

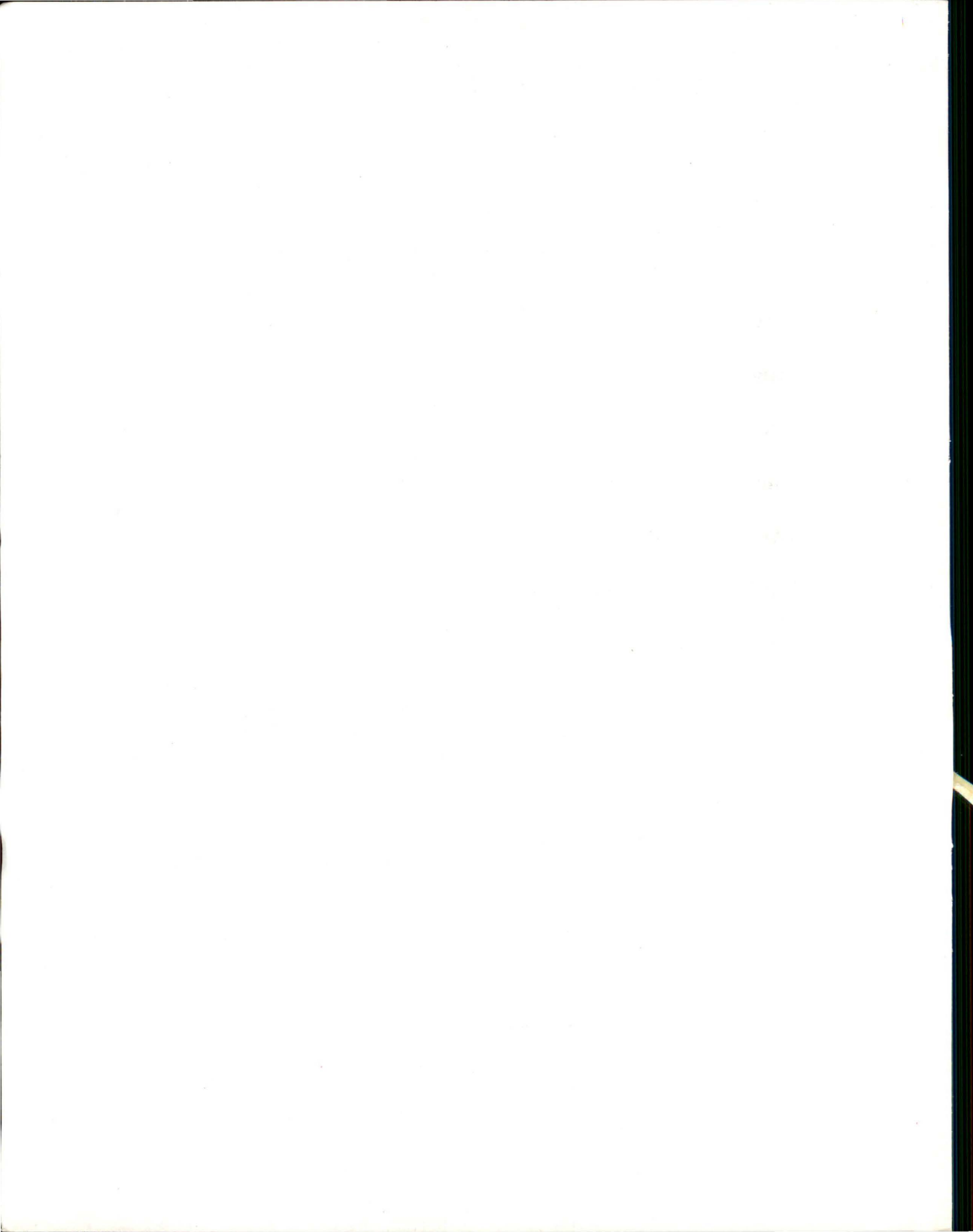
**Performance Audit of  
Supply Chain Management of  
Rations in Indian Army**

**Report of the  
Comptroller and Auditor General  
of India  
for the year ended March 2009**

03 AUG 2010  
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**Union Government  
(Defence Services-Army)**

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## PREFACE

A performance audit of the supply chain management of rations in the Indian Army was taken up with the objective of assessing the system of provisioning to ensure that the estimation of requirements was realistic and that the procurement was carried out according to the prescribed procedures and best practices. The audit also sought that the distribution system was strong enough to validate that the consuming unit was supplied required variety of quality ration as per the authorised quantity in a timely manner.

This report seeks improvement by highlighting the weaknesses in the system and goes on to recommend remedial measures which on implementation will lead to efficient management of the supply chain.

The Report has been prepared for submission to the President under Article 151 of the Constitution and is based on the findings of the test check of transactions of the Army Service Corps pertaining to the period from 2005-06 to 2007-08 and covered the three operationally active Commands viz. Northern Command, Western Command and Eastern Command apart from the Army HQ.



### HIGHLIGHTS

The Army Service Corps(ASC) is entrusted with the responsibility of providing rations to the Indian Armed Forces. The items of rations are divided into two categories, namely dry and fresh. Dry rations comprise of rice, wheat/*atta*, sugar, tea, edible oil, *dal*, dry fruits and tinned foods whereas items like vegetables, fruit, meat, milk constitute fresh rations. *(Paragraph 1.1)*

Dry rations are procured centrally through Army Purchase Organisation after quantity vetting by Ministry of Defence (Finance) and approval by the Competent Financial Authority. Fresh rations are procured in a decentralised manner at the level of the Supply Depot. The ASC formations at different levels make the procurement of such rations after conclusion of contracts within the powers of the Competent Financial Authorities at Command and lower echelons.*(Paragraph 1.3)*

The Performance Audit was carried out in the Northern, Eastern and Western Command of the Army. These Commands are operationally active and supply chain mechanism are more complex here because of terrain conditions and dispersal of troops. Eight items of dry rations viz. rice, *atta*, sugar, *dal*, tea, edible oil, malted milk food and jam tinned were taken up in audit for scrutiny. Entire range of fresh rations were selected in audit for scrutiny.*(Paragraph 1.4)*

The performance audit of the Supply Chain Management of Rations was carried out to assess whether (a) the system of provisioning ensured realistic estimation of requirement for dry rations without significant over or under procurement and stocking; (b) the procurement of rations was conducted according to the prescribed procedures and best practices to ensure timely availability of the required quantity of quality rations at reasonable prices; (c) the management of contracts was done in an efficient manner to ensure effectiveness and economy without compromising the quality; (d) the distribution system ensured that rations to consuming units were supplied as per the prescribed scales, variety and qualitative standards; and (e) the users were satisfied with the quality and availability of rations supplied. *(Paragraph 1.5)*

#### **Audit Findings**

The existing procedure for provisioning of dry rations failed to assess the requirement realistically. The failure was mainly due to systemic deficiencies due to which different quantities were worked out at different echelons applying different parameters. Opening stock balances adopted at different levels for demand projections differed substantially. The final requirement was, however, arrived through discussions between DGS&T and the Ministry. *(Paragraph 2.1)*

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During the last three years, except in the case of wheat and malted milk food in 2005-06, none of the selected items was procured according to the indented quantity by the APO. While in case of Sugar and Jam, there was over procurement, in all other items, there were significant under procurement which rendered the whole exercise of provisioning ineffective. **(Paragraph 2.2)**

Many of the national Federations and PSUs who were contracted to supply *Dal* and Tea failed to supply. These had to be procured through local purchase and Army incurred an extra expenditure of Rs 30.06 crore on account of local purchase of *Dal* and tea to meet the shortage caused due to failure of central supplies. **(Paragraph 2.2)**

Apart from being unwieldy the existing practice of procuring *Atta* by grinding of wheat purchased from FCI was uneconomical in comparison to the cost of branded *Atta* readily available in the market. The Army was incurring an estimated additional expenditure of Rs 25 crore annually, besides maintaining a detachment of personnel at each mill. **(Paragraph 2.2)**

Based on repeated extensions given by the CFL Jammu, troops in Northern Command were issued rations even after the expiry of original Estimated Storage Life (ESL). While the DGS&T instructions prohibit any extensions beyond three months of the ESL, yet *atta*, sugar, rice, tea, *dal*, edible oil, etc. was consumed even six to 28 months after the expiry of the original ESL. **(Paragraph 2.3)**

The procurement procedure for fresh items of rations was highly non-competitive and fraught with the risk of cartels. Despite the valid registration of 110 to 222 vendors in the three selected Commands, procurement in 46 *per cent* of the cases was done on the basis of two quotations. In 36 *per cent* cases contracts were concluded on the basis of single quotation only. A large number of vendors registered contrasting with only one or two vendors purchasing tender documents points strongly towards the serious problem of cartelization. **(Paragraph 3.2)**

In Delhi only one vendor purchased the tender documents and supplied meat worth Rs 5 crore annually during the last 3 years. Similarly in Chandimandir, only one contractor responded and bagged the contract for supply of meat with annual order values of Rs 2.34 crore. **(Paragraph 3.2)**

To determine the reasonable rates of various items of fresh rations, a Board of Officers constituted by the Station Commander determine the Average Local Market Rate (ALMR). Prior to opening of tenders, Reasonable Rates (RR) are worked out by a panel of officers for each item and station. In audit, it was seen that the accepted rates were way below the ALMR. Difference ranged from 25 *per cent* to 55 *per cent*. **(Paragraph 3.3)**



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While procurement rates of the adjoining stations forms a cogent benchmark for fixing of rates, a wide variation of up to 186 *per cent* was observed in such rates for procurement of fresh rations. **(Paragraph 3.4)**

The distribution of fresh vegetables and fruits was not in accordance with the prescribed norms. In 74 *per cent* of issue the consuming units did not receive the rations as per the prescribed mix. More importantly, Audit also found that items received by the consuming units were different from what was shown to have been issued to the unit by the supply depot. In many cases quantities also varied. **(Paragraph 4.1)**

The feedback reporting system of the Army showed that in 68 *per cent* cases the quality of rations was graded as satisfactory and below. This was notwithstanding the fact that “satisfactory” quality of rations was deemed unacceptable by one formation Commander. In 14 out of 50 selected cases in a Corps the quality of rations being supplied to troops was poor. **(Paragraph 4.4)**

## **RECOMMENDATIONS**

Accurate estimation of requirement being of critical importance in the large scale Supply chain of Dry Rations, the Standard Operating Procedures need to be reviewed urgently so that more realistic assessment of requirement can be made. Ministry should also review the reasons why the laid down procedures have failed to generate realistically accurate estimates and take corrective actions accordingly.

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Ministry of Defence and Army Headquarters should take urgent steps to strengthen the procurement procedures so that wide variations between provisioning and procurement are avoided. Ministry and APO should consider introduction of such risk purchase clauses in the Central Procurement contracts which will cover the local purchases made by the Supply Depots in case of non performance of the Central Contract.

\*\*\*

Opening up in well calibrated stages the procurement process to bulk producing companies especially in case of Sugar, *Dal* and Edible Oil should be considered.

\*\*\*

Ministry of Defence and Army Headquarters should consider the issue of procuring *atta* directly from the open market in packed bags.

\*\*\*

To ensure supply of good quality rations to the troops, Ministry and Army Headquarters should set a time limit for extension of estimated storage life taking into account the climatic conditions, beyond which under any circumstances, estimated shelf life of food items should not be extended.

\*\*\*

There exists a case for expanding the vendor base for supply of fresh rations. The risk of existence of cartels affecting the quantity and quality of rations is too serious to be ignored. Ministry of Defence should set clear targets regarding expansion of vendor base and progress should be closely monitored. The list of vendors should be put on the website of the ASC.

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Adequate care should be taken before registering the vendors. Registration should be done for specific vendors for specific group of items and experience of the vendors in dealing with those items should be verified.

\*\*\*

A specific period should be laid down, during which if a vendor fails to respond to any tender, he should be taken out of the vendors' list. Blacklisting of such vendors for a prescribed period also should be considered.

\*\*\*

Abnormal variations in rates of vegetable fresh, fruits and meat must be investigated and the Ministry may provide an assurance that these variations do not arise from any fraud or corrupt practices in the procurements of fresh rations in Army. Last Purchase Price of these rations should also be displayed on the website of ASC, which could be accessed by Supply Depots.

\*\*\*

Ministry should develop a mechanism in which the Reasonable Rates are realistically arrived and then enforced properly. Steps should be taken to disseminate more information and the representatives of the PCDA who is common to all such committees should play a more pro active role.

\*\*\*

Ministry should develop a set of guidelines containing Dos and Don'ts in such negotiations and hold procurement officers including financial advisers accountable for any significant deviation from the laid down norms of tendering.

\*\*\*

Ministry and Army Headquarters should review the whole set of instructions from the point of view of their implementability. In view of the logistical challenges facing procurement of fresh rations on such a huge scale, it is necessary that a thorough appraisal is made to identify the weaknesses in the system and rectify them.

\*\*\*

It is strongly recommended that Ministry and Army Headquarters should immediately draw up a detailed plan to computerise the management of supply chain of both dry and fresh nations. The power of the Information Technology should be leveraged to create a networked system connecting all the Supply Depots and Supply points. Issues, Receipts, Inventory management, Procurement and other aspects of supply chain management should be brought under this system. Contracted prices of various items should be published on the dedicated website to be created for this purpose.

The first part of the report deals with the general principles of supply management and the various methods of supply management.

The second part of the report deals with the various methods of supply management and the various methods of supply management.

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## Chapter 1: INTRODUCTION

### 1.1 Army Service Corps

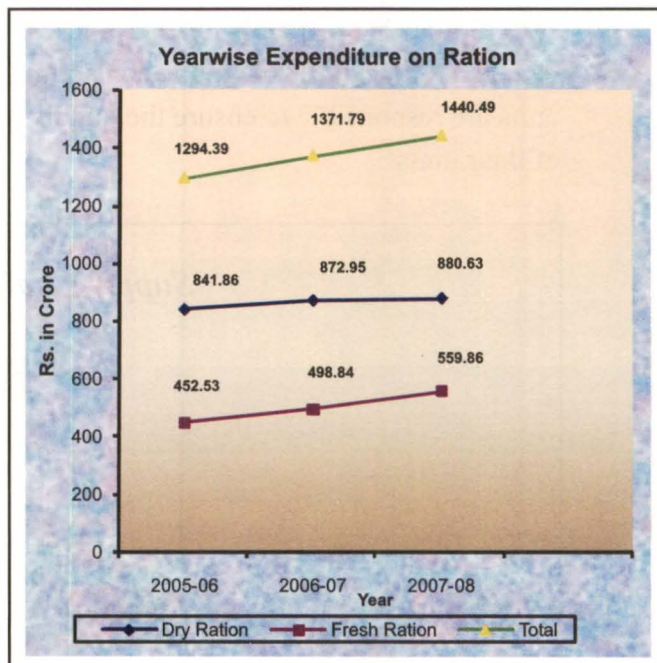
The Army Service Corps (ASC) is entrusted with the responsibility of providing rations to the Indian Armed Forces. The items of rations are divided into two categories namely dry and fresh. Dry items comprise of rice, wheat/atta, sugar, tea, edible oil, dal, dry fruits and tinned food, whereas items like vegetables, fruit, meat, milk etc., constitute fresh rations.

It is the primary responsibility of the Corps to provide wholesome and nutritious food to troops to meet their calorific and nutritional requirements so as to enhance their performance in

various terrains and climatic conditions. The ASC also supplies rations to other forces like Rashtriya Rifles, Border Security Force etc., when demanded. Supply of fresh rations to Air Force and Naval units, is through Air Force and Navy channels, which are independent of ASC.

| Year    | Expenditure (Rs in crore) |              |         |
|---------|---------------------------|--------------|---------|
|         | Dry Ration                | Fresh Ration | Total   |
| 2005-06 | 841.86                    | 452.53       | 1294.39 |
| 2006-07 | 872.95                    | 498.84       | 1371.79 |
| 2007-08 | 880.63                    | 559.86       | 1440.49 |

Table 1



ASC is headed by the Director General Supplies & Transport (DGST). About Rs 1440 crore is spent annually on procurement of rations.

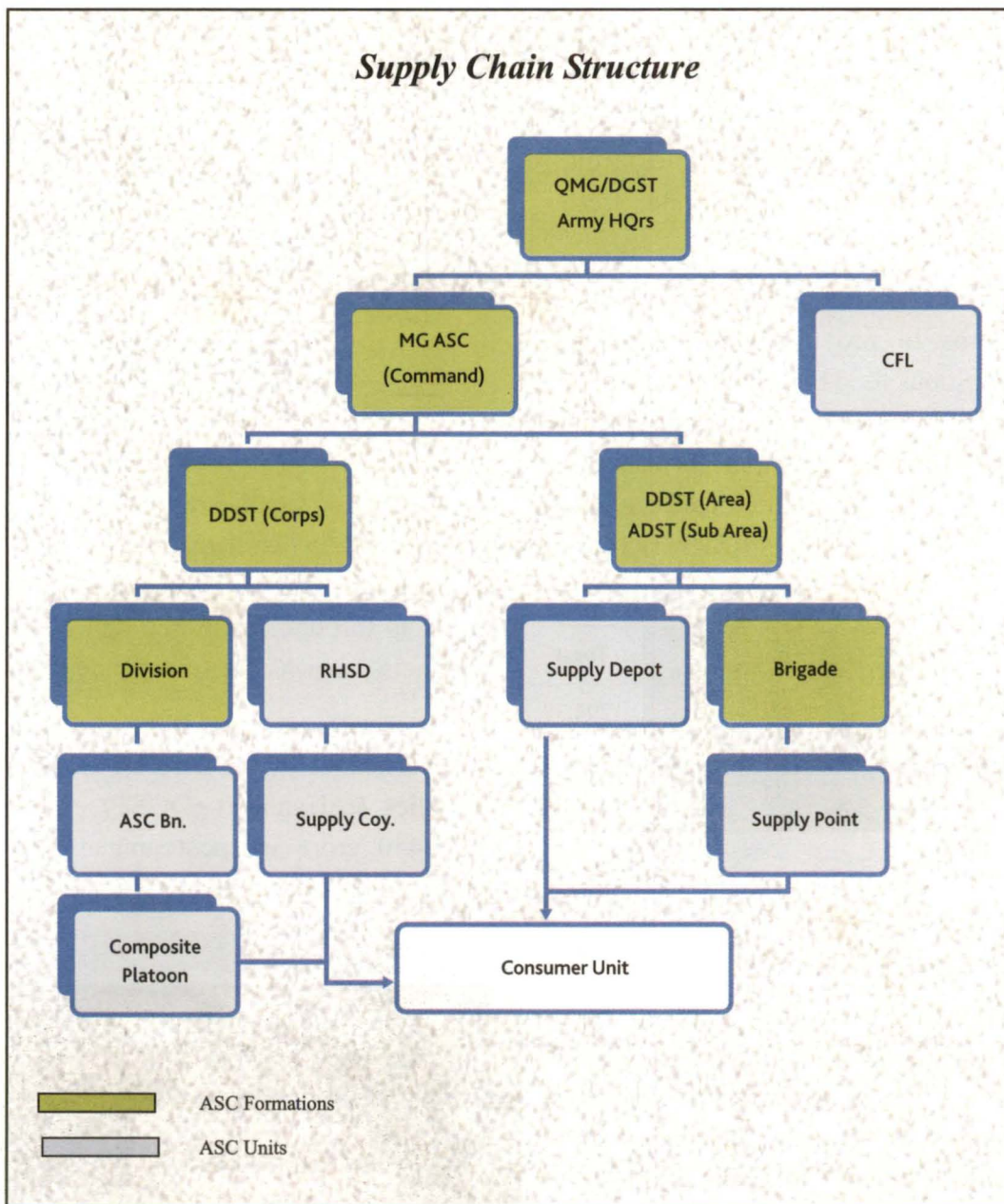
### 1.2 Supply Chain Structure

At Army HQ, the Quarter Master General (QMG) under whom the DGST functions is the Principal Staff Officer responsible for the effective and efficient functioning of the Army's supply chain of rations. At the



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Command level, the ASC formation is headed by the Major General Army Service Corps (MGASC) who controls the ASC functionaries at the Corps, Division and Area levels and executes the supplies through Supply Depots/ Companies under those formations. The Supply Depots located at each of the stations or formations play critical roles in the supply chain as these are responsible for the local procurement, receipt, storage and issue to the consuming units. The Commanding Officers of the units are responsible to ensure the quality and quantity of the supplies to the troops of their units.

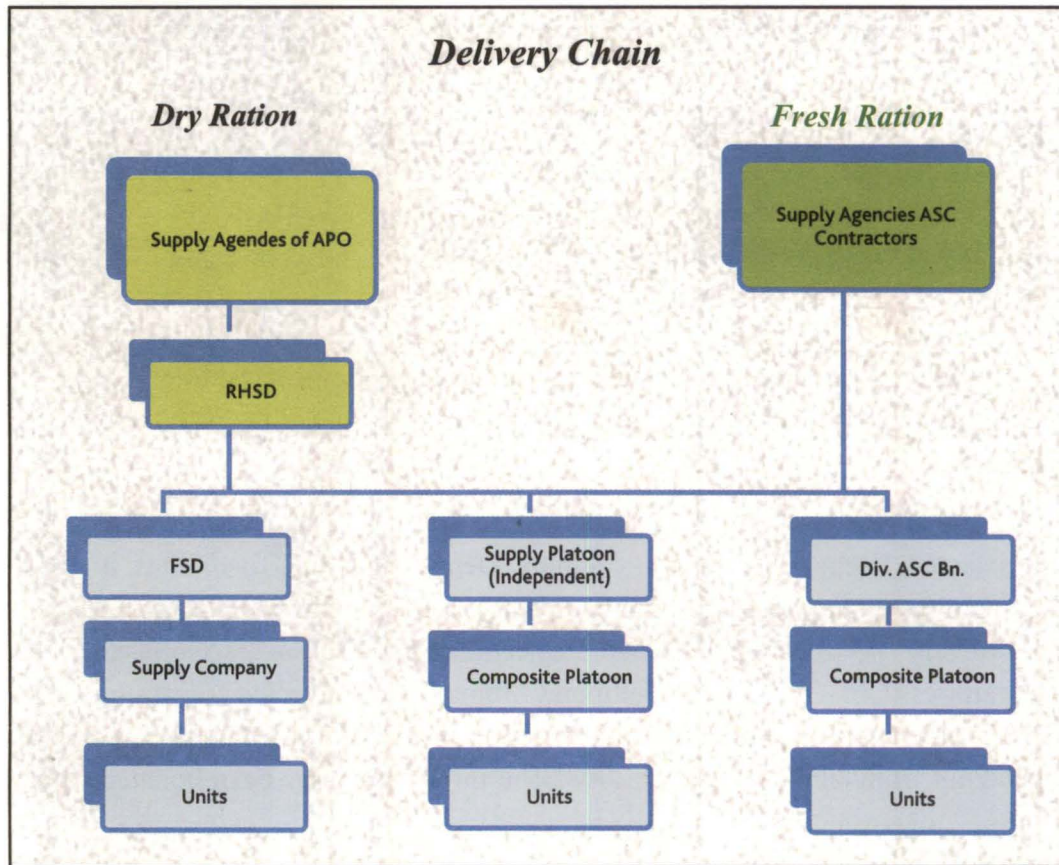


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## 1.3 Delivery Mechanism

Dry items of rations are procured centrally through Army Purchase Organisation (APO) after quantity vetting by the Defence (Finance) and approval by the Competent Financial Authority. Dry rations are delivered by the supplying agencies at the designated Rail Head Supply Depot (RHSD)/ Supply Depot (SD) after inspection by the Composite Food Laboratories (CFL). Further distribution to Field Supply Depots (FSD), Divisional ASC Battalions and Supply Platoons is carried out as per the Despatch Instructions (DI) issued by the Command Headquarters. Issue to consuming units is done by the Supply companies of the FSDs and Composite Platoons of other stock holding units.

Fresh rations are procured in a decentralized manner at the level of Supply Depots. Contracts for fresh rations are however, entered at the Command level. The ASC formations at different levels make the procurements of such rations after conclusion of contracts within the powers of the Competent Financial Authorities at Command and lower formation levels. Inspection, receipt and distribution of fresh rations are done by the supply unit of the formation as indicated in the graph below.



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### 1.4 Scope of Audit

The Performance Audit was carried out in the Northern, Eastern and Western Commands of the Army which are operationally active and, where the supply chain mechanisms are more complex because of terrain conditions and dispersal of troops. The selection of Commands was also determined by factors like feeding strength and the proportion of expenditure incurred. The following table indicating Command wise feeding strength is also suggestive of the fact that 64 per cent of the expenditure on fresh rations was spent in the Commands selected for audit. Separate expenditure for these Commands for dry rations could not be compiled as expenditure on dry rations which are procured centrally by the Army Purchase Organisation and released to Commands is controlled and managed by the Army HQ.

Table -2

#### *Expenditure on fresh rations by the Commands selected for Audit*

| Command  | Feeding strength (in ratio) | Expenditure (Fresh rations) 2007-08 |                                    |
|----------|-----------------------------|-------------------------------------|------------------------------------|
|          |                             | Rs in crore                         | As percentage of total expenditure |
| Northern | 8X                          | 201.17                              | 35.93                              |
| Western  | 5.5X                        | 79.18                               | 14.14                              |
| Eastern  | 4X                          | 77.90                               | 13.91                              |

Eight items of dry rations viz., *Atta*, Rice, Sugar, *Dal*, Tea, Edible Oil, Malted Milk Food and Jam Tinned were selected for scrutiny. These items constitute 98 per cent of the total volume of dry rations. Entire range of fresh rations was selected for detailed scrutiny.

The documents were examined at Supplies and Transport Branch of the Commands and selected Corps Headquarters, Supply Depots and ASC battalions in those Commands. At the central level, records were examined at DGS&T, APO and the Ministry. As regards the Food Inspection Organisations, Composite Food Laboratories (CFL) at Jammu, Delhi and Mumbai were selected for scrutiny. The performance audit covered a three year period from 2005-06 to 2007-08 and was carried out from June to October 2008. The information has been updated where required and possible.



### 1.5 Audit Objectives

The performance audit of the Supply Chain Management of Rations was carried out to assess whether:

- *The system of provisioning ensured realistic estimation of requirement for dry rations without significant over or under procurement and stocking;*
- *The procurement of rations was conducted according to the prescribed procedures and best practices to ensure timely availability of the required quantity of quality rations at reasonable prices;*
- *The management of contracts was done in an efficient manner to ensure effectiveness and economy without compromising the quality;*
- *The distribution system ensured that rations to consuming units were supplied as per the prescribed scales, variety and qualitative standards; and*
- *The users were satisfied with the quality and availability of rations supplied.*

### 1.6 Audit Criteria

The criteria for evaluating performance were derived from the following:

- *Standard Operating Procedures issued by Ministry of Defence*
- *Existing rules and regulations regarding tendering*
- *Technical instructions issued by agencies*
- *Defence Procurement Manual*

### 1.7 Audit Methodology

After a preliminary study to collect background information, the Performance Audit commenced with an Entry Conference with the Ministry of Defence on 15 July 2008. Detailed audit scrutiny was conducted at the Ministry of Defence, Office of the DGST, Command Headquarters, and selected Supply Depots. The reply of the lower echelons and the Army HQ has been taken into account to finalise the report. The draft Report was issued to the Ministry of Defence on 22 January 2009 and their reply was awaited as of March 2010.

### 1.8 Acknowledgement

Officials of the Ministry of Defence, DGST, MGsASC and Supply Depots had extended full co-operation during the audit which is gratefully acknowledged.

## Chapter 2: DRY RATIONS

### Audit Objective:

To assess whether

- the system of provisioning ensured realistic estimation of requirement.
- Procurement was conducted to ensure timely availability of the required quantity of quality ration.

### 2.1 Provisioning of Dry rations

Provisioning is the process of estimation of the annual demand for rations, for which procurement action is taken. In view of the large feeding strength, the vast geographical spread of the Army and centralized system of procurement coupled with limited shelf life of dry rations, correct estimation of requirement is a challenging but important task. Since bulk contracts are executed by the APO for supply of dry rations



based on the agreed levels of annual demands and thereafter, quantities are released to the Commands

Volume of Rations is very high.

for which payments are released centrally, realistic provisioning becomes extremely important from the point of view of inventory management. Unrealistic provisioning can lead to over-provisioning, which in turn causes wastage. Under-provisioning, on the other hand, results in short supply of rations to the troops. Such provisioning depends on three critical factors namely opening balance including dues-in, feeding strength, and estimated dues-out based on laid down scales of rations.

Ministry of Defence (Finance) laid down Standard Operating Procedures (SOPs) in December 2003, for Provision Review and Quantity Vetting for procurement through Army Purchase Organisation. In terms of these, the primary parameter for provisioning is the feeding strength which is calculated at 5/6<sup>th</sup> level of posted

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strength. 1/6<sup>th</sup> of the posted strength is not taken into account as army personnel are allowed two months' annual leave. The other inputs taken into account by the Area / Command HQ while preparing the demand are enumerated below:

- (a) Scales of rations as authorised by relevant Government and Army instructions;
- (b) Number of issues authorised;
- (c) Estimated assets on ground as on 31 March i.e. opening balance for the ensuing year;
- (d) Consumption figures for the last three years; and
- (e) Estimated payment issue requirement, if any.

The annual demands are compiled at the Command level by generating the Stock Return and Demand Statement (SRDS) from similar returns received from the lower echelons. The demands reflected in the SRDS take into account the feeding strength, scales of rations, opening balance and dues-in requirements.

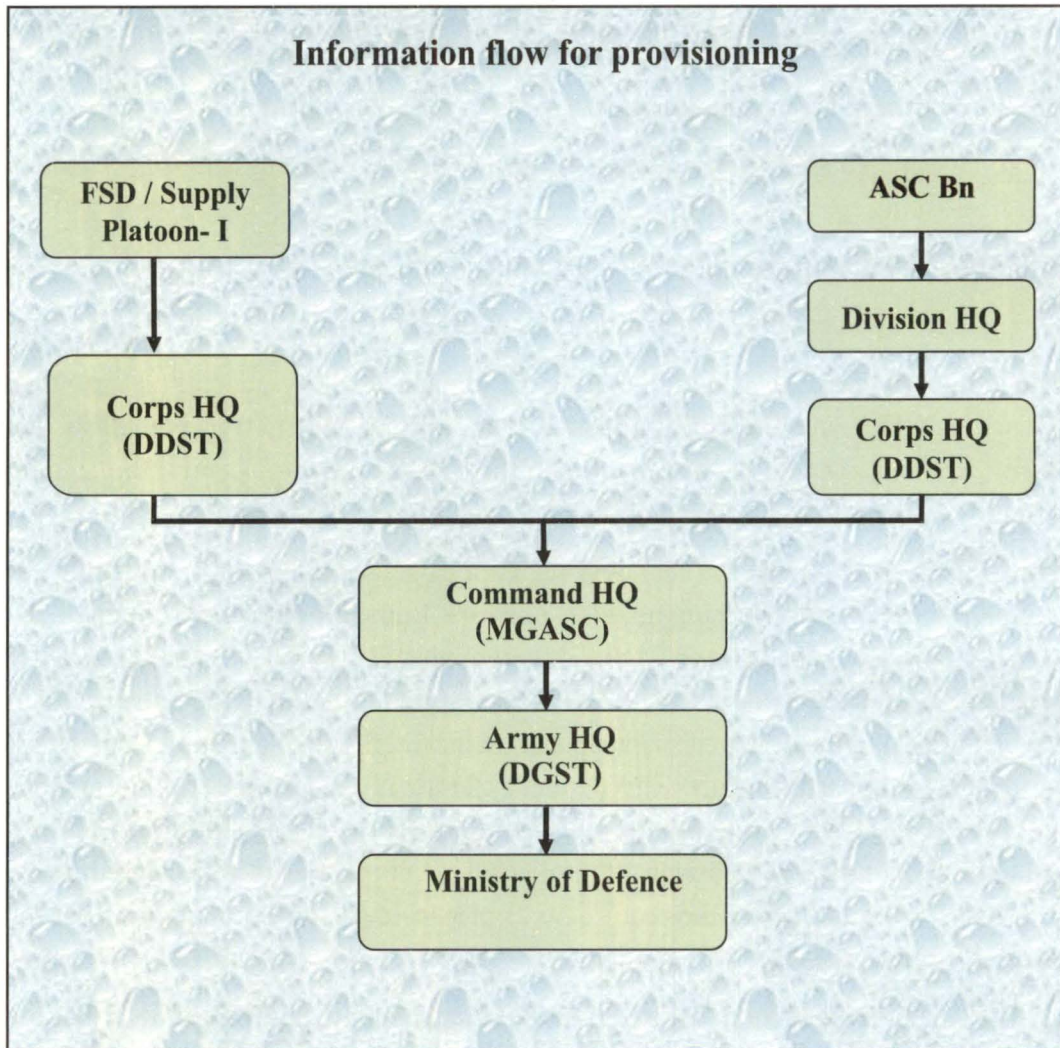
The SOPs also prescribe the schedule for various stages to be observed for timely completion of the provisioning process. The time frame requires the Command HQ to submit the Stock Return and Demand Statement (SRDS) to DGST by 31 May for provisioning for the next year. The DGST is required to validate the correctness of the demands and scrutinize the same to ensure that all the requisite inputs have been furnished by the Commands. The demand statements received from Commands are to be compiled to make a proposal separately for dry items and tinned rations. Additional quantity on account of the following eventualities is also catered for by the DGST, over and above the requirements projected by the Commands as per the normal formula:

- (a) Cushion on account of time required in inspection, analysis and verdict by CFL and transit from place of tendering to consignee depot;
- (b) Three months Advance Winter Stocking (AWS) in Northern Command beyond normal consumption year (April to March) to cater for road closure/transit up to June; and
- (c) Crushing/grinding refraction loss in case of wheat.

The DGST then projects the annual requirement of rations by 20 July to the Ministry for concurrence. Feeding strength statement of Army, Air Force, Navy and Paramilitary Forces along with consumption figures statement for preceding year are submitted with the proposal. The Ministry is required to concur with the proposal by 20 August, which is followed by approval of quantity for each item by

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the competent financial authority (CFA). Chart indicating the flow of information/ data for provisioning of dry rations from Supply Depot to the Ministry is given below:



Indents are then placed for the required quantities on the agencies concerned for procurement.

### **Provisioning was done on normative basis**

During audit, we found little evidence of seamless implementation of the laid down procedures. In fact we noticed differences in the estimation of annual requirement of dry rations at all levels i.e. Command HQ, the Army HQ and the Ministry. Different quantities were worked out by different agencies using different figures of the feeding strength of the troops and more importantly of the opening balance. The final requirement, on which procurement action was taken, was arrived after

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discussion and mutual agreement between the DGST and the Ministry. Scales of rations are laid down and data relating to opening balance and feeding strength is verifiable. Yet, critical data like feeding strength and opening balance, on the basis of which the provisioning was done, varied at different levels and was thus exposed to the risk of over or under provisioning. Scrutiny by Audit indicated more of excess provisioning than under provisioning. The discrepancies noticed in the provisioning process are discussed in the following paragraphs:

The annual requirement of dry rations projected by the three Commands to the DGST was significantly different from the demand worked out after consolidation of the SRDS received from the lower echelons under its control. Significant variations in respect of the items selected by Audit are given in Table 3:

**Table-3**

*Variation in the quantities worked out and quantities projected by the Commands*

| Year    | Item       | Command  | Qty (in MT)<br>Worked out by<br>lower echelons | Qty (in MT)<br>projected by<br>Commands to<br>DGST | Variation<br>(in per cent) |
|---------|------------|----------|--|--|----------------------------|
| 1       | 2          | 3        | 4  | 5  | 6                          |
| 2005-06 | Rice       | Western  | 18914  | 22000  | +16                        |
| 2006-07 | Rice       | Northern | 49386  | 40000  | -19                        |
| 2007-08 | Rice       | Northern | 32583  | 40000  | +23                        |
| 2006-07 | Wheat      | Western  | 24124  | 22000  | -9                         |
| 2006-07 | Dal        | Northern | 13949  | 11000  | -21                        |
| 2005-06 | Sugar      | Eastern  | 6271   | 8483   | +35                        |
| 2007-08 | Sugar      | Northern | 11006  | 13000  | +18                        |
| 2007-08 | Sugar      | Eastern  | 8806   | 10365  | +18                        |
| 2007-08 | Edible Oil | Northern | 7350   | 12000  | +63                        |
| 2006-07 | Tea        | Northern | 1676   | 1300   | -22                        |
| 2007-08 | Tea        | Northern | 1058   | 1300   | +23                        |
| 2005-06 | MMF        | Northern | 378  | 560  | +48                        |
| 2006-07 | MMF        | Northern | 927  | 600  | -35                        |
| 2006-07 | Jam        | Northern | 681  | 400  | -41                        |
| 2006-07 | Jam        | Western  | 122  | 175  | +43                        |

During audit, we could not find any consistent pattern to such differences nor was it explained to us. In case of Edible Oil the quantities projected to the DGST exceeded the combined demands by as much as 63 per cent, while the projected demand for jam was less than the combined demands by 41 per cent.

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Despite the elaborate exercise at the Command level, the DGST at Army HQ independently worked out the requirements of dry rations based on the posted strength of troops obtained from the manpower planning (MP) Directorate of Army HQ. There were, again, significant differences between the quantities demanded by the Commands and the requirements determined by the DGST. For instance, the requirement of wheat determined by DGST in 2005-06 was 162469 MT against the aggregated demand of 124934 MT of all the Commands i.e., 37,535 MT in excess. On the other hand, the requirement of sugar determined by the DGST in 2007-08 was 17,712 MT short of the combined demand projected by the Commands. The position is given in Table 4.

**Table-4**  
*Quantities demanded by all Command HQs and quantity worked out by Army HQ*

| Item              | Demand for net quantities projected by ( in MT) |        |                      |          |        |                      |          |        |                      |
|-------------------|---|--------|----------------------|----------|--------|----------------------|----------|--------|----------------------|
|                   | 2005-06   |        |                      | 2006-07  |        |                      | 2007-08  |        |                      |
|                   | Commands  | AHQ    | Percentage Variation | Commands | AHQ    | Percentage Variation | Commands | AHQ    | Percentage Variation |
| <i>Atta/Wheat</i> | 124934  | 162469 | 30                   | 142000   | 142309 | 0.2                  | 144246   | 141840 | -2                   |
| <i>Rice</i>       | 137342  | 131829 | -4                   | 139620   | 128546 | -8                   | 129702   | 129077 | -0.5                 |
| <i>Sugar</i>      | 49921   | 51024  | 2                    | 46097    | 42973  | -7                   | 51451    | 33739  | -34                  |
| <i>Dal</i>        | 40286   | 42685  | 6                    | 38512    | 37929  | -2                   | 44633    | 40540  | -9                   |
| <i>Tea</i>        | 4027  | 5388   | 34                   | 4349     | NA     | NA                   | 4092     | 4294   | 5                    |
| <i>Oil</i>        | 34122   | 37648  | 10                   | 35194    | 32387  | -8                   | 34298    | 35070  | 2                    |
| <i>Jam Tinned</i> | 997   | 1020   | 2                    | 1140     | 1199   | 5                    | 976      | 765    | -22                  |
| <i>MMF</i>        | 3512  | 3474   | -1                   | 4200     | 4137   | -2                   | 3287     | 3079   | -6                   |

When the total annual requirement determined by DGST was finally proposed to the Ministry for approval, the Ministry calculated the requirement on its own using the posted strength as furnished by the MISO (Management Information System Organization) as input. The total annual requirement for dry rations was finally arrived at through discussion between the Ministry and the DGST. It was observed in audit that the requirement finally projected by the Army HQ was always far in excess of requirement calculated by the Ministry and in most of the cases, the demand that was finally agreed was closer to the demand estimated by the Ministry as shown in table below:

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Table-5

*Quantity projected by Army HQ and those negotiated with MOD (Fin) ( in MT)*

| Item  | 2005-06                       |                         |                | 2006-07          |                         |                | 2007-08          |                         |                |
|-------|-------------------------------|-------------------------|----------------|------------------|-------------------------|----------------|------------------|-------------------------|----------------|
|       | Projected by AHQ <sup>1</sup> | Worked out by MOD (Fin) | Finally Agreed | Projected by AHQ | Worked out by MOD (Fin) | Finally Agreed | Projected by AHQ | Worked out by MOD (Fin) | Finally Agreed |
| Wheat | 188500                        | 155000                  | 145000         | 167400           | 150000                  | 145000         | 167700           | 145000                  | 145000         |
| Rice  | 156000                        | 140000                  | 140000         | 152000           | 125000                  | 138000         | 152700           | 139000                  | 130000         |
| Sugar | 62102                         | 47000                   | 47000          | 54000            | 49000                   | 47000          | 50050            | 47000                   | 47000          |
| Dal   | 50300                         | 45000                   | 47000          | 45300            | 41000                   | 42000          | 48000            | 42000                   | 42000          |
| Oil   | 46000                         | 40000                   | 41000          | 43000            | 34000                   | 37000          | 44000            | 40000                   | 40000          |
| Tea   | 6400                          | 4800                    | 5000           | 5200             | 3410                    | 4100           | 5350             | 4100                    | 4200           |
| MMF   | 4168                          | 2750                    | 2750           | 4900             | 3900                    | 3200           | 3881             | 3400                    | 3300           |

Audit found that the huge variation between the requirements worked out by the Ministry and the Army HQ was mainly due to the difference in arriving at the feeding strength i.e. the number of persons to be provided with rations. However, more alarmingly, the estimated opening stock as on 01 April of the ensuing year at the start of the provisioning period as adopted by the Ministry was different from that adopted by the Army HQ. Thus the total requirement was centrally determined more on a normative basis rather than on actual data as neither DGST nor the Ministry had at their disposal the correct figures of feeding strength and opening balance on ground.

### **Opening Stock balances adopted at different levels for demand projections differed substantially**

The opening balances for various items as projected by Army HQ differed substantially from the opening balances adopted by the Ministry while provisioning for the year. As on 1 April 2007, Army projected an opening balance of 15037 MT of wheat, whereas Ministry took 20105 MT as opening balance while calculating requirements for the year. The difference was of 5068 MT (34 per cent). In case of Sugar, the difference was of 2656 MT (19 per cent). In the absence of any data regarding opening balance at the stock holding echelons, such normative estimation of the opening stock by various agencies becomes a guessing exercise. The issue attains significance as in case of items other than wheat and rice, local purchases are resorted to frequently.

Factors like lack of reliable data on actual opening stock balance and feeding strength create significant risks of loss and wastage in the supply chain of dry rations. Management of commodities has a great deal of inherent risks of loss and wastage. The risks are exacerbated by lack of real data.

<sup>1</sup> Includes projections for Paramilitary Forces for 2005-06, 2006-07 & 2007-08

### **Recommendation 1**

**Accurate estimation of requirement being of critical importance in the large scale Supply Chain of Dry Rations, the Standard Operating Procedures need to be reviewed urgently so that more realistic assessment of requirement can be made. Ministry should also review the reasons why the laid down procedures have failed to generate realistically accurate estimates and take corrective actions accordingly.**

As regards the variations at the Command levels, while the HQ Northern and Eastern Commands did not offer any comments, Western Command HQ termed these variations as marginal and insignificant. The Army HQ in its reply attributed the variations to the additional cushion of two or three months which are planned to ensure that provisioning is adequately sufficient for the entire strength of defence forces and also to cater for increase/decrease of dependant troops in any area due to operational deployment, movement of units, training/exercises etc. The contention of Army HQ needs to be viewed in the light of the fact that cushions for the above stated unforeseen eventualities are also applied by the DGST.

The difference in working out the requirement at the Command level and by DGST was ascribed by the Army HQ to the perception of strength compilation at various levels. The Army HQ further acknowledged that the correct feeding strength of dependant troops can only best be obtained from Command HQ and that the strength obtained from MP directorate serve as general guidelines only. Notwithstanding such assertions and the provisions in the SOPs, the fact remains that the Army HQ overruled the numbers projected by the Commands and worked out the requirement on the basis of strength furnished by MP directorate.

The Army HQ stated that the difference in opening stock balances as on 01 April of ensuing year, adopted by the Army HQ and the Ministry was due to time lag of four/five months between the respective dates of their projection of requirement. While this may be true, this does not explain the wide variations in the figures of opening balance adopted by different agencies. None of the agencies use real data for provisioning.

Noting the concern of audit, Army HQ also informed that automation of supply functionalities was under way and once implemented, it would lead to better asset visibility and responsiveness and would ultimately lead to judicious management of resources.



### 2.2. Procurement of Dry Rations

Procurement of dry rations is the responsibility of the Army Purchase Organisation (APO) which is a separate wing functioning under the Ministry of Defence. Rice and Wheat are directly procured from the Food Corporation of India (FCI) after allocation by Department of Food & Public Distribution on a quarterly basis. These quarterly allocations are further distributed among the Command Headquarters, who based on the stock position in the Supply Depots issue release orders. The stock is then released by FCI on pre payment made by Supply Depots through the Controllers of Defence Accounts. Acceptance of these articles is subject to inspection by Composite Food Laboratories (CFL)/ Food Inspection Units (FIU) prior to dispatch by road. Sugar is allocated to the Army out of the levy quota by the Directorate of Sugar, Government of India. On allocation of levy sugar quota, APO issues supply orders to the concerned mills at the levy rates decided by Ministry of Consumer Affairs, Food and Public Distribution. *Dal*, Tea and Edible Oils are procured by APO from PSUs, state/national level cooperatives and federations enlisted with the Organisation. Tinned food and dry fruits are procured through open tender system from private firms/dealers registered with APO.

#### **Procurement not aligned with provisioning**

Indents are placed on APO for the annual requirement of rations as approved by the Ministry. It was noticed during audit that during the last three years, except in the case of wheat and malted milk food in 2005-06, none of the selected items was procured according to the quantity arrived after the provisioning exercise. The shortfall in procurement was due to failure of the contractors, most of them national level federations, to supply. The table on the following page sums up the picture:

Table-6

*Shortfall in procurement of indented quantity of dry rations*

(Qty in MT)

| 2005-06 |                 |              |                                     |                    |  |
|---------|-----------------|--------------|-------------------------------------|--------------------|--|
| Item    | Qty provisioned | Qty procured | Percent short fall (-) / Excess (+) | Local Purchase qty | Net Percent shortfall (-) / Excess (+) |
| Wheat   | 145000          | 145000       | Nil                                 | Nil                | Nil                                    |
| Rice    | 140000          | 137000       | (-) 2                               | Nil                | (-) 2                                  |
| Sugar   | 47000           | 54765        | (+) 17                              | Nil                | (+) 17                                 |
| Dal     | 47000           | 24385        | (-) 48                              | 7266               | (-) 33                                 |
| Oil     | 41000           | 36325        | (-) 11                              | Nil                | (-) 11                                 |
| Tea     | 5150            | 3735         | (-) 27                              | Nil                | (-) 27                                 |
| MMF     | 2160            | 2160         | Nil                                 | Nil                | Nil                                    |
| Jam Td  | 1050            | 599          | (-) 43                              | Nil                | (-) 43                                 |
| 2006-07 |                 |              |                                     |                    |  |
| Wheat   | 145000          | 138075       | (-) 5                               | Nil                | (-) 5                                  |
| Rice    | 138000          | 128147       | (-) 7                               | Nil                | (-) 7                                  |
| Sugar   | 47000           | 58944        | (+) 25                              | Nil                | (+) 25                                 |
| Dal     | 42000           | 24612        | (-) 41                              | 12687              | (-) 11                                 |
| Oil     | 37000           | 32805        | (-) 11                              | Nil                | (-) 11                                 |
| Tea     | 4100            | 3405         | (-) 17                              | 400                | (-) 7                                  |
| MMF     | 3200            | 2800         | (-) 13                              | Nil                | (-) 13                                 |
| Jam Td  | 870             | 1292         | (+) 49                              | Nil                | (+) 49                                 |
| 2007-08 |                 |              |                                     |                    |  |
| Wheat   | 145000          | 119500       | (-) 18                              | Nil                | (-) 18                                 |
| Rice    | 130000          | 116500       | (-) 10                              | Nil                | (-) 10                                 |
| Sugar   | 47000           | 44120        | (-) 6                               | Nil                | (-) 6                                  |
| Dal     | 37500           | 27004        | (-) 28                              | 1161               | (-) 25                                 |
| Oil     | 40000           | 26325        | (-) 34                              | Nil                | (-) 34                                 |
| Tea     | 4200            | 1385         | (-) 67                              | 1915               | (-) 22                                 |
| MMF     | 3300            | 3067         | (-) 7                               | Nil                | (-) 7                                  |
| Jam Td  | 867             | 947          | (+) 9                               | Nil                | (+) 9                                  |

Except for Sugar and Jam, in all other items, there were significant under procurements. In fact in most of the cases, the actual quantity procured was so much at variance with the provisioned quantity that the whole exercise of provisioning was rendered largely infructuous. While only in the case of *Dal* and Tea, the shortages were made up to some extent through local procurement by the depots, in other items the significant shortages were never made up.

The fact that shortages up to 43 *per cent* translating into requirements for 3 to 4 months implies one or more of following three possibilities:

- The troops consumed fewer rations than their entitlements or had resorted to large amount of in lieu items.
- There were enough unreported or unrecorded stocks with the army to tide over these shortages.
- The requirements projected annually were higher than what was actually required and consumed.

### **Excess procurement of Sugar, Short procurement of *Dal* and Tea**

It was observed in audit that in case of Sugar, there was excess procurement over and above the provisioned requirement in two years. During 2006-07, 11944 MT of sugar was procured in excess of the provisioned quantity i.e. an excess of 25 *per cent* over the requirement. The excess expenditure due to over procurement of various rations items was Rs. 9.99 crore in 2005-06 and Rs 18.42 crore in 2006-07.

As opposed to Sugar, in case of Tea and *Dal*, there was consistent shortfall in procurement in all the three years, which had to be made up to some extent through procurement at the local level by the depots. These local procurements led to additional expenditure on account of the higher price of such procurement. In 2005-06, there was a shortfall of 22615 MT (48 *per cent*) in central procurement of *Dal* and even after local procurement there was a shortfall of 33 *per cent*. The quantity of 7266 MT of *Dal* locally procured during the year was purchased at a rate of Rs 10288 per MT higher than the price of central procurement thus resulting in additional expenditure of Rs. 7.48 crore. Even during 2006-07 and 2007-08, there was a shortfall of 11 *per cent* and 25 *per cent* respectively. The extra expenditure due to the local procurement of rations to overcome shortages was Rs 7.48 crore during 2005-06, Rs. 10.92 crore during 2006-07 and Rs. 11.66 crore during 2007-08.

### **Large number of contracts pertaining to *Dal* and Tea failed**

Audit observed that a number of contracts signed for annual procurement had to be cancelled due to the failure of the contractor to supply the contracted rations. Of the 343 contracts signed during the three years period of 2005-06 to 2007-08, 80 contracts (23 *per cent*) had to be cancelled due to the non-performance of the contractors. 39 of these cancelled contracts pertained to *Dal* and Tea.

While the contracts entered into by APO provide for risk expense provisions in case of failure of the contracts, local procurements are made by the Supply Depots to meet the deficit. Despite failure of many contracts and consequent resort to local procurement at higher rates, in no case, provisions of risk purchase in the original contract could be invoked. This was because such provisions could be invoked only if APO had carried out the risk purchases.

These items are procured only from State or National level co-operatives, federation or PSUs. Some of the well known suppliers who failed were M/s Balmer and Lawrie, MMTC, STC, Andrew Yule, Bharat Food Co-operative Ltd, PUNSUP, Bharat Agri Exports, and M/s MP Trifac etc. Consistent shortfall in procurement of Tea, *Dal* and Edible Oil would indicate that the State Co-operatives and Federations are

either unwilling or incapable of supplying such huge quantity in bulk. Since these agencies also procure from private agencies in the market, giving preference to these agencies only resulted in restricted competition and short procurement.

Of the 23 contracts cancelled during 2007-08, four contracts pertained to the procurement of 1800 MT of North East Tea out of an indent of 2400 MT. The contracts were cancelled because the samples produced by the firm could not meet the enhanced specifications wherein moisture content was revised during 2007-08 from 41 *per cent* to 42 *per cent*. Due to cancellation of the contracts, 1915 MT of tea valuing Rs 20.09 crore had to be procured locally by the Supply Depots incurring an excess expenditure of Rs. 9.16 crore due to the higher price of local procurement vis-à-vis central procurement. Also local procurements were not made according to the stipulated specification. In fact the tender notices that were issued to the CSD and local vendors did not even describe the specification of the tea. Thus, in the end, the very purpose of ensuring quality for which the contracts were cancelled and for which additional expenditure of Rs. 9.16 crore was incurred could not be achieved. In September 2008, the specification of Tea was lowered to align these with the quality of tea available in the market.

### **Recommendation 2**

**Ministry of Defence and Army Headquarters should take urgent steps to strengthen the procurement procedures so that wide variations between provisioning and procurement are avoided. Ministry and APO should consider introduction of such risk purchase clauses in the Central Procurement contracts which will cover the local purchases made by the Supply Depots in case of non-performance of the Central Contract.**

### **Recommendation 3**

**Opening up in well calibrated stages, the procurement process to bulk producing companies especially in case of Sugar, *Dal*, and Edible Oil should be considered.**

Army HQ in its reply stated that failure of large value contracts for perishable items with short storage life could lead to disruption of the supply chain since their storage life precludes holding large reserves. It stated that as regards tea, a new policy which will lead to procurement through open tendering and with stringent quality control mechanism would be operational from 2009-2010. It acknowledged that procurement of *Dal* has been erratic.

Army HQ further stated that it visualized the following action to minimise variations between provisioning and procurement:

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- (i) A study by expert bodies like Institute of Chartered Accountants and Law firms to be undertaken to refine the contract procedures of the APO to ensure uninterrupted supply;
- (ii) Conclusion of Rate contracts in a graduated manner for certain low volume items like Coffee, Jam, Milk products with reputed suppliers so as to simplify the contractual procedures of the APO and reduce the inventory of ration items; and
- (iii) Automation of APO and modern measures like e-tendering to bring in transparency and efficiency in the system.

### Uneconomic cost of *Atta*

The practice of procuring wheat and then grinding it to *atta* for the troops is quite old. Meanwhile *Atta* is now widely available in the open market in packed bags. Comparative analysis at one Supply Depot proved that the cost of 50 Kg bags of a branded *Atta* as given in the offer submitted by one branded *Atta* company was much less than the cost of *Atta* produced through the present practice of grinding of wheat into *Atta* by the Army. The average cost difference between obtaining *Atta* from grinding of wheat and procuring branded *atta* readily available in the market was Rs 2 per Kg as indicated in table below:

**Table-7**

#### *Cost comparison of grounded *atta* and branded *atta**

|   | <b>Cost of <i>Atta</i> supplied by Army (per MT)</b> | <b>Market price of branded <i>Atta</i> (per MT)</b> |
|---|--|---|
| Cost of wheat (Rs)  | 13676.00   | -   |
| Add (+): Cost of transportation and grinding :<br>Rs 229.73 | (-) 257.91   | -   |
| Less (-): Buy back bran/bags:<br>Rs 487.64                  |  |   |
| <b>Total cost per MT (on wheat) (Rs)</b>                    | 13418.09   | -   |
| Quantity of <i>Atta</i> produced per MT of wheat            | 0.9215   | -   |
| <b>Net cost of <i>Atta</i> (Rs)</b>                         | 14561.00   | 12600   |

Going by this calculation, about Rs.25 crore could have been saved annually by procuring *atta* directly from the market. This would also save the expenditure for the Army for operating a detachment of personnel in each mill when grinding of wheat for the army takes place. The Audit view was endorsed by the Depot Commandant who stated in October 2008 that the case on the basis of similar analysis had been taken up with higher HQ, but the directions were awaited.

During audit, inconsistency in the rates at which contracts for grinding of *atta* were entered into by the Army at various stations was also noticed. For example, while the contracted rate for grinding at Jalandhar during 2005-06 was Rs 80 per MT, the rate at Jammu was Rs 250 per MT.

### Recommendation 4

**Ministry of Defence and Army Headquarters should consider the issue of procuring *Atta* directly from the open market, in packed bags.**

Army HQ confirmed that a case was being initiated for obtaining the approval of Ministry for procuring branded *atta* meeting ASC specifications under self certification by way of concluding contracts at the Command level.

### 2.3 Despatch of Stores much after the Estimated Storage Life (ESL)

Estimated Storage Life (ESL) of a food item is the period for which the food item is likely to remain fit for human consumption, under normal storage conditions. According to the DGST Technical Instructions, the Supply Depots are to ensure that food items are issued in accordance with their storage life (ESL).

The instructions also state that food stuffs must be consumed when they are sound, wholesome and fit in all respects and not at the last stages of storage. In special circumstances, ESL may be extended by a maximum period of three months.

Audit found that out of the 11346 samples of rations sent to the three CFLs for extension of ESL, extension was granted in respect of 11330 cases. Thus almost in all the cases, extension was granted. It was noticed that the CFLs in Mumbai and Delhi adhered to the DGST instructions 2005, of not extending the life of rations beyond three months of expiry of the prescribed ESL. However, CFL Jammu which covers the whole of Northern Command and some parts of Western Command was found to grant extensions well beyond three months of the prescribed ESL, in some cases even up to 28 months. It was found that *Atta*, Sugar, Rice, Tea, *Dal*, Edible Oil and Raisins were consumed even six to 28 months after the expiry of their normal ESL.

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Though in reply the CFL stated that such extensions were given after conducting detailed microbiological and chemical analysis, no such report was furnished to Audit. Even otherwise, according to the DGST instructions, no extension of life beyond three months should have been granted by the CFL under any circumstances. Repeated grant of extension in ESL clearly shows that troops located in Northern Command despite having difficult operational conditions are fed with rations of the quality far below DGST norms.

**Table- 8**

*Cases of extended ESL*

|   | 2005-06     | 2006-07     | 2007-08     |
|---|-------------|-------------|-------------|
| <b>No. of samples received</b>              | <b>3508</b> | <b>3812</b> | <b>4026</b> |
| <b>No. of samples in which ESL extended</b> | <b>3506</b> | <b>3802</b> | <b>4022</b> |
| <b>No. of samples in which ESL rejected</b> | <b>2</b>    | <b>10</b>   | <b>4</b>    |

### **Recommendation 5**

To ensure supply of good quality rations to the troops, Ministry and Army HQ should set a time limit for extension of estimated storage life taking into account the climatic conditions, beyond which under any circumstances, ESL of food items should not be extended to ensure supply of good quality rations to the troops.

## Chapter 3: FRESH RATIONS

### Audit Objective:

- To assess whether contracts were managed effectively and economically without compromising the quality.

### 3.1. Procurement of Fresh Rations

Procurement and supply of fresh rations in all seasons almost on a daily basis to thousands of units in all the stations is a daunting task. Fresh rations, which include many agricultural products, are sensitive to seasonal variations. They are also perishable. The supply chain management becomes even more complex when the variety, the constant change of preferences of the troops, volume indented and stringent specifications are taken into account. Procurement of fresh rations



Supply chain of fresh rations entails distribution of fresh vegetables to a large number of Units

is therefore necessarily decentralized and contracts are operated by the Supply Depots which issue the stores to the consuming units. Indents for fresh supplies are placed by units two days in advance. Based on these, the Depots place consolidated demands on the contractors.

Army has laid down elaborate procedures for procurement of items of fresh rations through local contracts concluded for each station or a supply depot. These contracts are approved by the QMG at the Army HQ, GOC-in-C of the Command or lower formation Commanders depending on the value of the contract. The responsibility for procurement lies with the Major General Army Service Corps (MGASC) of the Command and the DDSTs and ADSTs functioning under him.



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The expenditure of the Army on the various categories of fresh rations for the last three years is shown below:

**Table-9**  
*Expenditure on various categories of fresh rations*

*(Rs in crore)*

| Item  | 2005-06       | 2006-07       | 2007-08       |
|---|---------------|---------------|---------------|
| Meat  | 80.01         | 71.30         | 71.31         |
| Non Veg items other than Meat, (Chicken, Egg)       | 117.87        | 136.71        | 142.39        |
| Fresh Veg & Fruits including Potato Onion & Garlic  | 112.18        | 121.85        | 132.86        |
| Other items Milk, Butter, Bread, Mineral Water, Ice | 142.47        | 168.98        | 213.30        |
| <b>Total</b>  | <b>452.53</b> | <b>498.84</b> | <b>559.86</b> |

Analysis of expenditure on fresh rations in the three selected Commands indicated that per person expenditure from 2005-06 to 2007-08 in Northern Command was 61, 97 and 76 *per cent* higher than that in Western Command. Similarly, a comparative analysis of per person expenditure between Eastern and Western Commands also indicated that the expenditure in Eastern Command was 33, 70 and 33 *per cent* higher than that in the Western Command. The following table illustrate Command-wise pattern of expenditure on fresh rations:

**Table-10**  
*Per capita expenditure of fresh ration*

| Year    | Expenditure of fresh rations/per person/per annum |            |            |
|---------|---|------------|------------|
|         | NC<br>(Rs)  | WC<br>(Rs) | EC<br>(Rs) |
| 2005-06 | 6577  | 4086       | 5419       |
| 2006-07 | 7304  | 3703       | 6288       |
| 2007-08 | 7591  | 4303       | 5728       |

Such wide variations were largely due to variations in procurement prices and terrain conditions contributing to higher prices and transportation expenses. Dispersal of troops necessitating supply at more remote points also contributed to higher per capita consumption in terms of value.

### **3.2. Absence of adequate competition in procurement of fresh rations**

The ASC Procedure for Conclusion of Contracts stipulates that contract concluding authorities should make all efforts to generate adequate competition and analyze the rates from all the available sources. MGsASC are required to insert advertisements annually giving the types of contracts concluded in that Command and invite potential suppliers to register themselves as ASC contractors. Despite this and despite

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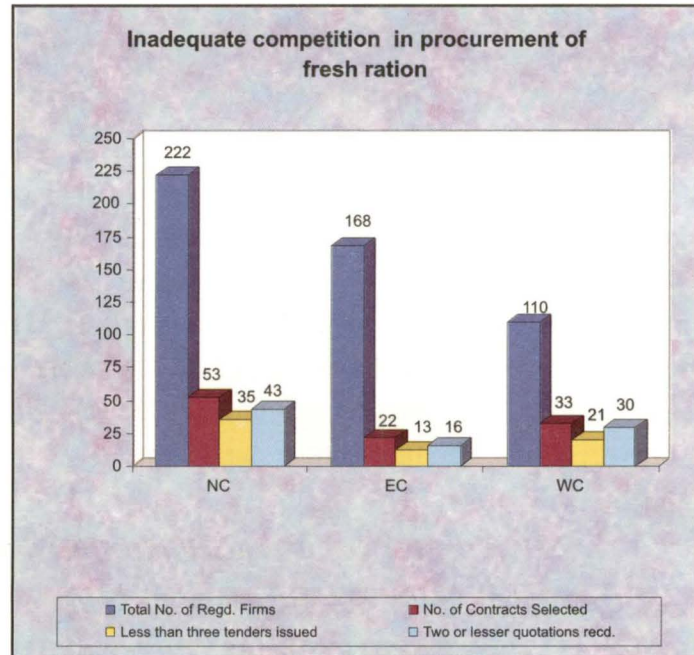
a large number of registered vendors, audit examination indicated that competition in tendering and contracting for fresh rations by ASC was highly limited. Overall, the procurement process was highly non-competitive.

During the audit, a sample of 108 contracts for fresh rations concluded in the period from 2005-06 to 2007-08 by various authorities in the three selected Commands were scrutinized in detail in order to assess the competitiveness in the tendering process.

In approximately 64 per cent of the cases where open tenders were invited from the registered firms during the period, only one or two vendors responded to the Notice Inviting Tender and purchased the tender documents. The response in terms of quotation received from vendors was even poorer. While in 36 per cent of the cases only one vendor had bid for the contract, in 46 per cent of cases only two

vendors had bid. Thus, 82 per cent of the procurement was based on less than three quotations. This was despite the fact that in all the three years, the number of vendors annually registered ranged from 110 to 222. A large number of vendors registered contrasting with only one or two vendors purchasing tender documents points strongly towards serious problem of cartelization in ASC procurements as also registration of unsuitable vendors without proper verification of their capacity.

In the course of audit analysis of the procurements made by MGASC, Western Command, it was found that in all the three years, in Delhi, only one vendor purchased the tender documents for the supply of meat and chicken and the contract was awarded to him. Thus, during the last three years, about Rs. 5 crore worth of meat and chicken was annually procured for Delhi station on a single vendor basis from M/s S. Mohd Iqbal & Co. despite the fact that 12 of the 99 vendors registered for the supply of meat and chicken in the Western Command were Delhi based.



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Similarly in Chandimandir, only two vendors responded for meat and chicken during tendering in 2005-06. The contract was awarded to M/s Moneesh & Co. In the next two years only M/s Moneesh & Co. responded and bagged the contracts with annual orders value of Rs 2.34 crore. This was despite the fact that eight of the 99 registered vendors were based at Chandimandir.

The ASC procedures further envisage that contractors would be registered only for those items in which they are genuinely interested and in which they have been dealing with in their normal course of profession. It was however noticed that vendors were registered for fresh rations as a whole and not specific to items. Thus the same vendor was registered for the supply of meat, vegetables, firewood, milk, green fodder and also transport. Several transport and tour companies were found to be registered for the supply of meat, eggs, vegetables, milk and charcoal in addition to provision of transport. On the other hand, a poultry firm was found to have been registered for the supply of transport and vegetables. Since vendors were registered for particular Command as a whole and not station-wise, even though there were 110 vendors registered on the whole, station-wise response of the vendors remained poor.

In reply MGASC WC accepted that the competition was low despite adequate advertisement and stated that the aspect of poor response needs to be evaluated at the highest level and necessary remedial measures evolved. Army HQ also acknowledged the point regarding low number of tenderers and stated that the remedial measures were being instituted. As regards anomalies in the process of registration, the Army HQ replied that the existing procedure enunciated in September 2006 was adequate and relevant.

The above evidence noticed during audit would however indicate that in the registration process, the procedures were not being strictly adhered to.

### **Recommendation 6**

**There exists a case for expanding the vendor base for supply of fresh rations. The risk of existence of cartels affecting the quantity and quality of rations is too serious to be ignored. Ministry of Defence should set clear targets regarding expansion of vendor base and progress should be closely monitored. The list of vendors should be put on the website of the ASC.**

### **Recommendation 7**

**Adequate care should be taken before registering the vendors. Registration should be done for vendors for specific group of items and experience of the vendors in dealing with those items should be verified.**

### **Recommendation 8**

**A specific period should be laid down, during which if a vendor fails to respond to any tender, he should be taken out of the vendors' list. Blacklisting of such vendors for a prescribed period also should be considered.**

Army HQ provided detailed replies which however, did not address the specific facts mentioned above. It said that tendering for perishable items is a complex matter requiring an uncanny ability to forecast correctly the circumstances under which the tenderer will have to supply the item in future. In the case of natural products like vegetables and fruit, the matter is even more complex as the production is seasonal, follows a cyclical pattern with high volatility in rates based on crop harvest, festival season and supply and demand parameters. The peculiar requirements of operating a contract for perishable also discourage many contractors from venturing into contracts in areas beyond their interest. It involves round the clock attention throughout the year, requirement of warehouses, cold chain facilities. Therefore, the contractor is more keen to secure a contract only at those locations wherein he has the above facilities. The trend therefore has been comparatively more competition in larger stations and initial phases which declined in smaller stations and late tender calls. In respect of meat group items, it was noticed that the number of serious bidders has been on the decline. The lesser number of tenders issued or received cannot be construed as a cause for reduced competition thus implying higher rates.

Army HQ also mentioned that the total number of fresh contracts was approximately 1280 in a year. The sample of 33 contracts as chosen by Audit was too small and drawing of conclusions based on such a selective sample was bound to throw up exceptions, which cannot be generalized as a rule.

Noting the point regarding low number of tenders received in Western Command, as highlighted in the report, Army HQ stated that remedial measures were being taken.

Regarding the recommendation relating to expansion of vendor base for supply fresh rations, it acknowledged that it was an important point, which was already being acted upon. It stated that with the advancement in the field of logistics, improved infrastructure and opening up of agricultural markets, many companies were entering the food markets dealing with both fresh and dry rations, there was a need to attract such players into ASC contracting systems as they would bring in improved supply chain management, superior warehousing and transportation facilities, and introduce price stability ensuring better quality control. It stressed the need of simplification of registration and payment procedures. It stated that a single

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point registration, easier verification and faster payment systems were required to be brought in.

It further brought out that provisions already existed to ensure that registration of contractors was carried out only for a specific group of items in which vendor had experience and expertise. To ensure that the performance of the contractor both in competing for a contract and for its subsequent execution was up to required standards, as also to weed out non interested contractors, detailed order had been issued in September 2006.

Audit however, affirms that the sample chosen in respect of the selected Commands relating to fresh rations was adequate to form a realistically general idea. The 33 contracts referred to in the replies of the Army HQ were selected out of 249 contracts concluded by HQ Western Command and HQ 11 Corps between 2005-06 and 2007-08. It represented 13 *per cent* of the contracts concluded, which is a reasonable sample for drawing an inference. The fact that in all these Commands, more than 100 contractors were registered and in most cases, only two or three vendors responded to tenders does not indicate serious competition. The advantages of larger stations as stated by Army HQ do not reflect on the fact that in stations like Delhi or Chandimandir, only one or two vendors purchased tender documents.

Appreciating the fact that orders already exist on various aspects brought out in this report, the evidence collected during audit however, indicate the necessity of implementing these orders more strictly which has been highlighted in the recommendations.

### **3.3 Unreasonably low rates for Fresh Rations**

To determine the reasonable rates of various items of fresh rations, a Board of Officers constituted by the Station Commander determine the Average Local Market Rates (ALMR). Prior to opening of tenders, Reasonable Rates (RR) are worked out by a panel of officers for each item and station. These rates are determined by factoring in the whole sale price index, average local market rates, all India average weighted rates, availability of the commodity, previous sanctioned rates etc. The L1 rates are then compared with the RRs before awarding the contracts. If the L1 rate is 20 *per cent* below the RR, the rate is considered as “fictitious” and is rejected.

During audit, it was noticed that in all cases, the accepted rates were way below the ALMR. In fact the RR itself was determined much below the level of ALMR, which rendered it grossly unrealistic. As will be evident from the table below, the accepted rate often was unviable compared to the market rate but was uncannily close to the Reasonable Rate.

## PA Report of Supply Chain Management of Rations in Indian Army

Table-11

### Variation between ALMR and RR

(ALMR, RR and Accepted Rate are in Rupees)

| Year    | Station      | Item            | Unit   | ALMR    | RR      | Accepted Rate (AR) | Difference between ALMR and RR (in per cent) | Difference between ALMR and AR (in per cent) |
|---------|--------------|-----------------|--------|---------|---------|--------------------|--|--|
| 2005-06 | Ambala       | Fowl Dressed    | Kg     | 70.42   | 41.55   | 41.28              | 41.00  | 41.38  |
| 2005-06 | Delhi        | Fowl Dressed    | Kg     | 75.83   | 46.20   | 46.60              | 39.07  | 38.55  |
| 2005-06 | Chandimandir | Meat Dressed    | Kg     | 112.00  | 65.80   | 65.20              | 41.25  | 41.79  |
| 2005-06 | Delhi        | Meat Dressed    | Kg     | 127.92  | 68.75   | 67.25              | 46.26  | 47.43  |
| 2005-06 | BD Bari      | Veg Fresh       | 100 Kg | 1320.00 | 591.22  | 610.00             | 55.21  | 53.79  |
| 2006-07 | Chandimandir | Meat Dressed    | Kg     | 110.00  | 68.50   | 61.75              | 37.73  | 43.86  |
| 2006-07 | Chandimandir | Meat on Hoof    | Kg     | 40.00   | 24.00   | 10.00              | 40.00  | 75.00  |
| 2006-07 | BD Bari      | Meat Dressed    | Kg     | 101.11  | 75.00   | 78.00              | 25.82  | 22.86  |
| 2006-07 | Udhampur     | Broiler Dressed | Kg     | 100.00  | 59.00   | 58.25              | 41.00  | 41.75  |
| 2006-07 | Akhnoor      | Veg Fresh       | 100 Kg | 881.23  | 490.35  | 456.00             | 44.36  | 48.25  |
| 2007-08 | Kolkata      | Meat on Hoof    | Kg     | 55.00   | 25.00   | 30.00              | 54.55  | 45.45  |
| 2007-08 | Delhi        | Meat Dressed    | Kg     | 129.33  | 73.00   | 73.00              | 43.56  | 43.56  |
| 2007-08 | BD Bari      | Fruit Fresh     | 100 Kg | 3661.90 | 1639.45 | 1700               | 55.23  | 53.58  |
| 2007-08 | Hasimara     | Meat Dressed    | Kg     | 141.96  | 95.00   | 89.11              | 33.08  | 37.23  |

### 3.4 Unusual variations in contracted rates in the same and adjacent locations

From the contracts, wide variation of contracted rates within the same geographical area was also noticed. Analysis of the rates accepted by various CFAs for adjoining stations in Northern, Western and Eastern Command indicated following.

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### Northern Command

B.D.Bari, Nagrota, Udhampur and Akhnoor are stations in Northern Command which are located within a radius of 40 Kms. The rates at which contracts were concluded at five adjacent stations in the Northern Command, during the last three year are shown in the table below:

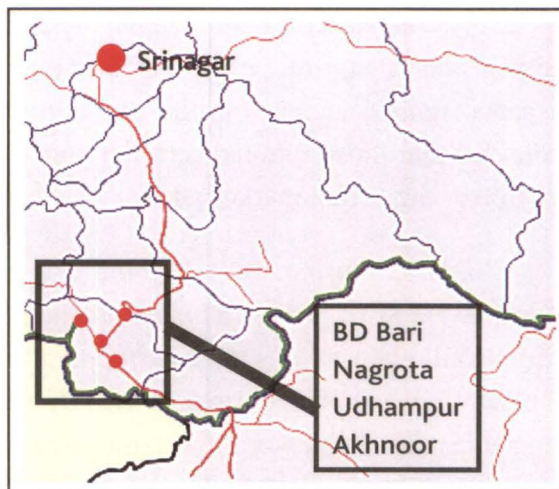


Table-12

### Comparative analysis of rates at adjacent stations in NC

(Rupees per Quintal)

| Station   | Vegetable fresh |       |       | Fruit |       |       | Meat  |       |       |
|-----------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|
|           | 05-06           | 06-07 | 07-08 | 05-06 | 06-07 | 07-08 | 05-06 | 06-07 | 07-08 |
| B.D. Bari | 660             | 675   | 772   | 1318  | 1423  | 1423  | 7300  | 7800  | 8185  |
| Nagrota   | 470             | 469   | 790   | 1040  | 1040  | 1390  | 7240  | 7240  | 7530  |
| Akhnoor   | 467             | 456   | 790   | 1050  | 1022  | 1612  | 6677  | 7677  | 7127  |
| Udhampur  | 780             | 850   | 940   | 1440  | 1555  | 1890  | 7940  | 8500  | 8915  |
| Srinagar  | 549             | 750   | 647   | 799   | 1000  | 945   | 8980  | 9497  | 9947  |

Analysis for the last three years showed wide variation in rates at which fresh rations was contracted at these stations as discussed below:

(i) During 2006-07 the rates for vegetables and fruit fresh at B.D. Bari were found to be higher than the rates at Akhnoor by 48 *per cent* and 39 *per cent* respectively. For Udhampur, the range by which the rates were higher than the rates at Akhnoor extended up to 86 *per cent* and 52 *per cent*. The contracts for B.D. Bari and Udhampur were approved by the Army Commander, Northern Command while the contracts at Nagrota and Akhnoor and Srinagar were approved by the Corps Commanders.

(ii) At Srinagar, the rates for fruits and vegetables were 12 *per cent* to 50 *per cent* lower than the same at Udhampur during 2005-06 to 2007-08

(iii) Unusual movement of contracted rates was also noticed for the same items in the same location. Nagrota and Aknoor witnessed an increase of 68 to 73 *per cent* for fresh vegetables from 2006-2007 to 2007-2008, whereas in case of fresh fruits

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the increase was of 33 to 58 *per cent*. The ALMR for these items did move only by 0.5 *per cent* in case of fresh vegetables and 21 *per cent* in case of fresh fruits. The disproportionate increase in the procurement rate of fresh items of fresh rations indicated that those rations were not consistent with the ALMR and therefore did not mirror the actual market rates.

(iv) Similarly, during 2006-07, the rates at which vegetable and fruits were contracted at Srinagar was 37 *per cent* and 25 *per cent* higher than the previous year while in all other stations the maximum increase was only 9 *per cent* and 8 *per cent*. The pattern was however reverse in 2007-08, when contracted rates at Srinagar for vegetables and fruits were lower by 14 *per cent* and 6 *per cent* respectively when there was an increase up to 73 *per cent* and 58 *per cent* at other adjoining stations.

(v) It was generally seen that the rates at which contracts were approved by the Army Commander Northern Command were higher than the rates at which contracts were concluded by the Corps Commanders of the Northern Command.

### Western Command

Similarly, comparison of contracted rates for meat and chicken at five major military stations in the Western Command showed similar variation during the same period as shown in table below:

**Table-13**  
*Comparative analysis of rates at adjacent stations in WC*  
(Rupees per quintal)

| Station      | Meat dressed |         |         | Broiler dressed |         |
|--------------|--------------|---------|---------|-----------------|---------|
|              | 2005-06      | 2006-07 | 2007-08 | 2006-07         | 2007-08 |
| Ambala       | 6498         | 6808    | 7108    | 5378            | 5578    |
| Chandimandir | 6520         | 6175    | 7155    | 4689            | 5345    |
| Jalandhar    | 6518         | 6800    | 7094    | 5285            | 5594    |
| Amritsar     | 6280         | 6650    | 6390    | 4700            | -       |
| Ludhiana     | 6435         | 7485    | 7078    | 6195            | 6013    |

While chicken was contracted at Amritsar for Rs 4700 per quintal during 2006-07, it was procured at Rs 6195 per quintal at Ludhiana which is an adjacent military station.

### Eastern Command

In Eastern Command, Dum Dum, Dakshineswar and Kolkata are the three main supply points for fresh rations in Kolkata. The closeness of the stations warrants that the purchase rates should be in close consonance. It was, however, found that while meat was procured in Kolkata at Rs 10,495 per quintal in 2006-07, it was procured for Rs 6100 per quintal at Dum Dum which is only approximately 4 Km from Kolkata. Table below shows the comparison:



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**Table-14**

*Comparison of rates for meat dressed at three stations in EC*

*(Rupees per quintal)*

| Station      | Meat    |         |
|--------------|---------|---------|
|              | 2006-07 | 2007-08 |
| Dakshineswar | 8430    | 8390    |
| Dumdum       | 6100    | 6900    |
| Kolkata      | 10495   | 10795   |

Total extra expenditure for the two years in procurement of Meat dressed at Kolkata at higher rates in comparison to the rates at Dumdum worked out to Rs 67.90 lakh.

We noticed abnormal differences between contracted rates for same items for supply to Supply Depots and Base/R&R Hospitals in Delhi in the same contracts. The differences were glaring as would be evident from the table below:

**Table-15**

*Difference in procurement rates at two locations in Delhi*

| Item   | Year    | Rates for Supply Depot Delhi per quintal | Rates for RR/ Base Hospital, Delhi per quintal | Difference (in percentage) |
|--|---------|--|--|----------------------------|
| Tori Ghia                                    | 2007-08 | 480                                      | 575  | 20                         |
| Lime Sour                                    | 2007-08 | 1900                                     | 3900   | 105                        |
| Capsicum                                     | 2007-08 | 550                                      | 775  | 41                         |
| Mussambi                                     | 2007-08 | 1200                                     | 1500   | 25                         |
| Oranges                                      | 2007-08 | 1100                                     | 1400   | 27                         |
| Lime Sour                                    | 2006-07 | 1800                                     | 3800   | 111                        |
| Tomato Red                                   | 2006-07 | 540                                      | 700  | 30                         |
| Lime Sour                                    | 2005-06 | 1800                                     | 3400   | 89                         |
| Beans/Peas                                   | 2005-06 | 400                                      | 500  | 25                         |
| Capsicum                                     | 2005-06 | 450                                      | 700  | 56                         |
| Apple(Red/ Golden/ Delicious)                | 2005-06 | 980                                      | 1400   | 43                         |
| Mangoes (Safeda, Langda/ Dussehri/ Totapuri) | 2005-06 | 950                                      | 1300   | 37                         |

Thus within the same contract for the same specification of items two different rates were applied, which was irregular. MGASC Western Command replied that the rates of supplies to hospitals were higher due to richer specification for consumption of patients. The contracts however did not specify any difference in specifications. Base Hospital Delhi is located within 2 Kilometers of RR Hospital and is 8 Kilometers from Supply Depot Delhi. The difference in rates, therefore, cannot also be attributed to distance between the two locations.

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REGISTERED BY POST/SUS  
In lieu of IAFZ-2124

ACCEPTANCE OF TENDER NOTE  
Regular Contract for the period from 01 Oct 2005 to 30 Sep 2006  
Supply Depot ASC Delhi Cantt

| S/No | Articles/Services to be supplied | Approximate quantity in Kgs/Gms | Rates tendered    |          | Per |
|------|----------------------------------|---------------------------------|-------------------|----------|-----|
|      |                                  |                                 | In Figures Rs. P. | In Words |     |

## RATES TENDERED FOR DELIVERY AT SUPPLY DEPOT ASC, DELHI CANTT

|    |                        |           |        |                                   |         |
|----|------------------------|-----------|--------|-----------------------------------|---------|
| 1  | Apple Red Delicious    | 9000.000  | 980.00 | (Rupees nine hundred eighty only) | 100 Kgs |
| 2  | Apple Golden Delicious | 7500.000  | 980.00 | (Rupees nine hundred eighty only) | "       |
| 3  | Apple Maharaja         | 3000.000  | 980.00 | (Rupees nine hundred eighty only) | "       |
| 4  | Bananas                | 21750.000 | 810.00 | (Rupees eight hundred ten only)   | "       |
| 5  | Guavas                 | 26250.000 | 800.00 | (Rupees eight hundred only)       | "       |
| 6  | Mangoes Safeda         | 26250.000 | 950.00 | (Rupees nine hundred fifty only)  | "       |
| 7  | Mangoes Langra         | 30000.000 | 950.00 | (Rupees nine hundred fifty only)  | "       |
| 8  | Mangoes Dasherri       | 22500.000 | 950.00 | (Rupees nine hundred fifty only)  | "       |
| 9  | Mangoes Malda          | 18750.000 | 950.00 | (Rupees nine hundred fifty only)  | "       |
| 10 | Mangoes Totapuri       | 30000.000 | 950.00 | (Rupees nine hundred fifty only)  | "       |
| 11 | Musk Melon             | 37500.000 | 800.00 | (Rupees eight hundred only)       | "       |
| 12 | Maltas                 | 7173.913  | 950.00 | (Rupees nine hundred fifty only)  | "       |
| 13 | Mussambies             | 44836.957 | 950.00 | (Rupees nine hundred fifty only)  | "       |
| 14 | Orange Nagpuri         | 34076.087 | 950.00 | (Rupees nine hundred fifty only)  | "       |
| 15 | Kinoo                  | 25108.696 | 950.00 | (Rupees nine hundred fifty only)  | "       |
| 16 | Pears Kashmiri         | 15000.000 | 800.00 | (Rupees eight hundred only)       | "       |
| 17 | Peaches                | 15000.000 | 800.00 | (Rupees eight hundred only)       | "       |
| 18 | Plums                  | 7500.000  | 800.00 | (Rupees eight hundred only)       | "       |
| 19 | Pineapple              | 18750.000 | 800.00 | (Rupees eight hundred only)       | "       |
| 20 | Apricot                | 7500.000  | 800.00 | (Rupees eight hundred only)       | "       |

## RATES TENDERED FOR DELIVERY AT RDP CAMP, DELHI CANTT

|    |                        |          |        |                                   |         |
|----|------------------------|----------|--------|-----------------------------------|---------|
| 21 | Apple Red Delicious    | 3000.000 | 980.00 | (Rupees nine hundred eighty only) | 100 Kgs |
| 22 | Apple Golden Delicious | 2400.000 | 980.00 | (Rupees nine hundred eighty only) | "       |
| 23 | Apple Maharaja         | 600.000  | 980.00 | (Rupees nine hundred eighty only) | "       |
| 24 | Bananas                | 6600.000 | 810.00 | (Rupees eight hundred ten only)   | "       |
| 25 | Guavas                 | 900.000  | 800.00 | (Rupees eight hundred only)       | "       |
| 26 | Maltas                 | 573.913  | 950.00 | (Rupees nine hundred fifty only)  | "       |
| 27 | Mussambies             | 1147.826 | 950.00 | (Rupees nine hundred fifty only)  | "       |
| 28 | Orange Nagpuri         | 1578.261 | 950.00 | (Rupees nine hundred fifty only)  | "       |
| 29 | Kinoo                  | 1721.739 | 950.00 | (Rupees nine hundred fifty only)  | "       |

## RATES TENDERED FOR DELIVERY AT BASE HOSPITAL, DELHI CANTT

|    |                        |          |         |   |         |
|----|------------------------|----------|---------|---|---------|
| 30 | Apple Red Delicious    | 5250.000 | 1400.00 | (Rupees one thousand four hundred only) | 100 Kgs |
| 31 | Apple Golden Delicious | 5000.000 | 1400.00 | (Rupees one thousand four hundred only) | "       |
| 32 | Apple Maharaja         | 2000.000 | 1400.00 | (Rupees one thousand four hundred only) | "       |
| 33 | Bananas                | 9750.000 | 900.00  | (Rupees nine hundred only)              | "       |
| 34 | Guavas                 | 1750.000 | 800.00  | (Rupees eight hundred only)             | "       |

Snapshot: Higher rates for Base Hospital vis-à-vis Supply Depot, both at Delhi Cantt

### Recommendation 9

Abnormal variations in rates of vegetable fresh, fruits and meat must be investigated and the Ministry may provide an assurance that these variations do not arise from any fraud or corrupt practices in the procurements of fresh rations in Army. Last Purchase Price of these rations should also be displayed on the website of ASC, which could be accessed by Supply Depots.

### Recommendation 10

Ministry should develop a mechanism in which the Reasonable Rates are realistically arrived and then enforced properly. Steps should be taken to disseminate more information and the representatives of the PCDA who is common to all such committees should play a more pro active role.

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Army HQ stated that ascertaining rates for fresh items was a peculiar and complex phenomenon. The rates of items change depending on the quality and also from season to season. It even changed from time to time within a particular day. Therefore for correct price discovery, the quality was to be correctly benchmarked against the rate band. It further stated that factors like quantum of demand, economies of scale achieved, transportation restrictions if any, competition at the time of conclusion of the contracts could all play a major role in the rates finally achieved.

It also stated that limited availability of fresh items at the consumption areas, the volumes at which they were required in the consumption areas, the present system available for sourcing and supply chain would indicate that merely offering of high rates for contracts was not likely to result in availability of better quality of items.

Notwithstanding the above, Army HQ stated that efforts to bring the contract rates in consonance to the realistic local market trends in line with the quality required were being undertaken in right earnest.

As regards unusual variations in contracted rates in the same and adjacent locations, Army HQ stated that in case a particular contractor had not been able to secure any contract in the calls at the initial stations, he would be desperate to secure a contract where tendering was still open. The rates offered at these stations might not mirror the actual market rates. It further stated that the volume of contracted quantity, which decided the economies of scale was another factor affecting the pricing pattern. The Army contended that feeding strength of Ambala and Chandigarh was 10500 and 14000 approximately whereas that in Ludhiana the same was about 1000. Similarly, where in Kolkata, the feeding strength was approximately 10000, in Dumdum and Dakshineswar, the same was as low as 200 to 250. Moreover, contracts in Dumdum and Dakshineswar were for combined items and the contractors would have calculated a basket rate which would be overall beneficial to him. Regarding different rates for Supply Depot and Base Hospital, Army HQ stated that the rates were bound to vary because the latter was a delivery point contract catering to an exclusive and a small strength of patients.

Notwithstanding the clarifications provided by Army HQ, it acknowledged that feasibility of further refinement of procedures of calculation of Reasonable Rate existed. There was a need, it stated, to further sensitize and provide necessary inputs to the executive officers to ease the process of fixation of Reasonable Rates and assist in post contract analysis. Army HQ further stated that the vast repertoire of data available with the IFAs/CsDA needed to be made available in order to effect correct price discovery in conjunction with market intelligence. The basic outlook

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of Defence (Finance) needed to evolve from that of financial audit to financial advice and a collaborative effort with emphasis on reliability and accountability was called for.

ACCEPTANCE OF TENDER NOTE

SCHEDULE

**CONTRACT FOR SUPPLY OF VEGETABLE FRESH AT ASC SRINAGAR FOR THE PERIOD FROM 01 APR 2007 TO 31 MAR 08 (BOTH DAYS INCLUSIVE) BASED ON SUBMISSION OF IAFS-1520 ON FORTNIGHTLY PAYMENT BASIS**

| Ser No   | Articles/Service to be supplied | Rate in figures per 100 Kgs |    | Rate in words (per 100 Kgs)                          | Approximate Scheduled Quantity in Kgs |
|--|---------------------------------|-----------------------------|----|--|---------------------------------------|
|  |                                 | Rs.                         | P. |  |                                       |
| <b>RATES TENDERED FOR DELIVERY AT FSD SRINAGAR</b> |                                 |                             |    |  |                                       |
| 1  | Brinjal                         | 646.90                      |    | (Rupees six hundred forty six and paise ninety only) | 46875.000                             |
| 2  | Caulliflower                    | 646.90                      |    | (Rupees six hundred forty six and paise ninety only) | 96875.000                             |
| 3  | Lady finger                     | 646.90                      |    | (Rupees six hundred forty six and paise ninety only) | 9375.000                              |
| 4  | Peas Green                      | 646.90                      |    | (Rupees six hundred forty six and paise ninety only) | 38750.000                             |
| 5  | Pumpkin                         | 646.90                      |    | (Rupees six hundred forty six and paise ninety only) | 50625.000                             |
| 6  | Beane French                    | 646.90                      |    | (Rupees six hundred forty six and paise ninety only) | 21250.000                             |
| 7  | Beane Cluster                   | 646.90                      |    | (Rupees six hundred forty six and paise ninety only) | 14375.000                             |
| 8  | Arvi                            | 646.90                      |    | (Rupees six hundred forty six and paise ninety only) | 3750.000                              |
| 9  | Cucumber                        | 646.90                      |    | (Rupees six hundred forty six and paise ninety only) | 8750.000                              |
| 10   | Carrot Country                  | 646.90                      |    | (Rupees six hundred forty six and paise ninety only) | 38750.000                             |
| 11   | Cabbage                         | 646.90                      |    | (Rupees six hundred forty six and paise ninety only) | 63750.000                             |
| 12   | Spinach Country                 | 646.90                      |    | (Rupees six hundred forty six and paise ninety only) | 28125.000                             |
| 13   | Methi                           | 646.90                      |    | (Rupees six hundred forty six and paise ninety only) | 9375.000                              |
| 14   | Tomato Ripe                     | 646.90                      |    | (Rupees six hundred forty six and paise ninety only) | 39375.000                             |
| 15   | Khol Khol                       | 646.90                      |    | (Rupees six hundred forty six and paise ninety only) | 20825.000                             |
| 16   | Bitter Gourd                    | 646.90                      |    | (Rupees six hundred forty six and paise ninety only) | 1875.000                              |
| 17   | Karam Sag                       | 646.90                      |    | (Rupees six hundred forty six and paise ninety only) | 63437.500                             |
| 18   | Chillies Green                  | 646.90                      |    | (Rupees six hundred forty six and paise ninety only) | 9687.500                              |
| 19   | Ginger Green                    | 646.90                      |    | (Rupees six hundred forty six and paise ninety only) | 4375.000                              |
| 20   | Coriander Green                 | 646.90                      |    | (Rupees six hundred forty six and paise ninety only) | 4375.000                              |
| 21   | Mint Green                      | 646.90                      |    | (Rupees six hundred forty six and paise ninety only) | 1562.500                              |
| 22   | Coconut Whole                   | 646.90                      |    | (Rupees six hundred forty six and paise ninety only) | 5937.500                              |
| 23   | Lime Sour (Kagzi)               | 646.90                      |    | (Rupees six hundred forty six and paise ninety only) | 4687.500                              |
| 24   | Turnips                         | 646.90                      |    | (Rupees six hundred forty six and paise ninety only) | 40937.500                             |
| 25   | Raddish Country                 | 646.90                      |    | (Rupees six hundred forty six and paise ninety only) | 52187.500                             |
| 26   | Bottle Gourd                    | 646.90                      |    | (Rupees six hundred forty six and paise ninety only) | 41250.000                             |
| 27   | Capsicum                        | 646.90                      |    | (Rupees six hundred forty six and paise ninety only) | 10000.000                             |
| 28   | Chippian Kaddu                  | 646.90                      |    | (Rupees six hundred forty six and paise ninety only) | 3125.000                              |
| 29   | Tomato Green                    | 646.90                      |    | (Rupees six hundred forty six and paise ninety only) | 15937.500                             |

(Total items twenty nine only)

Snapshot: All items carry the same rate

While Audit appreciates that volumes, local conditions and seasonal factors would affect the prices of vegetable and fruits and acknowledging that mere high rates do not automatically ensure high quality, unusual low rates when compared to market rate arrived by Army authorities themselves are fraught with risks of low quality goods. It will be reasonable to assume that no vendor would supply suffering losses. Extreme low rates would therefore, indicate compromise on quality.

It is also important to consider the issue in its totality. Audit had come across evidence that the fresh rations in the prescribed mix were not provided to the troops. There is little doubt that prices would vary from station to station and from item to item. Having a contract with different items of vegetables carrying

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the same rate, obviously allows the vendors to leverage the market conditions but not necessarily to meet the requirements of the troops. The viability of the contracted rates is also an important factor particularly when the competition is low due to participation of only a few vendors.

A small feeding strength in Ludhiana might be responsible for a hike in contracted rates but the same logic did not apply at Dumdum and Dakshineswar. Even if a contract is executed for combined items, it is difficult to accept as reasonable a price difference of 72 *per cent* between two adjacent locations.

### **3.5. Non adherence to tendering instructions**

Audit examined 82 contracts concluded during 2007-08 in Northern, Eastern and Western Commands to evaluate the tendering and contracting process. Our findings are discussed below:

(i) Procedures for conclusion of ASC contracts stipulate that tender forms could be issued only up to 12:00 hrs one day prior to the stipulated date of opening of tenders. Audit found instances where tenders were issued to certain vendors on the day of their opening i.e. after the expiry of the deadline. The DDST concerned stated that the dealing clerk was not aware that a date one day prior to the opening of the tenders should be recorded. Audit also found cases where tender fee in the form of postal orders was received after the date of issue of tender document, indicating a serious flaw in the tendering process.

(ii) Rates were negotiated with the L-1 firm in 78 *per cent* of the cases. In some cases, the rates at which the contracts were concluded after negotiations were drastically less than the original rates quoted by the vendor which rendered the final rates as abysmally low. As an extreme case, in the contract concluded for supply of fresh fruits, at 33 Corps, Eastern Command, the originally quoted total value of the contract of Rs 63,33,029 was reduced to Rs 40,64,485 after negotiations. Similarly in another contract for fresh items, under the same Corps the initially quoted value of Rs 76,23,421.83 was reduced to Rs 50,44,134.13 during negotiations. Some of the fruits under the contract for which rates were drastically reduced after negotiation are shown in table below:

Table-16

*Acceptance of low rates after negotiations*

| Item         | Binnagudi               |                        |                           | Bengdubi                |                        |                           |
|--------------|-------------------------|------------------------|---------------------------|-------------------------|------------------------|---------------------------|
|              | Quantity tendered in Kg | Rate quoted per 100 Kg | Rate negotiated per 100Kg | Quantity tendered in Kg | Rate quoted per 100 Kg | Rate negotiated per 100Kg |
| Orange       | 29167                   | 1485                   | 211                       | 21583                   | 1400                   | 100                       |
| Mussambi     | 36458                   | 1485                   | 211                       | 26979                   | 1400                   | 100                       |
| Apple Royal  | 10416                   | 5590                   | 3500                      | 7708                    | 4200                   | 2150                      |
| Litchi       | 2083                    | 5800                   | 4000                      | 1542                    | 6000                   | 3000                      |
| Grapes Green | 3125                    | 5000                   | 3000                      | 2313                    | 4500                   | 3150                      |

Instances were also seen where the CFAs accepted the rates, even though the quoted rates were less than the RR by more than 20 *per cent*. This indicated that reasonable rates were not determined accurately.

It would be evident that while there are enough instructions on tendering and contracting process, the system on the ground is informal. Many of the instructions are not followed.

**Recommendation 11**

Ministry should develop a set of guidelines containing Dos and Don'ts in such negotiations and hold procurement officers including financial advisers accountable for any significant deviation from the laid down norms of tendering.

**Recommendation 12**

Ministry and Army Headquarters should review the whole set of instructions from the point of view of their implementability. In view of the logistical challenges facing procurement of fresh rations on such a huge scale, it is necessary that a thorough appraisal is made to identify the weaknesses in the system and rectify them.

Army HQ stated that negotiations with L1 tenderer were conducted according to the guidelines of CVC, Ministry of Finance and Ministry of Defence. Regarding sharp drop in prices after negotiations, it stated that though if viewed in isolation, it would obviously stand as questionable, it needed to be viewed in the light of the fact that the initial rates quoted were 132 *per cent* and 119 *per cent* higher than the current contracted rate. Since these were basket rates and the physical demand

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would be less, Army HQ was of the opinion that the contractor might have used this to calculate his profit margins while bidding and negotiating for fruit contracts.

Audit has not seen the items in isolation and the full contracted value has also been considered. The total contracted value came down by 35 *per cent* and 33 *per cent* after negotiations. The price of oranges or musambies at Re 1 a kilogram even in season is unrealistic.

It is not the contention of Audit that negotiations should not be carried out. However it is equally important that market trends and market rates are kept in mind so that a rate, which in the Army parlance is called “freakish” is not accepted without adequate analysis and justification.

## **Chapter 4: DISTRIBUTION OF RATIONS**

**Audit Objective:**

To assess whether

- the distribution system ensured timely supply of sufficient quantity and variety of ration.
- users' satisfaction with regard to quality and availability of ration was maintained.

### **4.1. Fresh rations**

The proportion in which different varieties of vegetables and fruits are to be issued to the consuming units is prescribed for each month, for each station by the respective Station Commanders depending upon the troop's preference and local availability. Therefore the contract for the procurement of fruits and vegetables also stipulates that the contractor would supply the varieties of vegetables and fruits according to the prescribed proportion. Audit compared the procurement, issues and receipt of vegetables and fruits at 29 units at three major stations.

It was found that the consuming units did not receive the fruits and vegetables according to the prescribed mix. Analysis showed that in the case of vegetables and fruits, about 74 *per cent* of the issues made during the month were not in accordance with the prescribed norms of issue. In some months the non-adherence was even to the extent of 100 *per cent*.

Of the total fruit supply during July 2007, one of the units was to receive 65 *per cent* mangoes, against which it received only 19 *per cent*. While no guava was prescribed during that month, 29 *per cent* of the fruits received during the month were guavas. During October 2007, another unit was supposed to get 50 *per cent* apples and 20 *per cent* banana but it actually received 20 *per cent* apples and 60 *per cent* banana. At Delhi station, 10 *per cent* mussambi was authorised to the units in September 2006. It was found that no mussambi was issued to eight of the 15 units selected by Audit. While in the remaining units, the extent of issue was upto 23 *per cent* against the authorized 10 *per cent* per month. In reply the units stated that regular monthly feedbacks were being rendered where it was being asserted that only 60 to 70 *per cent* of the laid down percentage were being issued.



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### Discrepancy in issue and receipt of items

Audit also found that the quantities received by the consuming units were different from what was shown to have been issued to the units by the Supply Depots. Certain varieties of vegetables shown to have been issued by the Supply Depot and received by the consuming units were not even procured by the Supply Depots on those particular days. The units attributed short receipt to the Supply Depots. While no system for reconciliation between the units and depots existed, crosschecking of the unit records by Audit with the issue records at the depots indicated that there was a mismatch between what was issued to the units by the Depot and what was received by the units. A typical snapshot of issues by Supply Depot Akhnoor and receipts by 510 ASC Bn. in two days is given in the table below. Both the unit and the depot are commanded by the same Commanding Officer.

**Table-17**

#### *Anomalies in issue/receipt of vegetable and fruit fresh*

| Date: 9 July 2007                  |            |                    |            | Date: 20 February 2008             |              |                    |            |
|------------------------------------|------------|--------------------|------------|------------------------------------|--------------|--------------------|------------|
| Issued by SD Akhnoor to 510 ASC Bn |            | Recd by 510 ASC BN |            | Issued by SD Akhnoor to 510 ASC Bn |              | Recd by 510 ASC BN |            |
| Item                               | Qty (Kg)   | Item               | Qty (Kg)   | Item                               | Qty (Kg)     | Item               | Qty (Kg)   |
| Pumpkin                            | 19         | Pumpkin            | 15         | Brinjal                            | 58.5         | Brinjal            | 15         |
| Bitter Gourd                       | 28         | Bitter Gourd       | 7          | Cauliflower                        | 30           | Cauliflower        | 16         |
| Mint Green                         | 4          | Mint Green         | Nil        | Peas                               | 20           | Peas               | 12         |
| Totamo Green                       | 11         | Tomato Green       | 3          | Carrot                             | 15           | Carrot             | 35         |
| Cucumber                           | Nil        | Cucumber           | 3          | Cabbage                            | 25           | Cabbage            | 33         |
| Bottle Gourd                       | 39         | Bottle Gourd       | Nil        | Tomato                             | 11           | Tomato             | 8          |
| Chillies Green                     | Nil        | Chillies Green     | 1          | Ginger                             | 6            | Ginger             | Nil        |
| Knol Khol                          | Nil        | Knol Khol          | 30         | Chillies Green                     | 10.5         | Chillies Green     | 3          |
| R Saag                             | Nil        | R Saag             | 15         | Lime Sour                          | 6.3          | Lime Sour          | Nil        |
| Ladies Finger                      | 33         | Ladies Finger      | 60         | Coriander                          | Nil          | Coriander          | 5          |
|                                    |            |                    |            | Spinach                            | Nil          | Spinach            | 30         |
|                                    |            |                    |            | Radish                             | Nil          | Radish             | 25         |
| <b>Total</b>                       | <b>134</b> | <b>Total</b>       | <b>134</b> | <b>Total</b>                       | <b>182.3</b> | <b>Total</b>       | <b>182</b> |
| <b>Fruits</b>                      |            |                    |            |                                    |              |                    |            |
| Mango (S/F)                        | 90         | Pears              | 90         | Banana                             | 36           | Banana             | 82         |
|                                    |            |                    |            | Kinoo                              | 22           |                    |            |

During audit such discrepancies were widely seen across many units and Commands.

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The table below highlights item wise discrepancy in receipt of vegetables and fresh fruits by various units. It could be seen that out of the 43 cases, the discrepancy in the types of items issued and received was 100 *per cent* in 17 cases of vegetables and 23 cases of fruits.

**Table-18**  
*Item wise discrepancy in receipt of vegetable/fruit fresh*

| S. No. | Year    | Name of unit   | Date     | No. of items issued to units |        | Discrepancy in receipts |        |
|--------|---------|----------------|----------|------------------------------|--------|-------------------------|--------|
|        |         |                |          | Veg                          | Fruits | Veg                     | Fruits |
| 1.     | 2006-07 | 510 ASC Bn     | 01.07.06 | 7                            | 0      | 7                       | 2      |
| 2.     |         |                | 22.07.06 | 7                            | 2      | -                       | -      |
| 3.     |         |                | 16.08.06 | 7                            | 3      | -                       | -      |
| 4.     |         |                | 16.09.06 | 7                            | 4      | -                       | -      |
| 5.     | 2007-08 | 510 ASC Bn     | 12.04.07 | 7                            | 2      | 7                       | 2      |
| 6.     |         |                | 26.05.07 | 9                            | 2      | 6                       | 1      |
| 7.     |         |                | 18.06.07 | 8                            | 3      | 7                       | 2      |
| 8.     |         |                | 09.07.07 | 6                            | 1      | 6                       | 1      |
| 9.     |         |                | 08.08.07 | 8                            | 1      | 6                       | 1      |
| 10.    |         |                | 10.08.07 | 7                            | 0      | 7                       | 0      |
| 11.    |         |                | 20.08.07 | 7                            | 0      | 7                       | 0      |
| 12.    |         |                | 27.08.07 | 6                            | 1      | 6                       | 1      |
| 13.    |         |                | 05.09.07 | 8                            | 1      | 8                       | 0      |
| 14.    |         |                | 19.09.07 | 8                            | 2      | 4                       | 1      |
| 15.    |         |                | 29.09.07 | 5                            | 1      | 5                       | 1      |
| 16.    |         |                | 19.11.07 | 7                            | 1      | 4                       | 0      |
| 17.    |         |                | 07.01.08 | 10                           | 1      | 7                       | 0      |
| 18.    |         |                | 20.02.08 | 9                            | 2      | 5                       | 2      |
| 19.    | 2007-08 | 75 Armd Regt   | 05.09.07 | 7                            | 1      | 7                       | 1      |
| 20.    |         |                | 19.09.07 | 8                            | 1      | 3                       | 0      |
| 21.    |         |                | 29.09.07 | 6                            | 3      | 6                       | 3      |
| 22.    |         |                | 19.11.07 | 7                            | 1      | 7                       | 1      |
| 23.    |         |                | 07.01.08 | 10                           | 1      | 4                       | 1      |
| 24.    |         |                | 20.02.08 | 9                            | 2      | 5                       | 2      |
| 25.    | 2007-08 | 6 Raj Rif      | 26.05.07 | 9                            | 2      | 6                       | 1      |
| 26.    |         |                | 18.06.07 | 8                            | 3      | 8                       | 1      |
| 27.    |         |                | 27.06.07 | 6                            | 1      | 6                       | 1      |
| 28.    |         |                | 05.09.07 | 8                            | 1      | 8                       | 0      |
| 29.    |         |                | 29.09.07 | 8                            | 4      | 6                       | 4      |
| 30.    |         |                | 19.11.07 | 7                            | 1      | 5                       | 1      |
| 31.    |         |                | 20.02.08 | 9                            | 2      | 6                       | 2      |
| 32.    | 2007-08 | 110 Engr Regt  | 02.01.08 | 10                           | 2      | 2                       | 2      |
| 33.    |         | 25 Punjab Regt | 02.01.08 | 10                           | 2      | 7                       | 2      |
| 34.    |         | 110 ER         | 28.01.08 | 10                           | 1      | 8                       | 1      |
| 35.    |         | 25 PR          | 28.01.08 | 8                            | 1      | 8                       | 1      |
| 36.    |         | 110 ER         | 04.02.08 | 10                           | 1      | 6                       | 0      |
| 37.    |         | 25 PR          | 04.02.08 | 10                           | 1      | 4                       | 1      |
| 38.    |         | 110 ER         | 22.02.08 | 11                           | 2      | 6                       | 1      |
| 39.    |         | 25 PR          | 22.02.08 | 12                           | 3      | 8                       | 3      |
| 40.    |         | 110 ER         | 07.03.08 | 9                            | 3      | 9                       | 2      |
| 41.    |         | 25 PR          | 07.03.08 | 9                            | 3      | 9                       | 3      |
| 42.    |         | 110 ER         | 28.03.08 | 9                            | 3      | 6                       | 2      |
| 43.    |         | 25 PR          | 28.03.08 | 10                           | 3      | 5                       | 0      |

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Thus the existing system failed to ensure that the required quantity and variety of vegetable and fruits are supplied to the troops and underscored the lack of awareness about the authorization and entitlements amongst the users.

### 4.2. Discrepancy in demand by the Units and Supply by the Depots

As per the laid down procedure, the units would submit their demand on IAFS-1555 forty-eight hours in advance to the Supply Depot. The same would be consolidated and order placed on the contractor. The demands placed on the contractor would indicate the variety and quantity to be supplied and date, time and place where required.

Quantity of fresh rations demanded and supplied to a unit will depend on the feeding strength. Thus generally the proportion of vegetable, fruits and other items would follow a particular trend. This however was not seen in a few cases. As would be seen from the following table, the quantities of fruits and vegetables moved in a narrow band but the eggs supplied ranged from 1920 to 10470.

Table-19

#### *Disproportionate issue of fresh items of rations*

| Unit        | Month   | Vegetable (Kg) | Fruits (Kg) | Eggs (Nos) |
|-------------|---------|----------------|-------------|------------|
| 5011 ASC Bn | Feb 06  | 1486           | 1039        | 1920       |
|             | Mar 06  | 1721           | 992         | 2190       |
|             | Jan 08  | 1733           | 1040        | 10100      |
|             | Feb 08  | 1633           | 997         | 10470      |
| 11 CSR      | Feb 06  | 2273           | 1335        | 1740       |
|             | June 06 | 2089           | 1341        | 4680       |
|             | Sept 06 | 2777           | 1614        | 9150       |
|             | Mar 08  | 2682           | 1475        | 3270       |

In reply the Supply Depot stated that it was the responsibility of the accounting unit to draw their rations as per entitlement and that the Depot does not exercise any checks thereon. The reply further suggested that the overdrawn items should be adjusted by the units in subsequent demands. Such issue of huge amount of eggs without corresponding increase in other items would indicate issue of eggs as “in lieu” item.

### 4.3. No evidence of receipt of rations

While accounting for rations, all issues during the year are reconciled with the receipts by units. This involves matching of issue and receipt vouchers. In the Northern Command alone, Rs 1.92 crore worth of rations remained untraceable as

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of 31 March 2008. Of this, Rs 1.20 crore worth of rations was issued during 2005-06, the receipt of which was yet to be traced.

Army HQ stated that the vagaries of weather, local production of items, seasonal changes, changes in government policies etc. were variables which could lead to changes in availability of items which could be procured from the market by the contractor. Though generally 100 *per cent* adherence to percentage and schedule was maintained at the depot level, it was practically difficult to maintain the percentage for each variety issued for each and every unit, every month. Thus there could be minor variations as far as individual units were concerned.

It stated that the mismatch in issue and receipt vouchers in Northern Command was being investigated.

Army HQ also stated that to obviate the problem of distribution a proposal to bring in a reasonable amount of flexibility in the system was being taken up.

Audit views that if 100 *per cent* adherence to percentage and schedule is maintained at the Supply Depot level, it is not clear why the same is not adhered to in cases of units as they are the final recipients of fresh rations.

This issue also is required to be viewed in the light of the contractual format for fresh rations. If all the items carry the same rates, as are usual, some of the rates are freakishly low and flexibility is allowed in the system to the prescribed mix, it would be reasonable to assume that the contractor would tend to supply the items which are beneficial to him in terms of profit.

Finally, the fact of mismatch of issue and receipt is not explained by the above factors.

### **Recommendation 13**

**It is strongly recommended that Ministry and Army Headquarters should immediately draw up a detailed plan to computerise the management of supply chain of both dry and fresh nations. The power of the Information Technology should be leveraged to create a networked system connecting all the Supply Depots and Supply points. Issues, Receipts, Inventory management, Procurement and other aspects of supply chain management should be brought under this system. Contracted prices of various items should be published on the dedicated website to be created for this purpose.**

### 4.4. Quality of rations found inadequate by the Army's own feedback reporting system

#### Internal Study by Army HQ

A detailed study was conducted by Defence Research and Development Organization in coordination with the Director General Armed Forces Medical Services from September 2001 to September 2005 to assess the nutritional status of the three Services and the adequacy of the existing scales of rations. The study also included surveys at selected stations to assess the satisfaction level of troops regarding quantity, quality and taste of rations. The survey was repeated after a gap of three months.

While in the initial survey, the satisfaction with the quality of rations was 34 *per cent*, it decreased to 29 *per cent* in the second survey. Similarly the satisfaction with regard to taste of rations decreased from 32 *per cent* to 16 *per cent* in the second survey. Satisfaction with respect to quantity was also low at 38 *per cent* during the initial survey and 33 *per cent* during the repeat survey. The following were the important findings and recommendations of the report relevant in this context.

- Satisfaction level of troops regarding quantity, quality and taste of rations was very low; and
- The quality of meat and fresh vegetable was particularly low, and efforts should be made to improve the quality of meat and chicken.

In order to assess the quality of rations and make improvements, Army has a system of obtaining periodic feedback reports from the consuming units wherein the troops evaluate the quality of various items as excellent, good, satisfactory or poor. The reports are finally rendered to the Army HQ, which monitors the quality of rations provided to the troops.

Audit analysed 224 such feedback reports rendered by the units in Northern and Western Command during the period. Feedback reports were not furnished to Audit by Eastern Command. It was found that in 68 *per cent* of the feedback reports, the quality of rations was graded as satisfactory and below, in 31 *per cent* the grading was good and in only one *per cent* the grading was excellent. In 14 of the 50 cases pertaining to a Corps in Northern Command, the units had complained that the quality of rations was poor and sub-standard. Dissatisfaction was also experienced against the specification and size of eggs. The Commander of the Corps had issued instructions stating that any rations if graded as "Satisfactory" by the troops should be rejected and that only rations graded as "Good" or above should be accepted.

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The feedback report also contains a form for reporting of rejection of rations received from the Supply Depots due to poor quality. Audit found that only in case of 33 reports these rejection forms were filled up by the units. In rest of the feedback reports such forms were not included at all.

The draft report was issued to the Ministry of Defence in January 2009. Their reply had not been received till the finalization of this report as of March 2010.



**(Gautam Guha)**

**Director General of Audit**

**Defence Services**

**New Delhi**

**Dated: 4 May 2010**

**Countersigned**



**(Vinod Rai)**

**Comptroller and Auditor General of India**

**New Delhi**

**Dated: 4 May 2010**

### LIST OF ABBREVIATIONS

|            |  |
|------------|--|
| ADST       | Assistant Director Supplies and Transport  |
| ALMR       | Average Local Market Rate                  |
| APO        | Army Purchase Organisation                 |
| ASC        | Army Service Corps                         |
| ASC Bn     | ASC Battalion                              |
| AWS        | Advance Winter Stocking                    |
| CDA        | Controller of Defence Accounts             |
| CFL        | Composite Food Laboratory                  |
| DDST       | Deputy Director Supplies and Transport     |
| DGST       | Director General Supplies and Transport    |
| EC         | Eastern Command                            |
| ESL        | Estimated Storage Life                     |
| FCI        | Food Corporation of India                  |
| FSD        | Field Supply Depot                         |
| IFA        | Internal Financial Advisor                 |
| MGASC      | Major General Army Service Corps           |
| MISO       | Management Information System Organisation |
| MMF        | Malted Milk Food                           |
| NC         | Northern Command                           |
| PCDA       | Principal Controller of Defence Accounts   |
| PSU        | Public Sector Undertaking                  |
| QMG        | Quarter Master General                     |
| RHSD       | Rail Head Supply Depot                     |
| RR         | Reasonable Rates                           |
| SOP        | Standard Operating Procedure               |
| SRDS       | Stock Return and Demand Statement          |
| Supply Coy | Supply Company                             |
| WC         | Western Command                            |

