

**PROCUREMENT OF FRESH SUPPLIES IN
THE ARMY**

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**“PROCUREMENT OF FRESH SUPPLIES IN THE
ARMY”**

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Master of Philosophy in Social Sciences of the Punjab University, Chandigarh**

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CERTIFICATE

I have the pleasure to certify that Jitendra Singh Bisht has pursued his research work and prepared the present dissertation titled '*Procurement of Fresh Supplies in the Army*' under my guidance and supervision. The dissertation is the result of his own research and to the best of my knowledge, no part of it has earlier comprised any other monograph, dissertation or book. This is being submitted to the Punjab University, Chandigarh for the degree of Master of Philosophy in Social Sciences in partial fulfilment of the requirement for the Advanced Professional Program in Public Administration (APPPA) of Indian Institute of Public Administration (IIPA), New Delhi.

I recommend that the dissertation of Jitendra Singh Bisht is worthy of consideration for the award of M Phil degree of Punjab University, Chandigarh.

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LIST OF ABBREVIATIONS

ASC	Army Service Corps
ALMR	Average Local Market Rates
CFA	Competent Financial Authority
CST	Comparative Statement of Tender
RR	Reasonable Rates
CCR	Current Contract Rates
Offr	Officer
CO	Commanding Officer
2IC	Second in Command
HQ	Headquarters
NIC	National Informatics Centre
AT	Acceptance of Tender
CPPP	Central Public Procurement Portal
CDM	College of Defence Management
AOC	Army Ordnance Corps
LP	Local Purchase
GoI	Government of India

MoD	Ministry of Defence
DPM	Defence Procurement Manual
IFA	Integrated Financial Advisor
AON	Acceptance of Necessity
TE	Tender Enquiry
EMD	Earnest Money Deposited
IT	Information Technology
SCM	Supply Chain Management
SOP	Standing Operating Procedure
LTE	Limited Tender Enquiry
LD	Liquidated Damages
OTE	Open Tender Enquiry
FR	Financial Regulations
EME	Electrical & Mechanical Engineers
MES	Military Engineering Services
RFP	Request For Proposal
RR	Reasonable Rates
Veg	Vegetarian
RC	Rate Contract

DFPDS	Delegation of Financial Powers Defence Services
Govt	Government
JCO	Junior Commissioned Officer
ORs	Other ranks
GFO	Garrison Field Officer
CPOs	Central Paramilitary Organisations
L1	Lowest One
Pvt	Private

PROCUREMENT OF FRESH SUPPLIES IN THE ARMY

CHAPTER- I

INTRODUCTION

“An Army marches on its stomach”

- Napoleon

Background

1. Procurement of goods and services is a major activity of the state in furtherance of its objectives. With limited resources at the government’s disposal it is necessary to optimise all activities relating to procurement to get best value for money.

2. Army Service Corps (ASC) is one of the most crucial verticals of Defence Logistics. The services of Army Service Corps are indispensable both during war and peace and contribute extensively to the overall morale and satisfaction of the armed forces personnel. In addition to the provision of mechanical transport, air maintenance, animal transport, clerical and catering related support, the Corps also provides the Indian Army, Indian Air Force and partially to Indian Navy their daily entitled rations, at all locations, both during war and peace. The system of provisioning of rations to the dependent troops has so far stood the test of time very well in quantitative terms.

3. Procurement of rations is apparently simple but is a complex 'system' that requires the efficient and effective management of wide-ranging Dry supplies, Fresh supplies, Storage facilities, Handling Equipment and Supply Chain. While the Dry Supplies are procured centrally at the Army Headquarters level, Fresh Supplies are procured locally through annual contracts concluded as per laid down procedures (Government of India, Ministry of Defence, *Defence Procurement Manual*, 2009¹ and Govt policy letter on *Procurement of Perishable Supplies*, 2006²). The biggest challenge lies in meeting the expectations of the troops which belong to the diverse and heterogeneous population of India. Assured supply, value for money, vast geographical spread, diverse terrain, varying climatic conditions, security related environmental factors, consumer preferences, local availability, short shelf life, resource paucity in underdeveloped areas and state of infrastructure, are the other aspects which necessitate constant review of procurement procedures.

¹ Government of India, Ministry of Defence (2009), *Defence Procurement Manual*, Ministry of Defence, New Delhi.

² Government of India, Ministry of Defence (2006), policy letter on *Procurement of Perishable Supplies*, issued vide letter No PC/RAKSHA/63060/Q/ST5/3633/D(QS) dated 26 Sep 2006.

4. Recently there have been dynamic changes in the retail sector. The sector has witnessed high investment and diversification. Piggybacking the boom in retail, the Supply Chain has opened large opportunities in fresh and processed food area. Large players have opened up and established Food Supply Chains to cater to the needs of consumers. The Indian market has also matured and offers varied range of food products. The Supply chains have reached all metros, its suburbs and now are foraying into the smaller towns. These are opportunities waiting to be exploited by ASC. Supply chain within the ASC could exploit the market chain to meet its requirements using outsourcing/ third party logistics techniques.

5. Changing economic environment, better availability of vegetables and fruits coupled with major advances in supply chain and ration management procedures the world over, demand a de novo look at the existing management, processes and procedures for procurement of fresh supplies. With increasing literacy, media exposure and awareness over the years, the overall aspirations and expectations of troops has gone up.

Statement of the Problem

6. Keeping pace with overall development in the country and meeting the growing aspirations of Defence personnel, there has been significant improvement in procurement of fresh supplies in the last few years. However a large number of difficulties are often faced in management of contracts for fresh supplies by ASC leading to procedural delays in conclusion of contracts, failure of contracts, problems in quality, Arbitration/ legal cases and lower consumer satisfaction. The same has also been highlighted adversely by the Audit in

the past³ (Comptroller & Auditor General, 2010-11, Report number 6 on *Supply Chain Management of Rations in Indian Army*). There is a need to reform the procedures in procurement of fresh supplies and contract management to ensure optimum efficiency and higher satisfaction level.

Purpose/ Objectives

7. A motivated combat soldier is the cornerstone of all endeavours in the Armed Forces towards optimal operational efficiency. An often-repeated cliché is the quote “*An Army marches on its stomach*”. The importance of an effective ration management system as a function of command cannot be over emphasised.

8. Objectives. Against the backdrop, the aims:-

- a) To examine the present system of procurement of Fresh rations in the Armed Forces.
- b) To analyse legal provisions in various regulations relating to procurement including applicability of DPM 2009 and E-procurement policy.
- c) To analyse various issues in introduction of reforms in procurement of fresh supplies.
- d) To suggest measures to strengthen the procurement system so that consumer satisfaction could be enhanced.

Rationale/ Justification of Study

³ Comptroller & Auditor General Performance Audit Report (2010), Report number 6 on *Supply Chain Management of Rations in Indian Army*, C&AG, Delhi.

9. The existing system though has stood test of the time; at times tend to be personality oriented and rigid in execution, which fails to optimally achieve the desired satisfaction level amongst the consumers. A legacy of the British Raj, India has antiquated logistics apparatus which needs to be restructured to resonate with the dynamic and integrated roles that have evolved with the changed markets and higher aspirations of the troops. The existing system has accommodated numerous arrangements and incorporated certain adaptations as it responded satisfactorily to four major wars and numerous skirmishes that confronted India over the seven decades since Independence. However, with huge advancement in civil business practices, the procurement system of rations as part of the entire Logistics system in Armed Forces too needs to be reformed and brought in sync with the civil practices and technological advancements in the world.

10. Changing economic environment, better availability of vegetables and fruits coupled with major advances in supply chain and ration management procedures the world over, demand a de novo look at the existing management, processes and procedures for procurement of fresh supplies. With increasing literacy, media exposure and awareness over the years, the overall aspirations and expectations of troops has gone up.

11. To make the system more responsive to the requirements of Indian Armed Forces, the need is to identify existing drawbacks in the backdrop of the past events and likely future challenges, study the existing procurement system and concepts practiced by the civil/corporate houses and incorporate their relative strengths to formulate and revamp own procurement systems.

Research Questions/ Hypothesis

12. Research Questions.

- a) Is the present system of procurement of Fresh rations in the Armed Forces satisfactory?
- b) Is there a requirement to review the procedures relating to procurement including DPM 2009 and E-procurement model?
- c) What are the best business practices prevalent in market and other organisations for procurement for fresh supplies?
- d) How can the consumer satisfaction be enhanced further by changes in procedures for procurement of fresh supplies?

13. Hypothesis. The review of existing procedure for Procurement of Fresh Supplies in the Army would further enhance the overall consumer satisfaction.

Scope/ Limitations

14. The scope of this dissertation is as follows:-

- a) An overview of the existing system for management of ASC contracts for fresh supplies.
- b) Various provisions of DPM 2009.
- c) Efficacy of the revenue procurement procedures.
- d) Challenges faced during contract management.
- e) Recommendations to overcome challenges through procedural reforms, efficient operation of contracts and effective contract management.

15. The study has analysed the existing procurement system of fresh rations in the Armed Forces and identified issues that pose an impediment to arriving at a better and more efficient manner of procuring the fresh rations. It has also brought out suggestions to incorporate the recommended and the best/acceptable business practices of the civil business houses with the procurement system of fresh rations in the Armed Forces if not being done already. The dissertation has not got into the specific role and deployment of the Armed Forces as well as confidential aspects of operational logistics/procurement systems. Inadequacies have only been discussed at a conceptual level, leaving out the specifics.

Literature Review

16. The list of pertinent literature along with their extract that forms the literature review on the aforementioned problem statement is given below:-

- a) **Govt of India (GoI), Ministry of Defence, 2009** issued *Defence Procurement Manual* which lays down detailed procedures for all Revenue procurements in the Armed Forces; however it fails to elaborate on procedure for procurement of Fresh Supplies. Though fairly well established procedures for provision and procurement exist in the form of the DPM-2009 for revenue procurement, yet over a period they have developed deviations especially in terms of authority and accountability at various levels. The procedures have to be fine-tuned to the changing requirements of the army, the developments in the industrial and economic environment of the

country and the exponential increase in requirements due to the proliferation of inventory. The procedures have to be constantly modified and remodified. As the organisation evolves, revenue procurement has to be restructured or reconnected with the same. Thus, dynamism in evolving and changing according to the contemporary scenario, in the procurement process, which is ever so important, has to be maintained. Defence procurement, unlike procurement of other departments involves a deliberate and complex procedure that has evolved over a long period. This is done keeping in mind the safety and security of the nation, and the threat perceptions- extant as well as new ones, and therefore the ever-changing defence scenario needs to keep pace. Though, a well-framed DPM-2009 and other policies are being practised, it is understood that reforms and flexibility have to be integrated with the existing instructions based on feedback from the end-users, the approving authorities and based on the ever-changing defence perception. The lack of an integrated and synergised approach has to be made up. Strict adherence to a time frame under a strong monitoring force will work to the advantage of the system and ensure dauntless and resolute decision taking.

- b) **Govt of India (GoI), Ministry of Defence, 2006** issued Policy letter on *Procurement of Perishable Supplies* which gives out detailed procedure for procurement of fresh supplies. Owing to the peculiarities associated with the nature of perishable supplies and decentralised execution in penny packets at the level of consumption centres, contracts thereof are governed by a separate exclusive SOP issued vide Govt Of India, MoD Policy No PC /RAKSHA/63060/Q/ST-5/3633/D (QS) dated 26 Sep 2006. This separate provision is necessitated due to peculiar nature of perishable supplies and the recurring requirement on daily basis. Owing to the

peculiarities, the contract of perishable supplies manifests itself some characteristics of rate contract as well as quantity oriented contract in terms of deliverables on one hand and on the other hand it reflects shades of both types of tendering process is limited tender enquiry as well as open/ advertised tender enquiry. It is an old system for procurement of perishable supplies through conclusion of annual contracts through registered ASC contractors. Although it has stood the test of time, it needs to be updated keeping in view the changes in the market, financial powers and E Procurement policy. Some of the peculiarities are summarized as under:-

- i. Perishable nature of supplies necessitates decentralized procurement, as far as possible close to consumption centres.
- ii. Procurement in small quantities in penny packets including tendering of the procured items at remote locations.
- iii. Recurring requirement on a routine basis throughout the year.
- iv. Total requirement over the complete year can be estimated to a reasonable accuracy.
- v. Perishable supplies are very sensitive to price fluctuations being weather, market, and production sensitive.
- vi. Unlike other material needs of the Army, procurement of the desired quantity of perishable supplies on a given day is non violate requirement, since troops have to be fed on daily basis and alibi of non availability of perishable supplies is unacceptable.
- vii. Only enlisted vendors in each regional army commands are eligible to participate in the advertised tender enquiry process.

- c) **Comptroller & Auditor General** Performance Audit report of 2010-11 Report number 6 on *Performance Audit of Supply Chain Management of Rations in Indian Army* adversely commented on management of the food supply chain in three operational commands i.e. Northern, Eastern and Western Command of Indian Army. Audit highlighted systemic deficiencies including inability to consume rations within shelf-life. Report of High Level Committee to examine the recommendations of **C&AG 2010** which brings about large number of anomalies in the procurement which have not yet been fully addressed. The follow up audit in 2016, C&AG report commented “Ministry implemented only two out of 12 recommendations of PAC directly related to activities of Supply Chain Management of ration despite acceptance and assurance given in March 2013. As a result, activities related to provisioning/ procurement, testing, distribution of ration could not be improved and satisfaction level of the troops, particularly in Northern and Eastern Command remained low”. The 12 recommendations include review of estimation process, risk clause in central contracts, opening up procurement of sugar, oil, dal and atta from open market, limit extension of estimated shelf life, expand vendor base, strict registration process for specific items, blacklisting of vendors who fail to respond to tender, investigation of abnormal variations in rates of perishables, financial advisors to be proactive in benchmarking, hold procurement officers accountable, review procurement instructions and automation. It is considered that the C&AG did not involve the primary stakeholders in recommending the solutions to the systemic deficiencies identified by them and hence these continue to exist. The problem of supply chain needs to be analysed with adequate domain competence to arrive at root causes and identify leverage points.

d) **Defence Institute of Physiology and Allied Sciences (DIPAS)** has made significant contribution in the field of military nutrition since 1963, when first time the ration scale for high altitude was introduced. The nutritional requirements of Indian Army including specialized trainings such as high altitude warfare and commandoes have been re-evaluated using detailed investigations during 2001-2006. Committee to study recommendations of C&AG performance audit, in its report (Para 172) recommended for study by Defence Institute of Physiology and Allied Sciences(DIPAS) after every two years to suggest alterations in rations depending upon development of food technology and preference of troops. Defence Institute of Physiology and Allied Sciences (DIPAS) Study report (2015)⁴, ***Suggested Alteration in Ration Scale Depending upon Nutritional Aspects and Satisfaction Level of Troops of all the Three Service***, lays down that the primary goal of accessing quality of rations from troop's perspective i.e. to satisfy hunger, fulfilling emotional /psychological needs as well as to maintain health. The study report has brought out that out of the 53203 number of troops examined, most of them have found quality of rations to be good and above. Though the study has analysed basic food preferences in high altitude area, it has missed out on an important aspect of inter-se preference amongst the items of current high altitude rations inventory of tinned, dehydrated and ready to eat(RTE) varieties as well as options available in the market today in these categories. Also the modern energy saving cooking appliances has not been studied.

⁴ Defence Institute of Physiology and Allied Sciences (DIPAS) Study (2015), *Suggested Alteration in Ration Scale Depending upon Nutritional Aspects and Satisfaction Level of Troops of all the Three Service*, DIPAS, Lucknow Road, Timarpur, Delhi.

e) **Government of India (GoI), 2012** issued guidelines for *E-procurement*⁵ which lays down procedures and timelines for procurement of all items through E Procurement to ensure greater transparency in all procurements by all governmental organisations including conclusion of contracts by the Army. With web enabling one of the critical areas of their business, government departments can access new strategic partners, uncover new suppliers and streamline purchasing processes while simultaneously lowering costs. Adopting an e-procurement solution could save on the money, time and labour that are normally wasted on sieving through reams of paper. The opportunity to conduct online transactions with the government reduces red tape apart from simplifying regulatory processes. The National Informatics Centre (NIC) has developed its own e-Procurement software solution namely GePNIC to cater to the procurement/tendering requirements of the Government Departments and Organizations. The functional model developed by NIC is generic in nature and covers activities relating to e-tendering but not those pertaining to pre-tendering or post award of tender. The GePNIC solution being implemented in Indian Army is a shared application being used by various departments of Govt of India. The present version of the software uses only the e tendering and auction module. The supplier management is addressed to a limited extent. The implementation of e-procurement has converted the present tendering activity from manual to online system. Rest of the activities including acceptance of necessity by CFA, concurrence by IFAs at various stages, conduct of TEC, bench marking, negotiations where necessary and final CFA sanction continues to be done manually. Parts of procurement process remain isolated due to a silo mentality. This in turn prevents a more integrated approach to technology and its solutions. It is evident that e-procurement mechanisms

⁵ Government of India, Department of Expenditure, Office Memorandum (OM) no. 10/3/2012-PPC dated 30th March, 2012, *Preliminary Guidelines for e-procurement*.

need to be addressed within a more holistic context if they are to have any useful impact on broader management of the supply chain.

- f) **Government of India (GoI), 2016** issued *Delegation of Financial Powers to Defence Services (DFPDS)* ⁶ which has greatly enhanced the delegated financial powers to various appointments in consultation with Integrated Financial Advisor (IFA), however the organisation is not yet geared to conclude contracts as per Enhanced Financial powers. It is apparent that this enhancement of financial powers in a haste without putting the necessary infrastructure in place. According to these all enhanced powers are to be exercised in consultation with IFA, thus making them indispensable. The IFA cadre's lack of experience, training and involvement in defence matters has made it worse. Off course it has got a big boost in its cadre strength but in field areas it is a matter of concern where no one wants to go. One has to often actually keep chasing files to be cleared by them.
- g) **Ministry of Finance** has issued new *General Financial Rules (GFR)* ⁷ in 2017. The aim of any rule is to provide a framework within which an organization manages its business in a financially prudent manner without compromising its flexibility to deal with varied situations. The new GFRs 2017 aims to enable an improved, efficient and effective framework of fiscal management while providing the necessary flexibility to facilitate timely delivery of services. The move towards eProcurement and GeM

⁶ Government of India, Ministry of Defence (2016), *Delegation of Financial Powers to Defence Services (DFPDS)*, Ministry of Defence, New Delhi.

⁷ Ministry of Finance (2017), *Government Financial Rules (GFR)*, Ministry of Finance, New Delhi.

platform need to be analysed for feasibility to procure rations for meeting the requirements Defence services.

Methodology

17. The Methodology adopted for the study is as follows:-

- a) A study of the present system and analysis of its drawbacks has been carried out to arrive at contemporary solutions. The research design is both Descriptive and Exploratory.
- b) Primary Sources. Primary data have been collected through:-
 - (i) Quantitative and Qualitative inputs collected through Survey by administering Semi-structured Questionnaire (with few open ended Questions) to consumers and stakeholders.
 - (ii) Informal Interviews/interactions with domain experts handling Supplies.
- c) Secondary Sources. Secondary Data have been obtained through Literature survey of relevant Books; research papers; study reports; and different government reports on the subject which are public.
- d) Analysis. Data collected have been analysed using appropriate statistical tools.

18. To ascertain the opinion of various categories of personnel in receiving the Ration in Armed Forces, a thorough scan of the environment was carried out. Factors were arrived at to be included in the survey instruments. Best Practices were studied in the Government and private premier institutions to aid in making practical recommendations with an implementable time frame. The various aspects of organisational structure, infrastructural and supply

chain management were studied in detail and important lessons were drawn for making suitable recommendations. Questionnaires were designed to ascertain the perception of the different strata in various categories involved in receiving and providing fresh Rations in Armed Forces to include all categories of stakeholders and their recommendations for enhanced consumer satisfaction.

19. The problem statement highlights that the focus of the study is to enhance quality of fresh ration leading to user satisfaction. The various factors and sub factors have been identified after initial interaction with stake holders and personal experiences. These are listed below:-

- a) Quality of Fresh Rations items.
- b) Quantity of supplies.
- c) Timely supplies.
- d) Responsiveness of Supply Depot staff.
- e) General Procedures.
- f) Contract rates.
- g) Contract provisions.
- h) Infrastructure.
- i) Procurement procedures.

20. The Sampling was carried out by cluster method which covered the opinions of Officers, JCOs (Junior Commissioned Officers) and troops (Other Ranks) of the Armed Forces. A separate Questionnaire for ASC officers, domain experts who have the first-hand experience in handling of supplies has been prepared. The responses of clients have been

studied, statistically analysed, and relevant observations and inferences have been drawn.

The findings from these questionnaires has been utilised for the following:-

- a) Provide feedback on consumer satisfaction.
- b) Recognise areas that are working well.
- c) Indicate areas of improvement.
- d) Serve as baseline data for future client satisfaction measurements.

Structure of the Dissertation (Chapterisation)

21. The study is covered under following chapters:-

- a) Chapter I – Introduction. This chapter highlights the importance of the study undertaken.
- b) Chapter II – Concepts, Definitions and provisions of Defence Procurement Manual (DPM) 2009. This chapter gives out the various concepts and Definitions.
- c) Chapter III – Existing system for Procurement of fresh supplies. Existing procedures for procurement have been explained in detail.
- d) Chapter IV – Findings of Survey and Statistical analysis. Statistical treatment of primary data has been carried out to validate concepts and measures. Statistical data analysis, quantitative tools, Operation Research and System Analysis has been used to validate the Hypothesis.
- e) Chapter V – Challenges faced in Procurement. Various challenges faced in procurement of Fresh supplies and Contract management has been explained.
- f) Chapter VI – Recommendations and Conclusion. This chapter recommends measures to further streamline and improve the procurement procedures.

CHAPTER- II

CONCEPTS, DEFINITIONS AND IMPORTANT PROVISIONS OF DEFENCE

PROCUREMENT MANUAL (DPM) 2009

“Transparency is the key to good governance & e-governance is the only effective way of transparent governance. While transparency reduces corruption, good governance goes beyond transparency in achieving openness. Openness means involving the stakeholders in decision-making process. Transparency is the right to information while openness is the right to participation”.

- **Narendra Modi**

Prime Minister of India

22. All items of fresh supplies are procured through local contracts in the Army. The general rules for the submission of Indents by units for drawing rations are contained in Regulations for the Army and Army Service Corps Regulations. The detailed procedures for procurement have been laid down in the Orders and Instructions issued from time to time, the most important being the Defence Procurement Manual (DPM) 2009 which gives out the procedures for all Revenue procurement in the Army. A separate GoI policy letter has been issued in 2006 giving out the detailed procedure for conclusion of contracts of fresh supplies. It is therefore essential to understand certain important concepts, definitions and provisions of DPM 2009 which are elaborated in succeeding paragraphs.

Defence Procurement Manual (DPM)-2009

23. DPM-2009 is the authority for all revenue procurements in the Armed Forces. The principles and procedures contained in DPM 2009 are to be followed by all wings of the Ministry of Defence and the Defence Services, as well as all organizations and units/establishments there under, for procurement of goods and services, expenditure on account of which is met from the revenue heads of the Defence Services Estimates (DSE) and any other type of purchases to which the provisions are made specifically applicable. DPM being the authority for all revenue procurements its essential that certain concepts and definitions as enshrined in the DPM are understood as given below:-

- a) Conditions of Contract. A contract is a legal document and must be governed by certain terms and conditions to protect the interest of both the parties to the contract. It is important that every purchase officer is not only thoroughly familiar with each conditions of a contract, but that he is also able to take appropriate and timely action to safeguard the rights and honour of the Purchaser. It is also desirable that the conditions of a contract are practical, fair and just for both the Purchaser and the Supplier. The conditions of contract become binding for both parties on signing/acceptance of the mutually agreed contract.

- b) Competent Financial Authority. The Competent Financial Authority (CFA) is an authority duly empowered by the Government of India to sanction and approve expenditure from public accounts up to a specified limit in terms of amount of such expenditure and subject to availability of funds. All financial powers are to be exercised by the appropriate CFA. Where financial powers have been delegated to

more than one authority under the same Serial/Head, authority with higher delegated financial powers will constitute the 'next higher CFA'.

- c) Financial Power. Financial power is the power to approve expenditure to be incurred for bonafide purposes in accordance with the laid down procedure and subject to availability of funds. The powers delegated by the Ministry of Defence to various authorities in the Services Headquarters and other organizations/establishments under them, as also to authorities in other organizations under the Ministry of Defence, are personal and cannot be further sub-delegated to any subordinate authority by the delegate. However, on the strict understanding that the sole responsibility rests on them, the authorities to which financial powers have been delegated may authorize staff officer(s) to sign communications and financial documents on their behalf provided that the name of the officer who is authorized to sign is communicated to the Audit Officer concerned.
- d) Integrated Finance. While Finance Division of the Ministry of Defence functions as Integrated Finance for CFAs in the Ministry, officers designated as Integrated Financial Advisors (IFAs) constitute integrated finance for the CFAs in the Services Headquarters, Command Headquarters, lower formations and units there under.
- e) Rate Contract (RC). A Rate Contract is an agreement between the Purchaser and the Supplier to supply stores at specified prices during the period covered by the contract. An RC is in the nature of a standing offer from the supplier and no minimum drawl need be guaranteed. A contract comes into being only when a formal order is placed by the CFA or the Direct Demanding Officers (DDOs) on the Supplier.

- f) Conformity of the DMP 2009 with other Government Orders, etc. The provisions contained in this Manual are in conformity with other Government manuals like the General Financial Rules, Financial Regulations (Defence Services Regulations), as also other instructions issued by the Government and the Central Vigilance Commission from time to time. If any instance of variance between the provisions of this Manual and other Government Manuals comes to notice, the matter should be immediately referred to the Ministry of Defence for clarification. In such cases, however, the on-going procurement need not be stopped pending resolution of the issue, if the requirement is operationally urgent or delay is likely to have any adverse implications.
- g) Validity of Internal Orders and Instructions. Internal orders and instructions, including Standard Operating Procedures (SOPs), issued by various Wings of the Ministry of Defence and the Services may be deemed to have been modified by the provisions of this Manual, to the extent the former are not in conformity with this Manual. This is necessary for ensuring uniformity among the purchase practices followed by various wings of the Ministry and the Services. The concerned Wings of the Ministry and Services may take necessary action to suitably modify their internal instructions and orders accordingly.
- h) Fundamental Principles of Procurement/ Public Buying. Every authority delegated with the financial powers of procuring goods in public interest shall have the responsibility and accountability to bring efficiency, economy, transparency in

matters relating to public procurement and for fair and equitable treatment of suppliers and promotion of competition in public procurement.

- i) Open Competitive Tendering. When stores are purchased from contractors, the system of open competitive tender should normally be the preferred mode, except where otherwise permissible under the rules and the purchase should be made from the lowest tenderer.

- j) Delegation of Powers. With the objective of decentralizing powers to enable effective use of resources by the actual operators, financial powers have been delegated to various authorities in the defence establishments down to the unit commanders. These powers are to be used within the framework of laid down procedures, cannons of financial propriety and amplificatory instructions. The powers so delegated also imply accountability and the CFAs must ensure that financial propriety and probity are observed in all cases.

- k) Revenue Procurement. As per Rule 91 of the General Financial Rules, 2005, revenue should bear all subsequent charges for maintenance and all working expenses, including all expenditure on working and upkeep of the project and also on such renewals and replacements and such additions, improvements or extensions, etc., as under rules made by the Government are debitable to revenue account. The revenue procurement, therefore, implies procurement of items and equipments, including replacement equipment (functionally similar) assemblies/sub assemblies and components, to maintain and operate already sanctioned assets in the service, the necessity of which has been established and accepted by the Government. In the

context of defence procurements, what would constitute revenue procurement is defined in Chapter 1 of this Manual.

- l) Request for Proposal/Tender Enquiry. The Request for Proposal (RFP), also called Tender Enquiry (TE), is the most important document in the procurement process. The RFP should be prepared with due care and with complete details of the items or services required, terms and conditions including payment terms, and clear instructions to the bidders. The RFP should contain full and clear specifications, scope of requirement and the evaluation criteria, both for technical bids and commercial bids. RFP should be vetted by integrated finance in those cases where financial powers are to be exercised with their concurrence.

- m) CFA's Sanction: A sanction is a written authority from the CFA authorizing the expenditure. A sanction invariably indicates the reference to the authority under which expenditure is being sanctioned, the financial implication, the item for which the expenditure is approved and the budget code head.

- n) Determining Reasonability Rates (RR)/ Bench Marking. In the case of competitive tendering where two or more vendors are competing independently to secure a contract, the competitive bids form the basis for determining reasonableness of prices. Database maintained on cost, based on concluded contracts, price of the product available through market, etc. Should also be used to assess reasonableness of the price offered. Before scheduled negotiation, (wherever considered necessary), it would be advisable to work out the estimated reasonable rate or the benchmark, to

judge acceptability of the L1 offer based on available information. The approach to be adopted for assessing reasonability in different contingencies is given below.

- o) Liquidated Damages. Compensation of loss on account of late delivery where loss is pre-estimated and mutually agreed to is termed as the Liquidated Damage (LD). Law allows recovery of pre-estimated loss, provided such a term is included in the contract. For imposition of LD, there is no need to establish actual loss due to late supply.

24. Procedural Propriety. The procedure to be followed in making public procurement must conform to the following yardsticks:-

- a) The specifications in terms of quality, type etc., as also quantity of goods to be procured, should be clearly spelt out keeping in view the specific needs of the procuring organizations.
- b) The specifications so worked out should meet the basic needs of the organization without including superfluous and non-essential features, which may result in unwarranted expenditure. Care should also be taken to avoid purchasing quantities in excess of requirement to avoid inventory carrying costs.
- c) Offers should be invited following a fair, transparent and reasonable procedure; the procuring authority should be satisfied that the selected offer adequately meets the requirement in all respects.
- d) The procuring authority should satisfy itself that the price of the selected offer is reasonable and consistent with the quality required.

- e) At each stage of procurement the concerned procuring authority must place on record, in precise terms, the considerations which weighed with it while taking the procurement decision.

Contract Management

25. A contract is any agreement between two or more parties where one party agrees to provide certain deliveries or services, and the other party agrees to pay for those deliveries or services. A contract is a written or oral legally-binding agreement between the parties identified in the agreement to fulfil the terms and conditions outlined in the agreement. A prerequisite requirement for the enforcement of a contract, amongst other things, is the condition that the parties to the contract accept the terms of the claimed contract⁸. A proposal or offer when accepted is a promise, a promise and every set of promises forming the consideration for each other is an agreement and an agreement, if made with free consent of parties competent to contract, for a lawful consideration and with a lawful object, is a contract.

26. A simple question with a simple and a complex answer. Simply put contract management is the administration of contracts between a company and its vendors. Contract management or contract administration is the management of contracts made with customers, vendors, partners, or employees. Contract management includes negotiating the terms and conditions in contracts and ensuring compliance with the terms and conditions, as well as documenting and agreeing on any changes or amendments that may arise during its implementation or execution. It can be summarized as the process of systematically and

⁸ What is Contract Management, Website https://en.wikipedia.org/wiki/Contract_management.

efficiently managing contract creation, execution, and analysis for the purpose of maximizing financial and operational performance and minimizing risk. Seven fundamental criteria of Contract Management⁹ can be listed as under:-

- a) Creation. Whilst many companies work from standard contracts, they do have to be created in the first place and they often need to be changed as negotiations progress.
- b) Negotiation. Of the contracts to ensure that, the best possible contract is available to both parties.
- c) Adherence. To the contracts and all of its sections and aims.
- d) Service Level Agreements (SLA). SLA and Key Performance Indicators (KPI) are set to manage the day-to-day performance of the vendor.
- e) Managing Changes. That may be required as the relationship changes and problems arise.
- f) Documenting. Any changes that may have been agreed.
- g) Analyzing. The benefits that accrue or may be available from the contract.

27. The contracts need to be methodically managed in order to ensure that financial and operational risk is minimized and vendor performance maximized¹⁰. We need to look at three distinct areas of vendor relationship:-

- a) Contract Administration. This is the formal “nuts and bolts”, small print management of the physical contract and the adherence to the sections and aim of the contract.

⁹ Purchasing & Procurement Centre, Website <https://www.purchasing-procurement-center.com/>.

¹⁰ National Contract Management Association, on <https://www.ncmahq.org/>

- b) Service Delivery. This is the management of the delivery of the products by the vendor. It ensures that they meet the service performance and quality that is required. Service delivery is managed by adherence to several Service Level Agreements that are defined during contract negotiation.
- c) Relationship Management. This ensures that the relationship between the company and vendor is mutually constructive and problem free.

28. Contract management is a continuous process, starting with analysis and evaluation of the customer's inquiry, and carrying on until contract closure, upon fulfilment of all contractual obligations¹¹.

29. There may be occasions where what is agreed in a contract needs to be changed or modified later on. A number of bases may be used to support a subsequent change, so that the whole contract remains enforceable under the new arrangement. A change may be based on :-

- a) A mutual agreement of both parties to vary the contract, outside the framework of the existing contract. This would be an independent basis for changing the contract.
- b) A unilateral decision to vary the contract, contemplated and allowed for by the existing contract. This would normally have notice periods for fairness and often the right of the other, especially in consumer contracts, to cease the contractual relationship. Be careful that any one-way imposition of change is contractually justified, otherwise it may be interpreted as a repudiation of the original contract, enabling the other party to terminate the contract and seek damages.

¹¹ What is contract management, on <https://www.wisegEEK.com/what-is-contract-management.htm>

- c) A bilateral decision to vary the contracting, within the variation or change control process outlined in the existing contract. These are often called change control provisions.

E-procurement

30. E-procurement is an “internet-based purchasing system that offers electronic purchase, ordering processing and enhanced administrative functions to buyers, suppliers (Panayiotou, Tatsiopoulos, & Gayialis, and management”. In basic terms, e-procurement can be defined as “using Internet technology in the purchasing process” (Boer, Harink, & Heijboer, 2002)¹². E-procurement (electronic procurement, sometimes also known as supplier exchange) is the business-to-business or business-to-consumer or business-to-government purchase and sale of supplies, work, and services through the Internet as well as other information and networking systems, such as electronic data interchange and enterprise resource planning. E-procurement is done with a software application that includes features for supplier management and complex auctions.

31. The new generation of e-Procurement is now on-demand or a software-as-a-service. E procurement has been classified and defined by many authors. Some of the examples are e-MRO, web-based ERP, e-Sourcing, e-Tendering, e-Reverse Auctioning, e-Informing.

The e-procurement value chain consists of indent management, e Tendering, e Auctioning, vendor management, catalogue management, Purchase Order Integration, Order Status, Ship Notice, e Invoicing, e Payment, and contract management. Public sector organizations use e-procurement for contracts to achieve benefits such as increased

¹² Boer, L. De., Harink, J., and Heijboer, G. (2002), *A model for assessing the impact of electronic procurement forms*, European Journal of Purchasing & Supply Management, 8, 25-33.

efficiency and cost savings (faster and cheaper) in government procurement and improved transparency (to reduce corruption) in procurement services.

Supply Chain Management (SCM)

32. The supply chain can be seen as management of either supply relationships, inter-business chains, or strategic management of inter-business networks. According to Tan (2001), SCM literature has emerged from two principal sources, namely Transport & Logistics, and Purchasing & Supply¹³. Logistics is concerned with better management of physical distribution and the assets which support it, whilst purchasing stresses that sourcing of materials is a strategic process, creating critical links with an external supply base. In a wide-ranging review of SCM, Chen and Paulraj (2004) defined strategic purchasing and supply management as core elements of the supply chain literature¹⁴. They identified issues such as supply management, supplier base reduction, relationships and supplier selection as critical to a SCM strategy. Purchasing and interaction with suppliers are at the core of supply chain management and need to be understood as key activities in a supply chain strategy.

¹³ Tan, K. C. (2001), *A framework of supply chain management literature*, European Journal of Purchasing & Supply Management, 7, pp. 39-48.

¹⁴ Chen, I. and Paulraj, J. (2004), *Towards a theory of supply chain management: the constructs and measurement*, Journal of Operations Management, Vol. 22, pp. 119- 150.

CHAPTER- III

OVERVIEW OF THE EXISTING SYSTEM FOR PROCUREMENT OF FRESH

SUPPLIES

*“You can always tell an old soldier by the inside of his holsters and cartridge boxes.
The young men carry pistols and cartridges; the old ones, grub”*

-George Bernard Shaw

33. Supply of Rations is a major and an important facet of Logistics in the Armed Forces. ASC (Army Service Corps) is entrusted with the responsibility of providing rations, hygiene chemicals and FOL (fuel, oil and lubricants). These items are issued to various units by ASC supply depots spread across the country. Each depot has several dependent units and they issue items as per scale and authorization. Supply depots carry out provisioning, procurement and contract execution control for fresh rations. Fresh supplies are perishable items of supplies which are required for daily consumption to meet the basic nutritional aspects of all troops and include the following:-

- a) Meat, fish, eggs and poultry.
- b) Vegetables, fruits, onions, potatoes, ice and aerated water.
- c) Milk fresh, butter and cream fresh.
- d) Bread.

Conclusion of Contracts

34. All fresh Rations are procured through local contracts which are concluded on a yearly basis through Limited Tendering Enquiry (LTE) system with registered ASC contractors. ASC officer heading the branch at that Headquarters acts as the Executing officer, eg, MGASC/ Brig ASC. The detailed procedure for conclusion of contracts for Perishable items (fresh) have been given out in the Government of India policy letter No PC/RAKSHA/63060/Q/ST5/3633/D(QS) dated 26 Sep 2006. The contracts are concluded under the delegated Financial Powers of various Commanders as per revised Financial Powers given out in the DFPDS-2016 in accordance with the Financial Regulations¹⁵. The ASC functionaries at respective levels act as the Executive Officers and advisors to the Commanders. The important steps involved in the procedure are explained below with a flow chart:-

¹⁵ Government of India, Ministry of Defence (1983), *Financial Regulations, Part I, Vol II*, Revised Edition 1983.

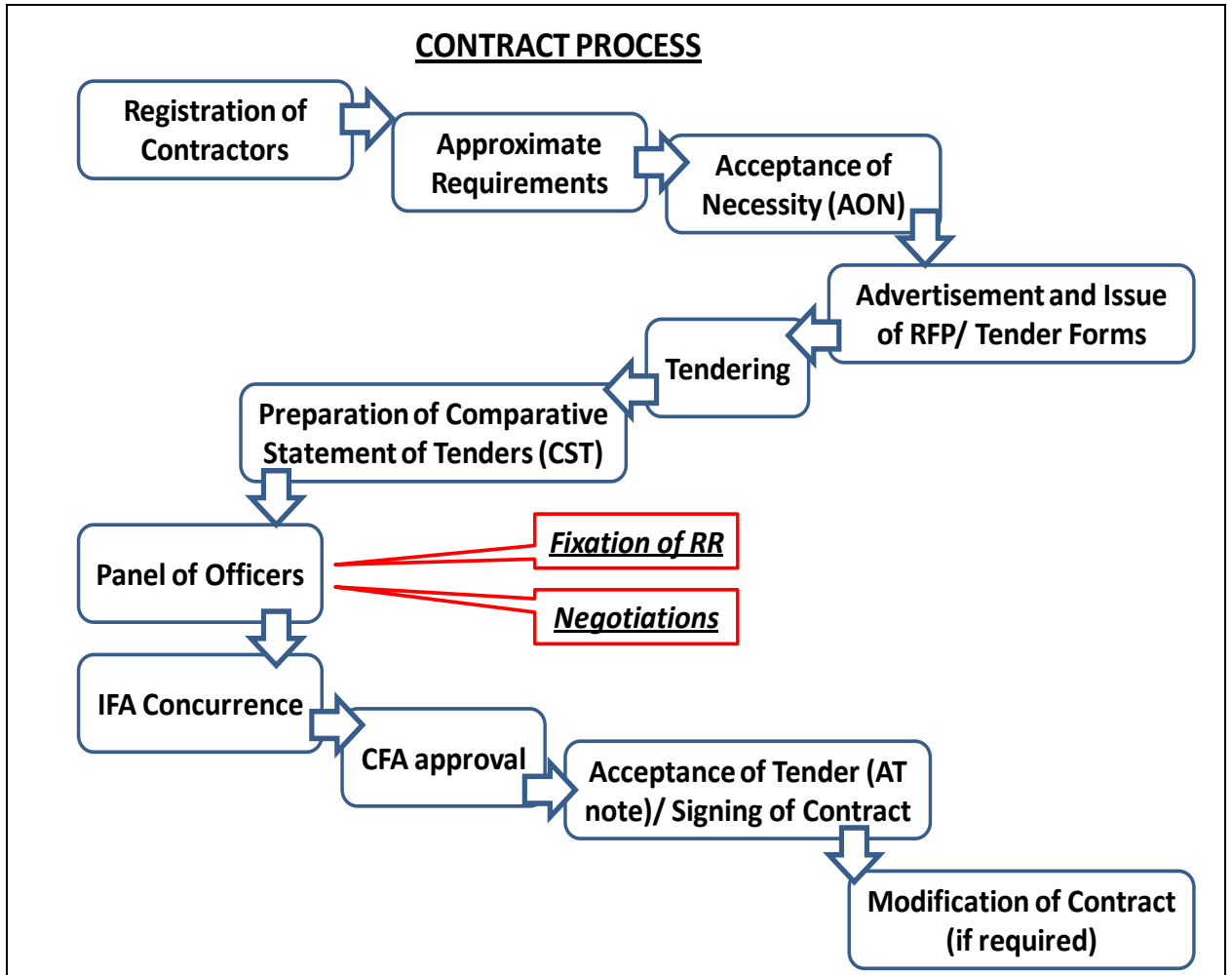


Figure 3.1: Contract Concluding Procedure

35. The Panel of Officers consisting of the Executive Officer (ASC officer heading the branch at that Headquarters), IFA representative and CFA representative are responsible for formulating the reasonable rates. They examine the tendered rates in hand in relation to the Reasonable Rates. Formulation of RR is a complex task and factors like the last purchase price (LPP), movement of price indices, the market intelligence regarding cost of the item or similar items etc, need to be considered while examining price reasonableness. The following inputs are generally used for determining the reasonable rates:-

- a) Whole Sale Price Index.

- b) Statistical rates.
- c) Average local market rates. Panel of Officers Tendering IFA Concurrence CFA approval Acceptance of Tender (AT note)/ Signing of Contract Fixation of RR Negotiations Preparation of Comparative Statement of Tenders (CST) Modification of Contract (if required)
- d) Pattern of rates sanctioned during the previous years.
- e) All India Average Weighted Rates.
- f) Availability of the commodity in different mandies (markets), location of such mandies, rates of commodity prevalent in these mandies and the distance to the nearest military station for which the contract is being concluded.
- g) Average contract rates of the commodity in different Commands during previous three years.
- h) The performance of Contractors and the failures that had taken place in the last one year.
- i) Risk and Expense purchase carried out in the last one year.
- j) Climatic conditions prevailing over the last one year.
- k) Taxation pattern of various states.
- l) Civil consumption of various stations.
- m) Local purchase rates of stations where contracts were not concluded.
- n) Rates obtained by other service, viz Navy.
- o) Rates achieved in the neighbouring depots in the same geographical area irrespective of the Comd.
- p) Average of Retail Rates, published by the Ministry of Agriculture, for last 12 months, reduced by a predetermined depression factor of not less than 20% for converting retail rates into wholesale rates.

- q) Export demand of the item.
- r) Natural calamities/disease affecting production.
- s) Statutory levies imposed by the Government.
- t) Increase/decrease in rates of labour and products.
- u) Inputs Form Web Sites.
- v) Inputs from Publications.

36. The RR is fixed for each item and station. The information about formulation of reasonable rates is kept as a closely guarded secret and under no circumstances divulged to persons other than the panel or the CFA. After Comparative Statement of Tender (CST) is prepared, the Lowest tendered (L1) rates are compared with RR and if found acceptable limits are recommended for acceptance otherwise recommended for retender. Negotiations may also be carried out with the L1 to reduce the rates. If rates are found to be below 20% of RR the tendered rates may be declared fictitious and rejected.

Management of Contracts

37. The fresh supplies are delivered through contracts operated by various Contract Operating Officers which are generally the ASC Officers incharge of the Supply Point or the Depot. It may also be operated by officers of respective units including Air Force/ Navy as per requirement. The supply officer or his representative inspects these for quality, variety/percentage and conformity to Defence specifications and further issues to consumer units. The important steps involved in the demand and supply are explained below with a flow chart:-

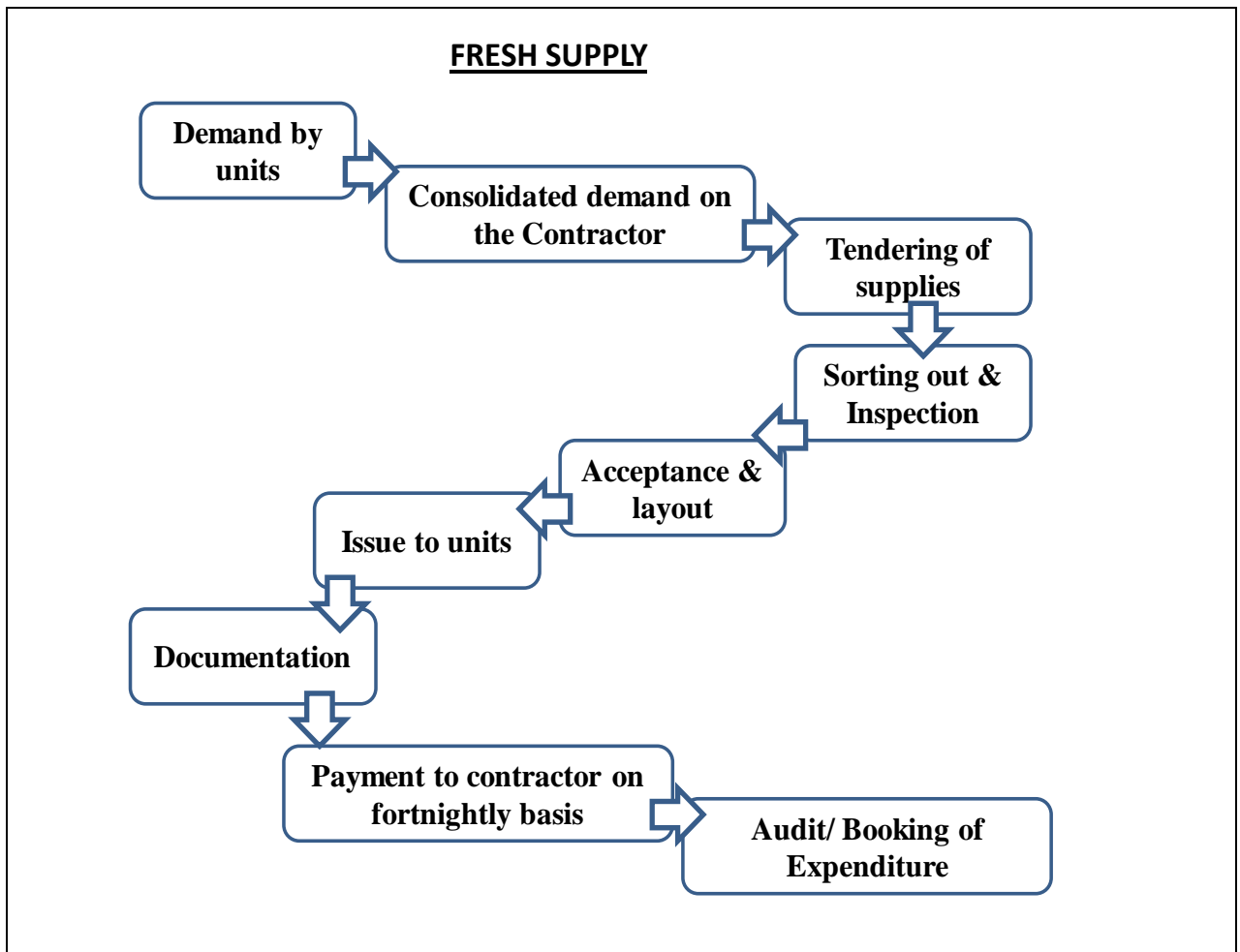


Figure 3.2: Fresh Supply Procedure

Local Purchase

38. When the supplies do not materialize by the stipulated delivery date and time as mentioned in the supply order, the purchaser has the option of carrying out risk and expense purchase against the defaulting contractor. Risk and Expense purchase is undertaken by the purchaser in the event of the supplier failing to honour the contracted obligations within the stipulated period. While initiating risk purchase at the cost and expense of the supplier, the purchaser must satisfy himself that the supplier has failed to deliver and has been given adequate and proper notice to discharge his obligations. Whenever risk purchase is resorted

to, the supplier is liable to pay the additional amount spent by the Government, if any, in procuring the said contracted goods through Local Purchase or fresh contract, i.e. the defaulting supplier has to bear the excess cost incurred as compared with the amount contracted with him.

CHAPTER- IV

FINDINGS OF SURVEY AND STATISTICAL ANALYSIS

39. Though fairly well-established procedures for provision and procurement of fresh rations exist, yet over a period they have developed deviations, especially in terms of authority and accountability at various levels. The procedures have to be fine-tuned to the changing requirements of the Army, the developments in the industrial and economic environment of the country, and the ever increasing aspirations of the consumers. The procedures have to be constantly modified and re-modified. As the organization evolves, the revenue procurement procedures have to be restructured or reconnected with the same. Thus, dynamism in evolving and changing according to the contemporary scenario, in the procurement process, which is ever so important, has to be maintained.

40. The system of fresh rations supply in ASC was studied in detail and the following intervention strategies emerge for improving the system:-

- a) Contracting methodology and procurement procedures.
- b) Procedure for fixation of Reasonable Rates (RR) during conclusion of contracts.
- c) Vendor base/ suppliers.
- d) Provisions (Term and conditions) of the contract.
- e) Accountability and responsibility at various levels.
- f) Infrastructure development and automation.

Survey

41. Having gone through various aspects of conclusion and operation of fresh contracts and the changes taking place in the environment, need is felt to carry out holistic review of the fresh supply system. To ascertain the feedback on consumer satisfaction as well as the problems being faced in execution of contracts, the following tools/ techniques were used to substantiate the data collected from available literature:-

- a) Questionnaire on Consumer Feed Back – Client Satisfaction/ Suggestions on Fresh Supply.
- b) Questionnaire for ASC Officers Feed Back – Suggestions on improvement in procedures for conclusion and execution of Fresh contracts.
- c) Chi Square Analysis to test the homogeneity of responses among all ranks.
- d) Statistic analysis of consumer survey for validation of hypothesis.
- e) Consolidation of findings and Recommendations.

42. A detailed questionnaire was prepared for consumer survey. A survey was carried out by administering questionnaire to Officers, JCOs (Junior Commissioned Officers) and Other Ranks (Ors). All stake holders including Army, Navy and Air Force were incorporated for the feedback. A separate Questionnaire for domain Experts (ASC officers) who have the first-hand experience in conclusion of contracts, procurement and handling of fresh supplies was prepared and feedback obtained. Copies of Questionnaire which were administered are placed at **Appendix ‘A’ and ‘B’**. The summary of surveys is as under:-

- a) Survey 1. A total of 97 questionnaires were received out of which 68 were Other Ranks, 17 JCOs and 12 Officers. Out of 97 samples, 78 Samples were judiciously

utilised for sample analysis. The details are given in Table at **Annexure 'I'** attached and summary is as under :-

a)	Other Ranks	61
b)	JCOs	10
c)	Officers	7
	Total	78

- b) Survey 2. A total of 14 questionnaires were received from ASC officers giving feedback on changes required in procedures for procurement of fresh supplies. The details are given in Table at **Annexure 'II'** attached. Samples were judiciously utilised for sample analysis.

Statistical Analysis

43. Statistics is a mathematical discipline which provides tools for collection, analysis & interpretation of quantitative data in a scientific manner to facilitate objective analysis of information. For the purpose of statistical analysis the nominal and ordinal data obtained through instruments was quantified on a Lykerts scale of 5 (0 TO 5). The qualitative response to each factor based on personal experience and perception of the individuals was quantified as follows:-

	Response	Scale
a)	Strongly Agree	5
b)	Agree	4

c)	Can't Say	3
d)	Disagree	2
e)	Strongly Disagree	1

44. Sample size calculation is concerned with how much data we require to make a correct decision on particular research. If we have more data, then our decision will be more accurate and there will be less error of the parameter estimate. This doesn't necessarily mean that more is always best in sample size calculation. If the sample size is greater than 30, then we use the z-test. Sample size calculation will also differ with different margins of error. As per principles of inferential statistics, the sample size was decided based on the population variability, confidence level and the acceptable error in estimation. Simple cluster sampling methodology is adopted in the present study. Random sample is collected from selected sample as a representative of the entire population of Armed Forces. The variability in the sample statistics results from sampling error by chance; that is, there are difference between each sample and the population, and among the several samples, owing solely to the elements we happened to choose for the sample.

45. Various constructs of consumer satisfaction level, procedures and opinion of domain experts on fresh rations based on the questionnaire administered was analysed in detail using statistical tools and techniques and summary of main attributes is given in succeeding paragraphs.

46. Consumer Satisfaction. Analysis of consumer feedback on level of satisfaction of fresh supplies is as under:-

Se r N o	MC TD	Quality				Quantity			Timely supply			Responsiveness			Averag e
		Q No 1	Q No 2	Q No 3	Q No 4	Q No 5	Q No 6	Q No 7	Q No 8	Q No 9	Q No 10	Q No 11	Q No 12	Q No 13	
1.	Mea n	3.9 9	3.9 0	3.6 5	3.7 2	4.0 3	4.1 3	3.5 1	3.8 6	3.8 8	3.2 7	4.0 6	3.6 7	3.49	3.78
2.	Stan dard Dev iatio n	0.7 6	0.7 4	0.9 7	0.8 6	0.7 8	0.8 7	1.0 3	0.7 8	0.7 0	1.0 3	0.9 0	0.9 4	1.06	0.92
3.	Mod e	4.0 0	4.0 0	4.0 0	4.0 0	4.0 0	4.0 0	4.0 0	4.0 0	4.0 0	4.0 0	4.0 0	4.0 0	4.00	4.00
4.	Med ian	4.0 0	4.0 0	4.0 0	4.0 0	4.0 0	4.0 0	4.0 0	4.0 0	4.0 0	3.5 0	4.0 0	4.0 0	4.00	4.00
5.	C of V	19. 05	19. 09	26. 60	23. 15	19. 48	21. 02	29. 45	20. 21	17. 96	31. 62	22. 06	25. 71	30.3 7	24.36

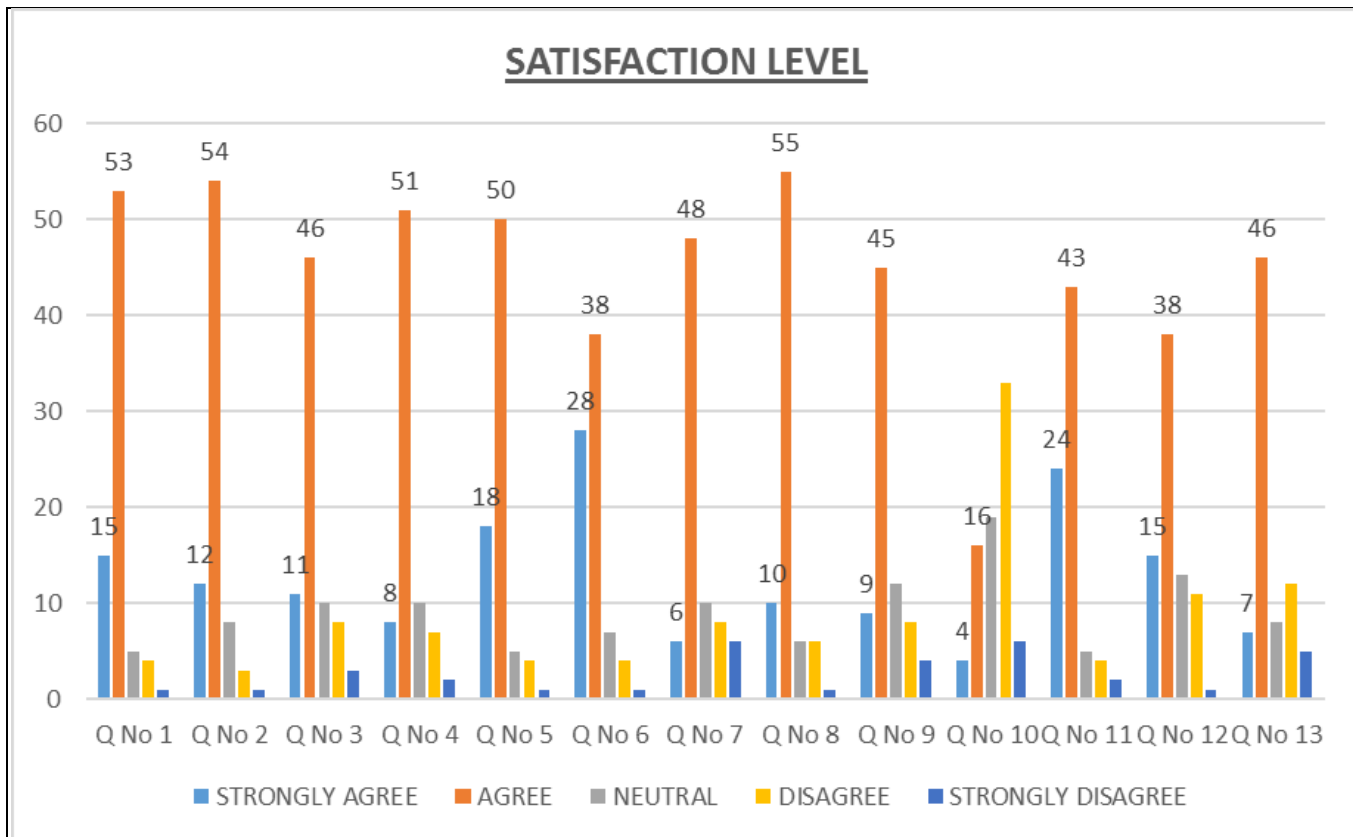


Figure 4.1: Histogram Chart showing Overall Satisfaction Level

- a) Mean = 3.78 - Majority Agreed.
- b) Standard Deviation = 0.92.
- c) Coefficient of Variation (CV) = 24.36.
- d) Statistical Assessment. The grand mean of the responses was according to Lykert scale in the region of agreement. The standard deviation of the responses was also bunched up around the mean thus showing not many variations from this.
- e) Administrative Decision. Thus a majority of respondents were overall satisfied with the quality, quantity, timings and response of the supply depot, **however there was scope for further improvement.**

47. Quality. To ascertain nature of the data, a sample question of satisfaction level is tested through histogram analysis. Data summary is as under:-

<i>Scale</i>		<i>ORs</i>	<i>JCOs</i>	<i>Officers</i>	<i>Frequency</i>	<i>% Freq</i>	<i>Cumulative %</i>
5	Strongly Agree	13	2	0	15	19.23	19.23
4	Agree	43	6	4	53	67.95	87.18
3	Can't Say	2	1	2	5	6.41	93.59
2	Disagree	2	1	1	4	5.13	98.72
1	Strongly Disagree	1	0	0	1	1.28	100.00
	Total	61	10	7	78	100	Total

The table is based on the entire sample data of 78 personals. The sample was plotted to ascertain the distribution pattern and the graph is shown below:-

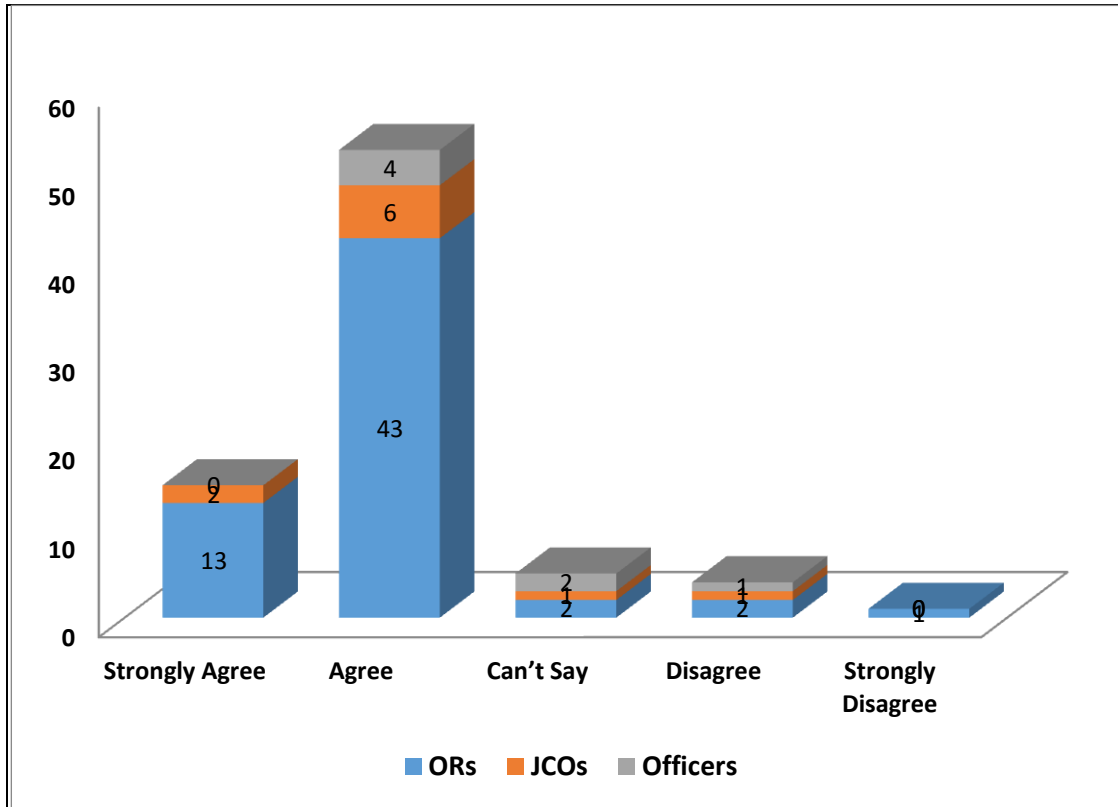


Figure 4.2: Histogram showing Satisfaction level in Quality

As seen above 87% of the respondents are satisfied with quality of fresh rations, only 6% indicates the satisfaction level to be below satisfactory within a constraint where almost 6% of the sample has expressed neutral opinion.

a) The summary of descriptive statistics is summarised below:-

i.	Mean	3.99
ii.	Median	4
iii.	Mode	4
iv.	Standard Deviation	0.76
v.	Range	4

vi.	Minimum	1
vii.	Maximum	5
viii.	Count	78
ix.	Confidence Level	95%
x.	Coefficient of Variation (CV)	19.05

The median and mode class is 4, which indicates somewhat satisfied. Thus, a majority portion of the sample population is somewhat satisfied with the quality of fresh rations, although there is still a scope of further improvement.

- b) The Analysis of Chi square test was carried out to test the homogeneity of the responses of the three categories of personals, ie Officers, JCOs and Other Ranks as per the following steps:-

(a) Step 1- Formulation of Hypothesis.

(i) **Ho** - The response to questions by all categories is homogeneous.

(ii) **H1** - The response to questions by all categories is not homogeneous.

(b) Step 2 - Level of Significance (LoS). The LoS is assumed to be 0.05 for this test.

(c) Step 3 – Determination of Observed Frequencies (fo). This data was extracted from the response to Question No 1 of Questionnaire by the respondents. The tabulated values of fo are as follows:-

		<i>ORs</i>	<i>JCOs</i>	<i>Officers</i>	Total
i.	Strongly Agree/ Agree	56	8	4	68

ii.	Disagree/ Strongly Disagree	3	1	1	5
	Total	59	9	5	73

(d) **Step 4 - Determination of Expected Frequencies (fe).** The fe is calculated from the values of fo as per the standard formula, $fe = (\text{Row Total} \times \text{Column Total}) / \text{Grand Total}$. Further the value of $(fo-fe)^2/fe$ is calculated as tabulated below:-

		fo	fe	$(fo-fe)^2/fe$
i.	ORs-Agree	56	54.96	0.02
ii.	JCOs-Agree	8	8.38	0.02
iii.	Officers-Agree	4	4.66	0.09
iv.	ORs-Disagree	3	4.04	0.27
v.	JCOs-Disagree	1	0.62	0.24
vi.	Officers-Disagree	1	0.34	1.26
	Chi-square Calculated			1.8994

(e) **Step 5 - Computation of Chi-Square Calculated.** This value is arrived by summing up the values of $(fo-fe)^2/fe$ i.e. 1.89 in this case.

(f) **Step 6 - Computation of Degrees of Freedom (df).**

$$\begin{aligned}
 df &= (\text{Number of rows} - 1) * (\text{Number of columns} - 1) \\
 &= (2-1)*(3-1) \\
 &= 2
 \end{aligned}$$

(g) **Step 7 – Computation of Chi-Square Critical.** This is derived from the following formula using MS Excel:-

$$\text{Chi-Square Critical} = \text{CHIINV}(\text{LoS}, \text{df})$$

$$= \text{CHIINV}(0.05, 2)$$

$$= 5.991$$

(h) **Step 8 – Compare Chi-Square Critical with Chi-Square Calculated.** The comparison graph is as shown below:-

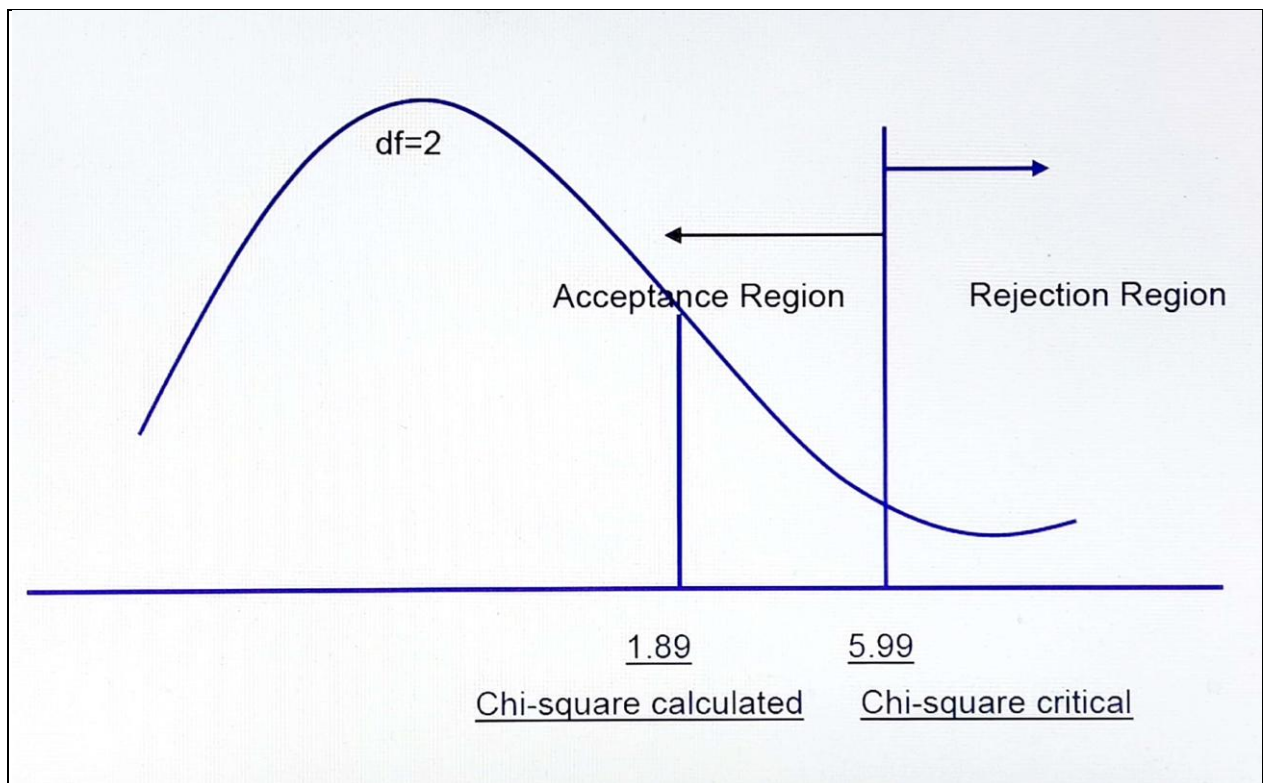


Figure 4.3: Graph of Chi-Square critical

(i) **Decision-** Since Chi-square calculated < Chi-square critical, hence Accept H_0 i.e

'The response to questions by all categories is homogeneous'.

48. Quantity. To ascertain nature of the data, a sample question of overall satisfaction level is tested through histogram analysis. Data summary is as under:-

		<i>ORs</i>	<i>JCOs</i>	<i>Officers</i>	<i>Frequency</i>
a)	Strongly Agree	15	2	1	18
b)	Agree	41	6	3	50
c)	Can't Say	3	1	1	5
d)	Disagree	2	1	1	4
e)	Strongly Disagree	0	0	1	1

Quantity Satisfaction

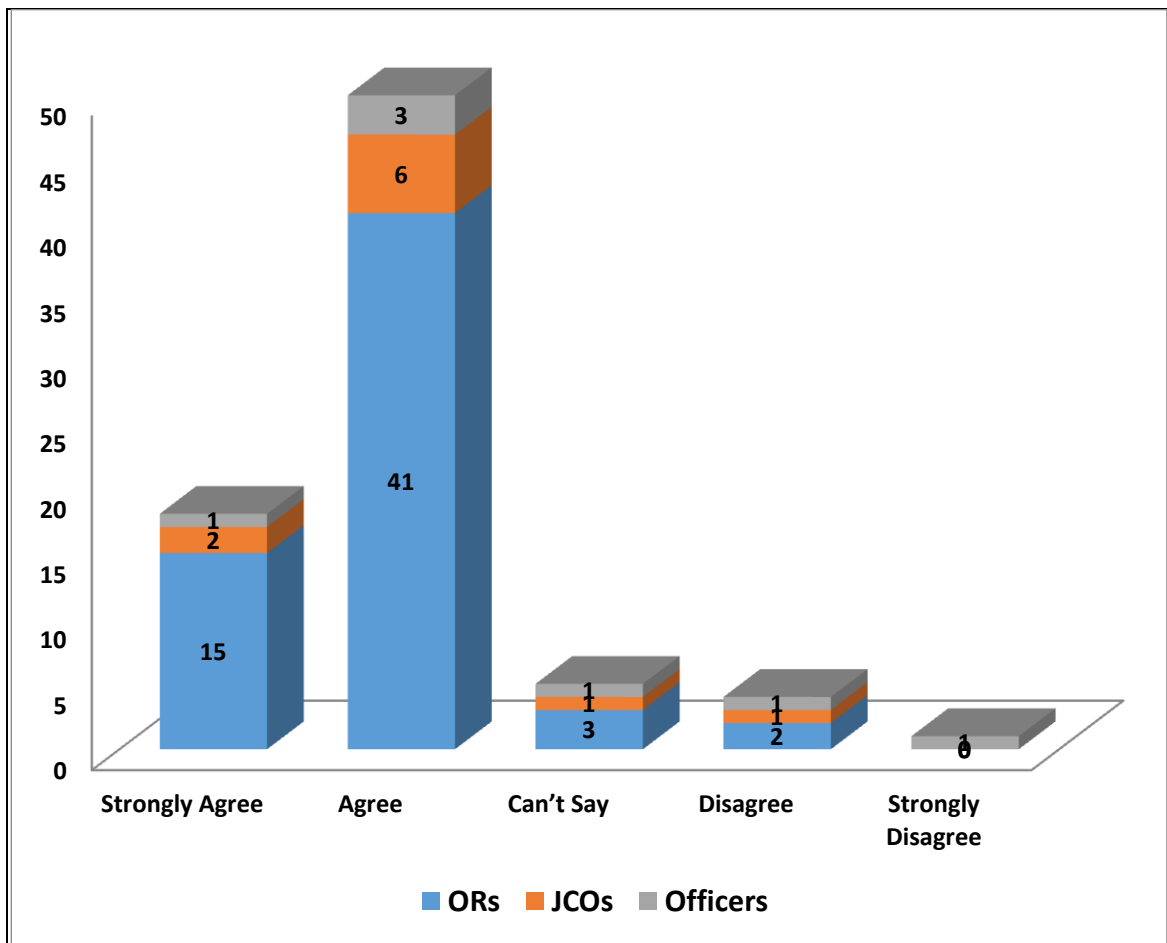


Figure 4.4: Histogram showing Satisfaction level in Quantity

As seen above 87% of the respondents are satisfied with quantity of fresh rations, only 6% indicates the overall satisfaction level to be below satisfactory within a constraint where almost 6% of the sample has expressed neutral opinion.

49. Timely Supply. To ascertain nature of the data, a sample question of overall satisfaction level is tested through histogram analysis. Data summary is as under:-

		<i>ORs</i>	<i>JCOs</i>	<i>Officers</i>	<i>Frequency</i>
a)	Strongly Agree	8	2	0	10
b)	Agree	46	6	3	55
c)	Can't Say	3	1	2	6
d)	Disagree	4	0	2	6
e)	Strongly Disagree	0	1	0	1

Timely Supply

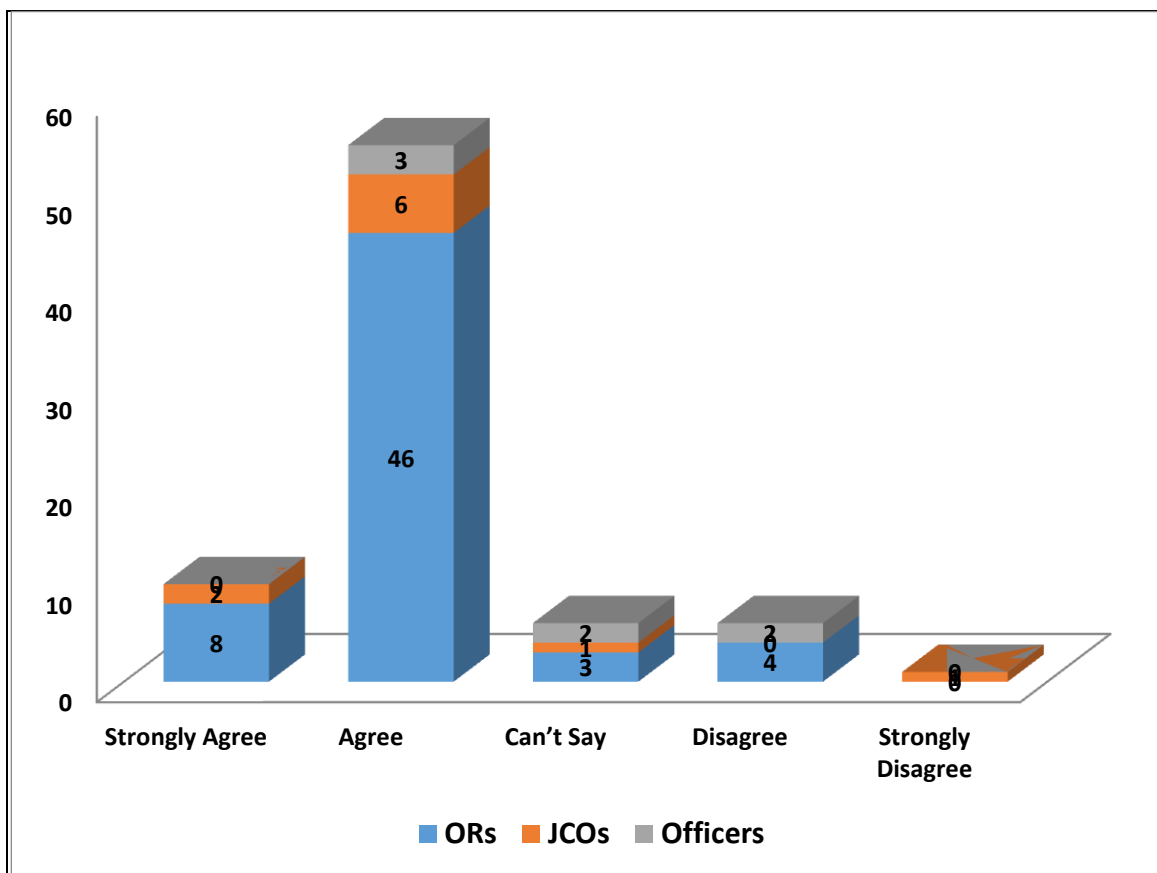


Figure 4.5: Histogram showing Satisfaction level in Timings

As seen above 83% of the respondents are satisfied with timings of fresh rations, only 12% indicates the overall satisfaction level to be below satisfactory within a constraint where almost 8% of the sample has expressed neutral opinion.

50. Realistic Contract Rates. To ascertain nature of the data, a sample question of overall satisfaction level is tested through histogram analysis. Data summary is as under:-

		<i>Frequency</i>
a)	Strongly Agree	1
b)	Agree	9
c)	Can't Say	1
d)	Disagree	2
e)	Strongly Disagree	1

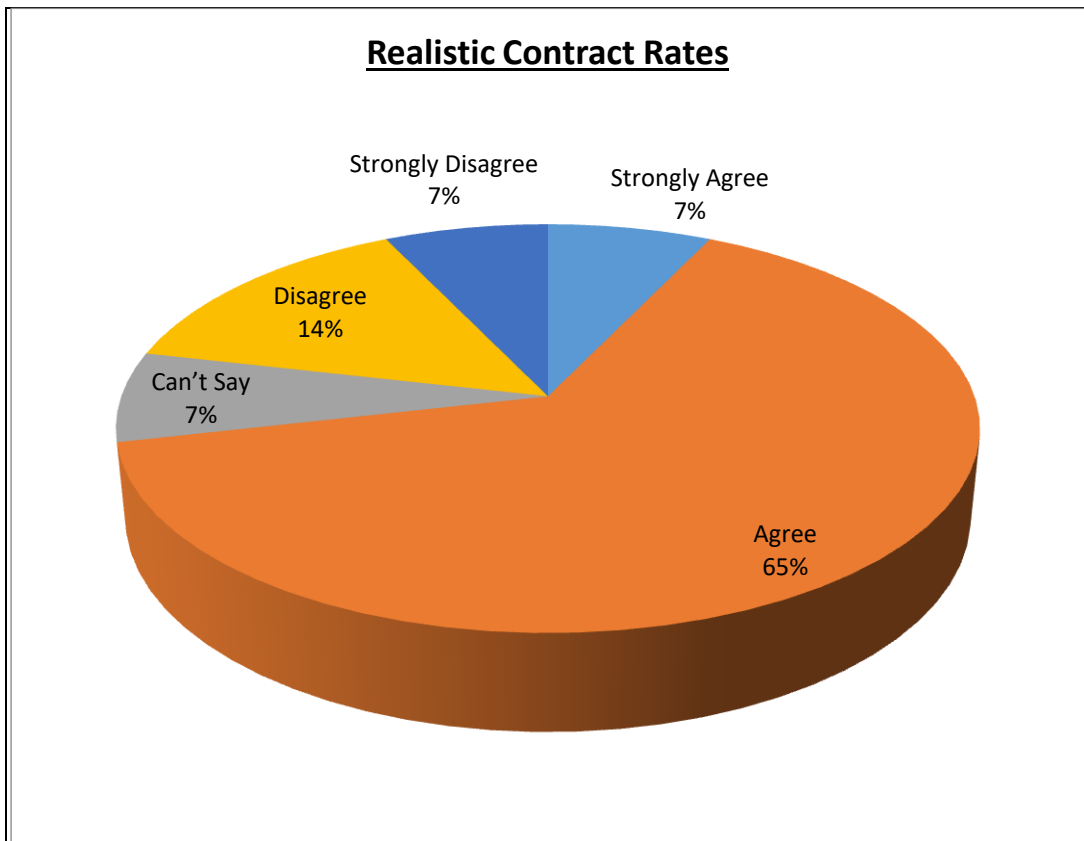


Figure 4.6: Pie Chart showing Satisfaction level in Realistic Rates

As seen above 72% of the respondents have expressed their opinion that contract rates are not realistic, hence review of rates required to ensure quality.

51. Change in Contractual Provisions. To ascertain nature of the data, a sample question of overall satisfaction level is tested through histogram analysis. Data summary is as under:-

		<i>Frequency</i>
a)	Strongly Agree	1
b)	Agree	11
c)	Can't Say	1
d)	Disagree	1
e)	Strongly Disagree	0

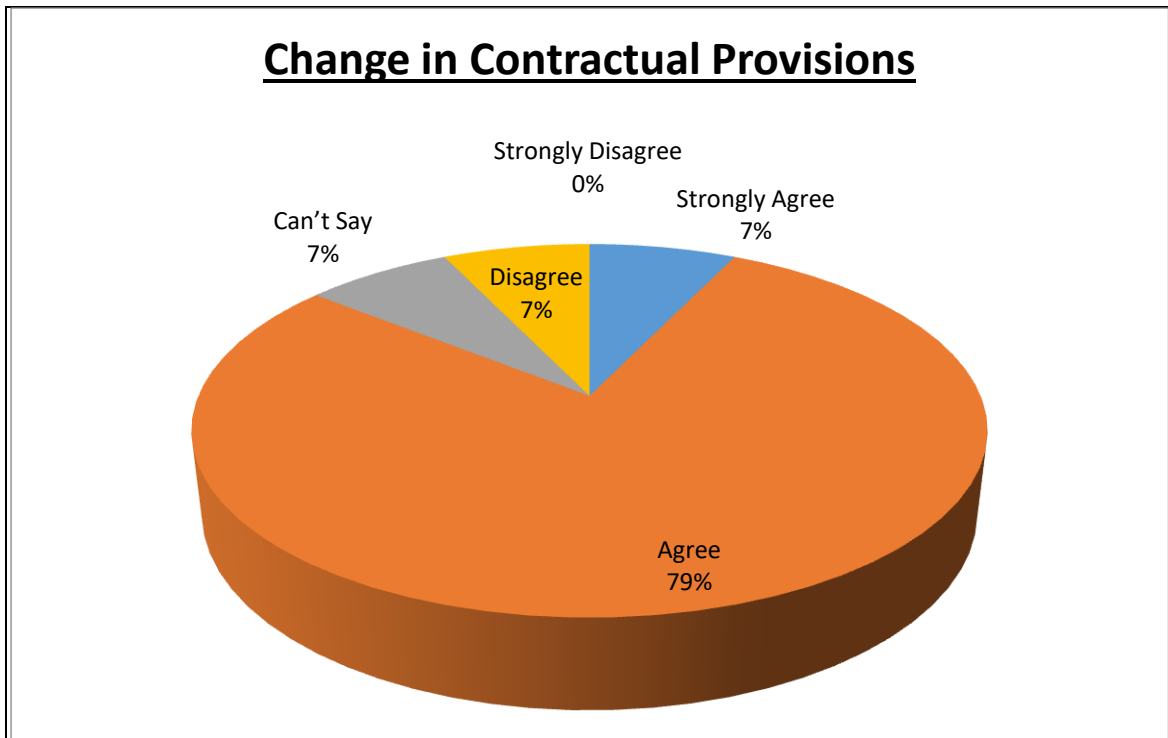


Figure 4.7: Pie Chart showing Satisfaction level in Contractual Provisions

As seen above 86% of the respondents have expressed their opinion for change in contractual provisions to enhance consumer satisfaction.

52. E- Procurement. To ascertain nature of the data, a sample question of overall satisfaction level is tested through histogram analysis. Data summary is as under:-

		<i>Frequency</i>
a)	Strongly Agree	5
b)	Agree	6
c)	Can't Say	3
d)	Disagree	0
e)	Strongly Disagree	0

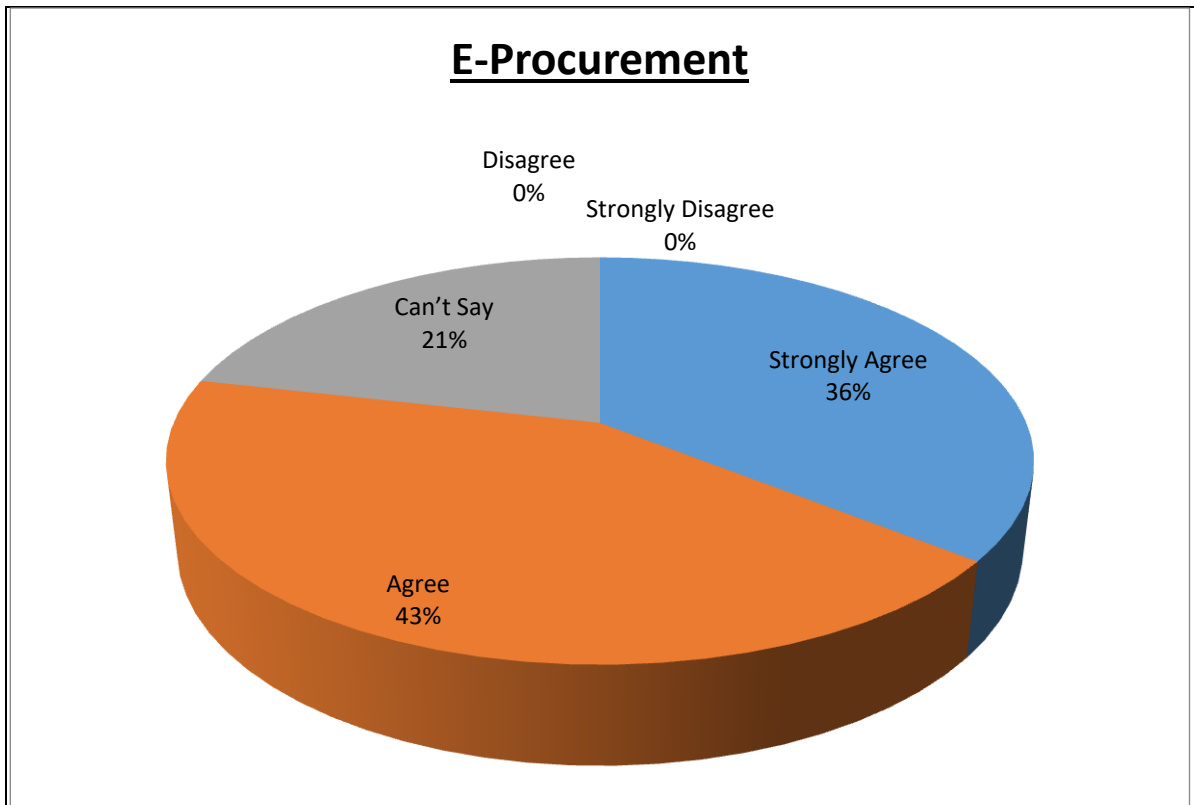


Figure 4.8: Pie Chart showing Satisfaction level in E-Procurement

As seen above 79% of the respondents have expressed their opinion that e- procurement has enhanced transparency, competitiveness and ensured timely contracts.

Descriptive Statistics

53. Certain issues requiring deliberations which emerged from the feedback through questionnaire administered and also during personal interaction with stake holders were analysed and have been summarized below.

54. Feedback from Consumers. It emerges from the descriptive statistical analysis that there exists in the environment a high level of overall satisfaction level in Quality and Quantity. Major findings of the survey are highlighted as under:-

- a) There exists a high level of satisfaction as regards fresh rations and troops were satisfied with the quality.
- b) Timely supply is a matter of concern. Prompt action to be taken against defaulting contractors and supplies issued in reasonable time.
- c) Issues of percentage & variety implementation still need to be addressed.
- d) Need to upgrade infrastructure in Sup Depot akin to Multi retail chains to enhance consumer satisfaction.
- e) The contract rates are gen not commensurate with the market rates resulting in problems in supplies.
- f) The fresh ration distribution system of Navy is perceived to be better - should adopt good practices.
- g) Ration money as per current market rates should be authorized instead of Rations in Peace stations.
- h) The contract should be concluded directly at unit level like in case of Assam Rifles/ CPOs.
- i) There is a need to further upgrade Ration scales and Defence specifications to enhance consumer satisfaction.
- j) Necessity to increase rations scales for vegetables. Scales of vegetables should be enhanced and introducing new Vegetarian items in scales of rations.
- k) Frozen items have found acceptability and are recommended to be enhanced.
- l) Milk should be supplied only through state cooperatives instead of Military Farms.

- m) The environment is not in favour of monetization of ration (Ration Money) as 64% have opted for non monetization of rations.
- n) Delays in Local Purchase at the Risk & Expense of Contractor.
- o) Introduction of age based rations, healthier alternatives and other frozen food products.
- p) Introduction of branded frozen food.
- q) Officers ration be reintroduced in peace stations.
- r) Direct delivery of rations to units.
- s) Automation to include Real-time Information, Traceability, Process and Inventory Visibility.

55. Feedback from ASC Officers. It emerges from the descriptive statistical analysis that there is a requirement of changing/ reforms in procedures to enhance the consumer satisfaction level. Major findings of the survey are highlighted as under:-

- a) There is a need to conclude contract at realistic rates to ensure better quality.
Fixation of Reasonable Rates (RR) - Need for realistic RR aligned with ALMR.
- b) Additional provisions and guarantees need to be added in the contract to safeguard against any defaults by contractors.
- c) Need to modernize infrastructure in Sup Depot akin to Multi retail chains to enhance consumer satisfaction.
- d) E tendering / procurement has enhanced transparency, competitiveness & ensured timely contracts.
- e) The provisions DPM-2009 needs to be modified to include separate chapter on conclusion of fresh contracts.

- f) The IFA should be made more accountable in conclusion of timely contracts.
Make IFA accountable for delays/ non conclusions/ low rates by making him a shareholder.
- g) Supply of Frozen/ chilled chicken/ meat is better option and order of the day.
- h) Entry of major retail players with Capability of contractors.
- i) Contracts should be concluded with large renowned Multi retail chains having Pan India presence to enhance consumer satisfaction.
- j) CFA powers needs to be exercised at lower levels.
- k) The contract system of Assam Rifles/ CPOs has not been found to be very successful.
- l) Periodical review of Percentage and variety of vegetables and fruits.
- m) Greater flexibility in percentage & variety implementation needs to be ensured.
Enhance flexibility of contract operation officer by providing band within which variety/ percentage can be supplied. Rigid adherence to percentage variety schedule of vegetables and fruits is logistically infeasible and impractical.
- n) Necessity to improve supply storage infrastructure - latest warehousing concepts, handling of rations, refrigerated Lorries. Authorisation of refrigerated storage.
- o) Realistic appraisal of defence specification of fresh rations.
- p) CFA powers needs to be exercised at lower functional level.
- q) Keep MRE/ Frozen Food as GS Reserve for Local Purchase at Risk & Expense of the contractor.
- r) Existing methodology of establishing Contract Carrying Capacity (CCC) acts as a dissuasive barrier preventing entry of professionals.
- s) Contactors who are commission agents and freight forwarders tend to resort to speculative tendering.

- t) Reluctance of major retail players due to fixed yearly contract rates, isolated stations -supply volumes low and uneconomical & cumbersome registration and contracting procedures.
- u) Region wise market size and local availability.
- v) Vendor Base – Government agencies.
- w) Fresh contract - twice a year.
- x) Present levels of contract conclusion and operation to continue and can be brought down to lower levels if it contributes to better quality.
- y) Local Purchase (LP) procedure at Risk & Expense of the Contractor in a time bound manner. Adequate time is not available to carry out LP on the same day.
- z) Tedious and difficult LP procedure - at times not practicable as items may not be available in the market in desired quantity as well as quality. Local sellers are not willing to supply on cheque payment.
- aa) Automation of demand and supply at Unit and Depot level.

Validation of Hypothesis

56. From the ibid conclusions drawn out of statistical inferences in this Chapter, as well as arguments projected in the previous chapters, there is enough statistical evidence to accept the Hypothesis. Having studied and analysed the responses received to the questionnaire in detail using various analytical tools, there is much required need to improve the fresh supply procurement system. Thus the Hypothesis, “*The review of existing procedure for Procurement of Fresh Supplies in the Army would further enhance the overall consumer satisfaction*” stands validated.

CHAPTER- V

CHALLENGES FACED IN PROCUREMENT OF FRESH SUPPLIES

“A starving army is actually worse than none. The soldiers lose their discipline and their spirit. They plunder even in the presence of their officers”

-The First Duke of Wellington

57. The system of food supply chain of the defence forces faces numerous challenges which add to the complexity of the task and at the same time effect ability to ensure a well constituted and preferred diet for the soldiers. Considering the causes, effects and likely remedial measures that can be employed to improve the supply system based on the findings and analysis, the problems and the challenges faced are explained in subsequent paragraphs¹⁶.

Vendor Base and Securing Contracts

58. Vendor base is the backbone of a logistics system and vendors who deliver need to be preserved, developed and supported. The unique nature of items required by the Army (defence specification) results in a limited vendor base. There are only a few who are willing to supply at far off remote areas, paving way for monopoly/cartel formation between the vendors, at times hampering the procurement process. In the current system, the existing vendor base for fresh items consists of essentially commission agents and freight forwarders.

¹⁶ College of Defence Management (CDM), Secunderabad, *Project studies report*.

Many of them further sublet the operation of contracts on ground to local suppliers. The existing vendor base does not include producers, growers, warehousing and marketing food agencies or large multi retail chains, who nowadays are flourishing in the civil supply chain market.

59. Problem Being Faced.

a) Supplying of fresh rations in the right variety, quality and quantity at the desired locations is full of risks and uncertainties due to following:-

- (i) Seasonal availability of numerous varieties through the month may not be conforming to contracted variety percentage.
- (ii) Fresh rations undergo quality deterioration in transit and due to unsuitable infrastructure, have a short shelf life.
- (iii) Success / failure of crops and its vulnerability to weather.
- (iv) Price volatility and other imponderables.

b) It is seen that the current vendors are resorting to speculative tendering in the hope for success, without planning for risk and uncertainties.

60. Expanding Vendor Base. Addressing such incalculable uncertainties requires professionals who preferably exercise modern practices of sourcing and grading perishable commodities at the farm end itself and who are equipped with the right wherewithal. There is a definite need to completely transform complexion of the current vendor base, by weeding out people bereft of desired expertise and expand the same with new inductions.

61. Registration Process. The registration process is adequate except that the physical verification of immovable assets takes time and effort. Hence certainly, the registration

process presently is very cumbersome and lengthy and involves many agencies and includes archaic police verification of firms, mortgaging of properties or huge money pledging before assurance of any business, recommendation from bankers through sealed notifications and so on. These are dissuasive barriers that prevent entry of professionals. The existing methodology of establishing Contract Carrying Capacity is also notional and outdated. In fact the immovable assets more often than not have proved unrecoverable in case of rescinding of contract. The whole process is periodically repetitive and needs to be simplified.

62. Entry of Major Players. Major players are reluctant to secure ASC contracts due to fixed yearly contract rates, isolated stations where supply volumes are low and uneconomical to set up modern supply chain and cumbersome registration and contracting procedures. New multi retail chains have opened up in all major towns and cities such as Reliance Fresh, Big Bazaar, Seven Eleven, Safal, Big Basket, etc which are even ready to deliver supplies at your door step.

63. Contracting Methodologies. The current methodology is time tested but is time consuming, inflexible and not suited for shorter duration contracts or for allowing major players assured business which spurs vendor investment in infrastructure for military supply chain use. We need to have flexible and tailored contracts to suit differing requirements of time, quantity and location in keeping with development penetration and local availability especially in remote locations. We should include negotiated contracts for fresh supply contracts.

64. Vendor Development. There is little effort seen towards vendor development. Vendor development involves educating prospective vendors and existing vendors through workshops and periodic contact programmes. This implies development of a vendor in order to equip him to deliver supplies / bring satisfaction more effectively in tune with consumer's expectations in keeping with rules and regulations. Vendors must become thoroughly familiar with the requirements of specifications and standards to ensure that the product offered meets the required quality, grade, type, style, size and other conditions set forth in the solicitation. Specifications also describe how to package, pack, label, mark and unitize product. The requirements are primarily of three categories, each designated with consideration to the length of time the product will be in storage, the number of times that it will be handled, and the distance and conditions under which it will be transported and stored. Vendors must be sensitised to all these and much more.

Percentage and Variety

65. Rigid adherence to issue of precise authorisations to the minutest detail for each variety of Fresh Fruits & Vegetables (FF&V) irrespective of size of each consumer unit, and availability of such fresh foods in the regional markets, is logistically infeasible and impractical. There is little room for flexibility in the present variety and percentage schedule.

66. Modifications in Percentage and Variety. Percentage and variety management is essentially to break monotony and provide a holistic palate appealing diet. With growing awareness more and more consciousness on correct foods is spreading, thus modifications in percentage and variety of FF&V should not be treated as 'rocket science', but should be

easily feasible within each station in keeping with views of consumers, local availability verification, with the designated local nutritionist/ medical authority in loop.

67. Flexibility in Percentage and Variety. Flexibility be incorporated in percent and management of FF&V. There is a necessity of educating the environment that the percentage and variety has to be maintained at a station/ formation level by the supply issuing unit rather than maintaining the same for each and every consumer unit. The contract should continue to be concluded as per the variety and percentage schedule procedure, however various functionaries in the execution/operation of contracts should have powers vested in them to allow for deviation from the variety percentage schedule.

68. Building Redundancy in Percentage and Variety.

a) Current growth rates in the food industry and value additive commodities will soon make available different varieties of canned and frozen vegetables commercially. Likewise in respect of fruits too sufficient variety of dried/ shelled items will be/ are available.

b) Based on revised authorisations these canned/ frozen/ dried/ shelled items may be warehoused separately. Such procurement will provide immense flexibility in ensuring that desired varieties and in right quantum reach the consumer.

c) On authorisation of such varieties in the rations structure following modus operandi is considered pragmatic:-

(i) Three types of foods entitled viz fresh, dry and frozen be treated as substitutes, with no embargo on issue of any.

(ii) In case of lack of availability of any fresh item suitable substitutes from dry or the frozen store be made available.

(iii) Fresh rations do not lapse, if not issued for the day as accounting is done on a monthly basis.

(iv) As suitable alternatives are available in the store, no immediate requirement for Risk & Expense purchase. The vender will be required to replenish the alternatives in the store in a laid down time frame and his lack of performance is penalized through liquidated damages and loss of business/removal.

Reasonable Rates (RR)

69. In the procedure for conclusion of contracts for fresh items, the one vital activity which plays a pivotal part affecting the entire contracting process and holds the key to the final result of either acceptance of the contract or the decision to go for re-tendering, is the fixation of Reasonable Rate (RR). This is one activity which demands the maximum attention and needs to be worked out with care and thought. Fixation of RR is a futuristic projection of likely rates for a contract scheduled to run for one year commencing after 4 months. The process is subjective and depends to a large extent on the panel members and various inputs made available to them. This complex task needs to be conducted more deliberately in a scientific way incorporating all quantifiable relevant factors and thereafter applying the value judgement to variable factors.

70. Problems in Present System. Presently, the data being considered for fixing the Reasonable Rate (RR) reflects the past or present cost of the item and does not cater adequately for the futuristic prices of the item. In an inflationary economy where the inflation of food article is in the range of over 10%, the tenderer will take into consideration

the futuristic price while quoting for a yearly contract. The difference in the procedure adopted in fixing of RR and the calculation of rate by the firm, is leading to a wide variation between RR and LTR, resulting in non-conclusion of contracts. There are many other factors in the present sys of fixation of RR like over reliance on CCR as compared to absolute rates existing in the market, considering increase in Wholesale Price Index (WPI) and not particular Commodity Price Index (CPI), Area under cultivation and projected crop yields, weather forecasts, etc which are leading to fixing of non-realistic RR in certain cases.

71. Market Information / Intelligence. RR must be more related to production costs/ market rates and forecasts of experts/ reputed consultants in the field. There is a need to hire consultants for obtaining market information/ intelligence from private/ government/ semi government agencies, analyse the same and widely disseminate these periodic assessments. Assessments should be forecast on production, availability and prices, in real-time to all functionaries.

72. Resource Mapping and Market Research Cell (REMMREC). For above to manifest and its meaningful application there is an urgent need to bring up REMMRECs on a regional basis. With real-time info flow, professionals engaged in the task of forecasting, authenticated online statistics; mandated to procure daily needs (in terms of consumables, transport and energy needs) and blessed with the biggest asset viz physical footprint over complete nation; as an organisation ASC is best suited to bring up REMMRECs with at least one each at Command HQ. Suitable data collation, regular updating, assistance from like bodies (government and private alike), and adoption of customized research tools will enable this cell to issue 'routine advisories on regional availabilities', facilitate 'price discovery', forecast market trends, advise on evolving dynamic transportation models, educate on

corporate business practices of interest, and so on, all leading to correct and timely decision making. Continuous reading of markets at local, wholesale and nodal levels to analyse the dynamics, trends and implications will provide a clear insight and the right perspective. For this there is a definite need to provide suitable staffing at each theatre level.

Conclusion of Fresh Contract

73. Problem in Conclusion of Contracts - Panel Discussion.

- a) RR. RR vary from station to station and are not correctly aligned with Average Local Market Rates (ALMR).
- b) Fictitious Rates. The 20% below RR limit qualifies a tenderer having bid -4% below Current Contract Rates (CCR) even when RR is fixed as high as +20% over CCR.
- c) Marginal Rates. The marginal acceptance over RR is not fixed.
- d) Basket Rates.
 - (i) RR is fixed in terms of actual cost in case of meat group items and percentage increase/decrease over CCR in case of other items.
 - (ii) For combined items the panel endeavours to arrive at a min acceptable rate of each individual item, but is unable to enforce them when encountered with fictitious rate of an individual item in basket.

74. Problems in Fixed Yearly Priced Contracts. Fixed yearly prices encourage speculative tendering and deter major players. They cause failures of supply due to price mismatch. Opinions exist on concluding short duration seasonal contracts with higher chances of success in availability prediction. On the other hand given the nature and wide range of

articles to be sourced, repeated tendering activity will tend to be voluminous and time consuming. We should introduce flexible contracts that have Dynamic Pricing Mechanisms. Once right and responsive vendors are engaged, they should be encouraged and facilitated to perform with dynamic pricing mechanisms and not intimidatory punitive tools of 'risk and expense'.

75. Periodicity and Duration of Contract. Existing duration and periodicity of fresh contracts need to be reconsidered as periodicity dictates the time plan for conclusion of contracts. For Oct - Sep contracts, the tendering action needs to start in Jun when crops for these items being contracted are not even sown, hence no prediction of likely supply or availability in desired period and likely rates can be made. For instance, in the existing scenario, the first call for potato-onion contracts for the period Apr to Mar is held in mid Nov and it is common knowledge that no forecast of potato crop is available before end Dec. Fixing of RR for such contracts would also be totally based on assumption and previous data. The sanctioned rates may not be sustainable or may be speculative to the benefit of contractors.

76. Level of Conclusion of Contracts. In the current system the contracts are signed at very high level with big players. These big players sub contract to medium players and medium players' further sub-sub contract. Therefore there are players, who are totally disconnected with consumers and also not providing service but are earning huge profits just because main contract is on their name. Secondly the money loses its value as each sub/sub-sub contractor has his profit margins built in and rightfully so. This kind of arrangements impacts the quality to a great deal.

77. Contracts in Navy. In the Navy, Contracts are concluded as per the value by Base Victualling Yards (BVY), Command Logistics officer and CSO (P&A). Beyond that contracts are in the financial powers of the Commander-in-Chief. The BVY's are also responsible to supply to ships and units. It is only Base Victualling Officers (BVOs) and the concerned Command Logistics officers who are the contract concluding authorities as per the value of the contract. Naval Officers In-Charge are nowhere involved in the Contract management or ration management. Of course as senior officers in their region of interoperability they are responsible. Navy being smaller organisation and the stations being major cities/ ports the management of Fresh becomes easier and efficient.

78. Assam Rifles Model. In case of Central Paramilitary Organisations (CPOs) and Assam Rifles fresh contract are directly concluded at unit / sector level (Brigade Level). But at such a lower level, there is a basic flaw in the system. The Commanding Officer is procuring for his own troops; and whom should these troops complain if there is problem. Secondly the complaint has to go through, proper channel, i.e. 2IC or CO etc, which means there will be very less complaints. So if there are fewer complaints, it would be not because people do not complain but because complains don't reach at appropriate level as the assurances are given at unit level. Thus, fewer complaints do not necessarily mean less problems or better quality.

Local Purchase (LP) Procedures

79. Carrying out LP at Risk & Expense of Contractor is tedious and difficult procedure and at times it may not be practicable as the item may actually not be available anywhere in the market in desired quantity as well as quality. Presently there are no stocks being maintained at supply depot/battalion as General Staff Reserves for fresh. There is on ground problem of

Local sellers not willing to supply on cheque payment. It is also seen that adequate time is not available to carry out LP on the same day. At times it is not possible to get quality stuff from market as the standard of fresh rations available in mandi may itself be of lesser quality than ASC Specification. In such cases it becomes important to educate troops about the prevailing conditions in the market eg sometimes the size of onion available in local / supply chain mandi's is so small that we are left with no option but to accept it.

80. Review of LP and Risk & Expense Procedure. The existing procedure should be modified to include aspects as under:-

- (a) There is requirement to have GS Reserves for fresh rations also in terms of Tinned provisions as this will reduce pressure on ASC at times of contract failure. The tinned provisioned may be served at least twice a month in peace locations and training establishments to develop taste for the same
- (b) Cash and Carry (DPM Para 2.4.14). The monetary limit of cash and carry should be enhanced to one day's contract value of the item which is being purchased locally.
- (c) The system of issuing two warnings to the failing contractor before our Board of Officers proceeds to market for LP be done away with. The demand placed on the contractor which has the time of delivery mentioned should be legally binding, failing which the Board of Officers may proceed to market for LP.
- (d) Simplify and shorten LP procedure by including SMS along with recorded telephone call as valid communication for conveying warnings.

Interpretation of DPM

Interpretation of DPM

81. Varying Interpretation by CFA and IFA. Troops deployed in deserts are authorised aerated drinks which earlier were provided by unit soda water factories. To provide better quality product, Govt recently approved provision of branded aerated water through local contract. As part of revenue procurement, contracts were processed for procurement of various brands of Coca Cola and Pepsi. During the processing a query was raised by one of the functionary as regards quality control/specification of the product and its testing in terms of the provisions of DPM. The firm Coca Cola or Pepsi are known to guard the specification of their products a closely guarded secret. Checking the specification of Coca cola or Pepsi therefore was not possible. Alternatively company manufacturing local aerated water and its procurement would have been the answer if reputed brands like Coca cola or Pepsi could not be tested. The provision of DPM was therefore incorrectly understood and interpreted and it took considerable time to resolve the issue. However in future similar problems being raised by any functionary on the garb of DPM or due to malafide intention can never be ruled out. It may also be noted that different commands are following different procedures and provisions while concluding the contracts. There are numerous such examples of flexibility of DPM being incorrectly interpreted leading to delays in procurement. Whether such interpretation is a show of propriety or malafide is debatable, however, every stage of procurement lands up with such avoidable situations.

82. Standardisation and Amendment of DPM. The DPM should contain detailed chapter on procurement of fresh supplies to include provisions of GOI letter of 2006. Immediate clarification be issued by the Service Headquarters in case of any doubts arising and the

spirit of DPM be kept in mind. The decision of CFA should be treated as final in case of any likely delay.

Transparency and Accountability

83. Constraints in Defence procurement in the backdrop of secrecy lack transparency, leading to corrupt practices. This results not only in delay in the availability of the stores/ supplies, but also causes great loss to the state due to cost and time factors. At times, it even ends up in the scrapping and delays in conclusion of contracts. Accountability and responsibility are, hence, the key areas which have to be kept in mind to ensure fast and honest dividends.

84. e-Procurement. Department of Expenditure, Govt of India, vide their Office Memorandum dated 30th March, 2012, mandates all Ministries / Departments of the Central Government, their attached and subordinated offices to commence e-Procurement in respect of all procurements with estimated value of Rs. 10 lakhs or above, in a phased manner. The timelines have been revised mandating all procurements above Rs 5 Lakh from 01 Apr 2015 and above Rs 2 Lakh from 01 April 2016 through e Procurement mode. To facilitate the same, National Informatics Centre (NIC) has developed an e-Procurement application, which is accessible through the Central Public Procurement (CPP) Portal ([URL:http://eprocure.gov.in](http://eprocure.gov.in)). e-procurement has been a welcome step but introduced for tendering purpose only, however its usage at unit and depot level remains limited. This is mainly due to either lack of infrastructure or deficient computer literacy. There is a need to integrate all stakeholders into IT network to ensure efficiency and transparency in procurement. The Army own e-procurement portal or Army Wide Area Network can be

expanded to include demand and supply. This, as on date, is lacking and requires immediate attention. In addition to e-advertisement, e-tendering, e-contracting, e-Procurement may include e-indenting, accounting and consumer feedback also. e-registration is another viable solution that could be resorted to for registration of contractors. Details of such firms promulgated on websites for the benefit of all purchase authorities will pave the way for ensuring quality and efficient procurement, thereby enhancing operational efficiency. Clausen, Kraay and Nyiri (2009) in their report titled “Corruption and Confidence in Public Institutions Evidence from a Global Survey” (undertaken on behalf of World Bank) bring out that in order to operate effectively, public institutions must also inspire confidence in those they serve¹⁷. Therefore, the necessity of adopting e-Procurement for public procurements becomes acute when seen in the light of multiple incidences of possible fraud, corruption, bid rigging and collusion between suppliers being reported in Media on regular basis.

85. Execution of Contracts. The supply depots/ points are generally given low priority in all aspects in station and left to fend for themselves. Since they are the contract executing agency they should be functioning above board and getting the best of supplies from the contract. One often find contractors involved in issue of supplies and getting in league with unit representatives. It is also believed that if execution of contract is strict, the contract rates would generally go up. The contract clauses are also not so stringent to ensure 100% performance by the contractors.

86. Defaulting Contractors. Many contractors flounder¹⁸ and greed drives them to seek more and more out of contracts by cutting corners, by influencing key persons, by raising

¹⁷ Clausen, B., Kraay, A., and Nyiri, Z. (2009), *Corruption and Confidence in Public Institutions Evidence from a Global Survey*, Policy Research Working Paper 5157. Available at <http://econ.worldbank.org>.

¹⁸ R Ramanathan, 2002, *Contract Management*, Konark Publishers.

non-issues, by resorting to unethical means and also defaulting in terms and conditions of contracts. This leads in many cases to arbitration, where contractors win more often than not, due to the inept defence put up by the government.

Integrated Financial Advisor (IFA)

87. The Integrated Financial Advisor (IFA) system has greatly enhanced the transparency and accuracy of procurement. However, until the issue of DPM-2009, duties of the IFA were largely regulated by various policy letters issued by the Government from time to time. In the absence of a well framed and comprehensive policy on the subject, the IFA had apportioned to itself a number of duties that do not strictly fall within its ambit. This practice continues despite these 'duties' not being reflected in the DPM-2009. Further, the concept of IFA was to be integrated with the functioning of the Competent Financial Authority (CFA). However owing to non-availability of officers, the IFA system is perceived by the CFAs to have evolved as a separate entity sitting in judgment over the actions of the CFA. Having objected to the existing course taken up by the CFA, the IFAs fight shy of rendering advice on alternate courses of action. The IFAs insist on separate case files being forwarded to them for perusal thus entailing loss of precious time. They are rather unwilling to accept responsibility for delays in procurement or incorrect procurement, which should logically be shared by them also since they are the advising and overseeing authority.

88. The role and functions of IFAs need to be re-defined in consultation with service headquarters. To achieve synergy, as also ensuring transparency in the Revenue procurement, new integrated organization needs to be created which would include all specializations like contract negotiations, contract management, project management and

supervision, vetting of major proposals, decision-making, etc., thus, incorporating 'quality service, technical know-how, finance, quality assurance, and administrative elements under one accountability centre', as highlighted by the CAG's 2007 report to the Parliament. This way the entire procurement procedure will be re-engineered and redundancy minimized, if not decimated.

Quality Control

89. A system of *Defence Food Specification (DFS)* is in place for quality control which gives out detailed quality parameters for food items procured for the defence forces. These need a periodic review to ensure that novel products launched in the market are included in the scope. The specification should not create such high entry barriers that the competitive market is distorted, while ensuring that quality concerns are not compromised. Quality control in food products procured by defence services is exercised through a system of Defence Food Specifications (DFS) for laying down acceptance criteria for every item and in-house system of inspection by Composite Food Laboratories (CFLs). DFS are prepared by the Office of Directorate General of Supplied and Transport and is ratified by the Technical Standardization Committee (TSC) which includes members from Defence Food Research Laboratory (DFRL), Central Food Technology Research Institute (CFTRI), Agmark, Bureau of Indian Standards, Representative of All India Food Preservers, Ministry of Health and Family Welfare, Ministry of Rural Development and Ministry of Food and Civil Supplies. The DFS are approved by Ministry of Defence. The DFS follows a system of end product analysis model of quality control which may not be adequate. Some of the latest changes which have taken in the market are given below which can be effectively incorporated into Army supplies:-

- a) Traceability and Use of Technology. Tracking and tracing are very important and technology insertion is required in the supply chain for this to be effective. Periodic scandals involving international supply chains have eroded the trust of consumers and have led to increase in demand of traceability and testing of quality. Technologies like Radio-frequency identification (RFID) tagging and bar-coding are the most popular technological innovations in this field.
- b) Hazard Analysis and Critical Control Points (HACCP). Hazard Analysis and Critical Control Points (HACCP) is recognized as the most important standard for safety and suitability of foodstuffs. Critical control points are the steps in the process where hazardous contamination can enter and HACCP aims at controlling through prevention rather than inspection. It has seven principles and 12 guidelines (developed initially for NASA space programs) and is foundation for other standards worldwide.
- c) International Standards Organisation (ISO 9000 and ISO 22000:2005). International Standards Organisation (ISO 9000 and ISO 22000:2005) are voluntary technical standards which are globally recognized. ISO 9000 is a generic standard providing quality assurance and not aimed specifically at food sector. This standard helps the company to formalize its management system of quality assurance, which also provides traceability of root causes of quality problems. ISO 22000:2005 is a standard dealing with food safety and is a general derivative of ISO 9000. This standard provides an opportunity to minimize system and audit variations on account of location, types of product and so on. It also reduces barriers to trade across

borders. Food Safety System Certification 22000(FSSC 22000) combines ISO 22000:2005 and Publicly Available Specification (PAS) 220:2008 and is recognized by Global Food Safety Initiative and the Food and Drink Federation. The application of management systems for quality of ISO 9000 could be considered to maintain the credibility of the food supply chain in the Army.

- d) Food Safety and Standards Authority of India (FSSAI). In India, the Food Safety and Standards Authority of India (FSSAI) has been established under Food Safety and Standards Act, 2006 which consolidates various acts and orders that have hitherto handled food related issues in various Ministries and Departments. FSSAI has been created for laying down science based standards for articles of food and to regulate their manufacture, storage, distribution, sale and import to ensure availability of safe and wholesome food for human consumption. Various central Acts like Prevention of Food Adulteration Act, 1954, Fruit Products Order, 1955, Meat Food Products Order, 1973, Vegetable Oil Products (Control) Order, 1947, Edible Oils Packaging (Regulation) Order 1988, Solvent Extracted Oil, De- Oiled Meal and Edible Flour (Control) Order, 1967, Milk and Milk Products Order, 1992 etc are repealed and consolidated under Food Safety and Standards Act, 2006. The Act also aims to establish a single reference point for all matters relating to food safety and standards, by moving from multi- level, multi- departmental control to a single line of command. To this effect, the Act establishes an independent statutory Authority – the Food Safety and Standards Authority of India with head office at Delhi. Food Safety and Standards Authority of India (FSSAI) and the State Food Safety Authorities shall enforce various provisions of the Act. This has certainly made quality control in

supplies in Army easier but a lot still depends upon the local contract operating authorities. There needs to be uniformity in executing the standards in all stations.

Miscellaneous Aspects

90. Procurement of Milk Fresh. Inefficient and uneconomical functioning of Military Farms has been amply highlighted in previous studies and they are under orders of closure now, but needs to be expedited. The Military Farms cannot compete with modern dairy and milk processing plants in technology as well as cost effectiveness. The Military Farms should focus on supply of milk in HAA/Field Areas, in remaining places milk supply ex Co-operative Federations of NCDFI should be undertaken.

91. Delegation of Financial Powers.

- a) The financial power at Command and Corps rests with the Army Commander and the Corps Commander who due to various operational, regimental and ceremonial duties are out of their Headquarters for better part of a month thus leaving very little time to peruse and analyse case files pertaining to revenue procurement. This leads to delays and postponement of decisions. It would be appropriate if the financial power are delegated to the Chief of Staff who is of considerably high rank and is available at the Headquarters always. This practice is already prevalent at the highest level wherein all financial power are vested with Vice Chief of Army Staff rather than Chief of Army Staff.
- b) The financial powers of all commanders and functionaries have been revised and enhanced vide DFPDS 2016 however all enhanced powers are now to be exercised with IFA concurrence which has apparently increased the IFA cadre strength and

power without much accountability. The process of vetting and approval of contract / sanction of local purchase / grant of variations etc is a complicated procedure and not easily understood by intermediary staff Officers, which causes delays and unnecessary correspondence and uncalled presentations. There is lack of ownership in staff and thus responsibility is diluted. However, the responsibility for delays / non-conclusion of contracts always gets attributed to ASC staff.

92. Review of DPM. DPM has undergone numerous revisions ever since it was first published in 2005. Another revision of DPM 2009 is already underway at MoD. Most of the revisions are made on feedback obtained from the environment; however the revisions are included in the DPM in a generic form without any mention of specific cases. Though formulation of SOPs by various procuring agencies has been done, these SOPs are often over ruled by advisors and auditors quoting DPM to be supreme. It is therefore essential that industry specific policies/SOP which are based on DPM are issued under the orders and authority of MoD.

93. Time Bound Processing. The effect of delay in processing and clearance of various procurement activities needs no emphasis. Every individual in the chain of the procurement process is accountable for taking action in a specified time period so that the requirements of the troops are met on time. Reduction in time frame for processing of revenue procurement cases by clubbing certain stages of processing/approval etc. Introduction of collegiate system of vetting of the RFP in order to reduce the time frame involved in movement of case files. Minor variations such as extension of date for tender opening/submission of bids etc should be permitted on the approval of Executive officers and need not be referred to CFA to save time. Similarly, approval of one lower rank officer should be permitted.

94. Information Technology (IT) and Integration. In tandem with the growth in purchasing and SCM literature, there has been a body of work examining the role and impact of IT in the supply chain. There are considerable benefits in developing integrated processes and functions with trading partners in the chain, both up and downstream. Handfield and Nichols (1999) suggest the three components in supply chain integration are: information management, inventory management and relationship management. Even where integration is a desired outcome, systems incompatibility, problems of implementation, and levels of connectivity all hindered the integration agenda. Fawcett (2008) identified several cultural barriers to implementing effective SCM, including lack of trust, unwillingness to share risk and reward, inflexible systems and processes, lack of training and resistance to change¹⁹. Further barriers to achieving integration have been identified as: fear of technology, organisational structures, yielding sovereignty and resistance of people. One theme in the supply chain literature identifies the need for integration between members of the chain, proposing inter-firm exchange of information and re-engineering of processes²⁰ (Lambert, 2004, Croxton et al, 2001).

¹⁹ Fawcett, S., Magnan, G. and McCarter, M. (2008), *Benefits, barriers and bridges to effective supply chain management*, Supply Chain Management: An International Journal, 13/1, pp. 35-48.

²⁰ Lambert, D. (2004), *Supply Chain Management: Processes, Partnerships, Performance*, SCMI, Sarasota, FL.

CHAPTER- VI
RECOMMENDATIONS AND CONCLUSION

“The General must know how to get his men their rations and every other kind of stores needed for war.”

- Socrates

95. Based on detailed study and analysis of subject, recommendations to overcome challenges through procedural reforms, efficient operation of contracts and effective contract management are given in succeeding paragraphs. The recommended changes in procedures and system provide pragmatic solution to deal with the complex challenges and enhance the satisfaction level in troops which will directly improve the morale, a force multiplier for any fighting force. The recommendations attempt to refine the procedures in supply chain by exploiting technology, innovations in the food technology and agriculture as well as by adopting the best practices in the modern supply chain management.

Recommendations

96. Vendor Base & Securing Contracts. The functional implementation would involve the following aspects:-

- a) Registration Process. It should be simplified by accepting only bank guarantees / FDRs as acceptable sureties, security deposits covering contract performance, introduction of vendor rating based on common criteria and capacity demonstration. In addition the re-verification of firms to be done every seven

years. To simplify the registration process and reduce documentation, following can be done:-

- (i) The sureties in terms of immovable properties should not be acceptable; instead bank guarantees / FDRs should be the only acceptable sureties.
- (ii) The security deposits should cover contract performance.
- (iii) Vendor rating should be based on turnover and possessed infrastructure.
- (iv) The Contract Carrying Capacity should be based on :-
 - (aa) Proven and established expertise of the individual or firm.
 - (bb) Suitable credit check through scrutiny of audited results.
 - (cc) Capacity demonstration.
 - (dd) Market footprint.
 - (ee) Recommendation of their clientele.
- (v) The re-verification of firms to be done every ten years.

b) Entry of Major Players. In the long term, contracts for specific projects based on RFP be done incorporating all basic aspects of ASC Contracts as well as additional tasks that we expect the Major Pvt players to perform. For the interim, they be allowed to participate in tender activity by enhancing the security deposit / bank guarantee provided the executive officer finds them genuine. To attract Major Private players into our contracting system, the following is suggested:-

- (i) Permitting Major Private players both in Vegetarian and Non-Vegetarian group at a nodal station as pilot project. The RFP for the project should incorporate all basic aspects of ASC Contracts as well as additional tasks that we expect the Major Private players to perform. A 'Special Circumstances' clause on Assessment and Registration of Suppliers for Defence be included in our registration process which will facilitate Major Private Players to get

registered for ASC Contracts. Additionally there is a case to consider unregistered contractors to participate in tender activity by enhancing the security deposit / bank guarantee provided the executive officer finds them genuine. The same has been laid down in DPM 2009. This is kind of back door entry.

(ii) Legitimize the entry of major players through the front door and allow them to emerge as stakeholders. These could be done as pilot project of negotiated contract for selected Command / Area involving cluster of stations. These negotiated contracts should be using best value source solicitation procedures where award is based on factors other than cost or price alone.

(iii) The above concept uses commercial distributors to directly deliver a full range of food items and beverages to customers in a specific geographic area.

(iv) Customers receive supplies within 48 hours of placing orders while reducing warehouse inventories. No substitutions are accepted unless authorised by the ordering activity.

(v) The contracts, with multiple renewable years, place an emphasis on quality, availability and minimum delivery lead time.

(vi) Prime Vendor contracts utilize Electronic Data Interchange which is available with the military authorities.

- c) Contracting Methodologies. We need to have flexible and tailored contracts to suit differing requirements of time, quantity and location in keeping with development penetration and local availability especially in remote locations. Negotiated contracts for fresh supply should also be considered. The negotiations should include methodologies of Best Value, Commercial Buying Practice and Multi-sourcing that brings government contracting in line with industry best

practices. The negotiations should include methodologies that bring government contracting in line with following industry practices:-

- (i) Best Value. This places emphasis on factors other than price, e.g. quality, past performance or technical merits. Best value allows the contracting officer to award to the firm that has the greatest probability of success in delivering the product.
- (ii) Commercial Buying Practice. This is an effort to interest more quality commercial manufacturers in doing business with the government by purchasing commercial items and following commercial procedures. A product demonstration model may be required.
- (iii) Multi-sourcing. This is a contracting method for the purchase of supplies/services for more than one but not more than three program years. The contracts is concluded with L1 at L1 rates for 100% scheduled quantity, and the respective rates of L2 or L3 or L4 ...etc are treated as their respective rate contract at the Risk and Expense of L1 vendor. Alternatively award could be made in equal quantities to more than one firm and additional quantities, if awarded, are based on actual performance.

97. Percentage and Variety. Flexibility must be incorporated in percent and management of Fresh Fruits & Vegetables (FF&V). Four options are there:-

- a) Option 1- Powers to deviate vested with COO, Executive Officer & CFA.
 - i. Contract Operating Officer. Upto 10% deviation of the laid down percentage for each variety for the month.
 - ii. Executive Officer. Upto 20% deviation of the laid down percentage for each variety for the month.

iii. CFA. Upto 25% deviation of the laid down percentage for each variety for the month.

b) Option 2 - Ceiling Monetary Rate (CMR) Concept. A unit can draw any amount of commodities desired by them irrespective of the scale, permissible within the budgetary outlay entitled to them as per their strength multiplied by the CMR per day.

c) Option 3 - Generic Management of Variety and Percentage. Generic percentage for vegetables be 30% hard variety, 30% normal variety, 25% leafy variety and 15% salad variety. Specific variety percentages remain a guideline and can be varied upto 10% of additional financial effect if any. If particular variety is not available in the market then an alternative maybe procured within the genus. Above 10% of the initial budgetary outlay will be required to be sanctioned by the CFA.

d) Option 4 - Build Redundancy in Percentage and Variety. Canned/ frozen/ dried/ shelled items may be procured and help in supply depot to have redundancy in percentage and variety.

98. Fixation of RR. Value judgement should continue to be the deciding factor for arriving at the RR. RR should be within an acceptable +/- 20 % range of ALMR. It should be more than whole sale rate published by horticulture information service monthly bulletin. Therefore, the RR be fixed as per the rate assessment by Panel sp by a mathematical model (which is an aid). The mathematical worksheet would form an essential supporting document to be enclosed in the RR envelope which would stand scrutiny later on. Suggested Mathematical Models for Fixation of RR are given as under:-

a) Model A is aligned to actual pricing mechanism based on rates as existing in the market. The Mandi tax, transportation cost, wastage allowance and govt taxes get added to these rates. They are then analysed with commodity price index as

affecting upward / downward revision of rates over last three years. The profit margin is also added to the rate and then any intangible contingency is factored in to arrive at the RR.

- b) Model B relies heavily on CCR over the last three years, CCR within Command and neighbouring stations of other Commands and inflation rate. These factors are given weighted percentage to arrive at a weighted average rate. In the end transportation and any contingency is factored in to arrive at the RR.
- c) Model C is based on price discovery mechanism and CCR. The mathematical average of market price and CCR is done and then the rates are analysed with commodity price index as affecting upward / downward revision of rates over last three years. In the end contingency and local conditions are factored in to arrive at the RR.
- d) Model D is also based on price discovery mechanism - ALMR and CCR – but has weightage between them. The weighted average of ALMR and CCR is done and then the rates are analysed with commodity price index as affecting upward / downward revision of rates over last three years. In the end contingency and local conditions are factored along with profit margin.

99. Conclusion of Fresh Contract.

a) Fictitious Rates. The rates be declared fictitious as under:-

- (i) Rate quoted is 10% below the fixed RR and is also below CCR plus average yearly inflation.
- (ii) Rate quoted is 20% below or above the fixed RR.

b) Marginal Rates. The Margin acceptance should be upto 25% of the positive hike percent over CCR and no negotiations should be permitted with L1 vendor if the tendered rate is in the margin acceptance zone of RR.

c) Basket Rates. For combined items the panel could endeavour to arrive at a min acceptable rate of each individual item. This would ensure that reasonable rate is accorded for each item. The tendered rate for each item in a basket will be declared fictitious if they are 20% below the RR, and recommended for acceptance upto 10 % above the RR.

100. Moving Away from Fixed Yearly Contracts. We should introduce flexible contracts that have Dynamic Pricing Mechanisms. ‘One size doesn’t fit all’, with this in mind four types of contracts models are suggested and these should be included in the revised DPM. The next CFA should be the deciding authority to specify which contracting methodology to be used. The four types of contracts are:-

a) Short Term Extendable Contracts. Here the vendor in competitive bidding quotes a variable base rate for the season i.e. different rate for each month of supply (no uniform rate), against an approximate quantity to be indicated. Rate revision during this period will be linked to food inflation rates (specifically of commodities under consideration). Such contracts could be concluded for a period of three to six months extendable by another three months.

b) Long Term Two Bid Contracts. In more developed places, where adequate footprint exists of major retail chains engaged in marketing of food commodities, another model could be ‘vendor selection’ through deliberate RFP, followed by technical proposal evaluation and competitive bidding. In this too price structures will vary with each month. Price revisions after delineation of certain key

variables will be through negotiation in a transparent manner. The contract may be extended again through negotiation by another six months.

- c) Reviewable Contracts. Contract should be annual but should have contractual provisions of allowing two reviews to both parties, which allow negotiations of price and variety percentage for balance contractual period. The first review to either party should not be before four months, and no review is allowed to a party within two months of previous review (of either party).
- d) Single Item Direct Delivery Rate Contract. Direct Delivery Rate Contract in a peace station may be done for a single item contract as is happening for milk with self certification. Under this rate contract the contractor will have the added responsibility of direct delivery upto the consumer premises.
- e) A thought could also be given to explore the feasibility of having a Price discount system with variable pricing with big market players.

101. Periodicity and Duration of Contracts.

- a) Conclusion of contracts should be planned in such a periodicity that tendering takes place after crop has been sown and cropping inputs are available to both supplier as well as accepting agency for realistic rates and less of speculations.
- b) The duration of contract should also be revised to reduce speculation. Contracts should be concluded for six months duration with the tendering activity starting not before 45 days of commencement of contract. However, considering the time it takes to sign and finalise contract and the availability of ASC staff, the present system of yearly contracts is reasonably good. Any reduction in duration will have to be supported by suitable increase of ASC staff under each CFA.

- c) There should be more reliance on E-tendering which reduces documentation and has a simplified procedure.
- d) Also the mandatory time for various activities in the contracting procedure will have to be shortened and vetting / approval by staff / CFA of approximate quantities and contractual documents will have to be time bound.

102. Level of Conclusion of Contracts. To ensure equal distribution of workload for conclusion of contracts in view of reduced duration, it is recommended that irrespective of the financial value, all Meat group contracts be processed at the level of Command / Corps while all fresh items other than Meat groups be processed at the level of Corps / Area / Div. The following is suggested:-

- a) Centralised Conclusion of Meat Group Contracts. It is recommended that centralised conclusion of contracts for a group of stations may be undertaken at the level of Command and Corps to ensure similar / near similar rates in neighbouring stations. The grouping of the stations could be done on the basis of a common axis and also on the basis of proximity of the stations.
- b) Decentralisation of Contracts. There is an expressed need to have contract concluding (executive officer) as well as contract operating officer at the same level or at most one level higher for better accountability. Hence, in the Army, the contracts for fresh rations less the Meat group items could be decentralised to Corps / Area / Div / Sub Area levels.

103. Exercise of CFA Powers.

- a) Existing CFA powers to be exercised fully as per the DFPDS-2016. In fact with most of the procurement now through e-procurement mode (CPP Portal) the powers should be exercised without IFA concurrence.
- b) As provisioned in DSR, the CFA for ASC contracts should be ASC appointments just as the case is with Engineers (including MES / border roads contracts) or Signals or EME or AOC. As it is for Local purchase of supplies in case of non conclusion of contracts, the financial powers are with the ASC appointments. Therefore, for all ration contracts, the CFA should be ASC appointments.

104. Local Purchase (LP) at Risk and Expense of Contractor.

- a) Heavy penalty clauses including any delays akin to LD clause should be included in the contract.
- b) The demand placed on the contractor which has the time of delivery mentioned should be legally binding, failing which the Board of Officers may proceed to market for LP.
- c) Simplify and shorten LP procedure by including SMS along with recorded telephone call as valid communication for conveying warnings.
- d) Cash and Carry clause of DPM (Para 2.4.14) should be exploited and the monetary limit of cash and carry should be enhanced to one day's contract value of the item which is being purchased locally.
- e) Reserves for fresh rations in terms of tinned / frozen provisions be provided and these be served at least twice a month in peace locations and training establishments to develop taste for the same.

105. Execution of Contracts. The best officers should be posted to supply depots/ points with adequate professional competence. Full latitude be given to enforce terms and conditions of the contracts. Periodic checks and balances should be enforced to ensure transparency and accountability. Some of the measures are given below:-

- a) Full automation of demand and supply.
- b) Upgradation of infrastructure with modern equipment.
- c) Installation of CCTV cameras.
- d) No direct contact with contractors.
- e) Regular checks by GFO/ duty officers and surprise visits by commanders/ Commanding officers/ Quartermaster.
- f) Units to check quality, quantity and correct documentation.
- g) Periodic monitoring by station commanders and Executive officers.
- h) The contract clauses need to be made stringent to ensure 100% performance by the contractors.

106. Quality Control. Although strict Defence Food Specification (DFS) have been made and are incorporated in the contracts, it been found the flexibility lies ultimately with the executing authorities and accepting units/ persons. The specifications needs to more in sync with the market availability and general standards. With the Food Safety and Standards Act, 2006 and Hazard Analysis and Critical Control Points (HACCP) certification in place more levy may be given to the suppliers with self certification guarantees. Heavy penalties should be incorporated in contractual clauses to ensure compliance. Traceability of products is important provision to ensure quality control and compliance.

107. E-Procurement. E-tendering has enhanced transparency, competitiveness & ensured timely contracts, however e-procurement needs to be implemented at lower levels with full digital integration of Vendors, CFA, IFA and Supply Units. The existing e Procurement process is very elementary and fails to harness the best industry practices and potential offered by e Governance and e Commerce platforms now easily available and accessible. The need of the hour is a customised e Procurement suite tailor made for procurement of all articles of perishable supplies handled by the ASC.

108. Miscellaneous Aspects.

- a) DPM-2009 should have separate chapter for ration procurement. The Government of India, Ministry of defence policy letter of 2006 on Procurement of Fresh Supplies could be amalgamated into DPM so as to have one single authority for all procurement.
- b) Infrastructure development at Supply depots to include capital works, Refrigerated vehicles, Refrigerated storage at supply depots to hold frozen food/fresh, automation in demand and supply.
- c) Milk should only be supplied through state cooperatives and closure of Military Farms be expedited. Except for supply of milk in HAA/Field Areas, in remaining places milk supply ex Co-operative Federations of NCDFI should be undertaken.
- d) Direct delivery of Rations upto unit location by the Vendors would reduce colossal wastage of manpower and resources in Ration collection, reduce wastage in multiple handling as also enhance consumer satisfaction level.
- e) Extension of Frozen/ chilled Chicken/ Meat to other areas. The introduction of Frozen/ chilled Chicken/ meat in peace stations with effect from 01 Apr 2017 has been widely appreciated and needs to be further extended.

- f) Review of Scales of Rations and Defence specifications in sync with nutritional/ dietary aspects and actual market availability.

Conclusion

109. Streamlining the procurement system is an ongoing process in today's world of ever-changing and advancing technologies. In order to achieve enhanced levels of satisfaction, it is then but natural to expect our procurement procedures to keep abreast of the best practices and most effective systems. Though the government and the service headquarters have made efforts to improve the revenue procurement structures and procedures, there is still much scope for reforms. Though a well- framed DPM-2009 is in place, it is understood that reforms and flexibility have to be integrated with the DPM, based on feedback from the end-users, the approving authorities and on the ever-changing perception. A well- organized and competent revenue system will go a long way in ensuring potent and productive results.

110. Fresh supply procurement, unlike procurement of other items, involves a deliberate and complex procedure that has evolved over a long period. The DPM should contain a separate chapter dedicated to procurement of fresh supplies after incorporating all recommendations. An integrated and synergized approach to ensure a time bound procedure for conclusion of contracts with accountability and strict execution mechanism will work to the advantage of the system. The e-procurement initiative and automation drive will definitely improve the system. Finely-tuned with reality and dealt with integrity of the highest order, a transparent supply procurement system, though arduous, will definitely provide the necessary fillip to consumer satisfaction level and improve efficiency.

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(Total Words- 24,240)

QUESTIONNAIRE (FOR CONSUMERS)**MANAGEMENT OF FRESH SUPPLIES**

ASC is responsible for supplies of Fresh rations in the Army. Keeping pace with overall development in the country and meeting the growing aspirations of Defence personnel, there has been significant improvement in procurement of fresh supplies in the last few years. As a part of sample survey on Topic "Procurement of Fresh Supplies in the Army" of a Dissertation study during course at IIPA, a realistic feedback is required to be obtained to establish need for reforms in fresh supplies management procedures to enhance consumer satisfaction.

You must have had adequate experience with fresh supplies as a consumer. Your valuable inputs in this regards is requested in the questionnaire below. Please tick the most appropriate answer. Your answers will be kept confidential and used for research purpose only.

[IN HINDI/ ROMAN HINDI FOR JCO/ORs]

Rank : _____ Name : _____ (optional)

Arm/ Service : _____

Gen Info

1. System of Accounting being followed by unit : Peace / Feild
2. Unit drawing fresh supplies from Supply Depot/ Point : _____ (optional)
3. Staying Single or with family in station: _____

Quality

1. The unit/ troops are generally satisfied with quality of fresh ration.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

2. The quality of fresh rations is issued as per ASC specifications.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

3. There is a need to amend scale and specifications to enhance consumer satisfaction.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

4. Adequate variety as per laid down Percentage schedule is supplied.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

Quantity

5. Full quantity as per demand is issued to unit.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

6. Weight of quantity of fresh rations issued is correct as per auth scales.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

7. Emergent demands if any are met by the Sup Pt/ ASC contractors.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

Timely Supplies

8. Fresh rations are issued as per laid down timings.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

9. There is no backlog of fresh sup.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

10. There are frequent delays in issue due to non sup by ASC contractors.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

Responsiveness & Behaviour of Supply Depot Staff

11. The Sup Depot staff is polite & courteous.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

12. The staff is prompt in dealing with any complaints if any.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

13. Prompt action is taken against defaulting and supplies issued in reasonable time.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

Gen Procedures

14. Adequate checks & balances are in place to ensure consumer satisfaction.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

15. The contract rates are gen not commensurate with the market rates resulting in problems in supplies.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

16. Upgradation of Infrastructure in Sup Depot akin to Multi retail chains and Automation will enhance consumer satisfaction.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

17. The contract should be concluded directly at unit level like in case of Assam Rifles/ CPOs.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

18. Ration money as per current market rates should be authorized instead of Rations in Peace stations.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

19. The fresh ration distribution system of other organisations like Navy/ PMF/ CPOs is perceived to be better.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

Any other Recommendations.

1. _____.

2. _____.

3. _____.

4. _____.

आपूर्ति- वितरण प्रणाली के बारे में सुझाव

ASC द्वारा वितरण प्रणाली को बेहतर बनाने के लिए सुझाव दें।
आपूर्ति वितरण प्रणाली को बेहतर बनाने के लिए सुझाव दें और
आपूर्ति वितरण प्रणाली को बेहतर बनाने के लिए सुझाव दें, आपूर्ति
प्रणाली को बेहतर बनाने के लिए सुझाव दें आपूर्ति प्रणाली को बेहतर बनाने के लिए सुझाव दें एक
आपूर्ति प्रणाली को बेहतर बनाने के लिए सुझाव दें "आपूर्ति प्रणाली को बेहतर बनाने के लिए सुझाव दें" पर
आपूर्ति प्रणाली को बेहतर बनाने के लिए सुझाव दें एक आपूर्ति प्रणाली को बेहतर बनाने के लिए सुझाव दें
आपूर्ति प्रणाली को बेहतर बनाने के लिए सुझाव दें आपूर्ति प्रणाली को बेहतर बनाने के लिए सुझाव दें एक
आपूर्ति प्रणाली को बेहतर बनाने के लिए सुझाव दें आपूर्ति प्रणाली को बेहतर बनाने के लिए सुझाव दें
आपूर्ति प्रणाली को बेहतर बनाने के लिए सुझाव दें इस आपूर्ति प्रणाली को बेहतर बनाने के लिए सुझाव दें
आपूर्ति प्रणाली को बेहतर बनाने के लिए सुझाव दें गए आपूर्ति प्रणाली को बेहतर बनाने के लिए सुझाव दें
आपूर्ति पर आपूर्ति प्रणाली को बेहतर बनाने के लिए सुझाव दें आपूर्ति प्रणाली को बेहतर बनाने के लिए सुझाव दें और
आपूर्ति प्रणाली को बेहतर बनाने के लिए सुझाव दें आपूर्ति प्रणाली को बेहतर बनाने के लिए सुझाव दें

नाम: _____, पता: _____ (आपूर्ति प्रणाली), आपूर्ति /
आपूर्ति: _____

जनरल आपूर्ति प्रणाली

QUESTIONNAIRE (FOR ASC OFFICERS)**MANAGEMENT OF FRESH SUPPLIES**

ASC is responsible for supplies of Fresh rations in the Army. Keeping pace with overall development in the country and meeting the growing aspirations of Defence personnel, there has been significant improvement in procurement of fresh supplies in the last few years. However a large number of difficulties are often faced in management of fresh supplies by ASC such as procedural delays in conclusion of contracts, failure of contracts, problems in quality, Arbitration/ legal cases and lower consumer satisfaction. There is a need to reform the procedures in procurement of fresh supplies to ensure optimum efficiency and higher satisfaction level.

As a part of sample survey on Topic "Procurement of Fresh Supplies in the Army" of a Dissertation study during course at IIPA, a realistic feedback is required to be obtained to establish need for reforms in fresh supplies management procedures to enhance consumer satisfaction. You must have had adequate experience in dealing with Fresh supplies while serving in Supply Depots / units/ Staff. Your valuable inputs in this regards is requested in the questionnaire below. Please tick the most appropriate answer. Your answers will be kept confidential and used for research purpose only.

Rank : _____ Name : _____ (optional)

Service: _____ yrs

Gen Info

1. Supply Unit/ Depots served _____ (Yes/ No)

2. Any experience in conclusion of contracts (Staff Offr/ Member/ other)
 _____ (Yes/ No)

Realistic Contract Rates

1. The contract rates are gen not found to be realistic leading to problems in supplies.
 (a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree
2. Good contract rates would ensure good quality of fresh rations and better consumer satisfaction.
 (a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree
3. Contractors often bag the contract at lower rates and later find it difficult to run the contract.
 (a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

Contract Provisions

4. Contractors often take advantage of contractual procedures to delay & compromise on quality / quantity.
 (a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree
5. Risk & expense is difficult to carry out against defaulting contractors in a time bound manner.
 (a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree
6. Big Contractors often sublet the contract to smaller contractors/ agents using provisions of Power of Attorney.
 (a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree
7. Additional provisions and guarantees need to be added in the contract to safeguard against any defaults by contractors.
 (a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree
8. Penalty clause akin to the LD clause should be added in contract to ensure timely supplies.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

Quality, Quantity & Distribution

9. There is a need to amend scales and Defence specifications to enhance consumer satisfaction.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

10. It is difficult and practically impossible to issue variety exactly as per laid down 100% Percentage schedule.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

11. Infrastructure in Sup Depot needs to be fully automated and upgraded akin to Multi retail chains to enhance consumer satisfaction.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

12. The introduction of Frozen/ Chilled meat/chicken has enhanced consumer satisfaction and should be extended to other areas also.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

13. Greater flexibility needs to be given to depot commanders in procurement of fresh supplies as per market availability.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

Contract Procedures

14. The contracts should be concluded at lower level (Sup Depot, Stn, Div, Sub area instead of Command, Corps, Area).

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

15. Contract should be concluded twice in a year to cater for wide fluctuations in the market rates.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

16. The contract should be concluded directly at unit level like in case of Assam Rifles/ CPOs.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

17. E tendering / procurement has enhanced transparency, competitiveness & ensured timely contracts.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

18. Fresh contract should continue to be concluded as per procedures laid down in GOI PC/ RAKSHA letter of 2006.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

19. The provisions DPM-2009 are adequate for conclusion of fresh contracts.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

20. The IFA sys is often responsible for unrealistic rates & delay in conclusion of contracts.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

21. Contracts should be concluded with large renowned Multi retail chains having Pan India presence to enhance consumer satisfaction.

(a) Strongly Agree (b) Agree (c) Can't say (d) Disagree (e) Strongly Disagree

Any other Recommendations.

1. _____.

2. _____.

3. _____.

4. _____.

<u>Quantity</u>																						
5.	1	2	1	1	4	6	3	50	3	1	1	5	2	1	1	4	0	0	1	1		
	5			8	1																	
6.	2	3	1	2	3	5	3	38	4	1	2	7	2	1	1	4	1	0	0	1		
	4			8	0																	
7.	4	1	1	6	4	4	3	48	5	3	2	1	6	1	1	8	5	1	0	6		
					1							0										
To	4	6	3	5	1	1	9	13	1	5	5	2	1	3	3	1	6	1	1	8		
tal	3			2	1	5		6	2			2	0			6						
					2																	
<u>Timely</u>																						
8.	8	2	0	1	4	6	3	55	3	1	2	6	4	0	2	6	0	1	0	1		
				0	6																	
9.	6	2	1	9	4	5	4	55	1	1	1	1	7	1	0	8	2	1	1	4		
					6				0			2										
10	3	1	0	4	1	3	2	16	1	1	2	1	2	3	2	3	3	2	1	6	(-)	
					1				6			9	8			3						
To	1	5	1	2	1	1	9	12	2	3	5	3	3	4	4	4	5	4	2	11		
tal	7			3	0	4		6	9			7	9			7						
					3																	
<u>Response</u>																						
11	2	2	2	2	3	5	3	43	3	1	1	5	2	1	1	4	1	1	0	2		
	0			4	5																	
12	1	1	1	1	2	5	4	38	1	2	1	1	8	2	1	1	1	0	0	1		
	3			5	9				0			3				1						

13	5	1	1	7	3	6	4	46	6	1	1	8	1	1	1	1	4	0	0	4	
					6							0				2					
To	3	4	4	4	1	1	1	12	1	4	3	2	2	4	3	2	6	1	0	7	
tal	8			6	0	6	1	7	9			6	0		7						
				0																	
<u>Procedure</u>																					
14	6	1	1	8	4	5	3	48	5	1	1	7	7	2	2	1	3	1	0	4	
					0											1					
15	1	2	1	1	3	3	3	42	7	2	1	1	1	2	2	1	1	1	0	2	(-)
	4			7	6							0	3		7						
16	2	2	1	2	3	5	6	42	2	1	0	3	4	2	0	6	1	0	0	1	(-)
	3			6	1																
17	2	1	1	4	2	4	2	28	5	3	2	1	2	1	1	3	3	1	1	5	(-)
					2							0	9		1						
18	4	1	1	6	1	2	2	17	6	3	2	1	2	3	1	3	1	1	1	12	(-)
					3							1	8		2	0					
19	6	1	0	7	3	4	1	38	1	2	0	1	5	2	3	1	3	1	3	7	(-)
					3				4			6				0					
To	5	8	5	6	1	2	1	21	3	1	6	5	8	1	9	1	2	5	5	31	
tal	5			8	7	3	7	5	9	2		7	6	2		0	1				
				5											7						

SURVEY II: QUESTIONNAIRE FOR ASC OFFICERS ON FRESH SUPPLIES

Ques No	Strongly Agree	Agree	Can't Say	Disagree	Strongly Disagree	Remarks
<u>Realistic Rates</u>						
1.	2	9	1	1	1	
2.	3	7	0	3	1	
3.	1	8	1	3	1	
Total	6	24	2	7	3	
<u>Contract Provisions</u>						
4.	3	7	1	2	1	
5.	4	7	1	1	1	
6.	1	6	3	3	1	
7.	3	7	1	1	1	
8.	4	6	1	1	1	
Total	15	33	7	8	5	
<u>Quality, Quantity, Distribution</u>						
9.	2	5	2	4	1	
10	4	6	2	1	1	

11	4	7	1	1	1	
12	5	7	0	1	1	
13	2	4	3	4	1	
Total	17	29	8	11	5	
<u>Contract</u>						
<u>Procedures</u>						
14	1	4	4	4	1	
15	1	3	4	5	1	
16	1	3	4	5	1	
17	6	5	2	1	0	
18	2	6	4	1	1	(-)
19	1	5	3	4	1	(-)
20	2	6	2	3	1	
21	2	6	3	2	1	
Total	16	38	26	25	7	