production of high calibre guns during last three years. The plea of security is also not tenable as five factories had been continuing production in Armapore region of Kanpur for decades without security problems.

II Project sanction

Though the Ministry's Note to the CFA for seeking the project sanction mentioned the production of CQB carbine as per TOT and Protective carbine after successful development by OFB/Armament Research and Development Establishment (ARDE) of Defence Research and Development Organisation (DRDO), there was no finality in the selection of products. Till the time of approval of the project, the Government had not selected the foreign firm from which CQB carbine was to be procured under TOT. Even the user trial evaluation of the Protective carbines had not been completed. Thus, the requirement of plants and machinery was worked out by OFB without knowing the final products to be manufactured and their technology to be adopted.

Though the project is to be completed by October 2010, the tender for the procurement of CQB carbine has not yet been finalised. Similarly, the user trials of the Protective carbine have not been successful. As a result, neither the choice of CQB carbine nor the Protective carbine have been finalised resulting into uncertainty regarding types of plant and machinery required to be procured for the factory.

OFB stated in November 2009 that the proposal for setting up a new factory was going on simultaneously with indigenous development of Protective carbine.

Fresh Request for Proposal (RFP) was also under progress for TOT for CQB carbine. Thus, OFB has tacitly admitted that the project was sanctioned without even deciding the technology to be adopted and the items to be produced. Hasty sanction of the new factory, citing urgency of the requirement for the new generation carbines, was proved injudicious since the same level of urgency in sanction of a new project was not translated into action during execution of the project as discussed in the succeeding paragraphs.

While sanctioning a new ordnance factory, the Ministry had also failed to learn lessons from the experience of setting up of a new factory at Nalanda, which was targeted for completion by October 2005. The project has been badly delayed and resulted time and cost overrun was reported in Paragraph 6.3 of the Report No.CA 4 of 2008 of the Comptro1ler and Auditor General of India. Subsequently, in February 2009, the estimated cost of Nalanda project was revised to Rs 2160.51 crore, an increase of Rs 1219.38 crore from the initially sanctioned cost of Rs 941.13 crore i.e. an increase of 130 *per cent*.

III Products not yet finalised

A - User trials of Protective carbine not sucessfu1

Mention was made in Paragraph 47 of Report No**.** 7 of 2001 of the Comptroller and Auditor General of India, about failure of ARDE and Small Arms Factory Kanpur (SAF) to develop and produce 5.56 mm INSAS Carbine even after a lapse of 13 years and expenditure of Rs 22.18 crore and Army's foreclosure of the requirement in January 2000. Ministry in their Action Taken Note (ATN) of June 2002 stated that Army finalised a revised General Staff Qualitative Requirement (GSQR) in September 2001 for modern sub-machine carbine and their requirement was being met with the existing 9 mm carbine. Subsequently, ARDE and SAF separately developed carbine viz. 5.56 mm MSMC and 5.56 mm AKC respectively. Both the carbines were offered for user trials between January 2006 and January 2009.

In the confirmatory trials of January 2009, the trial team observed that there was a definite and sharp decline in reliability performance, manufacturing, workmanship standards and material appropriateness. The weapons were not fit for induction into service. The team recommended that the development agencies should undertake de-novo approach breaking free from the current unsuccessful design and the GSQR might be reviewed or a fresh QR formulated as certain qualitative requirements were either against weapon reliability or/and also against the basic user aspiration.

Subsequently, a meeting was held on 4 February 2009 to resolve the impasse on the Protective carbine and following decisions were taken:

- DRDO and OFB in association with the user should develop a successful model for trials within six months;
- A twin approach i.e. selection of a CQB Carbine and Protective Carbine would be pursued. Once a weapon was selected, the production could be limited to one weapon; and
- The calibre is to remain 5.56 mm.

OFB stated in November 2009 that a de-novo development had been adopted. Thus the Protective carbine to be produced in the new factory at Korwa was still under development stage.

B- Non-finalisation of tender for CQB carbine & resultant non-existent TOT

Army issued GSQR in November 2005 for the CQB carbine. In order to import the CQB carbine, the Ministry issued Request for Proposal (RFP) in April 2007 for procurement of CQB carbines along with TOT. However, they withdrew the RFP in December 2007 without assigning any reason. The Ministry issued another RFP in April 2008 with specific mention of "Less the TOT for passive night sight". However, in June 2009, it withdrew the RFP owing to inadequate competition and the technical specifications not meeting the user's requirement. Thus, a supplier for the CQB carbine could not be identified even as of November 2009 though the Army had shown operational urgency in 2005.

IV Delayed execution of the project

Land acquisition

As per Detailed Project Report (DPR), transfer of 34 acres of land and spare accommodation by HAL Korwa and acquisition of balance land was to be completed by February 2008. However, the HAL was yet to transfer the land as of October 2009. Although the sanction of the project had envisaged acquisition of 20 acres of land at an estimated cost of Rs 5 crore, the requirement nearly doubled to 39 acres. The application submitted in February 2009 for acquisition of the land was pending with the Uttar Pradesh Government as of November 2009.

Thus, selection of project site at Korwa instead of FGF involved delays and impasse in land acquisition although it had been perceived to be a possible bottleneck at the time of the initiation of the project and was to be avoided while selecting the site.

Civil works

Floor area of six production shops was originally estimated as 12,600 sq. metre. But it was revised to 17,184 sq. metre during May-August 2008, considering safety distances and aesthetic look, which would involve an estimated additional expenditure of Rs 5.98 crore. Construction of 150 residential quarters, owing to non-transfer of residential accommodation by HAL as originally expected, would entail an additional expenditure of Rs 14.89 crore.

Only the re-routing of various utilities and construction of three production shops were completed till September 2009 and works in respect of other shops started in March–April 2009, i.e. after a lapse of 18 months from the date of project sanction.

Plants and machinery

Procurement of plants and machinery was scheduled to commence in February 2008 to be completed by April 2010. However, due to non-finalisation of the carbine, only the procurement of general purpose plants and machinery was initiated and that too was in the tendering stage as of October 2009.

Project expenditure

Even though the project was sanctioned for completion by October 2010, not much headway has been made in the execution of the project. Only a sum of Rs 13.56 crore could be expended up to September 2009 against sanctioned amount of Rs 408.01 crore. Thus, the progress in terms of the expenditure was only a meager three *per cent* though two-third of the sanctioned time for completion of the project had elapsed.

OFB stated in November 2009 that Rs 21.79 crore was spent apart from committed liability of Rs 59.82 crore towards civil works. This appeared an inflated amount since the Half-yearly Progress Report of the project as of October 2009 indicated an expenditure of only Rs 11 crore for civil works.

V Ineffective project monitoring

Ministry constituted, in January 2008, a Project Management Board (PMB) under the Chairmanship of Secretary (Defence Production) and member representatives from the Ministry, Army, DRDO, DGQA and OFB, to review/monitor the progress. Although the PMB was required to meet at least once in six months to ensure establishment of the project within the scheduled time, only one meeting was held in May 2008.

Another Steering Committee, at Board level, met four times between April 2008 and October 2009 and took various decisions for time-bound completion of all the activities. Despite this no significant progress was made to meet the operationally urgent requirement of the Army.

OFB stated that the Steering Committee in its meeting of October 2009 decided to issue tenders for plants and machinery for similar small arms components with typical drawings to hold the project timeframe. The Committee also identified a sporting rifle to be produced at Ordnance Factory Korwa to give flexibility in production. This is yet another indication of defective planning and imprudent decision as production of sporting rifle was not the activity for which the project was conceived. The shift to production of sporting rifle in priority over the production of new generation carbines for which urgent operational requirement had been projected by the Army in October 2005 would only cast doubt about the very genesis of the project.

VI Conclusions and Recommendations

The sanction of a new ordnance factory to be set up at Korwa in Amethi was ill conceived as obvious from the tardy progress shown in its execution. The sanction was untimely since the carbines to be produced in the factory were yet to be decided. The site selection was flawed since even the minimum land required to set up the factory was not available and was awaiting acquisition. Diversion of the production activity of the proposed factory into production of sports rifle signifies that the new generation carbines for which the Army and the Paramilitary forces had projected urgent operational requirement took a back seat. In the present stalemated state, the necessity for continuation with the project needs to be reviewed urgently by the Ministry and a pragmatic decision taken by looking into the cost and benefits of setting up a new factory *vis a vis* the augmentation of the facility in any of the existing ordnance factories.

The matter was referred to the MOD in October 2009; their reply was awaited as of April 2010.

Procurement of Stores and Machinery

Stores

7.3 Extra expenditure in procurement of Oleum

The failure of HEF to invoke risk purchase clause coupled with OFB's failure to allot funds in time to make contractual payments for supplies received, foreclosed the possibility of obtaining Oleum at an economical cost. It also resulted in an extra expenditure of Rs 2.80 crore incurred in the purchase of Oleum to make good the shortage in supply.

High Explosives Factory Kirkee (HEF) procures Oleum from trade to manufacture Trinitrotoluene (TNT). HEF placed an order in April 2007 on M/s Rama Krishi Rasayan Limited Pune (Firm 'A') for supply of 7432 tonne Oleum at a fixed unit cost of Rs 3327 per tonne (inclusive of all taxes).

Firm 'A' supplied only 3558 tonne Oleum up to November 2007 with interruption between September 2007 and October 2007, due to major problem at the firm's end. Subsequently, firm 'A' refused to supply remaining 3874 tonne attributing it to the failure of HEF to pay for Oleum already supplied. The Firm 'A' claimed that Rs 45.07 lakh due upto October 2007, which increased to Rs 48.65 lakh upto November 2007 was not paid within 30 days stipulated in the supply order. HEF released the outstanding payments to the firm 'A' in December 2007 after withholding Rs 18.22 lakh. HEF attributed the delay ranging between 9 days and 70 days in making payment to firm 'A' to delay in release of funds by Ordnance Factory Board (OFB). When Audit enquired in March 2009 from OFB about the reasons for delay in releasing budgetary allotment to HEF, OFB did not furnish any reasons.

Firm 'A' did not supply the balance quantity of 3874 tonne on order, citing HEF's failure to make timely payments as per contract. HEF did not take any action against the firm "A' for their failure to supply Oleum in September 2007 and October 2007 nor resort to risk purchase when they refused to supply the balance quantity on order. Instead, HEF procured Oleum under three orders, viz. 1200 tonne in October 2007 at unit cost of Rs 6732, 2200 tonne in December 2007 at unit cost of Rs 10,039 and 700 tonne in March 2008 at unit cost of Rs 16,342 from two firms, viz. M/s HOC Limited Mumbai and M/s Narottam Das and Company Nagpur. HEF incurred an extra expenditure of Rs 2.80 crore in procurement of 3874 tonne of Oleum (included in 4100 tonne procured under the three orders), which was contractually required to be supplied by firm 'A'. As an alternative of making risk purchase under supply order of April 2007, HEF decided to refer the matter for arbitration, which was yet to be initiated as of August 2009, forfeit an amount of Rs 18.22 lakh which was due to the firm and blacklist them.

The Ministry of Defence (MOD) stated in October 2009 that the non-supply of Oleum was not due to the non-payment of dues to the firm but due to the pollution problem at the factory of the firm 'A' and increase in the price of Sulphur which is the raw material for production of Oleum.

However, it is a fact that HEF did not invoke risk purchase to enable recovery of the extra expenditure of Rs 2.80 crore incurred in the purchase of 3874 tonne Oleum, when firm 'A' refused to supply the remaining quantity on order. The refusal of firm 'A' to supply the remaining ordered quantity citing failure to make the payments within the time limit also could not be effectively countered by HEF as there was an admitted delay in payment due to delay in allotment of funds by OFB. Thus OFB and HEF had made it possible for the firm to dishonour the contractual liability to supply Oleum at a time when there was a surge in the price of Sulphur. OFB was also yet to refer the case to arbitration as of October 2009, although the breach of contract was committed in December 2007.

7.4 Undue benefit to a firm in procurement of Oleum

Ordnance Factory Itarsi accorded undue benefit to a firm by acceding to their request for acceptance of price variation clause, excise duty component and increased freight charges after opening of the tender and placement of order.

Ordnance Factory Itarsi (OFI) requires Oleum to manufacture Nitroglycerine, Nitrocellulose and Nitroguinadine. OFI issued a limited tender enquiry in December 2007 to eight firms for procurement of 1558 tonne Oleum. Only M/s Lalit Brothers, Ratlam submitted bid within the scheduled time and date, i.e., 14:30 hours on 03 January 2008. The firm quoted fixed rate of Rs 12,834 per tonne, which included basic rate of Rs 11,182, VAT of Rs 447 and freight of Rs 1205.

At 07:08 PM on the same day, OFI received a fax from the firm seeking enhancement in the basic rate by Rs 1700 per tonne and inclusion of price escalation clause, citing unexpected increase in the price of Sulphur, the raw material for Oleum. Again at 7:10 PM, OFI received another fax from M/s Khaitan Chemicals and Fertilizers Limited, Indore quoting Rs 16,531 per tonne, inclusive of basic cost of Rs 11,500, excise duty of Rs 1895, VAT of Rs 536 and freight of Rs 2600. Despite the clear provision in the General Financial Rules that late bids, i.e. bids received after the specified date and time of receipt of bids, should not be considered OFI took cognizance of these fax quotations. As per the laid down rules of ordnance factory board spot comparative statement duly signed by the officers opening the tenders are to be prepared immediately after opening the bids. However, in the instant case the comparative statement of tenders was prepared by recording the second bid which was received after opening of the bid and the enhancement in rates quoted by the first lone bidder. Based on the recommendations of the tender purchase committee to accept the lowest offer, OFI placed supply order on M/s Lalit Brothers on 11 January 2008 for supply of 1558 tonnes Oleum at a cost of Rs 2.28 crore at the enhanced basic rate of Rs 12882 per tonne sought by the firm in addition to VAT and freight. As the supply order had an option clause to enhance the quantity by 25 *per cent*, in June 2008 OFI exercised the option to procure additional quantity of 390 tonne. OFI received 1951.76 tonne Oleum between February 2008 and February 2009 and paid Rs 3.47 crore to the supplier.

Even though the supply order of January 2008 did not contain any provision for payment of excise duty over and above the quoted rate, in May 2008 OFI decided to pay excise duty as an additional element. OFI justified this payment stating that when the revised rate of Oleum was fixed in March 2008 by considering the formula for increase in cost as indicated by the firm's principal viz. M/s Khaitan Chemicals and Fertilizers Limited, Indore the addition of excise element was omitted due to oversight. Thus, the unit rate of Oleum went up to Rs 18,148, inclusive of all charges, retrospectively from 25 January 2008.

While the limited tenders were issued to both the firms considering them as separate tenders, it became clear that M/s Lalit Brothers was only a dealer of M/s Khaitan Chemicals and Fertilizers Limited. This had limited the scope for getting competitive rates.

In June 2008, OFI agreed to yet another request of M/s Lalit Brothers to enhance the freight from Rs 1205 per tonne to Rs 1596 per tonne on account of increase in cost of fuel. OFI, however, ignored the fact that the element of freight was fixed and the escalation factor did not apply to it.

When Audit pointed out the above irregularities and highlighted the resultant undue benefit of about Rs 1.07 crore given to the supplier, Ordnance Factory Board stated in October 2009 that M/s Lalit Brothers did not charge any thing extra for the Oleum which they purchased from their principal and supplied to OFI, except charging the freight. OFB admitted that the increase in freight given by OFI was wrong and that the excess payment of Rs 3.79 lakh on that account had been deducted from the pending bills.

Regarding acceptance of late bids, OFB stated that a Board of Enquiry had been appointed to investigate whether there had been any serious violation of the system of documentation in General Manager's office as it had been found that they did not maintain any record of the receipt/dispatch of the fax quotation in the instant case.

Audit views that the entire pre and post contract activities showed an inclination to favour the single vendor, viz. M/s Lalit Brothers who acted on behalf of the principal, viz. M/s Khaitan Chemicals and Fertilizers Limited. Despite knowing that these two firms had principal-dealer relationship, they were treated as two competing bidders and thus losing the scope for getting competitive bids. The acts of accepting late bids and amending the supply order to facilitate extra payments to the supplier merit independent investigation.

The matter was referred to the Ministry of Defence in April 2009; their reply was awaited as of April 2010.

7.5 Non-utilisation of propellant

Acceptance of two types of propellants in mismatched combination lots by Ordnance Factory Badmal resulted in non-utilisation of one type of propellant valuing Rs 40.55 lakh for over two years.

Ordnance Factory Badmal (OFBL) imported 95,000 Kg and 85,000 Kg of propellant-15/1 and propellant-12/7 respectively against a supply order of September 2006, from M/s Tasko Export Ukraine for production of semi-combustible cartridge cases of two versions of 125 mm ammunition. After their receipt in March 2007, OFBL could not utilize 9150 Kg propellant-12/7, since the two propellants were received in mismatched combination lots.

OFBL had ordered supply of the two propellants in the ratio of 1:0.80, whereas the firm manufactured and supplied propellant-15/1 and propellant-12/7 in a different ratio based on assessed charge mass value which was not as per the requirements of OFBL. OFBL overlooked this variation in supply and accepted the supply by waiving the need for undertaking pre-despatch inspection. As a result, 9150 Kg propellant-12/7 valuing Rs 40.55 lakh received was lying with OFBL without use as of December 2009 for want of matching lot of propellant-15/1.

In April 2008, OFBL proposed to import 11,438 Kg propellant-15/1 to facilitate utilization of the unused 9150 Kg propellant-12/7. The Senior Quality Assurance Establishment (Armament) Badmal (SQAE), however, disapproved the proposal on the ground that procurement of both the propellants needs to in matching combination lots of ballistic similarity, which can be established only through confirmatory firings by the original equipment manufacturer, i.e., the overseas supplier. However, later in May 2009 OFBL ordered supply of 11,438 Kg propellant-15/1 from the same supplier. The receipt of 11,438 Kg propellant 15/1 was awaited as of November 2009.

Reversing its earlier opinion, the SQAE stated in November 2009 that utilization of the propellants might be possible if the laboratory tests and confirmatory firing to be undertaken at their end are satisfactory. The prospect of utilization of the propellant-12/7 however remained uncertain as of November 2009.

OFB admitted in October 2009 that OFBL had erred in accepting the propellants in mismatching quantities, but stated that with the receipt of 11,438 Kg propellant-15/1, the propellant-12/7 lying at the factory would be gainfully utilized. OFB however was silent as to the time frame within which the matching quantity of two propellants would be utilized.

Acceptance of mismatched combination lot of two propellants by OFBL led to non-utilisation of propellant valuing Rs 40.55 lakh for over two years. Its utilization was also uncertain as it is contingent up on the satisfactory laboratory test and confirmatory firing test to be undertaken by SQAE.

The matter was referred to the Ministry of Defence in April 2009; their reply is awaited as of April 2010.

7.6 Extra expenditure due to delay in finalisation of offer

Delay in acceptance of an offer within its validity period resulted in import of the items at an extra cost involving an additional expenditure of Rs 2.85 crore. Failure of the Ministry to take a decision despite the clearly available 22 weeks validity, against time frame of 12 weeks prescribed, is indicator of lack of time consciousness in dealing with such cases.

The Ministry of Defence (Ministry) in 2005 fixed a time limit of 12 weeks, including one week for preparation and dispatch of supply order, for finalizing the commercial offer for procurement of stores and machinery.

Heavy Vehicles Factory (HVF) issued tender enquiry for ten product support items for indigenous manufacture of T-90 tanks. HVF received a commercial offer from the collaborator (Rosboronexport, Russia) in July 2006 with a validity period up to 31 December 2006. As the total value of nine items was beyond the financial power of the General Manager, HVF approached Armoured Vehicles Headquarters, Avadi (AVHQ) in August 2006 for their sanction to procure it at a total cost of USD 20.50 million (Rs 96.75 crore). AVHQ in turn referred the case to Ministry in September 2006 for necessary sanction.

Ministry in December 2006, after a lapse of more than two months from the date of receipt of the request, directed the HVF/AVHQ *inter alia* to furnish the basis on which they ascertained the reasonability of prices quoted and efforts made to get the reasonable discount from the collaborator which was furnished by HVF in December 2006. Ministry, in turn, directed Ordnance Factory Board /AVHQ in January 2007 to finalise the case at their end under the enhanced financial powers delegated to OFB with effect from December 2006. In the meantime the validity of the offer expired in December 2006. Resultantly, HVF received fresh price bid from the firm in June 2007 and placed order in November 2007 at a cost of USD 28.94 million (Rs 118.37 crore) for ten items inclusive of a few additional sub items not included in the earlier offer.

In the revised offer of the firm, rate of three items were more than the original offer of July 2006, of which in one item viz. fire fighting system, the increase was more than two fold, i.e. from USD 5,727.63 per unit to USD 11,462 per unit. In the case of other two items i.e. Mounting Automatic Loading Gear and 12.7 AA Gun mount, the unit rate went up from USD 24,360.76 and USD 7092.04 to USD 31,433 and USD 8,226.41. The increased rates of the collaborator were accepted by OFB without any negotiation.

Thus, the failure of Ministry to accord sanction within the stipulated time resulted in an extra expenditure of USD 697,049 equivalent to Rs 2.85 crore in procurement of the items.

OFB stated in August 2009 that (i) 12 weeks prescribed in the procurement manual is only a general guideline and the time frame varies from case to case basis and also processing involves multiple authorities and (ii) since the overall percentage increase of cost of the revised offer with respect to the first offer was only 1.67 *per cent* over period of one year the question of price reduction did not arise and hence it was decided to procure the items at revised offer. OFB further added that the unit rate went up in respect of only one item and for the remaining two items the increase in rates was due to addition of one sub assembly. OFB's contention is not tenable since the (i) time schedule of 12 weeks was fixed by the Ministry only after factoring the ground realities (ii) overall increase in the cost of three items ranged between 16 *per cent* and more than 100 *per cent* and (iii) the item codes mentioned in original and revised commercial offer for the two items was one and the same and as such the cost of items in both the commercial offers was inclusive of sub assembly. Further, the collaborator had given a validity period of 22 weeks for the HVF to finalise the commercial offer.

The case was referred to the Ministry in May 2009: their reply was awaited as of April 2010.

7.7 Extra expenditure in the purchase of sponge iron

Failure of Metal and Steel Factory Ishapore to accept the supplies offered against a supply order by a supplier and subsequent purchase of the item against a new supply order placed within a year at a unit rate higher by 79 *per cent* resulted in an additional burden of Rs 39.62 lakh.

Metal and Steel Factory Ishapore (MSF) placed an order in August 2007 on M/s Abhishek Mineral Industries Kolkata for supply of 300 tonne sponge iron at a unit cost of Rs 16101, to be completed by November 2007 to meet the production requirement during 2007-08. The firm offered the item for inspection in October 2007. MSF did not undertake inspection and asked the firm to withhold the supply due to lack of storage space.

In February 2008, when MSF asked the firm to offer the item for inspection, the firm informed that the market rate of the sponge iron had gone up to Rs 19,000 and therefore sought the enhanced price for the supply. MSF rejected the demand for enhanced rate claiming that the supply order had no price variation clause. MSF met their requirement of 2007-08 by using 293.095 tonne received at the rate of Rs 16,101 per tonne from another firm, M/s Alloys and Metals (India) Kolkata against the order placed in June 2007.

Further, MSF procured 716.3 tonne sponge iron in August 2008 from M/s Alloys and Metals (India) Kolkata in water proof bags at a unit rate of Rs 28,800 per tonne, which was higher by 79 *per cent* when compared with the earlier supply order. Audit pointed out in August 2009 that the procurement of the sponge iron in August 2008 at enhanced rate could have been avoided had the supply offered by M/s Abhishek Mineral Industries Kolkata against the order placed on them in August 2007 been accepted within the validity of the supply order, i.e., November 2007. Audit also observed that by freeing M/s Abhishek Mineral Industries Kolkata of their contractual liability to supply the sponge iron at the contracted rate of Rs 16,101 per tonne, and subsequent procurement from M/s Alloys and Metals (India) Kolkata at the increased rate of Rs 28,800, there was an avoidable extra expenditure of Rs 39.62 lakh, inclusive of taxes.

Ministry stated in March 2010 that the requirement for production during 2007-08 could be met as sufficient stock of sponge iron and steel scrap was available with MSF. The firm was asked not supply the store in October 2007 for want of storage space and to avoid deterioration in storage. Ministry added that the knowledge that sponge iron deteriorates in open storage was gained only as a matter of experience. Regarding the additional expenditure incurred in the subsequent purchase, Ministry stated that nobody was aware in advance that the price of the item would go up and they do not engage in speculative buying. This contention of the Ministry obfuscates the fact that the requirement of 300 tonnes had been projected by MSF for use during 2007-08 and it was only on this account that the supply order had been placed on M/s

Abhishek Mineral Industries Kolkata in August 2007. The contention that the MSF was unaware of the fact that the sponge iron when stored in open would deteriorate and it had to be learnt by experience is an attempt to elude criticism since possible deterioration of sponge iron in open storage is a well known fact.

Thus, by refusing to accept the sponge iron offered in October 2007 at a unit rate of Rs 16,101, MSF had to incur extra expenditure of Rs 39.62 lakh, in its subsequent purchase made at the rate of Rs 28,800 within less than a year.

Miscellaneous

7.8 Recoveries at the instance of Audit

Based on Audit observations, five ordnance factories recovered Rs 1.60 crore from private and public authorities.

At the instance of Audit, five ordnance factories recovered Rs 1.60 crore on account of excess payment of Central Sales Tax/Value Added Tax ,Service tax and stamp duty, interest on security deposit with the electricity companies and recovery of rent/water/electricity charges from the residents of the factory's estates, as per the details given below: -

Sl No	Units/formations	Nature of irregularity	Period	Amount recovered (Rs in lakh)
1	Ordnance Factory Kanpur and Ordnance Factory Muradnagar	The factories failed to obtain interest on security deposits from Kanpur Electric Supply Corporation Kanpur and Paschimanchal Vidhyut Nigam Limited Muradnagar	March 2002 to March 2008	101.95
2	Ordnance Factory Dehu Road	The factory paid excess amount on account of Central Sales Tax/Value Added Tax to M/s Micron Instruments Private Limited New Delhi, M/s Sandeep Metal Crafts Private Limited and M/s Priya Precision Comp Limited	March 2005 to April 2009	26.35
3	Ordnance Factory Ambernath	The factory paid excess amount on account of Service tax and stamp duty on clearing/handling and transportation charges to M/s Minerals and Metals Trading Corporation Mumbai.	November 2007 to January 2009	23.31
4	Ordnance Factory Dehra Dun	The factory failed to recover water charges from the residents of its estates at appropriate rates	October 2003 to April 2008	8.30
			Total	**159.91**

Ordnance Factory Board in December 2009 accepted the above mentioned facts.

The matter was referred to the Ministry of Defence in July 2009; their reply was awaited as of April 2010.

7.9 Loss due to non-availing of power and load factor incentives

Ordnance Factory Ambernath and Ordnance Factory Dehu Road could not obtain incentives estimated at Rs 13.33 crore from their electric supply companies due to their failure to achieve the desired power and load factors.

The Maharashtra Electricity Regulatory Commission (MERC) offered power factor[21] and load factor[22] incentives to all its electricity consumers with effect from December 2003, for attaining the power/load factor as under:-

Sl. No.	Power factor	Incentives as a percentage of electricity charges	Load factor as a percentage of total contracted demand	Rebates as a percentage of electricity charges
1	0.95	Nil	Below 75 *per cent*	Nil
2	0.96	1	Between 75 *per cent* and up to 85 *per cent*	0.75 *per cent* for every percentage point increase beyond 75 *per cent*
3	0.97	2	Above 85 *per cent*	1 *per cent* for every percentage point increase beyond 85 *per cent* and up to a maximum of 15 *per cent*
4	0.98	3	-	-
5	0.99	5	-	-
6	1.00	7	-	-

While Ammunition Factory Kirkee obtained maximum power and load factor incentives from their electric supply agency by achieving the prescribed factors, Ordnance Factory Dehu Road (OFDR) and Ordnance Factory Ambernath (OFA) could normally achieve power factor ranging between 0.95 and 0.98 but the load factor was well below 75 *per cent* of the contracted demand during April 2004 to October 2008.

Power factor of unity (1) could have been achieved with the installation of condenser and capacitor banks at all major installations for which adequate infrastructure was available at OFA. Load factor above 75 *per cent* could also have been attained by readjusting the maximum demand of electricity based on the past consumption pattern. Having failed to do so, OFDR and OFA did not obtain incentives/rebates of about Rs 13.33 crore (Rs 5.05 crore as power factor incentives and Rs 8.28 crore as load factor rebates). Further, OFA did not obtain even the eligible power factor incentive of Rs 0.71 crore despite achieving power factor ratio ranging between 0.96 and 0.98 during April 2004 to October 2008.

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[21] Power factor is the ratio of the real power flowing to the load to the apparent power

[22] Load factor is the ratio of the total units of electricity consumed to the contracted maximum demand of electricity

Ordnance Factory Board (OFB) stated in November 2009 that OFDR had initiated action to install capacitor banks at all major load centers and that OFA was trying to achieve the power factor of 0.99, though it would involve huge capital investment and maintenance cost. OFB further stated that OFA had started receiving power factor incentives from October 2006 onwards and that the power factor incentive was not given by their supply agency till September 2006. OFB's contention that power factor incentive was applicable only from October 2006 is not tenable since the MERC had extended the incentives to all consumers with effect from December 2003. OFA needs to take up the matter with their electricity supplier to obtain Rs 0.71 crore due as power factor incentive.

Regarding the load factor, OFB stated that it was not possible for OFDR to achieve load factor above 75 *per cent* as it would involve continuous usage of the electrical gadgets irrespective of their requirements in production process. Further, OFA had reduced the contracted demand to obtain load factor rebates, although such reduction was not considered desirable as it might cause difficulty in the future when the demand for electricity is to be enhanced. The contention about the necessity for continuous usage of electrical gadgets irrespective of production load to obtain load factor incentives is irrelevant since load factor is the ratio of the consumption during a month to the possible maximum consumption. It is therefore a measure of efficiency and should be achievable with better load management by periodic analysis of average consumption pattern.

Considering the fact that the incentives lost by the two factories, viz. OFDR and OFA for the period up to October 2008 was a huge amount of about Rs 13.33 crore, concerted efforts are required to be taken by all the ordnance factories based in Maharashtra State to achieve the desired power/load factors to avail of the maximum possible incentives admissible under the incentive scheme announced by the Maharashtra Electricity Regulatory Commission.

The matter was referred to the Ministry of Defence in July 2009; their reply was awaited as of April 2010.

7.10 Suspected fraud in reimbursement of Customs duty to suppliers

Two private firms got "reimbursement" of Customs Duty of Rs 1.19 crore from Ordnance Equipment Factory Kanpur for supply of machines, by producing documents, suspected to be forged to claim the re-imbursement. Audit examination revealed that the one firm did not pay Customs Duty and another firm undervalued the cost of machines to pay lower rate to the Customs and managed to obtain reimbursement of higher rate of Customs Duty from the factory.

Mention was made in Paragraph 7.8 of the Compliance Report No 17 of 2008-09 of the Comptroller and Auditor General of India regarding a suspected fraud in payment of customs duty of Rs 31.20 lakh by the

Ordnance Equipment Factory Kanpur (OEF) to M/s Anurag Trading Company, Kanpur for import of two hydraulic shaving machines against its order of December 2007. Action Taken Note on the Paragraph was awaited as of February 2010 from the Ministry of Defence.

Further examination by Audit revealed that while procuring Moulding machine, Hydraulic Splitting machine, Fleshing machine and Splitting machine against its four orders placed between June 2006 and December 2007, OEF reimbursed customs duty amounting to Rs 1.18 crore to M/s Anurag Trading Company Kanpur. It was found that M/s Anurag Trading Company Kanpur got released the imported machines at nil rate of duty by producing customs duty exemption certificate bearing the signature of General Manager, OEF to the Customs.

After the case of suspected fraud, which was reported in Paragraph 7.8 of Compliance Audit Report No 17 of 2008-09 was raised by Audit in June 2008, M/s Anurag Trading Company Kanpur paid Customs duty of Rs 87.92 lakh (out of Rs 1.18 crore received from OEF), to the Customs in October 2008 along with penalty and interest of Rs 38.59 lakh. These cases reveal that the said firm had been persistently evading payment of Customs duties by producing 'fake' Customs duty exemption certificate but claiming the amount from OEF.

Audit also came across another case where M/s Perfect DMS Engineering Limited Kanpur, while importing clicking machine against OEF's order of October 2006, actually remitted Rs 1.25 lakh as duty to the Customs by undervaluing the cost of machine and obtained reimbursement of customs duty of Rs 2.56 lakh from OEF by submitting a forged duplicate copy of the Bill of Entry.

On being pointed out in Audit, Ordnance Factory Board (OFB) stated (November 2009) that there was no fault on the part of the factory as the firm fraudulently obtained exemption of Customs duty on the basis of forged documents without the knowledge of the customer. OFB's contention is not tenable since the factory had failed to ensure the authenticity of the documents provided by the private firms before reimbursement of customs duty.

The suspected fraud was, apparently, possible owing to absence of any system for verification of the genuineness of the claims submitted by the importers. The Ministry may devise a system for making an independent and mandatory verification from the customs authorities concerned by the purchasing agencies to ensure genuineness of the claims of suppliers for re-imbursement of customs duties in cases of supply of imported stores to the Defence Services. Although it is desirable to make pre-payment verification in all cases, post payment verifications may be resorted to where the time allowed for making contractual payment is limited making it impossible to verify genuineness before the due date of payment. In such cases, re-imbursement may be made by taking adequate

safeguards for effecting recovery, if the claims were found non-bona fide in the subsequent independent verification.

The matter was referred to the Ministry in August 2009; their reply was awaited as of April 2010.

(GAUTAM GUHA)
Director General of Audit
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New Delhi
Dated: 2010

Countersigned

(VINOD RAI)
Comptroller and Auditor General of India

New Delhi
Dated: 2010