PREFACE

This Report of the Comptroller and Auditor General of India for the year ended March 2010 containing the results of the Performance Audit of the "Fertilizer Subsidy" has been prepared for submission to the President of India under Article 151 of the Constitution.

The Performance Audit was conducted between June 2009 to March 2010 through test check of records of the Department of Fertilizers, Fertilizer Industry Coordination Committee and Directorates of Agriculture of the 24 State Governments, as well as field survey of fertilizers dealers and farmers. The period covered under the audit was 2003-04 to 2008-09. To ensure that the observations made by audit are objective and are drawn up after the audited institution is given sufficient opportunities to respond to these observations, we have fine tuned our audit methodology to ensure at least two interactions with the Department concerned to apprise them of our findings. Such opportunities are also designed to obviate any reservations on part of the concerned department which would make them feel that their view point was not incorporated in our findings. Invariably, where we disagree with the clarification provided by the Department, we reflect their view point also in the Report.

While every effort is being made to ensure total transparency and a well balanced approach, we are constrained to point out that in the course of this Audit while the Principal Director of Audit forwarded the draft Report to the Secretary, Department of Fertilizers on 1.12.2010 seeking his comments and also seeking an Exit Conference, the letter was not replied to. Subsequently, the Principal Director of Audit addressed the Secretary, Department of Fertilizer again on 25.2.2011, stating that the comments of department are still awaited. He also reminded the Secretary to indicate a convenient date for the Exit Conference. Unfortunately, even this letter went unheeded.

It is for the Parliament and the Public Accounts Committee to judge whether Government Departments should continue to display such low priority to Audit Reports.

Executive Summary

Background

The fertilizer subsidy/ concession regime in India has had a long and chequered history, dating back to 1957. Currently, urea is the only controlled fertilizer, which is subject to price distribution and movement control under the Fertilizer Control Order and Fertilizer Movement Control Order to the extent of 50 per cent of production. Other fertilizers like DAP (Di-Ammonium Phosphate), Mono-Ammonium Phosphate (MAP), Single Super Phosphate (SSP), Triple Super Phosphate (TSP), Muriate of Potash (MOP) and NPK (Nitrogen – Phosphate – Potassium) complexes are decontrolled fertilizers, whose use for agricultural purposes is subsidised.

Why we conducted this performance audit

We had reviewed the Retention Price Subsidy (RPS) scheme for Urea, which was reported through the CAG's Audit Report No. 2 of 2000 (Civil). We had also conducted an IT audit on the Concession Scheme Information System (CSIS) and reported the findings in Chapter 3 of the CAG's Audit Report No.3 of 2005 (Civil). Since then, the RPS for urea has been replaced by the New Pricing Scheme (NPS). Also the quantum of expenditure on fertilizer subsidy, which touched Rs. 96,603 crore in 2008-09 (inclusive of subsidy payments through issue of fertilizer bonds) before coming down to Rs. 61,636 crore in 2009-10, has increased enormously. Further, in view of the huge differences between the subsidised prices of fertilizers and the production/ import cost, there are considerable incentives for diversion of subsidised fertilizers to non-agricultural purposes. Consequently, we decided to conduct a Performance Audit of Fertilizer Subsidy covering both controlled and decontrolled fertilizers.

Our performance audit covered fertilizer subsidy for the period from 2003-04 to 2008-09 (including test check of 979 fertilizer subsidy claims/ payments for Rs. 54,358 crore between 2006-07 and 2008-09), verification of distribution of fertilizers in 24 States, covering 94 districts, 188 blocks and scrutiny of records of 44 fertilizer quality control laboratories. In addition, survey covering 5498 farmers and 1092 dealers were conducted in 24 States.

(Para 3.1.3)

Main Findings

Assessment of Fertilizer Requirements

We found that the process of detailed assessment of fertilizer requirements was flawed. No minutes of the deliberations of the seasonal Agriculture Zonal Inputs Conferences were maintained by the Department of Agriculture and Co-operation, in the absence of which the justification for the State-wise and month-wise requirement of major fertilizers could not be ascertained. This was further confirmed by the State-specific audit findings, which revealed that requirements of fertilizers were generally projected by an increase of 5 to 10 per cent over the previous season's / year's requirements, and indicated that no scientific method was followed for assessing the requirement of fertilizers. In most States, the requirement of various types of fertilizers were projected at the level of the State Directorate of Agriculture only (without input from the District and lower levels) and not based on the availability of irrigation facilities soil health and other local factors. Further, in most States, testing of soil health, which would facilitate determination of the correct dosage of fertilizer nutrients, covered only a fraction of the agricultural land holdings.

(Para 4.2)

Fertilizer Production, Import and Consumption

We found that the assessed requirement of fertilizers went up by more than 70 per cent during the 11 year period from 1998-99 to 2008-09, total production went up by just 11 per cent, while imports went up by nearly 236 per cent. Despite the huge amount of subsidy (increasing from Rs. 11,387 crore in 1998-99 to Rs. 96,603 crore in 2008-09), the production of fertilizers increased only marginally from 269 lakh MT to 298 lakh MT. Changes in the subsidy regime, including Stages I to III of the New Pricing Scheme (NPS), have failed incentivize increase in domestic production of fertilizer. Increased consumption of fertilizer is, thus, largely met through increased fertilizer import. This leaves the country dependent on imports, whose pricing is volatile. The subsidy/ concession on imported fertilizers over 1998-99 to 2008-09 increased from 3 per cent to 47 per cent of the total subsidy.

(Para 5.1)

The production of urea during the 11 year period from 1998-99 to 2008-09 registered a negligible increase of just 3 per cent. Although the change in urea subsidy policy from individual unit-based pricing under the Retention Price Scheme (RPS) to group based pricing under the New Pricing Scheme (NPS) resulted in a substantial shift from naphtha-based urea production to gas-based urea production, it did not result in a significant

increase in either capacity or production of urea. Increased consumption of urea was met primarily through imports. Further, the weighted average cost of production of urea increased substantially by 81 per cent to 120 per cent, post the NPS. Even the conversion of naphtha units to gas-based units did not result in a reduction in the cost of production. Also, despite the group approach of NPS, the pre-set norms for energy consumption (which represents the single largest component of the cost of production of urea) varied from unit to unit within the same group.

(Para 5.3.2)

As regards phosphatic fertilizers, although the capacity nearly doubled from 1998-99 to 2008-09, actual production of DAP and NPK complexes increased by only 30 per cent. In fact, the production of DAP came down substantially. However, the indigenous production of phosphatic fertilizers is largely based on imported raw materials/ intermediates. The increase in consumption of DAP/ MAP/ NPK complexes was met primarily through imports at very high prices, which led to multi-fold increases in the subsidy burden.

(Para 5.4.2)

As regards potassic fertilizers, the country's requirement is met fully through imports. We found that, instead of curbing further imports and drawing down on available stock as of March 2008, the Ministry imported an additional 57 lakh MT of MOP (43 lakh MT as per expenditure figures), with an avoidable addition to the subsidy burden of about Rs. 10,000 crore.

(Para 5.5)

On the consumption front, while there was a consistent gap between consumption and assessed requirements, the consumption figures broadly tracked the total availability of fertilizers (production + import), indicating that whatever fertilizer was available was readily consumed. While this is most likely on account of the highly subsidised price, this also confirms the lack of assessment of requirement on a scientific basis.

While fertilizer consumption increased by 46 per cent from 2003-04 to 2008-09, the major components of agricultural production (foodgrains, oilseeds and sugarcane) increased by just 16 per cent over the same period, indicating a relatively weak correlation. Also, the pattern of fertilizer consumption across different States was highly skewed, with States like Andhra Pradesh, Punjab, Haryana and Bihar having high consumption rates while Madhya Pradesh, Orissa, Assam and Jharkhand had very low consumption rates. There was a fairly high degree of correlation between the consumption rates and the proportion of irrigated area; the higher the proportion of irrigated area, the higher the rate of consumption of fertilizers. For example, Punjab with 98 per cent irrigated area consumed 221 kg/ha in 2008-09, while Jharkhand with 10 per cent irrigated area consumed only 56

kg/ha. It may be noted that data on fertilizer consumption is based only on first point sales at the district levels and does not taken note of actual consumption (let alone purchases) by individual farmers for agricultural purpose; to that extent, the fertiliser consumption data is unreliable. Also, despite huge amounts of subsidy/ concession, we found numerous instances of non-availability/shortage of fertilizers as well as instances of overstocking/excess availability of fertilizers, confirming a mismatch between supply and requirement at the grassroot level. We also found several instances of diversion of fertilizers for non-agricultural purposes, as well as smuggling of fertilizers in border districts in the Eastern/North-eastern States.

(Para 5.6)

Payment of Subsidy Claims

Fertilizer units/importers are eligible for subsidy payments when fertilizers are despatched to the first stocking points in the district, and details of despatch are uploaded onto the web-based Fertilizer Management System (FMS). However, there is no mechanism for reconciliation of unit-wise and district-wise despatch data with corresponding data on receipts at the first stocking point in the districts. We attempted a limited reconciliation exercise on a sample basis for 2008-09 (April 2008 to December 2008) which revealed that 48624 MT of fertilizers valuing Rs.83 crore stated to have been despatched by the manufacturing units were not recorded as received at the 1st stocking points in various States.

In our opinion, the requirement for certification in Proforma 'B' by the State Governments of sales of decontrolled fertilizers for agricultural purposes (notwithstanding the inadequacies in the certification process) is the only major control over end-use of fertilizers.

Linking certification with release of balance payment of 10/15 per cent (with the penal clause providing for bank guarantee for 100 per cent of unadjusted concession) provided clear incentives/disincentives for ensuring timely submission of Proforma 'B'. With the removal of such a linkage from June 2007, there is no longer adequate incentive to ensure certification by the competent authorities (viz. the State Governments) of end-use of decontrolled fertilizers for agricultural purposes. This resulted in accumulation of outstanding Proforma 'B' for the years 2007-08 to 2009-10 of Rs.50,587 crore.

(Para 6.2 & 6.10)

Further, in most of the States, verification of sales for agricultural purposes (which would provide assurance of proper end-use of subsidy) was non-existent or inadequate, as it did not involve physical verification of stocks or sales beyond the 1st point sales, and in many

cases not even verification of receipts, invoices etc. Further, although the subsidy was released on the basis of the receipt of fertilizers at district level and the freight subsidy was paid upto block level, there was no state level mechanism for physical verification of the confirmation of receipt at district, block and consumer levels. We also found deficiencies in licensing and other arrangements for sale of fertilizers.

(Para 6.3)

Records relating to the import of urea on Government account for the period 2005-06 to 2008-09 from the Department of Fertilizers and import of DAP by IPL on Government instructions during 2007-08 from IPL were not provided to audit. Based on the records relating to fertilizer imports provided to us, we found certain irregularities in import of DAP by IPL, as well as certain discrepancies between imports and corresponding supply of DAP by IPL.

(Para 6.6.1)

We found a disturbing trend of increasing consumption of subsidised fertilizers (urea, DAP, MOP etc.) by mixing units in several States. This resulted in breaking of the subsidy chain, since the prices of mixtures are generally higher and subject to varying levels of license and regulation/ self-regulation in different States. Further, the fertilizer consumed by these mixing units is at the expense of the ordinary farmer. Control over quality of fertilizer mixtures is also minimal, exposing unsuspecting farmers to the risk of sub-standard quality mixtures.

(Para 6.7)

Quality Control

We found that the fertilizer quality testing infrastructure in the country was grossly inadequate. The annual capacity of the existing quality control laboratories was only 25 per cent of the required capacity for testing of samples from all sales outlets twice a year (i.e. once each for rabi and kharif). Further, many of the laboratories were deficient in terms of both physical and human infrastructure. Consequently, there was a significant shortfall in the actual number of samples tested vis-a-vis both the target as well as the capacity of the laboratories. Also, the stipulated time limits for sending of samples to the quality control laboratories, sending of analysis reports by the laboratories to the concerned authorities and corrective action thereon were not adhered to in most States, with huge delays. As a result, even when sub-standard quality fertilizer was detected, by the time the analysis reports reached the concerned authorities and action was initiated, the balance stock of the fertilizer lot (pertaining to the sub-standard sample) had already been sold to unsuspecting farmers, who unknowingly used such sub-standard fertilizers.

(Para 7.2 and 7.3)

Results of Surveys of Farmers and Dealers

The survey of 1092 fertilizer dealers revealed several significant findings. 57 per cent of the dealers indicated that they were not getting the required quantity and type of fertilizers in time. 37 per cent indicated that they were facing problems in transportation in lifting their requirement. Only 51 per cent indicated that they were able to supply fertilizers as per demand to the farmers in time. As many as 40 per cent of the dealers indicated that samples had not been selected in any of the last three years from their stock for fertilizer quality testing.

The survey of 5498 farmers also threw up important findings. 45 per cent of the surveyed farmers indicated that they had bought fertilizers at prices higher than the MRPs, while 56 per cent indicated that they did not know the MRPs for fertilizers fixed by the Government. 59 per cent of the farmers faced problems for getting their full requirement of fertilizers in a timely fashion. 55 per cent of the surveyed farmers expressed their need for fertilizers in small quantity bags (contrarily, only 40 per cent of the surveyed dealers indicated that farmers were demanding small quantity bags); 51 per cent indicated that they did not have enough money to buy their full requirement of fertilizers. 76 per cent of the surveyed farmers had not got their soil tested for scientifically ascertaining the requirement of fertilizers.

(Para 8.1 and 8.2)

Conclusion

In spite of massive amounts of expenditure by GoI on fertilizer subsidy/ concession, annual production of fertilizers increased only marginally from 284 Lakh MT in 2003-04 to 298 Lakh MT in 2008-09. Changes in the subsidy regime, have failed to incentivize significant increase in domestic production of fertilizer. Overall, the increased consumption of fertilizer is, thus, largely met through increased fertilizer import.

The process for detailed assessment of fertilizer requirements was flawed, with the general practice being merely projections of increases of 5 to 10 per cent over the previous season's/ year's requirement. Further, first point sales were being treated as consumption for purposes of passing on fertilizer subsidy.

There were significant deficiencies in planning of fertilizer supplies, with several instances of both over-supply and under-supply at the district and lower levels, with consequential excesses/shortages of the required fertilizers at the time when the farmers needed the same. Even the prescribed checks for verification of sales of decontrolled fertilizers by the State Governments were largely restricted to first-point sales, and were not performed at block and lower levels and to the ultimate consumers i.e., the farmers. There was no

physical verification of sales and stocks (even on a sample/ percentage basis). The consumption of subsidized fertilizers by "mixing units" in different States represents a major flaw in the "subsidy chain", since these units consume subsidized fertilizers, but sell mixtures at higher rates and are subject to varying levels of license/ regulation/ self-regulation in different States (without any Central control).

We also found significant deficiencies in quality control over subsidized fertilizers in terms of inadequate/ poor infrastructure, lack of adequate skilled manpower, and huge shortfalls in testing of fertilizer samples.

Consequently, we find it difficult to derive assurance that the huge expenditure incurred on fertilizer subsidy payments to manufacturers/ importers of fertilizers actually result in full availability of high quality fertilizers as per requirement at the stipulated subsidised prices in a timely manner to the farmers.

What do we recommend?

The vast majority of India's population is still dependent on agriculture for their livelihood. Increased agricultural productivity is essential not only for ensuring and maintaining food security, but also for ensuring equitable and high rates of income growth for all sections of society. A key component of the strategy for increased agricultural production is the optimal use of chemical fertilizers for increased yields, while maintaining soil fertility and avoiding adverse impact on soil and water. Towards this objective,

- Department of Agriculture and Co-operation (DOAC) should ensure that the seasonal fertilizer requirements are assessed on a scientific basis, and not merely by adding a specified percentage to last year's consumption. For this purpose, DOAC should ask for submission of detailed fertilizer requirements (ideally upto block level), preferably in electronic format, so as to facilitate analysis and highlighting of discrepancies. Also, requirements of selected States/ Districts should be subjected to detailed scrutiny/ examination on a sample/ rotational basis.
- In line with the spirit of NPS, DoF should set timelines for formulating a uniform energy norm across all urea manufacturing units within the group. Notwithstanding possible inconvenience to fertilizer manufacturers, the earlier system of retaining 10-15 per cent of the subsidy till receipt of certification in Proforma 'B' of agricultural sales of decontrolled fertilisers by the State Governments should be considered for re-introduction. Further, DoF should stipulate detailed procedures for verification of sales for agricultural purposes by the State Governments (including verification of receipt at block and consumer levels), physical verification of stocks or sales beyond 1st point sales etc. Also, DoF may consider a similar regulatory mechanism in respect of urea, despite its being a "controlled" fertilizer.

- Sale of subsidised fertilizers of all types (urea, DAP, MAP, MOP etc.) to mixing units should not be permitted; such mixing units should purchase non-subsidised fertilizers for their use. Where DoF feels that certain mixtures are essential/ desirable for agricultural consumption, their prices should be notified based on the subsidised inputs (as per nutrient value); they should also be subject to full-scale quality testing.
- The fertilizer quality control infrastructure in the country should be upgraded through setting up of new laboratories, upgradation of existing laboratories infrastructure and recruitment of suitably qualified staff. Timelines should be specified for ensuring adequate capacity for seasonal testing of all sale outlets. If deemed necessary, adequate financial assistance could be provided to the State Governments for this purpose.
- State Government Departments and quality control laboratories should be held accountable for timeliness in drawal of samples, sample analysis, and communication of sample results. IT should be used for collation and wide dissemination of sample results; in addition, display of sample results on the notice boards of Block Panchayats may be considered.

1 Fertilizers – An Introduction

1.1 Main types of fertilizers

Fertilizer is any material, organic or inorganic, natural or synthetic, which supplies one or more of the chemical elements required for the plant growth. Sixteen elements are identified as essential elements for plant growth, of which nine are required in macro quantities and seven in micro quantities. However, the primary nutrients for plant growth are **Nitrogen (N), Phosphorus (P)** and **Potassium (K)**. Their concentration in a fertilizer is expressed as a percentage of N, P_2O_5 and K_2O. Primary nutrients are normally supplied through chemical fertilizers.

Fertilizers are broadly grouped into:

- **Nitrogenous (N) fertilizers** – Urea is the main nitrogenous fertilizer.
- **Phosphatic (P) fertilizers** - Di-Ammonium Phosphate (DAP), Single Super Phosphate (SSP), Mono Ammonium Phosphate (MAP) and Triple Super Phosphate (TSP) are the main fertilizers[1] of this group.
- **Potassic (K)** fertilizers – Muriate of Potash (MOP) (which provides P and K nutrients) is the main potassic fertilizer.
- **Complex and other fertilizers** – These includes different grades of complex fertilizers(termed as NPK complexes) which provide all three nutrients in varying proportions (e.g.15-15-15; 17-17-17; 14-28-18; 12-32-16[2]) as well as other fertilizers like Ammonium Sulphate (AS), Nitro Phosphate etc.

1.2 Secondary and micro-nutrients

Calcium, magnesium and sulphur are termed as secondary nutrients, and are required in relatively smaller quantities than primary nutrients for plant growth. Deficiencies in supply of secondary nutrients and other essential elements reduce the efficiency of primary nutrients by restricting the yield to a lower level. Hence, to obtain optimum results, crops have to be supplied with secondary nutrients in addition to primary nutrients.

Micronutrients are a group of nutrients which are essential for plant growth in minute quantities. Intensive cropping depletes all nutrients, including micronutrients, from the soil at a fast rate. Therefore, selective use of micronutrients is necessary for increasing agricultural production. Iron, zinc, manganese, copper, boron, molybdenum and chlorine fall under this category. Ten micronutrients, namely zinc sulphate (monohydrate &

[1] DAP (Di-Ammonium Phosphate) and MAP (Mono Ammonium Phosphate) are also important sources of nitrogen (in addition to phosphate)

[2] These figures denote the proportion of N-P-K.

heptahydrate), manganese sulphate, borax, solubor, copper sulphate, ferrous sulphate, ammonium molybdate, chelated zinc, and chelated iron have been incorporated in the Fertilizer Control Order (FCO). Further, fortified fertilizers like zincated urea and boronated single superphosphate have also been notified under the FCO.

1.3 Controlled and decontrolled fertilizers

In terms of control, fertilizers can be categorized into:

- **Controlled fertilizer (Urea)** – i.e. fertilizers subject to price, distribution and movement control under the Fertilizer Control Order (FCO) and Fertilizer Movement Control Order (FMCO) issued under the Essential Commodities Act (ECA). Urea is the only controlled fertilizer; currently only 50 per cent of the production is controlled.
- **De-controlled** fertilizers – all other fertilizers[3] (DAP, NPK complexes, MAP, MOP, TSP, AS and SSP etc.)

However, in practice, fertilizers (whether controlled or decontrolled) which are subsidized for agricultural consumption are, in effect, subject to explicit/ implicit control by the Government of India (GoI) (either through formal allocation orders or through supply plans) and the State Governments, primarily to ensure proper targeting of fertilizer subsidy and minimize diversion of subsidized fertilizer for non-agricultural purposes. Also, "farm-gate" prices of all major fertilizers subject to subsidy are controlled by the Government to ensure a uniform sale price throughout the country, which is substantially lower than the cost of production/ import.

1.4 Dependence on import

Out of the three primary nutrients (N, P and K) required for various crops, indigenous raw materials are available mainly for nitrogenous fertilizers. Though the requirement of urea is largely met through indigenous production, it is also imported on Government account to bridge the gap between requirement and domestic production. In 2008-09, imported urea accounted for about 15 per cent of the total requirement.This is in contrast to the situation during 2000-01, 2002-03, and 2003-04, when domestic production was enough to meet the entire requirement and, therefore, no urea was imported on Government account.

In the case of phosphates, the paucity of domestic raw material has been a constraint in the attainment of self-sufficiency in the country. Indigenous rock phosphate supplies meet only 5-10 per cent of the total requirement of P_2O_5 (Phosphate). During 2008-09, about 65 per cent of the requirement of phosphatic fertilizer was met through domestic production, based on

- indigenous/imported rock phosphate, imported sulphur and ammonia; and

[3] Di-Ammonium Phosphate(DAP), Mono-Ammonium Phosphate(MAP), Muriate of Potash(MOP), Tripple Super Phosphate(TSP), Ammonium Sulphate (AS), Single Super Phosphate (SSP)

- indigenous/imported intermediates, viz ammonia and phosphoric acid;
- the remaining 35 per cent of requirement was met through import of finished fertilizers.

In case of MOP, the entire demand for direct application as well as for production of complex fertilizers is met through imports.

2 Fertilizer Subsidy Regime

2.1 Evolution of Fertilizer Subsidy Regime

The fertilizer subsidy/ concession regime has a long and chequered history, dating back to 1957, as summarized below:

Table 2.1 Chronology of Key Events relating to Fertilizer Subsidy and Control

Period	Event
1957	Fixing of Maximum Retail Prices (MRP) of urea through Fertilizer Control Order, 1957
1973	Fertilizer (Movement) Control Order issued for Government control of fertilizer distribution and its inter-state movement
November 1977	Retention Price Scheme (RPS) for nitrogenous fertilizers introduced
February 1979	RPS for complex fertilizers introduced
May 1982	Single Super Phosphate (SSP) brought under RPS
August 1992	Phosphatic (P) and Potassic (K) fertilizers decontrolled, based on the recommendations of JPC
October 1992	Concession on decontrolled P and K fertilizers introduced
April 2003	Replacement of RPS by stage wise New Pricing Scheme (Stage I)
April 2004	NPS Stage II - 1.4.2004 to 30.9.2006
October 2006	NPS Stage III - 1.10.2006 onwards
April 2010	Nutrient Based Subsidy (NBS) for decontrolled fertilizers in replacement of existing concession scheme[4]

2.2 Subsidy on Urea

2.2.1 Erstwhile Retention Price Scheme (RPS)

Until March 2003, the Retention Price Scheme (RPS) governed the payment of subsidy to urea manufacturers on the following broad lines:

[4] Not covered under this Performance Audit

- A retention price (cost of production of each individual unit as assessed by the Government plus 12 per cent post-tax return on net worth) was determined for each individual unit, depending upon the technology, feedstock used, the level of capacity utilization, energy consumption, distance from the source of feedstock/raw materials, etc.
- The difference between the unit-wise retention price and the statutorily notified sale price was paid as subsidy.

2.2.2 New Pricing Scheme

The New Pricing Scheme (NPS) was formulated with effect from April 2003 to replace the Retention Price Scheme and was expected to boost production, encourage internationally competitive norms and parameters for the urea industry, reduce urea subsidy and promote greater transparency and efficiency. The NPS marked a shift from a unit-wise approach for calculation of subsidy to a group-based concession approach, based on vintage and feedstock. Under the NPS, urea manufacturing units were classified into 6 groups, based on vintage and the feedstock used:

- Pre-1992 gas based units
- Post-1992 gas based units
- Pre-1992 naphtha based units
- Post-1992 naphtha based units
- FO/ LSHS[5] based units
- Mixed energy based units

For each of the groups, the retention prices were to be based on normative cost of production plus 12 per cent post-tax return on net worth.

NPS envisaged three stages, whose salient features were as follows:

NPS Stage	Main Features
NPS-I (April 2003 to March 2004)	• Classification of units into six groups based on vintage and feedstock. • Weighted average retention price and dealer margin of the unit as applicable on 1.4.2002 was to be computed for each group. Units with deviation of 20 per cent and above with reference to the group average were treated as outliers in their respective groups. • Units, which had lower retention price than the weighted

[5] Fuel Oil/ Low Sulphur Heavy Stock

NPS Stage	Main Features
	group average, were to get the concession as per their individual retention price. The remaining units (excluding outliers) were to get concession based on weighted group average retention price. • Units having exceptionally high or low retention price, i.e deviation of 20 per cent and above with reference to group average were treated as outlier units and they were given a special dispensation in the form of 50 per cent of the difference between their own retention price and the group average concession rate. This was extended up to 31 March 2006.
NPS-II (April 2004 to September 2006)	• The six groups would remain as in Stage –I and units having lower concession rate than group average would continue to get the individual concession rate. The concession rates would be adjusted for reduction in Capital Related Charges (CRC). Group energy norms would be enforced on efficiency considerations. Group energy norms and the scale of reduction on account of CRC would be finalised by the Department of Fertilizers.
NPS-III (October 2006 to March 2010[6])	• The classification of units into six groups would continue. Capacity utilization levels of 93 per cent for pre-92 Naphtha and FO/LSHS based plants and 98 per cent for pre-92 gas, post-92 Naphtha and mixed energy based plants would be considered for calculating the base concession rates for urea units. • No permission would be required for production beyond 100 per cent of re-assessed capacity. Production between 100 per cent and 110 per cent would be incentivized on a net gain sharing ratio of 65:35 between the Government and the unit respectively, with the proviso that the total amount paid to the units, after including variable cost would be capped at the unit's own concession. • Government would not subsidize the additional production, if not required for agricultural consumption. • The monitoring of the movement and distribution of urea throughout the country would be done by an on-line computer based monitoring system. The time limit of the existing payment system i.e. 45 days would be adhered to.

[6] Subsequently extended till further orders

NPS Stage	Main Features
	Subsidy would be paid only after the urea reached the district. Certification by State Governments would not be required for release of subsidy to urea units.

As regards imported urea, since the consumer prices of both indigenous and imported urea are fixed uniformly, subsidy is paid on imported urea in order to bridge the difference between the cost of imports and the statutorily fixed consumer price.

The movement and distribution of urea has been partially decontrolled (25 per cent of production during Kharif 2003 and 50 per cent of production during Rabi 2003-04), whereby urea manufacturing units are permitted to sell decontrolled urea at the statutorily notified sale prices anywhere in the country. In practice, although the distribution of urea has been decontrolled to the extent of 50 per cent, the requirement of detailed supply plans means that, in effect, all distribution for agricultural consumption is controlled.

Control over distribution and movement is managed by the Department of Fertilizers (DoF). Supply from plants and ports (for imports) is arranged through allocations given to companies and states, and monthly movement orders are issued to each company, with monitoring through the internet-based Fertilizer Monitoring System (FMS).

2.3 Concession Scheme for De-controlled Fertilizers

The Concession Scheme for phosphatic and potassic fertilizers, currently administered by the DoF, was introduced on an ad hoc basis in October 1992. Fertilizers under the concession scheme are sold at indicative Maximum Retail Price (MRPs) fixed by the Department of Fertilizers.

The difference between the total delivered cost of the fertilizers at the farm gate and the MRP payable by the farmers is given by the Government of India, as concession/subsidy to the farmers and disbursed to the fertilizer manufacturers/importers.

For decontrolled fertilizers, movement is as per the agreed supply plan (based on requirement assessed by the States on weekly and fortnightly basis). Monitoring is done through the internet-based Fertilizer Monitoring System (FMS).

Till March 2010, the concession scheme covered different phosphatic and potassic fertilizers - Di-Ammonium Phosphate (DAP), Nitrogen Phosphate and Potash (NPK), Muriate of Potash (MOP), Mono-Ammonium Phosphate (MAP) and Single Super Phosphate (SSP) sold at indicative Maximum Retail Prices (MRPs)[7]. Indigenous and imported Triple Super Phosphate (TSP) (0-46-0) and indigenous Ammonium Sulphate (20.6-0-0-23) were also included under the concession scheme with effect from April 2008 and July 2008 respectively.

[7] Till April 2008, SSP prices were notified by the State Governments; from May 2008, GoI notifies a uniform All India-MRP. Other SSP (not sold at MRPs) is not eligible for subsidy.

Initially, the Department of Fertilizers was extending the Concession Scheme on year to year basis with the approval of CCEA. From 1999-2000 onwards, the scheme was formulated on the basis of the recommendation of the Tariff Commission. With the implementation of the Tariff Commission report on complex fertilizers from 1.4.2002 and on DAP and MOP with effect from. 1.4.2003, the CCEA, in January 2004, approved the concession scheme on the new methodology till 31.3.2006, which was further extended till 31.3.2007. During the extension of the concession scheme for the year 2007-08, the DoF, among other changes in the implementation, also sought approval for change in basis for notifying rates of concession from quarterly to monthly.

While extending the concession scheme from 1.4.2008 (2008-09), the following changes were brought into the scheme:

- The Maximum Retail Price (MRP) of all fertilizers under the Concession Scheme were revised
- Concession for indigenous DAP was brought at par with the concession for imported DAP

For decontrolled fertilizers, i.e., DAP, NPK, MOP etc., supply in accordance with the supply plan is necessary in order to claim concession.

The gap between the market/ international prices and the MRPs notified by the Government is so high that in effect, even decontrolled fertilizers sold at subsidised rates are controlled.

2.4 Nutrient Based Subsidy (NBS) Regime

The Government introduced the Nutrient Based Subsidy (NBS) policy for decontrolled phosphatic and potassic fertilizers with effect from 1 April 2010 in replacement of the concession scheme. Under the scheme, DAP (18-46-0), MOP, MAP (11-52-0), Triple Super Phosphate (TSP), 12 grades of complex fertilizers, Ammonium Sulphate (AS), (Caprolactum grade by GSFC and FACT) and SSP are covered. Any variant of the fertilizer with secondary and micronutrients (except sulphur) as per the FCO is also eligible for NBS.

The main difference between the NBS and the erstwhile Concession Scheme is that earlier concession rates were fixed separately for each fertilizer, while under NBS, the concession rates are fixed for primary nutrients (with additional subsidy rates for secondary and micronutrients viz Boron and Zinc) quantities of N, P, K and S, thus bringing about uniformity in concession rate determination across different fertilizer composition.

The per kg NBS for nutrient N, P, K and S for 2010-11, with effect from 1 April 2010 are Rs. 23.227, Rs. 26.276, Rs. 24.487 and Rs. 1.784 respectively.

Further, with effect from 1 April 2010, 20 per cent of the decontrolled fertilizers produced/imported in India are now under movement control under ECA, 1955.

2.5 Freight Subsidy

A separate uniform freight subsidy policy on all subsidized fertilizers covered under the NPS-III for indigenous and imported urea and the concession scheme on phosphatic and potassic fertilizers has been implemented with effect from 1 April 2008. Under the uniform freight policy, inland freight for transportation of fertilizers is reimbursed to the fertilizer companies from plant/ port up to the block level. For this, rates are calculated based on actual railway freight, and in the case of road transport, rates are based on the average lead distances of all the blocks in the district and the state level truck rates from rake point to the block.

2.6 Subsidy Payments and MRPs

Details of the subsidy paid on fertilizer between 2003-04 and 2009-10 are given below:

Table 2.2 – Subsidy paid on Fertilizer during 2003-10

Product	Subsidy (Rs. in Crore)						
	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Urea	8509	10737	11887	15924	23056*	31,048*	22184
Decontrolled Fertilizers (range)	3326	5142	6596	10298	16934*	65,555*	39452
Total	11835	15879	18483	26222	39990	96,603	61636

*Includes payment of subsidy through issue of fertilizer bonds. These bonds are issued to the fertilizer units for outstanding subsidy claims, typically with maturity periods of 15 years or more, thus, enabling GoI to defercash payments correspondingly.

As can be seen above, payments on account of fertilizer subsidy increased more than eight-fold from 2003-04 to 2008-09, before coming down a little in 2009-10. Decontrolled fertilizers were the primary factor on this account, with an increase of almost 20 times from 2003-04 to 2008-09.

A comparison of the MRP and average subsidy for urea and other decontrolled fertilizers reveals the following position:

Table 2.3 - MRP and Average subsidy (Rs. /MT) for Urea

	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Urea MRP	4830	4830	4830	4830	4830	4830	4830
Avg. subsidy per MT	4305	5196	5331	6543	8880	11651	8317

Table 2.4 Major recipients of subsidy on Urea

(Rs. Crore)

Sl. No.	Manufacturing Units[8]	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	Total
1.	IFFCO* (Coop)	1616.66	2115.67	1822.18	2631.6	3377.97	4276.61	15840.69
2.	NFL*(PSU)	1961.37	1758.84	1557.83	1849.71	3013.48	3498.79	13640.02
3.	RCF (PSU)	669.42	671.09	852.01	1193	1618.37	2217.27	7221.16
4.	CFCL (Pvt)	848.09	1207.68	1157.71	761.83	1387.65	1403.62	6766.58
5.	MFL (PSU)	409.76	496.74	676.39	1008.89	899.39	1045.66	4536.83
6.	NFCL (Pvt)	354.32	482.30	623.83	825.42	1002.65	1231.92	4520.44
7.	ZIL (Pvt)	381.41	484.61	623.09	786.03	748.69	1066.19	4090.02
8.	MCFL (Pvt)	226.21	384.63	461.32	640.67	758.17	988.59	3459.59
9.	GNFC (PSU)	224.85	265.46	293.98	325.71	775.73	664.13	2549.86
Subsidy released to Importers (Urea)								
1.	MMTC (STE)	0	294.42	506.57	1365.10	3314.09	3282.62	8762.80
2.	IPL (STE)	0	250.14	339.76	1449.03	2400.16	4255.11	8694.20
3.	STC (STE)	0	0	0	0	0	1609.94	1609.94

*All units of NFL

*All units of IFFCO

Table2.5– MRP and Average subsidy (Rs/ MT) for decontrolled fertilizers

	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
MRP per MT			3400 to 9350*			3400 to 10350	3400-10350
Avg. subsidy per MT (Rs)	2242	3044	3691	5234	8735	27842	14895

*till 17-06-2008

[8] Indian Farmers Fertiliser Cooperation Ltd. (IFFCO), National Fertiliser Limited (NFL), Rashtriya Chemicals & Fertilizers Limited (RCF), Chambal Fertilizers and Chemicals Ltd. (CFCL), Madras Fertilizers Ltd. (MFL), Nagarjuna fertilizers & Chemicals Ltd (NFCL), Zuari Industries Ltd. (ZIL), Mangalore Chemicals and Fertilizers Ltd. (MFCL), Gujarat Narmada Valley Fertilizers Co. Ltd. (GNFC), Minerals and Mines Trading Corporation Ltd. (MMTC), M/s Indian Potash Ltd. (IPL), State Trading Corporations Ltd. (STC)

Table 2.6-Major recipients of subsidy on De-controlled fertilizers

(In Crores)

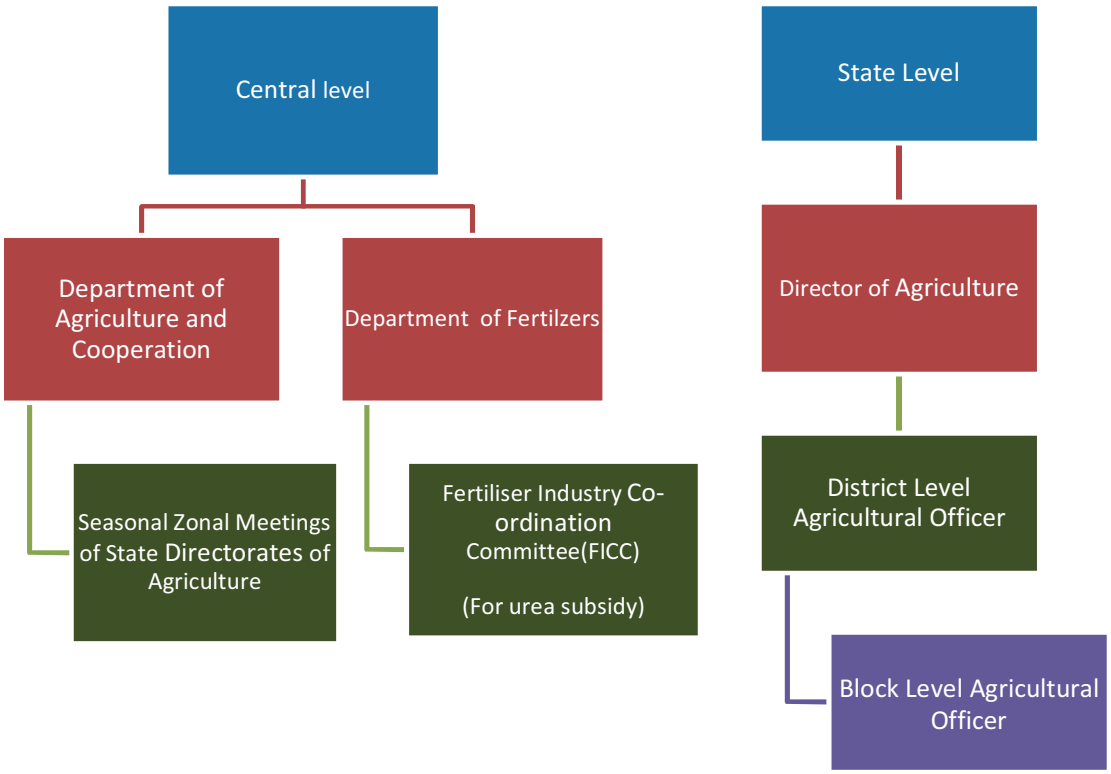
Sl.No.	Manufacturing Units[9]	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	Total
1.	IFFCO (Coop)	657.21	971.71	1096.33	1287.01	2785.79	10007.45	16805.50
2.	CFL (Pvt)	157.63	301.52	369.06	626.72	876.53	7176.89	9508.35
3.	GSFC (PSU)	197.39	263.47	299.90	696.66	1176.35	3347.48	5981.25
4.	PPL (Pvt)	206.05	310.32	494.69	794.05	1165.48	2961.93	5932.52
5.	TCL (Pvt)	0	233.96	270.23	460.71	726.17	2311.85	4002.92
6.	ZIL (Pvt)	139.7	243.99	304.83	481.35	741.27	1840.07	3751.21
7.	FACT (PSU)	122.41	211.66	281.05	404.80	359.06	1215.92	2594.90
8.	**Total**	**1480.39**	**2536.63**	**3116.09**	**4751.3**	**7830.65**	**28861.59**	**48576.65**
Importer								
1.	IPL (STE)	374.26	685.36	979.80	1607.45	4667.46	12643.96	20958.29

2.7 Organisational set up

The nodal ministry in the Government of India (GoI) for fertilizer subsidy is the Department of Fertilizer under the Ministry of Chemicals and Fertilizers. The role of various authorities at the Central and State level in fertilizer subsidy/concessions is depicted below:

[9] Indian Farmers Fertiliser Cooperation Ltd. (IFFCO), Coromondal fertilizers Ltd. (CFL), Gujarat State Fertilizers &Chemicals Ltd (GSFC), Paradeep Phosphates Ltd. (PPL), Tata Chemicals Ltd., (TCL), Fertilizers and Chemicals Travancore Ltd (FACT) , Indian Potash Ltd. (IPL)

Figure 2.1 –Organisational set up



2.8 Fertilizer Monitoring System (FMS)

An IT system, the Fertilizer Monitoring System (FMS), was launched by the DOF in January 2007 to monitor the movement of different fertilizers at various stages in their value chain. It monitors the production, despatches, receipt and sales of DAP, MOP, TSP, MAP, NPK and urea (indigenous and imported) fertilizers. FMS also facilitates processing of subsidy/concession payments (on the basis of receipt) of DAP, MOP, TSP, MAP, and NPK fertilizers with a view to reducing the processing time.

3 Audit Approach, Previous Audit Findings and Organisation of Current Audit Findings

3.1 Audit Approach

3.1.1 Audit Objectives

The main objectives of the performance audit were to ascertain whether:

- Policies and procedures for subsidy/ concession on fertilizers were designed to ensure adequate and timely availability and equitable distribution of fertilizers , minimise the budgetary impact of fertilizer subsidy, incentivise efficiency gains, and minimise leakage of subsidised fertilizer beyond the targeted beneficiary group;
- Subsidy/ concession was paid in accordance with the stipulated policies and procedures;
- Procedures for monitoring the production and distribution of fertilizers were adequate and effective;
- There were adequate and effective procedures for actually verifying the timely receipt of fertilizers, and its equitable distribution at the stipulated prices at the grassroot level; and
- Procedures for ensuring the quality of fertilizer at all levels were adequate and effective.

3.1.2 Audit Criteria

The main sources of audit criteria were:

- Instructions/ circulars/ orders issued by DoF/FICC governing the grant of subsidy/ concession;
- Supply plans and ECA allocations issued by DoF; and
- Sanctions for payment of subsidy/ concession.

3.1.3 Audit Scope and Coverage

The performance audit covered the fertilizer subsidy payments for the period from 2006-07 to 2008-09 (3 years) involving scrutiny of 979 claims amounting to Rs.54,358 crore, as well as imports at one port (Kandla)**.** Further, verification of the distribution of fertilizers covered the period from May 2008 to December 2008 was conducted in 24 States, covering 94 districts, 188 blocks. In addition, records of 44 fertilizer quality control laboratories were scrutinised, and surveys of 5498 farmers and 1092 dealers in 24 States were conducted.

Sample selection was done using the "Simple Random Sampling without Replacement (SRSWOR)" method. Details of the audit sample are indicated in ***Annexe-3.1.***

3.1.4 Audit Methodology

The performance audit commenced with a presentation at an entry conference held with the Department of Fertilizers in April 2009, wherein the audit methodology, scope, objectives and criteria were explained. Field audit, including scrutiny of records and surveys was conducted between June 2009 and March 2010.In addition, a meeting with the Fertilizer Association of India was also held in January 2010.

The Draft Audit Report of Performance Audit on Fertilizer Subsidy was issued to the Department of Fertilizer on 1.12.2010. Despite issue of a reminder, no reply was received, nor could an exit conference being scheduled with the DoF to discuss the audit findings. However, exit conferences were held with 21 out of the 24 State Governments (except Bihar, Maharashtra and Tripura) in respect of the State specific audit findings.

Audit gratefully acknowledges the cooperation and assistance extended by the DoF, the State Governments and their officials at various stages of conduct of the Performance Audit.

3.2 Previous Audit Findings

A review on "Implementation of Retention Price Subsidy Scheme on sale of controlled fertilizers" had appeared in the CAG's Audit Report No. 2 of 2000 (Civil). The main audit findings of this review were as follows:

- Fertilizer Industry Coordination Committee (FICC) paid fertilizer subsidy on urea of Rs. 25,155 crore during 1992-98 on the basis of cost data furnished by the fertilizer units without independent verification and scrutiny of basic records maintained by them.

  DoF in their Action Taken Note stated (August 2001) that Office of the FICC had been advised to identify suitable Cost and Chartered Accountants from the Institute of Chartered Accountants of India to verify the cost data.

- Delay in revision and adjustment of subsidy on reduction in corporation tax of all fertilizer units during 1994-95, 1996-97 and 1997-98 resulted in advance excess payment of subsidy of Rs. 408 crore.

  DoF stated that the delay in revision and adjustment of subsidy was attributable to :

  a) delay in approval of the parameters of 6th pricing period,

  b) paucity of staff and its frequent transfers,

  c) FICC being involved in a number of committees constituted during that period

- Sample checks disclosed that FICC allowed Rs.2731 crore to 20 fertilizer units during 1991-97 on account of corporation tax[10] without ascertaining the actual amount of corporation tax paid by these units. Also, provisions made for payment of corporation tax aggregating Rs. 1849 crore for 1993-98 were transferred to general reserve and, in

[10] One of the elements of costs recokoned by FICC for calculating the retention price.

turn, treated as part of net worth for computation of Retention Price Scheme, which resulted in extra outgo of subsidy of Rs. 460 crore.

DoF, in reply, merely enclosed a copy of the DoF's note dated 16.8.1994 considered and approved by CCEA in its meeting held on 26.8.1994, saying that rate of return on net worth might be allowed @12%, grossed up at the prevailing rate of corporate tax, and the Group Retention Price might not be applied for the present.

- FICC adopted higher rate of depreciation of 6.33 per cent against the prescribed rate of 5.28 per cent. This resulted in excess provision of depreciation of Rs. 592 crore during 1993-98, which led to payment of excess subsidy.

  DoF, in their action taken note, stated that they were in the process of formulation of a new pricing policy for urea units keeping in view the recommendations of the Expenditure Reforms Commission.

- Recovery of subsidy was not made on sale of sub-standard fertilizer, where subsidy was paid on the basis of standard fertilizers.

- Subsidy of Rs. 43 crore paid during 1986-95 were pending recovery from various units due to closure of some units referred to BIFR.

  DoF stated that the issue of recovery would be taken up after the receipt of the decision of BIFR.

- Delay in finalization/revision of retention price in respect of nine fertilizer units had resulted in non- recovery of Rs. 678 crore of excess subsidy paid to them.

  DoF stated that out of nine units, notifications effecting changes in the retention prices in respect of 6 units had already been issued. In respect of one unit, recovery was being made. In other two cases, the units were different than the one mentioned by audit.

An IT audit review of the Concession Scheme Information System (CSIS) also appeared in Chapter 3 of the CAG's Audit Report No.3 of 2005 (Civil). The main audit findings are summarized below:

- Deficient planning, design and implementation of the computerized Concession Scheme Information System (CSIS) for regulating the concession to the manufacturers and importers on the sale of decontrolled fertilizers entailed the risk of unauthorized working practices and depressed the reliability and usefulness of the System.

- Absence of formal security policy and procedures in the IT system rendered the system insecure.

- The programme lacks many important features that are essential for risk free management of the Concession Scheme and does not contain appropriate validation checks or master data tables for minimizing erroneous data entry and consequential incorrect payments of concession.

This system has since been replaced by the Fertilizer Monitoring System (FMS) with effect from 22nd January 2007.

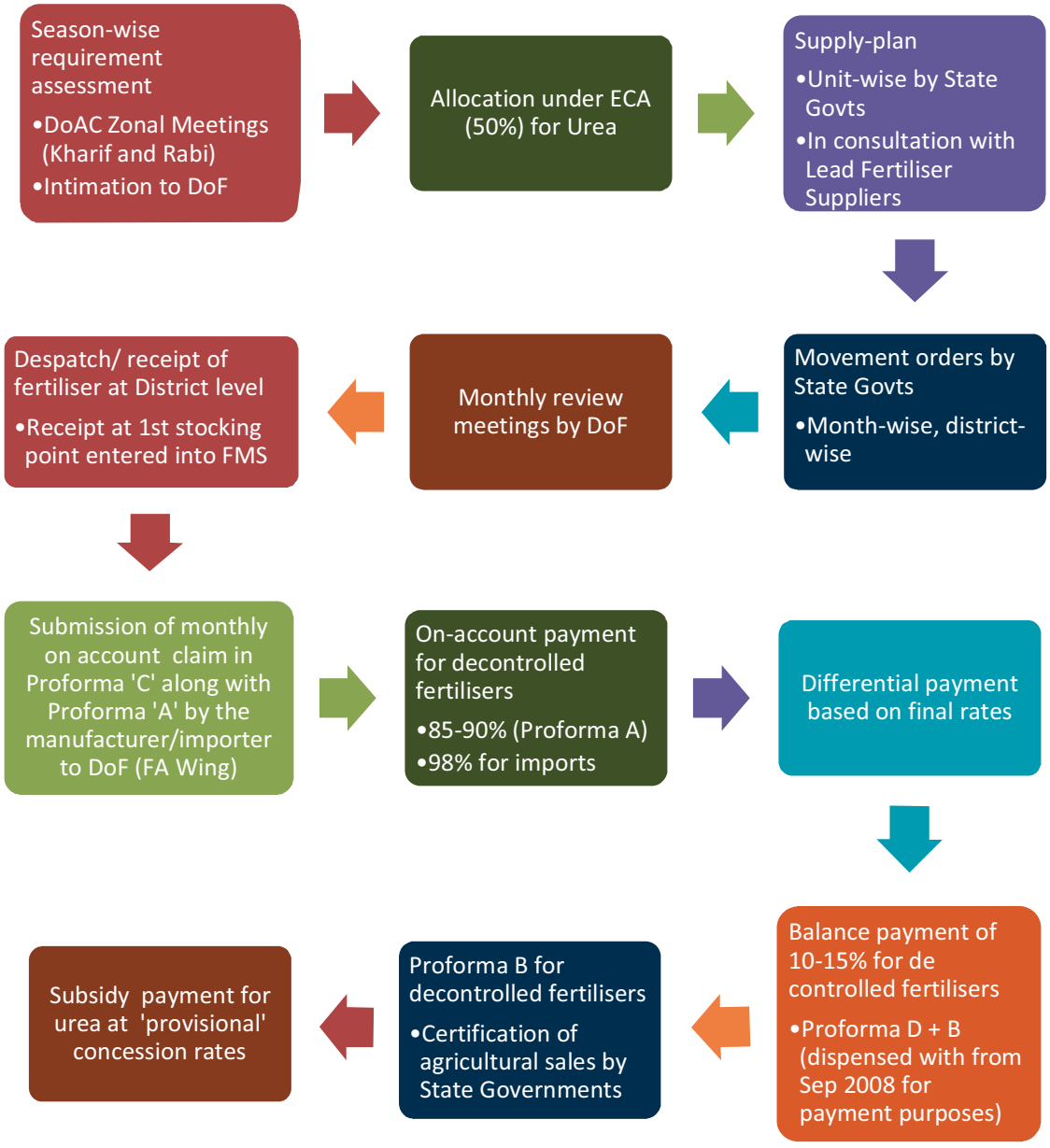
3.3 Organisation of Current Audit findings

The findings from the current Performance Audit have been categorized into two sections.

- ***Overall Audit Findings – In this section, different areas of interest have been analysed from a nation-wide perspective, and only brief, summary information on findings in different States has been provided.***
- ***State specific findings – In this section, detailed findings, amplifying the overall audit findings, have been presented state-wise.***

4 - Assessment of Requirement of Fertilizers

Figure 4.1 - Process from Assessment of Requirement to Payment of subsidies



4.1 Procedure for Assessment of Fertilizers Requirement

The requirement of major fertilizers, namely urea, DAP, MOP and complex fertilizers, is assessed 3-4 months before each cropping season *namely* Kharif (1 April to 30 September) and Rabi season (1 October to 31 March)to ensure adequate availability of fertilizers to farmers.

For this purpose, Department of Agriculture and Cooperation (DoAC) calls for certain information from the States, including:

- consumption of fertilizers;
- off take of fertilizers by the State level fertilizer suppliers of various categories;
- area under coverage and irrigation;
- product wise opening stock;
- requirement;
- Sales points and district-wise consumption of fertilizers, retail points;
- consumption of micro nutrients;
- quality control and fertilizer samples;
- soil testing;
- progress report of soil testing etc.

Assessment of requirement is made through "**Agricultural Inputs Zonal Conferences"**organised by the Department of Agriculture and Co-operation (DoAC), Ministry of Agriculture with participationfrom the representatives of the Department of Fertilizers, Directorates of Agriculture of the State Governments, ICAR[11], the Fertilizer Association of India, Lead Fertilizer Suppliers, and other fertilizer industry representatives. At these conferences, the State Governments/UTs present their projected requirements for major fertilizers.

After detailed discussions and taking into account the previous season's consumption, the State-wise and month-wise assessment of requirement of major fertilizers is finalized by the DoAC and communicated to the DoF. Thereafter, the Essential Commodities Act (ECA) supply plans and movement orders are issued under the Fertilizer Movement Control Order for indigenous and imported urea by the Department of Fertilizer. Similarly, "agreed" supply plans[12] are also prepared and issued for decontrolled fertilizers.

[11]Indian Council for Agricultural Research

[12]Agreed by the fertilizer manufacturers/importers with the State Governments.

4.2 Deficiencies in Assessment of Fertilizer Requirement

We found that no minutes of the deliberations of the seasonal Zonal Conferences were maintained by the DoAC. In the absence of such minutes, the basis and detailed justification for the State-wise and month-wise requirement of major fertilizers could not be ascertained. This is further confirmed by the State-specific audit findings, which revealed that requirements of fertilizers were generally projected by an increase of 5 to 10 per cent over the previous season's/year's consumption, and indicated that no scientific method was followed for assessing the requirement of fertilizers.

A summary of State-wise findings is given below: details are given in the State specific chapters.

Table 4.1 – State-wise deficiencies in assessment of Fertilizer requirement

SlNo.	Name of State	Summary of findings
1.	Andhra Pradesh	• Soil testing is necessary in order to ascertain the availability of primary and secondary nutrients in the soil so as to provide specific recommendations for the requirement of different fertilizers. However, out of the 120.44 lakh of land holding, the Department of Agriculture was conducting soil tests for approximately 4.60 lakh (4% only) land holdings per year only. At this rate, it would take about 26 years to get all the land holdings tested. • The assessment of requirement of fertilizers was not based on recommendations of Panchayat Samithis, but was done simply by adding 10 to 15 per cent to the highest consumption during the preceding five years. No procedures for assessment of fertilizer requirement were prescribed by the Commissioner and Director of Agriculture to be followed by the district/mandal level agriculture officers. • In Guntur district, during 2008-09 (Kharif and Rabi seasons), due to shift in crop pattern of major crops like maize, cotton and chillies, there was a sudden increase in fertilizer demand, which was not taken into consideration by the Department of Agriculture.
2.	Assam	• The requirement projected was based on previous year's consumption. • No norms/standards had been used for calculating the requirement of fertilizers based on the type of crop, irrigated/non-irrigated area, soil health and other local factors.
3.	Bihar	• No norms were laid down for calculating the requirement of fertilizer based on type of crop, irrigated/ non-irrigated area, soil health and other local factors. • The requirement of various types of fertilizers was projected at the Directorate level considering only the previous years' consumption data (without input from District and lower levels) and not based on

SlNo.	Name of State	Summary of findings
		the irrigated/non irrigated area, soil health and other local factors. This requirement was generally based on adding 10 to 20 per cent to highest consumption year onthe average of 3 years consumption. • Even the previous year's consumption data was not realistic, as break up of consumption data at the district level was not available. • The assessed requirement of fertilizer was not properly broken down block-wise. The supply at district level was broken down block wise not on the basis of cultivable land, but on the basis of number of Panchayats in the block without any documentation. • Consumption was based on the basis of supplies made by the fertilizer company.
4.	Chhattisgarh	• No norms/standards or guidelines were laid down for calculating requirement of fertilizers. The assessment of requirement was done on the basis of actual consumption of fertilizers in the last few years, increased by a certain percentage.
5.	Gujarat	• No norms/standard were laid down for assessing the requirement of fertilizer based on the type of crops, irrigated/non-irrigated area, soil health and other local factors. • Fertilizer requirement for the district were not sent by the Dy. Director of Agriculture of the concerned district for the Zonal Agriculture Input Conference. These were prepared at the State level, without such inputs from lower levels. • Further, no meetings with the farmers/ co-operatives and other stakeholders at district level were held for assessment of the fertilizers. Also, the Panchayat Samitis/Block Samitis were not involved in the assessment of fertilizer requirement.
6.	Haryana	• Requirement was calculated season-wise (Kharif/Rabi) based on the previous year's consumption. Panchayat Samitis/Block Samitis, etc. were not involved in assessment of the fertilizer requirement. Assessment was for the whole district, and not based on geographical factors and soil composition, which would vary across blocks.
7.	Himachal Pradesh	• The assessment of requirement of fertilizers for the State was being done by the Department on the basis of the previous year's sales reported by HIMFED and IFFCO. The requirements so assessed were being presented at the Zonal Input Conference on fertilizers. • The State Agriculture Department stated (in March 2010) in the exit conference that it was difficult to assess the actual requirements, keeping in view of the climate conditions of the State.
8.	Jharkhand	• During 2006-09, the assessment of fertilizer requirement was prepared in consultation with the lead fertilizer supplier i.e IFFCO and other manufacturers. There was no correlation between the dosages prescribed by Birsa Agricultural University (BAU)/Directorate of

SlNo.	Name of State	Summary of findings
		Agriculture (DoA) and that projected by the DoA in the Zonal Agriculture Input Conference; the gap between the two ranged from 31 to 92 per cent during 2006-09. The District and Block Agricultural Officers and farmers were not involved in the assessment process.
9.	Jammu & Kashmir	• The fertilizer requirement in Kashmir Division was being assessed on the basis of fertilizer dosages recommended by the Sher-e-Kashmir University of Agriculture, Sciences and Technology Kashmir (SKUAST), for cultivation of agricultural/horticulture crop, on area basis. In Jammu Division, the assessment was being done on the basis of cropped area and the previous year's off-take. • No orders/instructions had been issued to district/block level Agricultural Offices for assessment of fertilizer requirements. For assessment at the district/block level, there was nothing on record to indicate that meetings were held with the farmers and there was involvement of Panchayat Samiti/ Block Samiti in the assessment. • Based on the dosages of fertilizer recommended by SKUAST for paddy and maize on area basis, the requirement for these two crops alone worked out to 41360 MT of Urea, 29920 MT of DAP and 8840 MT of MOP, against which the total requirements of the Kashmir Division had been shown to Government of Jammu and Kashmir as 40200 to 40650 MT of Urea, 15675 to 17500 MT of DAP and 4000 to 5565 MT of MOP during the three kharif seasons.
10.	Karnataka	• The prescribed criteria for calculating the requirement were previous year's district wise consumption, best season consumption, seasonal conditions, crop coverage and diversification and discussions with lead fertilizer unit as well as other manufacturers during monthly meetings. However, in the test checked districts, the requirement was projected on the basis of previous year's consumption data with an increase of 10 per cent.
11.	Kerala	• The assessment of requirement was not based on type of crop, increase/decrease in crop area, cropping pattern, area under irrigation etc. Instead, it was calculated by adding five per cent to the highest consumption during the last five years up to 2007-08. During 2008-09, the requirement was calculated by taking 10 per cent increase over the consumption during previous seasons, except for DAP for which an increase of 25 per cent was taken. • Consumption was calculated on the basis of receipt of fertilizer by whole sellers/retailers during the season. The total of the subsidy claims/sales reports submitted by the manufacturers was taken as the consumption for the season.
12.	Madhya Pradesh	• No circulars/ guidelines for assessing the requirement of fertilizers were issued by the Director of Agriculture, to the district offices. No norms/standards were laid down for calculating the requirement of fertilizers based on the type of crop, irrigated/non- irrigated area, soil

SlNo.	Name of State	Summary of findings
		health and other local factors, discussions/meetings with Panchayat Samiti, Block Samiti, suggestions of farmers, no. of major, medium, small and marginal farmers etc. In many cases, demands were not even sent from the district level, and even when the districts sent the demands, the figures were changed at the Directorate level. • In response to audit enquiry, the Deputy Directors of Agriculture (DDsA) of the test checked districts stated that demands were decided on the basis of previous year's consumption.
13.	Maharashtra	• As per instruction issued by the Commissionerate of Agriculture (CoA), the district wise demand of fertilizers in Kharif and Rabi seasons was to be assessed based on maximum consumption of fertilizers during the last three years, cropping pattern and irrigation facility in the district. • However, it was seen in audit that the Agricultural Officers had collected the sale data of previous years from the dealers concerned and furnished them to the ADOs who in turn sent the information to the Deputy Director of Fertilizer (DDF), Pune, instead of assessing the requirement as per the instructions issued by the CoA.
14.	Manipur	• The requirement of fertilizers was projected on the basis of previous years' consumption.
15.	Meghalaya	• No specific norms/standards had been laid down for assessment of the requirement of fertilizers based on the type of crop, irrigated/ non-irrigated area, soil health and other local factors. The requirement of various types of fertilizers was projected on the basis of previous year's consumption data received from MECOFED and other wholesale dealers in the State.
16.	Nagaland	• The assessment of requirement was made on the basis of the sales data collected from dealers in the State.
17.	Orissa	• Though the assessment of fertilizer requirements at the district level was finalised after a strategy committee meeting held by the District Collector in the presence of representatives of different fertilizer manufacturers and the District Agricultural Officers (but without any involvement of the farmers), the Directorate of Agriculture, who consolidated the assessments, projected the State's requirement by adding 5 to 10 per cent of quantity to the previous years' consumption. • Soil-testing reports aimed at use of balanced doses of fertilizer as per the soil health condition were not considered while preparing the assessment of fertilizer requirements.
18.	Punjab	• The assessment of requirement of fertilizers was not being received from all the Chief Agriculture Officers (CAOs) regularly in the office of the Director of Agriculture. Instead, the Director of Agriculture used the data of previous year's consumption with minor adjustments for calculating the requirement of fertilizers for the subsequent year.

SlNo.	Name of State	Summary of findings
		• Soil tests were being carried out regularly, but the analytical reports of these tests were not considered while assessing the fertilizer requirement. • Panchayat Samiti/Block Samiti, farmers' co-operatives and other stakeholders at district level were not involved in the assessment of the fertilizer requirement.
19.	Rajasthan	• Requirement was being assessed at the Directorate level, keeping in view the consumption of fertilizers in the previous five years and total area sown in the State assuming normal rain fall. However, the assessed requirement was not based on assessments at the district/ block level, casting doubts on its robustness.
20.	Tamil Nadu	• Joint Directors of Agriculture (JDA) finalised the requirement of the fertilizers in each district based on cropped area and recommendation made by the Tamil Nadu Agriculture University, Coimbatore in consultation with the Assistant Director of Agriculture (ADA) of the block concerned. However, no documentation was available in the JDA office or at Block ADA's office. At the state level, the requirement was calculated by adding a certain percentage to the highest consumption (supply made to First Stock Point) in the best Rabi/Kharif season in a district, which was then projected at the Zonal Conference. • No discussions were held with Block Samitis or farmers for finalizing the district level requirement.
21.	Tripura	• Assessment of requirement of fertilizer was done while preparing the Perspective Plan at every Agriculture Sub Division based on the standard recommended dose, and 3 years average consumption for the period ending 1996-97. However, the plan was revised in 2004-05 as the target so fixed was quite high. For example the projected requirement of fertilizer for the year 2004-05 was reduced from 111156 MT (575 kg per hectare) to 46000 MT (130 kg per hectare) in the revised perspective plan. • No norms/standards had been laid down for calculating the requirement of fertilizers based on the type of irrigated/non-irrigated area, soil health and other local factors. • The assessment of requirement, thus, *prima facie* appeared to be a theoretical exercise and not based on actual field assessment.
22.	Uttar Pradesh	• The assessment of requirement of fertilizer at the district level was not done in the test checked districts except in Gorakhpur for 2008-09, that too, only on the basis of cropped area, without holding meetings with farmers, co-operatives etc. and without taking into account the factors such as cropping patterns etc. • Instead, the assessment of fertilizer requirement for the state was

SlNo.	Name of State	Summary of findings
		projected by the Agriculture Department by increasing the previous year's consumption of fertilizer.
23.	Uttarakhand	• The assessment of requirement of fertilizers in the State, at all levels, was based on consumption of last year/ season instead of type of crop, irrigated/ non-irrigated area and other local factors. Thus, the assessment could not be termed as scientifically determined. • Panchayat Samiti and Block Samiti were not involved in the assessment of fertilizer requirement. • No data regarding per hectare consumption of fertilizer was available in the State, apart from the consolidated report in the Zonal Conference booklet.
24.	West Bengal	• The State Government had fixed norms of consumption of fertilizers per hectare, based on types of crops to be cultivated. However, the same norm was fixed for all blocks in a district, irrespective of soil health and irrigation facility. Although block wise requirement of fertilizers for each season was assessed on the basis of type of crops grown, this was not projected at the State level. • The requirement of fertilizers for each season was assessed on the basis of previous years' consumption in consultation with Lead Fertilizer Supplier and Fertilizer Association of India but was not based on the type of crops to be cultivated and soil fertility level. • In the absence of soil testing, farmers were not aware of required dose of fertilizers to be applied on their land. As a result, farmers were using fertilizers more than the required doses resulting in high rate of per hectare consumption.

Recommendation - 1

Department of Agriculture and Co-operation (DOAC) should ensure that the seasonal fertilizer requirements are assessed on a scientific basis, and not merely by adding a specified percentage to last year's consumption. For this purpose, DOAC should ask for submission of detailed fertilizer requirements (ideally upto block level), preferably in electronic format, so as to facilitate analysis and highlighting of discrepancies. The requirement of fertilizer of different types should also take into accounts stocks available in the States. Also, requirements of selected States/ Districts should be subjected to detailed scrutiny/ examination on a sample/ rotational basis.

Further, audit analysis revealed that the consumption of Urea, DAP/ MAP and NPK complexes (i.e. excluding MOP) broadly tracked the availability of fertilizers (i.e. production + import), rather than being in line with the assessed requirement of fertilizers, which should have been the case. In other words, the entire quantity of fertilizers available (except

for MOP) was supposedly consumed, which casts further doubts on the robustness of the process for assessment of requirements. This is brought out in greater detail in Chapter 5.

4.3 Buffer Stock

With a view to maintain stocks of urea in case of a shortfall in production due to disruption in supplies of feedstock or delay/disruption in imports and to tide over the sudden spurt in demand/shortages in any part of the country, the DoF was required to operate buffer stock through the State Institutional Agencies/Fertilizer Companies in major agricultural States up to a limit of 5% of their seasonal requirement. Further, in case of DAP and MOP, DoF was required to maintain the buffer stock through IPL during the period 2006-09 as under:

Table 4.2 – Details of buffer stock of DAP and MOP

Year	Product	
	DAP (MT)	MOP (MT)
2006-07	2,00,000	1,00,000
2007-08	3,50,000	1,00,000
2008-09	3,50,000	1,00,000

*Source DoF's order dated 28.7.2008

State wise details of allocated quantities of buffer stock are given in ***Annexe-4.1***.

State findings revealed that in ten states (Andhra Pradesh, Assam, Chattisgarh, Gujarat, Haryana, Madhya Pradesh, Punjab, Rajasthan, Tamil Nadu and West Bengal), there were deficiencies in maintenance of buffer stock, as summarised below:

Table 4.3 – State-wise deficiencies in maintenance of buffer stock

Sl.No	Name of State	Deficiencies in maintenance of Buffer stock
1.	Andhra Pradesh	10,000 MT and 17,000 MT of DAP was to be maintained during 2006-07 and 2007-09 respectively as per the instructions of DoF dated 28.7.2008. However, no buffer stock of DAP was maintained upto September 2008 i.e. Kharif 2008.
2.	Assam	A buffer stock of 5000 MT MOP was to be maintained during 2006-09, out of which 5000 MT MOP was maintained only in March 2009.
3.	Chhattisgarh	5000 MT of DAP was to be maintained during 2008-09, but not maintained.
4.	Gujarat	5000MT MOP and 5000 MT DAP was to be maintained during 2008-09, but was not maintained.
5.	Haryana	No Buffer Stock of MOP (7000 MT each) was maintained during 2006-09. In the case of DAP, buffer stock of 31,666 MT and 11,330 MT only

		was maintained against the prescribed limit of 35000 MT and 40000 MT respectively during the year 2006-07 and 2007-08.
6.	Madhya Pradesh	Buffer stock of urea was not being maintained by the institutional agencies in the test checked districts.
7.	Punjab	Against 55000 MT of DAP, 37000 MT of DAP only was maintained. Thus, the buffer stock was short maintained by 18000 MT.
8.	Rajasthan	The prescribed buffer stock of urea was not maintained during 8 months out of 14 months from September 2007 to March 2009 and the shortfall ranged from 38 to 95 per cent.
9.	Tamil Nadu	Buffer stocks of 10000 MT and 15000 MT of DAP during 2006-07 and 2007-09 and 7500 MT of MOP during 2006-09 were to be maintained. However, no records to verify the fact were made available to audit at the Commissionerate of Agriculture.
10.	West Bengal	The shortfall in maintenance of buffer stock in each monthduring the peak periods (May to December) ranged from 61 to 99 per cent and 40 per cent to 77 per cent during the years 2007 and 2008 respectively.

5 - Fertilizer Production, Import and Consumption

5.1 Overview

A summary of assessed requirement, production, import and consumption of major fertilizers (Urea, DAP, MOP and NPK complexes) from 1998-99 to 2008-09 is given below:

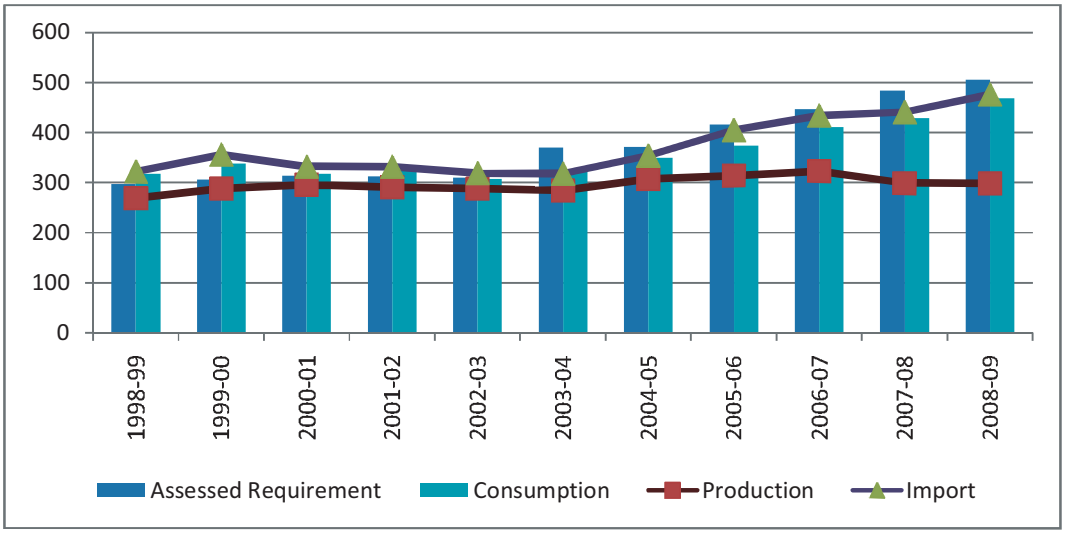
Table 5.1 - Fertilizer Requirement, Production, Import and Consumption

(In lakh MT)

	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Assessed Requirement	297	306	314	312	310	370	371	416	447	484	506
Production	269	288	296	291	288	284	307	314	323	299	298
Import	53	68	36	41	31	34	47	91	111	142	178
Total (Prod. + import)	322	356	332	332	319	318	354	405	434	441	476
Consumption	317	338	317	331	307	321	350	374	411	429	468

Note:-Figures from 1998-99 to 2002-03 do not include requirement of NPK fertilizers

Chart 5.1 Requirement, consumption and total availability of fertilizers



As can be seen from the above, while the assessed requirement of fertilizers went up by more than 70 per cent during the 11 year period from 1998-99 to 2008-09, production went up by less than 11 per cent. During the same period, imports went up by nearly 236 per cent. The correlation between availability (production + import) and consumption was,

however, high, indicating that whatever fertilizer was available was readily consumed; this is most likely on account of the highly subsidised price.

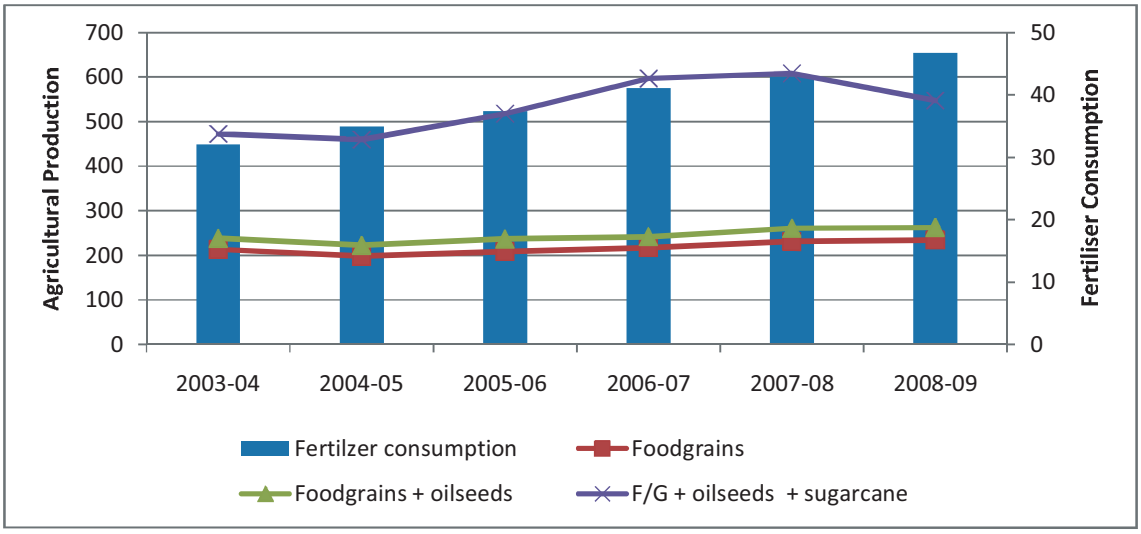
Table 5.2 Fertilizer consumption and major agriculture crops growth during 2003-04 to 2008-09

(Million Tonnes)

	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	Percent growth
Fertilizer consumption	32.1	35	37.4	41.1	42.9	46.8	46%
Foodgrains	213.19	198.36	208.6	217.28	230.78	234.47	10%
Oilseeds	25.19	24.35	27.98	24.29	29.76	27.72	10%
Sugarcane	233.86	237.09	281.17	355.52	348.19	285.03	22%
Foodgrains + Oilseeds + Sugarcane	472.24	459.8	517.75	597.09	608.73	547.22	16%

Source: Agriculture at a glance -2010

Chart 5.2 Growth of fertilizer consumption & production of major agricultural crops



While fertilizer consumption increased by 46 per cent from 2003-04 to 2008-09, major components of agricultural production (Food grains, Oilseeds and Sugarcane) increased by just 16 per cent during the same period. This indicates that the correlation between increased fertilizer consumption and increased agriculture production is relatively weak.

5.2 Import of Fertilizers

The position of import of fertilizers during the period from 2003-04 to 2008-09 was as under:

Table 5.3 Quantity of Fertilizer Imports

(In lakh MT)

Year	Urea	DAP	MAP	MOP	Total imports
2003-04	0	7.34	0.65	25.79	33.78
2004-05	6.41	6.44	0.22	34.09	47.16
2005-06	20.57	24.38	0.45	45.78	91.18
2006-07	47.19	28.75	0.97	34.48	111.39
2007-08	69.28	27.24	1.50	44.21	142.23
2008-09	56.67	61.92	2.67	56.72	177.91
Total	200.12	156.57	6.46	241.07	603.65

*MAP was included in subsidy scheme with effect from 1.4.2007

Table 5.4 - Monetary value of Fertilizer Imports

(In Million US $)

Year	Value of Urea imported	Value of DAP imported	Value of MAP	Value of MOP imported
2003-04	0	NA	NA	NA
2004-05	152.48	NA	NA	NA
2005-06	394.76	NA	NA	NA
2006-07	1027.01	846.40	NA	753.32
2007-08	1213.29	1317.57	72.03	1130.52
2008-09	2416	6805.34	297.32	3153.03
Total	**5203.54**	**8969.32**	**369.35**	**5036.87**

*Value relating to DAP, MOP and MAP is provisional data provided by the DoF

Over the six year period from 2003-04, the imports of fertilizers increased almost six-fold in quantitative terms, the main jump being in DAP/MAP which increased more than eight fold. Urea was not imported at all in 2003-04, but by 2008-09, imported urea constituted 22 per cent of total availability of urea. There was an increase in imports of all categories of fertilizers. This reflected:

- the inability of the subsidy scheme to incentivize increase in production and
- also scope for diversion/leakage, considering the huge differences between the international and subsidised prices of imported Fertilizers.

Despite the huge amount of subsidy (increasing from Rs. 11387 crore in 1998-99 to Rs. 96603 crore during 1998-99 to 2008-09), the production of fertilizers has increased only marginally only from 269 lakh MT to 298 lakh MT during the same period. Changes in the subsidy regime, including NPS Stages I to III, have failed to incentivize increase in domestic production of fertilizer. Increased consumption of fertilizers is largely met through increased fertilizer import. This leaves the country dependent on imports, whose pricing is volatile. By contrast, the subsidy/ concession on imported fertilizers over 1998-99 to 2008-09 has increased from 3 per cent to 47 per cent of the total subsidy.

5.3 Urea

5.3.1 Overall Position

A profile of the assessed requirement, production, import and consumption of urea during the period 2003-09 is given below:

Table 5.5 – Requirement, Production, Import and Consumption of Urea

(In lakh MT)

Year	Assessed Requirement	Production	Import	Total Availability	Consumption[13]	Gap between requirement and consumption	Gap between total availability and consumption
2003-04	211.60	192.02	0.00	192.02	197.67	13.9	-5.65
2004-05	214.08	203.13	6.41	209.54	206.65	7.4	2.89
2005-06	234.26	200.91	20.57	221.48	222.98	11.3	-1.50
2006-07	249.46	203.21	47.19	250.40	243.38	6.1	7.02
2007-08	271.71	198.88	69.28	268.16	259.63	12.1	8.53
2008-09	281.34	199.67	56.67	256.34	266.49	14.9	-10.15
Total	1462.45	1197.82	200.12	1397.94	1396.8	65.7	1.14

[13] Based on the sale figures at Ist sale point.

As can be seen above, while there is a consistent gap between consumption and the assessed requirement, the consumption figures broadly track the total availability of urea (production + import). This serves to further confirm our view that the assessment of requirement was not done on a scientific basis

5.3.2 Urea Production and Capacity

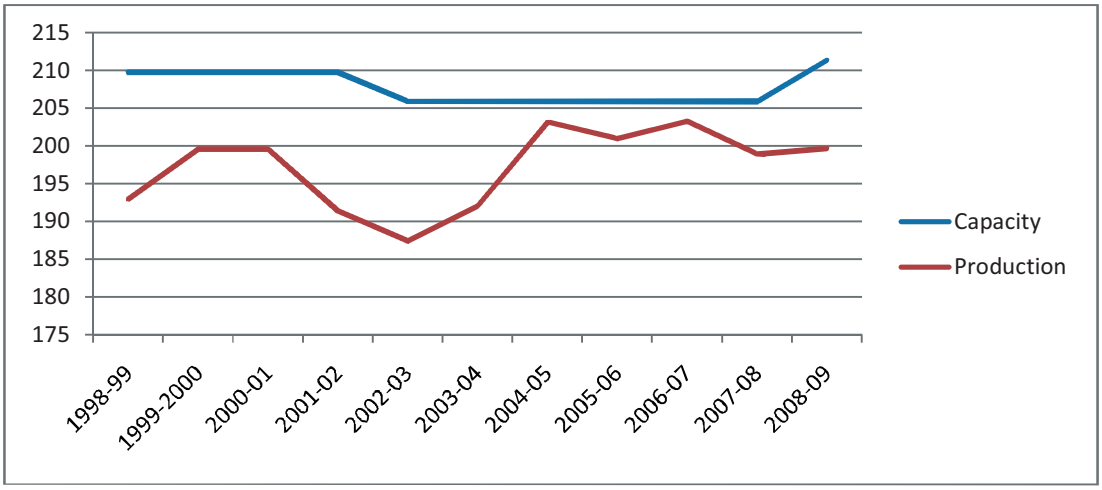
The capacity and actual production of urea for the period from 1998-99 to 2008-09 is summarized below:

Table 5.6 – Capacity and Production of Urea

(In lakh MT)

Year	Capacity	Production
1998-99	209.73	192.93
1999-2000	209.73	199.52
2000-01	209.73	199.53
2001-02	209.73	191.33
2002-03	205.84	187.37
2003-04	205.84	192.02
2004-05	205.84	203.13
2005-06	205.84	200.91
2006-07	205.84	203.21
2007-08	205.84	198.88
2008-09	211.37	199.67

Chart 5.5 - Capacity and Production of Urea



As can be seen above, production of urea during the 11 year period from 1998-99 to 2008-09 registered a negligible increase of 3.5 per cent, with a marginal decrease of 3 per cent during the period from 1998-99 to 2002-03 (the period covered by the erstwhile RPS) and an increase of 7 per cent thereafter till 2008-09 (during the NPS regime). Further, the increase in capacity was negligible. Clearly, the change in urea subsidy policy from individual unit-based pricing (RPS) to group based pricing (NPS) did not result in a significant increase in either capacity or production of urea.

5.3.3 Impact on cost of production

One of the prime objectives of introduction of the New Pricing Scheme (NPS) and group based concession was to gradually migrate from Naphtha/FO/LSHS, which is more cost effective to gas based feedstock so as to minimise the cost of the production. Analysis of pre-NPS and post-NPS production data, representing the share of different groups in total urea production, revealed the following position:

Table 5.7- Group wise Pre-NPS and Post-NPS Production of Urea

(In lakh MT)

Name of Group	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Group I Pre 1992 Gas based	46.41	47.85	47.87	47.50	46.48	47.94
Group II Post 1992 Gas based	55.54	59.94	60.08	78.58	91.20	90.36
Group III Pre 1992 Naphtha	26.47	28.81	27.22	18.56	12.16	11.98
Group IV Post 1992 Naphtha	17.06	17.59	18.16	9.52	0	0
Group V FO/LSHS	21.36	21.99	21.44	21.28	21.72	21.33
Group VI Mixed feedstock	25.16	26.95	26.14	27.77	27.32	28.06
Total	192	203.13	200.91	203.21	198.88	199.67

As can be seen above, there was a substantial increase in gas-based urea production which represents most cost-effective, which was matched by a corresponding reduction in naphtha-based urea production. However, this did not result in a significant increase in overall production; increased consumption of urea was met primarily through imports.

An analysis of the weighted average cost of production per MT in different groups from 2003-04 to 2008-09 revealed the following position:

Table 5.8- Group wise Pre and Post NPS Weighted Average Cost of Production of Urea

(Rs/MT)

Name of Unit	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	% Increase in cost of production in six years
Group I Pre-1992 Gas	4777	5052	5096	6025	7175	8646	81
Group II Post-1992 Gas	5860	6584	6521	8799	9234	10699	83
Group III: Pre - 1992 Naphtha	12251	15077	17895	21775	23792	27004	120
Group IV: Post-1992 Naphtha	10168	12750	12153	10686	--	--	--
Group V: FO/LSHS	10276	10550	12725	13924	15628	20871	103
Group VI: Mixed Feedstock	7462	8129	8752	10593	12700	14917	100

One objective of the introduction of NPS was to promote cost cutting measures by using international standards, state of art technology and efficient use of feedstock. However, the above analysis shows that the weighted average cost of production of urea increased substantially by 81 per cent to 120 per cent, post NPS. Even the conversion of naphtha units to gas-based units (described subsequently) did not result in a reduction in the cost of production.

5.3.4 Conversion of Naphtha/FO/LSHS to Gas

For urea production, gas as the feedstock represents the most efficient method of production, particularly in terms of its impact on subsidy especially through this feedstock (gas/naphtha) represents 70 to 80 per cent of the cost of fertilizer production. As per the DOF guidelines of March 2007, all functional naphtha and FO/LSHS based units were to be converted into Natural Gas (NG)/ Liquefied Natural Gas (LNG) within a period of 3 years; this was targeted to create subsidy savings of Rs.3300 crore per annum.

In all, 12 Naphtha/FO/LSHS units were to be converted to gas-based units. However, as of May 2010, only four units had been converted to gas-based units. Further, even after conversion of these four units, the cost of production as well as the subsidy burden actually

went up (except a marginal reduction of cost of production – though not total subsidy – in the case of IFFCO Phulpur-II) as detailed below:

Table 5.9- Cost of Production of Urea for Four Units converted to gas based production

Sl.No.	Details	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	Date of conversion
1	**SFC, Kota – Capacity (In MT) 379500**							
	Production (MT)	363948	379000	381300	361156	379000	394533	Sep. 2006
	Cost of Prodn (Rs/MT)	10719	14268	15786	18199	18916	20500	
	Subsidy (In crore)	299.37	310.48	436.36	402.40	684.10	649.46	
2	**IFFCO, Phulpur I- Capacity (In MT) 551100**							
	Production (MT)	540765	565056.10	551100	573603	629757	662536	July 2006
	Cost of Prodn (Rs./MT)	10733.25	13031.23	15985.63	11085.11	10148.2	11354.54	
	Subsidy (Rs.in crore)	460.95	526.58	536.03	754.97	551.22	604.96	
3	**IFFCO, Phulpur II- Capacity (In MT) 864600**							
	Production (MT)	850882	864022	884600	882600	924223	840584	May 2006
	Cost of Prodn (Rs./MT)	10615.44	13243.70	15693.99	12625.22	11192.04	12469.22	
	Subsidy (Rs.in crore)	577.55	865.60	913.65	1078.78	1253.73	702.84	
4	**CFCL, Gadepan II – Capacity(In MT) 864600**							
	Production (MT)	854646	894627	931443	951956	995596	1008255	April 2007
	Cost of Prodn (Rs/MT)	9723.46	12273.10	8790.91	10685.77	8400.33	10814.34	
	Subsidy (Rs.in crore)	617.47	821.19	828.45	527.02	994.67	842.34	

Despite conversion of four naphtha units to gas-based units, the overall cost of production and subsidy burden actual went up post-conversion. While one could argue that this would

have gone up even further had naphtha continued as the feedstock for these units, the ultimate objective of NPS of reduction of cost of production and subsidy burden has not been achieved.

5.3.5 Pre-set Energy Norms for Urea Production

Energy consumption represents the single largest component of the cost of production of urea. One of the objectives of NPS in general, and NPS stages II and III in particular, was to incentivize a shift towards lower energy consumption, through creation of group energy norms; this was also envisaged by the Expenditure Reforms Commission (ERC). This would penalize inefficient producers, since energy consumption above the specified norms would not be eligible for subsidy. By contrast, efficient producers who managed to consume less energy than the pre-set norms would get the benefit of the difference, provided that these savings resulted in additional investment in the units, which would, hopefully, also increase capacity and production in the medium to long term.

However, audit scrutiny revealed that despite the group approach of NPS, the pre-set energy consumption norms prescribed by DoF varied from unit to unit even within the same group, as detailed in ***Annexe 5.1.***

Furthermore, BVFCL-Namrup II, which commenced production in 2005-06 (November 2005), is also not an efficient unit on the basis of its energy consumption level, because production went up from 21695 MT in 2005-06 to 61858 MT in 2008-09 and its energy consumption of 22.624 G cal/MT is the highest for any gas based urea manufacturing units and has still not been placed in any of the six groups.

It is apparently evident that the production never reached upto the capacity level. More over the production drastically came down in 2008-09 to 39 per cent of the total capacity but the cost of production increased by 41.37 per cent from 2008-09. The energy consumption level has also gone up from 12.102 to 17.679 G cal/pmt.

Clearly, the objective of group-based energy norms of NPS was not being achieved in practice. Even, excluding the case of BVFCL- Namrup III (which is a peculiar case on account of the technology used, on which the DoF may take a view as to whether its continuation is worthwhile, at all due to the exorbitant cost of production and subsidy per MT), there were variations amongst different units in the same group. Further, the objective of reinvestment of energy savings (vis-à-vis the preset norms) of increased capacity/production has not been achieved.

Recommendation - 2

In line with the spirit of NPS, DoF should set timelines for formulating a uniform energy norm across all units within the group.

5.4 DAP/ MAP and NPK complexes

5.4.1 Overall Position

The overall position of assessed requirement, production, import and consumption of DAP/ MAP and NPK complexes is summarized below:

Table 5.10-Requirement, Production, Import and Consumption of DAP/ MAP

(in lakh MT)

Year	Requirement	Production	Import of DAP and MAP	Total availability (Col.3-Col.4)	Consump-tion	Difference (Col.2 - Col.6)	Gap between (Col.5 – Col.6)
1	2	3	4	5	6	7	8
2003-04	71.89	47.19	7.99	55.18	56.24	15.65	-1.06
2004-05	70.60	51.59	6.66	58.25	62.56	8.04	-4.31
2005-06	78.03	45.05	24.83	69.88	67.64	10.39	2.24
2006-07	81.30	46.78	29.72	76.50	73.81	7.49	2.69
2007-08	89.22	42.04	29.90	71.94	74.97	14.25	-3.03
2008-09	94.83	29.70	64.59	94.29	92.31	2.52	1.98
Total	485.87	262.35	163.69	426.04	427.53	58.34	-1.49

Table 5.11- Requirement, Production, and Consumption of NPK complexes

(Figures in lakh MT)

Year	Requirement	Production	Consumption	Gap between requirement and consumption
2003-04	63.14	45.03	47.57	15.57
2004-05	63.42	52.65	56.80	6.62
2005-06	74.40	67.68	66.94	7.46
2006-07	82.90	72.98	67.99	14.91
2007-08	87.40	58.30	65.71	21.69
2008-09	92.32	68.64	68.05	24.27
	463.58	365.28	373.06	90.52

Table 5.12 Indigenous production and import of DAP/MAP

(In Lakh MT)

Year	DAP Production	Import of DAP	Import of MAP	Total Import
2003-04	47.19	7.34	0.65	7.99
2004-05	51.59	6.44	0.22	6.66
2005-06	45.05	24.38	0.45	24.83
2006-07	46.78	28.75	0.97	29.72
2007-08	42.04	27.24	1.50	28.74
2008-09	29.70	61.92	2.67	64.59
Total	262.35	156.07	6.46	162.53

As in the case of urea, while there is a consistent gap between consumption and the assessed requirement, the consumption figures broadly track the total availability of fertilizers (production + import). This serves to further confirm the fact that the assessment of requirement was not done on a scientific basis.

5.4.2 Production of Phosphatic Fertilizers

There are 19 DAP and NPK complex manufacturing units; the year wise capacity and production of phosphatic (DAP+NPK) fertilizers are depicted below:

Table 5.13 - Capacity and Production of DAP and NPK Complexes

(In Lakh MT)

Year	Capacity of DAP+NPK	Production of DAP	Production of NPK	Total production of DAP+ NPK
1998-99	67.14	38.68	37.07	75.75
1999-2000	74.14	38.63	50.01	88.64
2000-01	84.08	48.89	47.44	96.33
2001-02	117.47	50.94	49.09	100.03
2002-03	120.90	52.36	48.59	100.95
2003-04	122.68	47.19	45.03	92.22
2004-05	127.94	51.59	52.65	104.25
2005-06	130.24	45.05	67.68	112.73

Year	Capacity of DAP+NPK	Production of DAP	Production of NPK	Total production of DAP+ NPK
2006-07	130.59	46.78	72.98	119.76
2007-08	130.61	42.04	58.30	100.33
2008-09	134.04	29.70	68.64	98.34

As can be seen above, although the capacity for phosphatic fertilizers nearly doubled from 1998-99 to 2008-09, actual production increased by only 30 per cent. The production of DAP actually came down substantially. It may however be noted that indigenous production of phosphatic fertilizers is largely based on imported raw materials/intermediates. The increase in consumption of DAP/MAP/NPK complexes over this period was met primarily through imports at very high prices, which led to multi-fold increases in the subsidy burden.

5.5 MOP

The country's requirement for potassic fertilizers is met fully through imports. The table below summarises requirement, import and consumption of MOP.

Table 5.14-Requirement, Import, and Consumption of MOP

(In lakh MT)

Year	Requirement	Import	Consumption	Gap +/- (Col.2 -Col.4)	Import value of MOP
1	2	3	4	5	6
2003-04	23.73	25.79	19.12	4.61	NA
2004-05	23.21	34.09	24.06	-0.85	NA
2005-06	28.89	45.78	16.57	12.32	NA
2006-07	33.24	34.48	25.86	7.38	7533.20
2007-08	36.13	44.21	28.81	7.32	11305.15
Total		**184.35**	**114.42**	**69.94**	
2008-09	37.86	56.72	40.77	15.95	31530.30
G. Total	183.06	241.07	155.19	85.88	

The import of MOP during the period 2003-08 was 184.35 lakh MT, while actual consumption was only 114.42 lakh MT resulting in surplus stock of 70 lakh MT as of March 2008. The requirement of MOP for 2008-09 was 38.86 lakh MT, including one lakh MT of buffer stock to be maintained by IPL. This could have been easily met out of the surplus

stock of 70 lakh MT of MOP already lying in the stock as of March 2008. Further, during 2008-09, the international price of MOP, (which is completely imported in India) increased enormously and was almost four times its normal cost. (Rs.7595/MT in April 2008 to Rs. 28410/MT in December 2008). However, the DoF, instead of curbing further imports of MOP and drawing down on available stock, imported an additional 56.72 lakh MT (43.29 Lakh MT as per expenditure figures). This resulted in an avoidable addition to the subsidy burden of Rs. 10,000 crore. In fact, even without taking into account the available stock from earlier imports, the imports during 2008-09 were substantially higher than the assessed requirements and the consumption for the year.

5.6 Fertilizer Consumption

Fertilizer consumption has gone up substantially from 317 lakh MT to 468 lakh MT over the 11 year period and from 1998-99 to 2008-09. However, the pattern of fertilizer consumption (per hectare of gross cropped area) across different States is highly skewed. States like Andhra Pradesh, Punjab, Haryana and Bihar have high consumption rates of 240, 221, 202 and 179 Kg per Ha respectively, while States like Madhya Pradesh, Orissa, Assam and Jharkhand have very low consumption rates of 71, 62, 62, and 56 Kg per Ha respectively. There was a fairly high degree of correlation between the consumption rate and the proportion of irrigated area; the higher the proportion of irrigated area, the higher the rate of consumption of fertilizers[14]. For example, Punjab with 98 per cent irrigated area consumed 221 kg/ha in 2008-09, while Jharkhand with 10 per cent irrigated area consumed only 56 kg/ha. Details of the State-wise consumption rates are given below:

Table 5.15 - State-wise per hectare fertilizer consumption (N+P+K) to gross cropped area for the period 2003-04 to 2008-09

(Kg/ hectare)

Sl.No.	State/UT	2008-09 Kg/hectare consumption*	Per centage of gross irrigated to total cultivated area**
1.	Andhra Pradesh	240	46
2.	Punjab	221	98
3.	Tamil Nadu	217	56
4.	Haryana	202	86
5.	Bihar	179	61
6.	West Bengal	158	57
7.	Uttar Pradesh	156	75
8.	Karnataka	147	29
9.	Gujarat	141	42

[14] The coefficient of correlation, (a statistical measure) between the fertilizer consumption (in 2008-09) and proportion of irrigation area was 0.76, which is fairly high.

Sl.No.	State/UT	2008-09 Kg/hectare consumption*	Per centage of gross irrigated to total cultivated area**
10.	Uttarakhand	123	46
11.	Maharashtra	114	20
12.	J&K	93	41
13.	Kerala	89	16
14.	Chhattisgarh	81	26
15.	Madhya Pradesh	71	32
16.	Orissa	62	37
17.	Assam	62	2
18.	Himachal Pradesh	61	19
19.	Manipur	57	22
20.	Jharkhand	56	10
21.	Rajasthan	49	36
22.	Tripura	47	35
23.	Mizoram	47	10
24.	Meghalaya	14	26
25.	Arunachal Pradesh	3	20
26.	Nagaland	2	29
27.	Sikkim	0	8
	All India	129	44.56

Kg/hectare consumption based on 2006-07 provisional gross cropped area

*Source: **FS-55, Page II-25 for gross cultivated area and gross irrigated area*

5.7 *Non availability/ shortage of fertilizers*

Despite huge amounts of subsidy/concession on controlled and de-controlled fertilizer, there were numerous instances of non-availability/shortage of fertilizers as summarized below:

Table 5.16– State-wise instances of non-availability/ shortage of fertilizers

Sl.No.	Name of State	Summary of findings
1.	Andhra Pradesh	• In Guntur district during 2008-09 (Kharif and Rabi seasons), adequate quantities of fertilizer were not supplied in time to the farmers, which led to agitations by farmers. • In the remaining three tests checked districts (Kadapa, Karimnagar and Warangal), delay in supply of fertilizer was

Sl.No.	Name of State	Summary of findings
		noticed. • Even after issue of instructions by the district collector, Guntur regarding equitable distribution of fertilizers (DAP, MOP and other complex fertilizers) to all the dealers for easy access to farmers in remote areas also, the ManaGromor Centres of Coromandal Fertilizers Ltd. (CFL) were allotted fertilizers more than the prescribed percentage. Consequently, the farmers were forced to rush to mandal headquarters where ManaGromor Centres existed, incurring additional expenditure on travel and transportation of fertilizer.
2.	Assam	• There was excess availability of 5,35,927 MT of different categories of fertilizer as compared to quantity procured during 2006-09 which ranged between 1 and 87 per cent.
3.	Bihar	• Farmers/ dealers complained that there were shortages and they had problem in procuring fertilizer during crop period. However, no norms were fixed to regulate the sale of fertilizers. • Dealers complained that there were shortages in procuring fertilizers during the crop period. Farmers also complained that they had to pay much higher rates for purchase of fertilizer, and were not getting the required quantity, which affected the crop adversely.
4.	Chhattisgarh	• There were excess/short supply of fertilizers against the targets in three of the four selected districts. • No rationing system was followed for sale of fertilizers.
5.	Gujarat	• The variation between requirement and actual supply ranged between 1% (Urea Kharif 2008-09) to 23% (DAP Kharif 2008-09). During survey of dealers, farmers and the Co-operative societies, the farmers complained of short supply and stated that they had to purchase fertilizer from other blocks.
6.	Haryana	• The availability of Urea and DAP in the State was more than the projected requirement, and consumption was more or less equal to requirement during 2006-09. In respect of NPK and MOP, except in 2007-08, availability was lower than the projected requirement, and consumption was far below the requirement.
7.	Himachal Pradesh	• During 2006-09, against the requirement of 3,53,400 MTs of different types of Fertilizers, actual supply was 3,21,133 MTs

Sl.No.	Name of State	Summary of findings
		resulting in an overall shortage of 32,267 MTs. • Supply of 19430 MTs of NPK 10:26:26 was received during Rabi 2007-08 (7221 MTs) and Kharif-Rabi 2008-09 (12209 MTs) without any requirement. During Rabi 2008-09 against the requirement of 7500 MTs of NPK 15:15:15, actual supply received was 12863 MTs. This indicates that the farmers were compelled to purchase these categories against short supply of NPK 12:32:16.
8.	Karnataka	• There were no norms to regulate sale of fertilizers. Only during short / delayed supply, were the sales monitored by the staff of the Agriculture Department. • There was substantial variation between the assessed requirement and supply of fertilizers during the period 2006-07 to 2008-09. The shortfall in respect of supply of Urea, DAP, MOP, and Complexes ranged from 5 per cent to 59 per cent and the excess supply over requirement ranged between minus 2.34 per cent to minus 26.37 per cent. • In some districts, shortages of fertilizers were reported.
9.	Kerala	• Shortfall in DAP and MOP ranged between 5 per cent and 25 per cent, and excess ranged between 12 per cent and 33 per cent of the requirement during 2006-09. Shortfall in other complex fertilizers was more pronounced, ranging between 44 to 76 per cent.
10.	Maharashtra	• The companies did not supply fertilizers as per the supply plan during the years 2006-07 to 2008-09, which resulted in uneven supply of various kinds of fertilizers.
11.	Madhya Pradesh	• During dealer/farmer's survey, the cooperative societies and the farmers complained that during the peak season, farmers faced a shortage of fertilizers and they had to rush from one block to another and had to pay higher prices (Rs.350 to Rs. 500 per bag of Urea) for purchasing the fertilizers.
12.	Manipur	• The shortfall in availability of urea during 2006-07 to 2008-09 ranged from 31 to 45 per cent.
13.	Meghalaya	• There were substantial variations between the assessed requirement and actual supply of fertilizers during 2006-09. • The variation/shortfall between the requirement and actual supply of Urea, DAP and MOP during 2006-07 to 2008-09 ranged between 5.73 per cent and 25.41 per cent in respect of Urea, 7.23 per cent and 58.72 per cent in respect of DAP and

Sl.No.	Name of State	Summary of findings
		34.50 per cent and 41.18 per cent in respect of MOP.
14.	Rajasthan	• No norms were prescribed to regulate sale of fertilizer. • The farmers were advised to use fertilizers as per recommendations made in the Soil Health Card. However, Soil Health Cards were issued only to five per cent of farmers (300345) against total number of land holders (58,19,203) of the State during 2008-09.
15.	Tamil Nadu	• During 2007-08 there was acute shortage of DAP in the State due to stoppage of production and reduction in import of DAP. Hence, based on GoI direction, Tamil Nadu Marketing Federation (TANFED) was nominated as the nodal agency for procuring the DAP from the importers and DAP was distributed to the farmers through Primary Agricultural Co-operative Banks (PACBs). PACBs insisted on production of land holdings certificate from the revenue officials each season for the purchase of DAP by farmers. Farmers found it very difficult in getting the certificate as the land possessed by the farmers was on lease, and certificate was issued in the name of the land owner. Hence, though DAP was available, farmers could not get the same and had to use complexes in the place of DAP. In certain PACBs, only members of the PACB were given the fertilizer.
16.	Tripura	• During surveys, retail dealers and farmers complained that due to delay in supply of fertilizer, the farmers had to buy fertilizers, at higher rate than MRP from the market.
17.	Uttar Pradesh	• Short supply of DAP in Barabanki and Lakhimpur Kheri ranged between 7 to 78 per cent and excess supply of DAP in Aligarh, Bulandshahr, Gorakhpur Moradabad and Varanasi ranged between 6 to 139 per cent. • Short supply of urea against supply plan in Barabanki, Bulandshahar Gorakhpur and Lakhimpur Kheri ranged between 8 to 71 per cent, and excess supply of urea in Aligarh, Moradabad and Varanasi ranged between 6 to 75 per cent. • Short supply of MOP in Barabanki, Lakhimpur Kheri and Moradabad ranged between 41 to 100 per cent and excess supply of MOP in Aligarh, Bulandshahar, Gorakhpur and Varanasi ranged between 159 to 722 per cent. • Short supply of NPK in Aligarh, Barabanki, Bulandshahr, Lakhimpur Kheri and Moradabad ranged between 18 to 100

Sl.No.	Name of State	Summary of findings
		per cent and excess supply of NPK in Gorakhpur and Varanasi ranged between 126 to 148 per cent. • In seven test checked districts, the actual supply of DAP was in excess of the supply plan by 6 per cent to 139 per cent. In case of urea in these districts, excess actual supply against the supply plan ranging from 6 per cent 75 per cent during April 2008 to December 2008. Likewise in MOP, the excess actual supply ranging from 41 per cent to 722 per cent. Excess actual supply of NPK was ranging from 18 per cent to 148 per cent.
18.	West Bengal	• There was short supply in respect of each item of fertilizer during each of the years 2006-07 to 2008-09 (except in case of MOP during 2008-09) as compared to the requirements. • In case of complex fertilizer (NPK), the shortfall in supply was less significant during 2006-07 while in other cases, the shortfall varied from 3 to 33 per cent of requirement during each of the years 2006-07 to 2008-09. • There was skewed distribution i.e. lesser supply in distant and disjointed districts having no rake points in comparison to requirement, and in sharp contrast, higher supply in districts having better accessibility. • All the districts, except one, (Uttar Dinajpur-border district) received fertilizers much less than the requirements, irrespective of availability of rake points.

6 - Payment of Subsidy Claims

6.1 Procedure for payment of subsidy/concession

The procedure for payment of subsidy/concession for urea and decontrolled fertilizers is summarized below:

Figure 6.1 – Payment of subsidy for urea

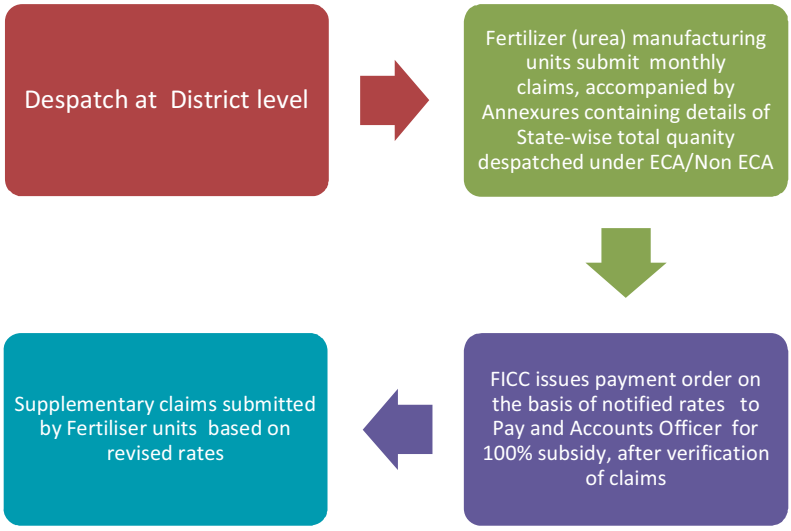
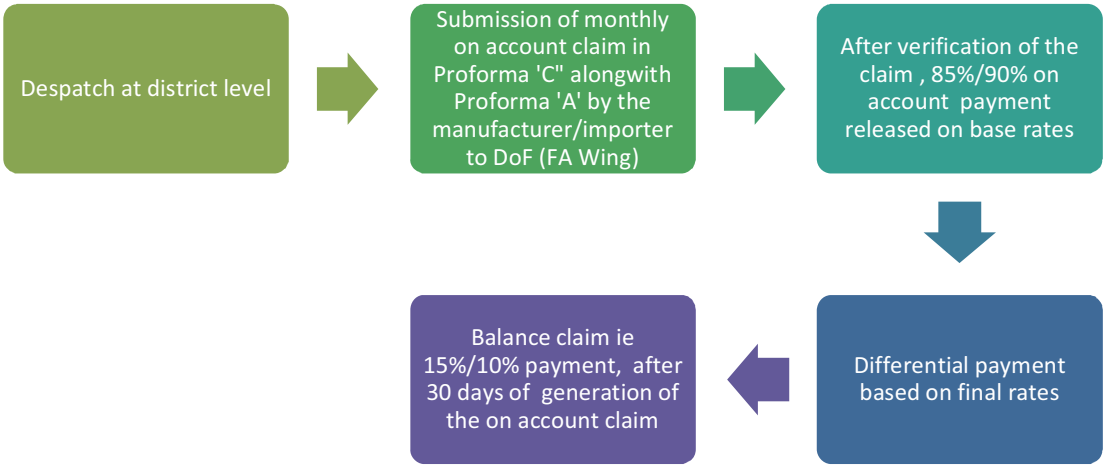


*Figure 6.2 – Payment of concession for decontrolled fertilizers**



**Proforma 'A' indicates the sale details with invoices and other supporting documents which are sent to State Directorate of Agriculture. Proforma 'B' certification of the sale of fertilisers claimed by manufacturers by the State Government. Proforma 'C' claims of subsidy.*

We scrutinised 979 claims for subsidy/concession amounting to Rs.54358 crore, covering the period from 2006-07 to 2008-09; details are indicated in ***Annexe 6.1***. The main findings from our scrutiny of subsidy/concession claims are summarized below.

6.2 Outstanding Proforma 'B' Sale verification certificates amounting to Rs.50698 crore

The guidelines of August 2002 issued by the DoF stipulated that for release of the balance payment (10/15 per cent) of concession for decontrolled fertilizers, the State Governments were required to furnish sale verification certificates in Proforma 'B' within a period of 90 days from the date of receipt of "on account claims" in Proforma 'A' from the manufacturing/importing units. In case of non-receipt of Proforma'B' from the concerned State Governments/U.T within 5 months, the matter would be taken up by the DoF with the concerned State; if the outstanding Proforma 'B' was not furnished within 180 days from the date of receipt of 'On Account' claims, the manufacturers/importers were liable to submit Bank Guarantee equivalent to 100 per cent of the unadjusted 'on account' payment of the concession received for the concerned months.

This procedure was partially modified in June 2007 so that the balance 10 per cent - 15 per cent of the concession claim would be considered for payment on the expiry of 30 days from the generation of the 'on account' claim, irrespective of whether the sales had been certified in Proforma 'B' by the State Government concerned. However, despite this relaxation, the State Governments were still required to submit the sales certificate in Proforma 'B' for the purpose of reconciliation. DoF issued instructions in July, September, and November 2008 that the requirement of 'Proforma B' had not been dispensed with, and would be needed for reconciling the concession payments already made with actual sales, as certified by the State/UT governments.

In our opinion, the requirement for certification in Proforma 'B' by the State Governments of sales of decontrolled fertilizers for agricultural purposes (notwithstanding the inadequacies in the certification process) is the only major control over end-use of fertilizers. Linking certification with release of balance payment of 10/15 per cent (with the penal clause providing for bank guarantee for 100 per cent of unadjusted concession) provided clear incentives/disincentives for ensuring timely submission of Proforma 'B'. With the removal of such a linkage from June 2007, there is no longer adequate incentive to ensure certification by the competent authorities (viz. the State Governments) of end-use of decontrolled fertilizers for agricultural purposes.

Year wise details of outstanding Proforma 'B' from 2003-10 as provided by DoF are as below:

Table 6.1 – Year-wise details of outstanding Proforma 'B'

Year	Amount (Rs in crore)
2003-04	22.64
2004-05	63.08
2005-06	3.64
2006-07	21.52
2007-08	8400.44
2008-09	29654.64
2009-10	12532.14
Total	50698.10

It will be seen that the outstanding Proforma 'B' for the years 2003-04 to 2006-07 amount to just 111 crore, while the outstanding amounts for the years 2007-08 to 2009-10 amount to 50587 crore.

6.3 Non verification of fertilizer sales/stock

In most of the States, verification of sales for agricultural purposes (which would provide assurance of proper end-use of subsidy) was non-existent or inadequate, as it did not involve physical verification of stocks or sales beyond the Ist point sales, and in many cases not even verification of receipts, invoices etc.

A summary of State-specific findings on is given below:

Table 6.2 – State-wise findings on non-verification of fertilizer sales/ stocks

Sl. No.	Name of State	Summary of findings
1.	Bihar	• Verification of sales was never done in the four selected districts. • Certification was done and bills were verified on the basis of quantities entered in the stock registers of the buffer. However, no physical verification of stock was conducted. • The stipulated procedure for verification of sales beyond Ist stock point upto farmers level were not followed. • No certification was done of the fertilizers received by whole sale from rake points in other districts.
2.	Chhattisgarh	• The verification was done on the basis of entries in the stock registers and bill books of the dealers, which was then reported by the DDAs to the DA. No physical verification of stock was, however, found to have been carried out. Also, there was neither any process of verification of sales beyond the first point sale i.e. upto the farmer level, nor did any checks exist for examining the genuineness of the party to which the sale was made.

Sl. No.	Name of State	Summary of findings
		• The State Agriculture Department certified the quantities sold to the Markfed only on the basis of a certificate of receipt given by District Marketing Officers (DMO).
3.	Gujarat	• In respect of first point sales in the State, on receipt of copy of proforma 'A' from the units, the Director of Agriculture sent 20% randomly selected sales to the Deputy Director of Agriculture of the District for verification of receipt by the dealers. However, the Agriculture Officer of the block was just signing the statement received from the manufacturer. No sales invoices, delivery challan, physical verification of stock etc. had been verified by the Agriculture Officer of the block, as the State Government had granted relaxation from submission of delivery challans to GSFC, GNFC, IFFCO, and KRIBHCO, which were the major manufacturing companies in State. • Further, no verification of subsequent sales (beyond first point sales) up to the farmers' level had been carried out. • The State Agriculture Officer was just signing the statement received from the manufacturer. No sales invoices, delivery challan, physical verification of stock etc. were verified. Affidavits/certificate of receipt of goods obtained from Ist point dealers.
4.	Himachal Pradesh	• Bills for subsidy claims for supplier and manufacturers of Fertilizers were certified on the basis of receipt of Fertilizers certified by the 1st sale points of HIMFED and by the member Cooperative Societies of IFFCO, and not on the basis of physical verification of receipts of Fertilizers/stock entries thereof. • In Kangra block, test check of records of four out of six member societies of IFFCO revealed that the quantity of Fertilizers shown as sold/released to them by IFFCO had not reached the premises/stores of the said Societies, as its stock and issue/sales entries could not be verified from their records viz. respective registers/ledgers.
5.	Jammu & Kashmir	• Only First point sales were being verified as per the lifting certificates issued by the lifting agencies. Jammu & Kashmir Cooperative and Marketing Federation (JAKFED), Agro Industries Development Corporation Ltd. (AIDCL) and Cooperative Marketing Societies (CMS).
6.	Jharkhand	• There was no process for verification of sales beyond the 1st stocking point sale upto the end users viz. the farmers. • Verification was done on the basis of details in Proforma 'A' and stock register of dealers.
7.	Karnataka	• For the test checked period in the selected districts, physical verification of stock was not conducted.
8.	Madhya Pradesh	• It was noticed that there was no system in place to verify the authenticity of sales to genuine farmers. Physical verification of the stock was not conducted in the test checked districts, except for district Indore.

Sl. No.	Name of State	Summary of findings
9.	Maharashtra	• Verification of stock was not carried out by the ADOs of Amravati, Latur, Osmanabad and Pune districts in respect of certain lots which ultimately led to non submission of report to the DDF. It was found that the DDF proposed to release balance subsidy in Proforma 'B' to the DoF without getting these supplies verified, in contravention of the circular issued by the CoA. • In reply the ADOs stated that due to non furnishing of invoices in time by the manufacturers and workload, 20 per cent physical verification of stock could not be done.
10.	Manipur	• In respect of decontrolled fertilizers, first point sales reported through proforma B was verified only on the basis of affidavits from the dealer. In respect of urea, verification was made by obtaining delivery challans from the dealers. However, the State Government did not adopt any mechanism for verification of sales beyond the first point sales up to the farmers' level also, no physical verification of stock was conducted.
11.	Meghalaya	• Verification of monthly sales of decontrolled fertilizers was done on the basis of certificates of sales submitted by MECOFED and purchase certificate in respect of Private Wholesale Dealers submitted by the District Agriculture Officers concerned. • No process for verification of sales beyond the first point sales upto the farmer levels which would have, (to ensure authenticity of sale to genuine farmer) existed.
12.	Nagaland	• Procedures such as independent verification of sales by obtaining copies of sales invoices, delivery challans, sales tax payment receipts, stock registers, physical verification of stock etc. were not carried out by the Department before forwarding claims for subsidy.
13.	Orissa	• The Junior Quality Control Inspector/Asst. Agricultural Officer verified the receipts and sales during field inspections and record certificate of verification on the body of the stock register of the dealers, but no separate verification reports were maintained and made available to audit.
14.	Punjab	• No periodical checking of the stocks was done by the officers of the Agriculture Department in three out of four selected districts (i.e. Bathinda, Faridkot and Ludhiana), which was attributed to shortage of technical field staff. • Sales verification done on the basis of Affidavits and through sales invoices, delivery challans etc.
15.	Rajasthan	• First Point sales were being verified on the basis of stock registers, bills of company and other records. However, no mechanism for verification of sales beyond first sale point upto farmer level had been evolved.
16.	Tamil Nadu	• No physical verification of stock was done by the block officials. In certain cases the stock was moved out to the retailers by the first stock point without even unloading the stock and invoices were sent subsequently. Hence even if the supply details were received on the same day, physical

Sl. No.	Name of State	Summary of findings
		verification cannot be done, as verification beyond the first stock point is not carried out by the block officials.
17.	Tripura	• On the basis of the stock entry certificate, Proforma 'B' was certified and sent to the Govt. of India. However, no evidence of actual verification of stores by the Inspectors was noticed.
18.	Uttar Pradesh	• In four test checked districts, namely Aligarh, Bulandshahar, Lakhimpur Kheri and Varanasi, physical verification was not conducted during 2008-09, while in the remaining three districts i.e. Barabanki, Gorakhpur and Moradabad, physical verification of stock was done only at the time of raid and collection of samples of fertilizer.
19.	Uttarakhand	• There was no process for verification of sale beyond first sale point.
20.	West Bengal	• There was no system of physical verification of stocks at any level.

The above state wise findings revealed that although the subsidy was released on the basis of the receipt of fertilizers at district level and the freight subsidy was paid upto block level, there was no state level mechanism for physical verification of the confirmation of receipt at district, block and consumer levels.

Recommendation - 3

Notwithstanding possible inconvenience to fertilizer manufacturers, the earlier system of retaining 10-15 per cent of the subsidy till receipt of certification in Proforma 'B' of agricultural sales of decontrolled fertilisers by the State Governments should be considered for re-introduction. Further, DoF should stipulate detailed procedures for verification of sales for agricultural purposes by the State Governments (including verification of receipt at block and consumer levels), physical verification of stocks or sales beyond 1st point sales etc. Also, DoF may consider a similar regulatory mechanism in respect of urea, despite its being a "controlled" fertilizer.

6.4 Deficiencies in the licenses and other arrangements for sale of fertilizers

State-specific deficiencies in licensing and other arrangement for sale of fertilizers are summarised below:

Table 6.3 – State-specific deficiencies in licensing and other arrangements

Sl.No	State	Deficiencies
1.	Assam	• Six retail dealers were carrying out the fertilizer business without valid license from the state agriculture department, while another four could not produce a copy of their license to audit.
2.	Chhattisgarh	• In the four selected districts, all the 588 Co-operative Societies (Durg-182, Raipur-206, and Surguja-64 and Bilaspur-136) were doing the business of retail sale of fertilizers without any certificate of registration from the appropriate authority, which was against the provisions of FCO.
3.	Jammu & Kashmir	• The Jammu and Kashmir Co-operative Supply and Marketing Federation, the main lifting agency in the State did not have a valid license. The license for carrying on such business was only issued to the federation in November 2009, after the omission was pointed out (October 2009) by audit. • Most of the Co-operative Marketing Societies and some private dealers dealing with sale of fertilizers did not have valid licenses as required under the FCO 1985. In certain cases it was noticed that the Societies / Dealers having retail license were doing sale of fertilizers as wholesale dealers. • Stock registers as required under clause 35 (1) (a) in form – N of the Fertilizer (Control) Order 1985 had not been maintained by the dealers. • Purchase bills in support of purchase of fertilizers were not available with the dealers (except those functioning as lifting agencies). Only challans showing the quantity of material received were available with the dealers in some cases.
4.	Orissa	• Four co-operative societies (Jharsuguda-3 and Agalpur-1) and one dealer in Agalpur block in Bolangir were engaged in sale of fertilizers without any FCO registration certificate and on the basis of co-operative license for pesticide sale.
5.	Kerala	• There were reports of illegal cross border transportation of fertilizer to other states in the print/visual media. However, no report, as of October 2009, was available in the Directorate on action taken at the districts.
6.	Manipur	• The Sub-Divisional Police Officer, Chandel under FIR No.20 (10) 2008 seized (October 2008) 93.50 MT of fertilizers (Urea: 61.50 MT; Potash: 32 MT) worth Rs.4.40 lakh at Molnom village of Chandel district, while being smuggled to Myanmar.

Sl.No	State	Deficiencies
7.	West Bengal	• 548.331 MT of fertilizers worth Rs 177.89 lakh were seized by the Border Security Force (BSF) during January to September 2008. • There was no restriction in issuing licenses to dealers in border area (740 licenses had been issued to various dealers in the border areas for procurement and sale of fertilizers and food grains). In certain cases, four to five members of a family had been issued dealer permits (in the names of wife, sons, daughters, etc) without any justification. Thus, issue of large number of permits and inflow of disproportionate quantity of goods to the border areas, facilitated smuggling of goods (including fertilizer) across the border. The Department had no monitoring mechanism over the performance of dealers in border areas, in order to prevent smuggling of fertilizers across the border.

6.5 Discrepancies in supply of DAP during 2008-09 by IPL

Scrutiny of records relating to payment of concession for DAP in respect of imports by IPL revealed that during 2008-09 as per claims the quantity received in various States (Andhra Pradesh, Bihar, Chhattisgarh, Madhya Pradesh, Orissa, Uttar Pradesh and West Bengal) was 30.42 lakh MT. However, as per data in the FMS, the quantity received was only 28.78 lakh MT, leaving an unexplained shortfall of 1.64 lakh MT, which involved payment of concession of Rs.762 crore to IPL. In view of the sky-high prices at which DAP was imported during 2008-09, the discrepancy between the quantity claimed and actual receipt is a serious issue, which needs to be examined closely.

6.6 Subsidy on Imports

6.6.1 Irregularities in Import of DAP by IPL during 2007-08

Due to reduced indigenous production of DAP as well as lower level of imports of DAP by the private fertilizer companies, it was decided by the Committee of Secretaries to import 17.5 lakh MT of DAP for 2007-08. Import of urea on Government account is done through the Canalising Agencies/State Trading Enterprises (i.e. Indian Potash Limited (IPL), Minerals and Metals Trading Corporation Limited (MMTC) and State Trading Corporation.

The DoF authorized IPL in June 2007 to import the entire requirement of DAP as per the following instructions:

- IPL would be eligible to claim concession on the sales of this DAP as per the prevailing concession rate for that period. The difference between concession payable and the amount already paid per MT on the quantity sold would be paid to/recovered from STEs, as the case may be.
- IPL would expedite the sales of DAP from the quantity imported on priority basis to minimize the outstanding amount of tentative concession.

- IPL would maintain separate accounts of sales and closing stock and submit the details to Director (Movement) and Director (Accounts) in the DoF on a monthly basis.

IPL imported 17.58 Lakh MT of DAP during the period from June 2007 to February 2008 in 43 shipments for which advance payment of Rs.1652 crore, being 100 per cent of the cost of cargo, was released to them. Audit scrutiny revealed the following:-

- IPL failed to submit monthly sales accounts of imported DAP as of March 2010. In the absence of the monthly sales account, audit could not ascertain whether IPL sold the fertilizer out of the stock imported on specific Government instructions or out of its own imports. Further, despite not rendering monthly account of receipt/sales, IPL continued to get payment on account of concession during 2007-08 amounting to Rs.4233.43 crore on its monthly claims, and the amount of advance Rs.1652 crore remained unadjusted.
- Since IPL failed to submit the monthly sales account, advance payment of Rs.1652 crore was recovered in one lump sum in October 2008. However, DoF did not impose interest/penal interest on the advance payment of Rs.1652 crore**,** which worked out to Rs.187.87 crore.
- The methodology for fixing monthly rates of concession for imported DAP provided for an allowance for credit for 105 days on Cost and Freight (C&F) price. However, since advance payment was made by DoF to IPL for import of DAP on Government instructions, inclusion of credit allowance for fixing the rate of concession was unjustified, and resulted in excess subsidy payment of Rs.42.82 crore.
- DoF did not issue any directions/movement plan for each individual shipment of DAP imported on Government account. In the absence of any such movement plan, audit could not ascertain whether the imported DAP was actually despatched/sold to the Districts/States facing shortages of DAP, and whether timely availability of DAP was ensured.
- The necessary documents required to be submitted along with the claim for the payment of cargo viz:, copy of original contract, copy of Bill of Lading, shipping documents, waiver certificate from the Chartering Wing of the Ministry of Shipping, copy of the original Letter of Credit, documents relating to the samples drawn by the Central Fertilizer Quality Control Training &Institute and analysis report thereof, 2 copies of commercial invoice, and draft survey certificate issued at the load port were not available in 29 cases out of 43 shipments. This would point out the inadequacy of proper documentation.
- Out of the 43 shipments, the quantity shown in one shipment (VELA-Bill of Lading No. MI IC 2007029), in the Bill of Lading was 62039.021 MT, whereas the sellers' commercial invoice showed a lesser quantity as 52039.021 MT. Though the payment was made only for 52039.021 MT, reason for the discrepancy of 10000 MT could not be ascertained.

6.6.2 Excess payment on import of urea by IPL during 2008-09 and 2009-10

During 2008-09 and 2009-10 (upto December 2009), Department of Fertilizer (DoF) authorized IPL to import 18.08 lakh MT and 13.17 lakh MT urea respectively to meet the gap between assessed demand and estimated availability. IPL entered into a contract in December 2008, with an Indian Firm Compagnie Indo-Francaise De Commerce Pvt. Ltd. (CIFC), New Delhi.

As per the special conditions governing the opening of the irrevocable Letter of Credit, the "Buyers liability is restricted only to the value of Letter of Credit in Indian Rupees". IPL had claimed (January 2009) 98 per cent of the value of the cargo on the basis of the exchange rates prevailing on the date of opening of Letter of Credit, and the balance 2 per cent claim was submitted by IPL, quoting the exchange rate prevailing on the date of final payment.

As per records IPL had paid the cost of cargo to CIFC, New Delhi (an Indian Company), in Indian Rupees. Audit, however, observed that a payment of Rs.190.50 crore (being 100 per cent of the cost of cargo plus allied charges) was paid to IPL by DoF for supply of 140261.288 MT of imported urea. This included payment of Rs.3.00 crore on account of variation in the exchange rate. This payment of Rs.3 crore was not admissible, as the IPL had made all the payments to CIFC in Indian rupee and in India and the payment was to be restricted to the amount of LC which was Rs. 187.50 crore.

DoF, in its, response stated that the payment was made after obtaining the approval of the competent authority. However, the reply was not forthcoming on the issue of allowing exchange rate variation on payment made in Indian Rupees.

6.6.3 Fixing of rates of concession of imported DAP and MOP

Audit scrutiny revealed that while fixing the base rates of MOP and monthly final rates of concession of imported DAP and MOP for the period from April to September 2007, customs duty was erroneously calculated on Cost and Freight (C&F) price on credit basis instead of cash basis. This resulted in higher concession rates (per MT) of Rs.12 to Rs.15 in respect of DAP (final rate) Rs.9 to Rs.11 of MOP (final rate) and Rs.4 of MOP (base rate). This erroneous calculation of customs duty resulted in payment of excess concession of Rs.4.18 crore (DAP Rs.2.05 crore and MOP Rs.2.13 crore).

6.6.4 No supply plan for urea imported by IPL

Scrutiny of data relating to import of urea provided to audit revealed that IPL imported 18 lakh MT of urea on Government account at costs ranging between US$ 247/MT (Rs.11704/MT) and US $ 850/MT (Rs.41693/MT) between July 2008 to January 2009 for which payment of Rs.4,487 crore was made to IPL by DoF. However, the FMS data indicated that there was no supply plan for the quantity imported by IPL.

6.6.5 Non Production of records relating to import of urea by DoF and by IPL

- Records relating to the import of urea of 193.71 Lakh MT on Government account for the period 2005-06 to 2008-09 were called for from the Department of Fertilizer but were not provided to audit. Similarly, records relating to import of 40.70 Lakh MT of urea by IPL during 2007-08 and 2008-09 on Government account was not provided to audit.
- Details relating to import of 17.58 Lakh MT of DAP on Government instructions during 2007-08 were not provided to audit by IPL.

6.7 Subsidized fertilizers consumed by mixing units

6.7.1 Consumption of subsidized fertilizer by Mixing Units

An increasing trend in fertilizer consumption noticed in several states was the consumption of subsidized fertilizers (Urea, DAP, MOP etc) by mixing units for producing fertilizer mixtures. This has several implications:

- The subsidy chain is, in a sense "broken", since fertilizers subsidized by GoI and sold at fixed MRPs are utilized for preparing mixtures, whose prices are generally higher and are subject to varying levels of license and regulation/self –regulation, if any, differing from State to State.
- The standard fertilizer consumed by these mixing units, is at the expense of the ordinary farmer in terms of reduced availability of standard fertilizers and higher prices for such standard fertilizers. This is especially true of DAP/MAP whose market prices have skyrocketed and where shortages have been reported in different States.
- Control over their quality, (including periodic testing of samples) is often minimal, and unsuspecting farmers are exposed to the risk of fertilizer mixtures of substandard quality which may not have the desired effect on crop yield.
- Summary of State-specific findings in respect of subsidized fertilizers consumed by mixing units are given below, while details are indicated in the State-specific chapters.

6.7.2 Kerala

In Kerala, there are 74 mixing units. The per hectare consumption of the two test checked districts i.e. Kottayam and Palakkad have shown higher consumption of Urea, DAP and MOP than other districts mainly due to the consumption of these items by the mixing units. In Palakkad, out of a total sale of 4964.65 MT of urea, 181.15 MT of DAP and 1874.35MT MOP, 2200 MT(44 per cent) of Urea, 181.15MT (100 per cent) of DAP and 650 MT (35 per cent) of MOP respectively was purchased by the mixing units during April 2008 to December 2008.

MRPs fixed by the Association of Mixing Units in the State are much higher than that fixed by GOI as detailed below:

Table 6.4 – MRPs for complex fertilizers in Kerala

MRP fixed by GOI for complex fertilizers		MRP fixed by Mixing Units for complex fertilizers		
Product	Price (Rs)	Product	Price (Rs) with effect from Aug 2008	Price (Rs) with effect from Oct 2008
20:20:0:13	6295	18:18:(18):18	9800	**9800**
15:15:15:0	5121	20:0:10	6060	**5785**
17:17:17:0	5804	12:12:6	8300	**6910**
19:19:19:0	6487	10:10:4	7480	**6300**
		12:12:12	8700	**7588**
		10:10:10	7860	**6690**
		15:10:6	**8040**	**6925**

Source: Directorate of Agriculture

Further, it was detected during quality checks, that 92 per cent out of the non-standard inorganic fertilizers were mixtures. Hence, the mixing units were consuming the subsidised fertilizers and selling low quality mixtures at higher prices to the farmers.

6.7.3 Madhya Pradesh

In Bhopal, the test checked district, mixture plant owners were purchasing huge quantity of standard fertilizers (Urea, DAP, MOP, SSP) from companies and dealers for preparing N.P.K mixtures. The farmers' survey also revealed that there was demand for standard fertilizers i.e. Urea, DAP, MOP etc. and not of mixtures made at local level. Thus, usage for standard fertilizers as raw material for preparing mixtures may lead to shortage of fertilizers and also black marketing.

The details of fertilizers purchased by one mixture plant during the last three years were as under:

Table 6.5 – Purchase of fertilizers by one mixture plant in Madhya

Name of the Mixture Plant	Year	Quantity purchased (MT)
AP India Biotech Pvt. Ltd., Deewanganj, Raisen	2007-08	5138.84
	2008-09	5658.76
	Up to 31.10.09	948.65

It was found that a private dealer of Bhopal sold the subsidized fertilizer to a distillery which was not a farmer but a manufacturer of beer and beverages. When the matter was taken up with the Director of Agriculture, Bhopal, it was stated that the bills of Urea were not verified.

6.8 Tamil Nadu

There are 156 physical and 7 granulation fertilizer mixing units in Tamil Nadu.

The production of various standard and granulated mixtures during the years 2007-08 and 2008-09 were as under:

Table 6.6 – Production of mixtures in Tamil Nadu

(In MTs)

Type of unit	Year	Categories of fertilizers used by the units								
		Urea	SSP	TSP	MOP	DAP	MAP	Rock phosphate	NPK complex	Total
Physical	2007-08	55852	20742	83	47962	33359	503	804	3738	163043
	2008-09	62854	16830	1568	45007	18646	-	1840	7159	153904
Granulation	2007-08	43410	293	-	35439	36475	5311	720	8319	129967
	2008-09	50551	46	2992	28133	13890	-	3314	656	99582
Total		212667	37911	4643	156541	102370	5814	6678	19872	546496

The Joint Directors of Agriculture, while certifying the concessional sale of fertilizers to first stock point sales did not mention (except Salem) the quantum of subsidised fertilizers consumed by the mixing units in their respective districts.

6.8.1 Gujarat

Three dealers sold 36250 MT fertilizer (Urea, DAP, MOP and complex) during 2007-10 (upto September 2009) to their sister concerns for manufacturing different NPK fertilizers not subsidised under FCO and for which no MRP had been fixed by the Government.

During the Dealer survey and Farmer survey, purchasing of fertilizer mixtures was not revealed/indicated.

6.8.2 Irregular payment of concession of Rs.7.21 crore to SSP units

As per the scheme guidelines of August 2002, the manufacturers/importers are required to sell the decontrolled fertilizers at the applicable MRP. The claim of the manufacturers/importer in Proforma 'C' shall be accompanied with a certificate that the sales have been effected only to registered manufacturers of NPK fertilizers under the Fertilizer Control Order (FCO), and that the sales so reflected were the actual sales on consignment basis.

Audit scrutiny revealed that the DoF released subsidy of Rs. 7.21 crore during 2008-10 to seven SSP manufacturers for transferring the stock to their own mixing units. Since this was an internal transfer of stock (not a first point sale, which involved neither transfer in the ownership of the goods nor sale of fertilizers at the applicable MRP), the payment of subsidy of Rs.7.21 crore was irregular.

Recommendation – 4

Sale of subsidised fertilizers of all types (Urea, DAP, MAP, MOP etc.) to mixture units should not be permitted; such mixture units should purchase non-subsidised fertilizers for their use. Where DoF feels that certain mixtures are essential/ desirable for agricultural consumption, their prices should be notified based on the subsidised inputs (as per nutrient value); they should also be subject to full-scale quality testing.

6.9 Avoidable interest payment of Rs.1.41 crore to OMIFCO

As per the Urea Off-Take Agreement (UOTA), of May 2002 entered into between the GoI and Oman India Fertilizer Company (OMIFCO) for the supply of Urea, OMIFCO shall deliver to the GoI, within four days of the Bill of Lading, the documents relating to details of purchase of Urea to the GoI, payment by GoI to OMIFCO shall become due 20 days after the date of the Bill of Lading for Urea shipments. Further, interest is leviable at the stipulated "Late Payment Rate" for delays in payment by the GoI.

Audit scrutiny revealed that there were delays in settlement of invoices of OMIFCO by DOF, ranging between 1 to 139 days during the period 2005-09. This resulted in avoidable interest payment amounting to Rs 1.41 crore.

DoF, in its response stated that they were now getting the shipping documents well in time i.e within 4 days from the date of Bill of Lading.

6.10 Discrepancies in despatch data

Fertilizer units/importers are eligible for subsidy payments when fertilizers are despatched to the first stocking points in the district, and details of despatch are uploaded onto the web-based FMS. Audit scrutiny, however, revealed serious deficiencies in the current procedures, as there is no mechanism for reconciliation of unit-wise and district-wise despatch data with corresponding data on receipts at the first stocking point in the districts. Audit attempted a limited reconciliation exercise on a sample basis for 2008-09 (April 2008 to December 2008) which revealed that 48624 MT of fertilizers valuing Rs.83 crore stated to have been despatched by the manufacturing units were not recorded as received at the 1st stocking points in various States as summarised below; details of the discrepancies are indicated in ***Annexe 6.2.***

Table 6.7 – Summary of discrepancies in despatch data

Sl.No.	State	Manufacturer/Product	Quantity not received (MT)	Amount (Rs. in Crore)
1	West Bengal	Tata Chemicals Ltd (TCL) (MOP), RCF (MOP), IFFCO (NPK), PPL (DAP,MOP,NPK), IPL (DAP,MOP)	24174.90	64.93
2	Bihar	KRIBHCO, Hazira (Urea), Indogulf, Jagdishpur (Urea), RCF (Urea, MOP) , KSFL (Urea), NFCL (Urea), TCL Babrala (Urea), IPL (DAP, Urea), PPL (MOP)	21193.45	14.60
3	Madhya Pradesh	IPL (MOP,DAP)	177.30	0.71
4	Haryana	IPL (DAP)	91.40	0.28
5	Gujarat	KRIBHCO (Urea), HINDALCO(DAP), IFFCO (Urea), GNVFC (NPK)	2837.00	2.13
6.	Jharkhand	PPL (MOP, NPK)	150.00	0.49
	Total		48624.05	83.14

7 - Quality Control

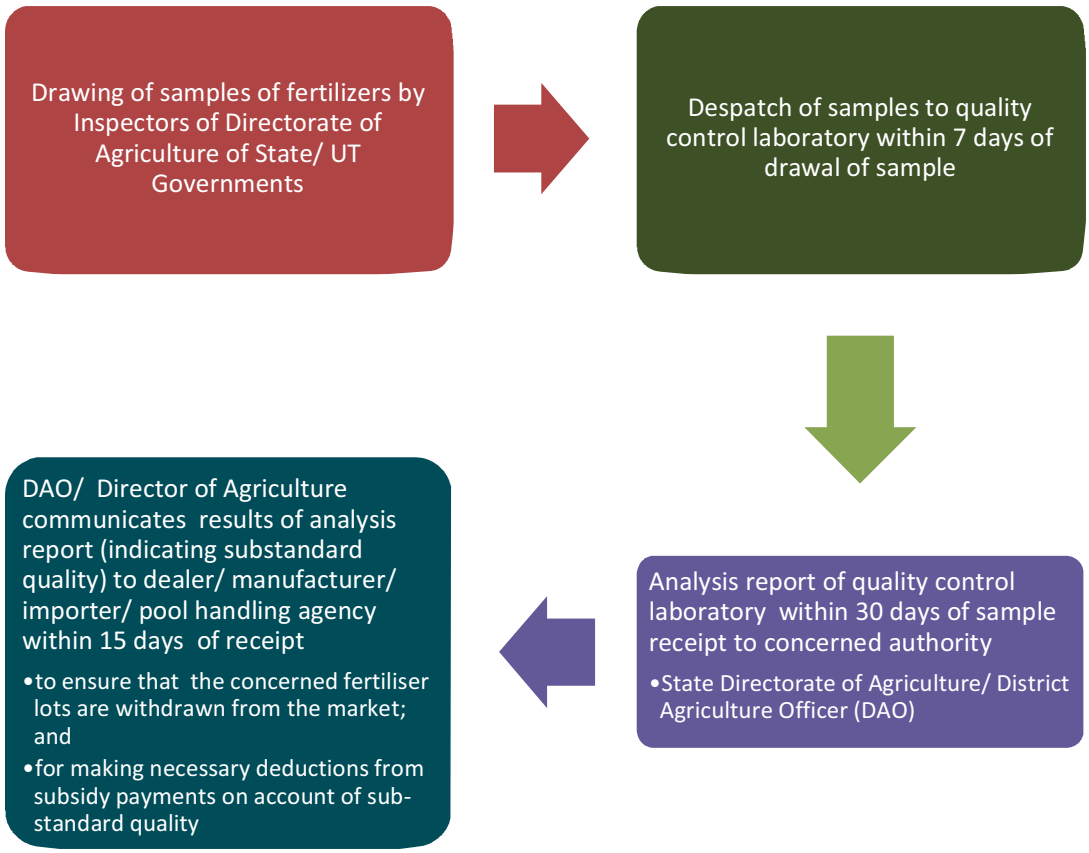
7.1 Background

Regulation of quality of fertilizer is governed by the FCO, 1985. The fertilizer quality control laboratory structure in India consists of

- A Central Fertilizer Quality Control and Training Institute at Faridabad and its regional laboratories at Mumbai, Chennai and Kalyani (Calcutta), and
- 67 Fertilizer Quality Control Laboratories in 22 States/UTs.

The procedure for drawing and analysis of samples and follow-up action thereon is as follows:

Chart 7.1 – Process for drawing, analysis and reporting of quality of fertilizer samples



7.2 Inadequate capacity for testing fertilizer samples

As of March 2009, there were 268120 sales outlets in the country. The minimum requirement of fertilizers samples to be tested for ensuring quality was 5,36,240 to cover each sale outlet during Kharif and Rabi. However, the annual capacity of the existing quality control laboratories was only 1,32,965 against which 1,04,498 samples were actually tested during 2008-09; details are given below:

Table 7.1 - Details of All India Total Sale Points, Total Laboratories, Samples Analysed

	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
No. of sale points	2,82,468	2,88,756	2,92,692	2,71,215	2,58,718	2,68,120
Minimum no. of samples required to be tested	5,64,936	5,77,512	5,85,384	5,42,430	5,17,436	5,36,240
No. of laboratories	67	67	67	68	68	71
Capacity of laboratories (samples)	1,24,778	1,24,730	1,22,488	1,29,250	1,29,331	1,32,965
No. of samples analysed	1,04,647	1,08,859	1,11,745	1,16,142	1,06,378	1,04,498
Percentage of samples drawn and analysed to minimum requirement	18.52	18.84	19.08	21.41	20.55	19.48
No. of samples found non- standard	5,785	6,535	6,728	6,956	5,933	5,729
Percentage of samples analysed and found non-standard	5.5	6.0	6.0	6.0	5.6	5.5

7.3 Other deficiencies in Testing of Quality of Fertilizer

Field scrutiny revealed the following deficiencies in testing of fertilizer quality:

- Many of the fertilizer quality control laboratories were deficient in terms of physical and human infrastructure. Many essential items of testing equipment were either not available, or were non-functional. As regards staff, there were shortage in availability of staff vis-à-vis the sanctioned number of posts, and many staff members had not received the necessary training at CFQCT&I Faridabad, without which they would not be statutorily qualified to discharge their duties under the FCO.
- There was a significant shortfall in the actual number of samples tested vis-à-vis the targets as well as the capacity of the laboratories.

- The stipulated time limits for sending of samples to the quality control laboratories, sending of analysis reports by the laboratories to the concerned authorities and corrective action thereon were not adhered to in most States, with huge delays. As a result, even when sub-standard quality fertilizer was detected, by the time the analysis reports reached the concerned authorities and action was initiated, the balance stock of the fertilizer lot (pertaining to the sub-standard sample) had already been sold to unsuspecting farmers, who unknowingly used such sub-standard fertilizers.
- Recoveries on account of fertilizer subsidy on substandard fertilizer were not made in full in many cases.

A summary of State-wise findings on quality control given below: details are given in the State Specific Chapters.

Recommendation – 5

The fertilizer quality control infrastructure in the country should be upgraded through setting up of new laboratories, upgradation of existing laboratories infrastructure and recruitment of suitably qualified staff. Timelines should be specified for ensuring adequate capacity for seasonal testing of all sale outlets. If deemed necessary, adequate financial assistance could be provided to the State Governments for this purpose.

State Government Departments and quality control laboratories should be held accountable for timeliness in drawal of samples, sample analysis, and communication of sample results. IT should be used for collation and wide dissemination of sample results; in addition, display of sample results on the notice boards of Block Panchayats may be considered.

Table 7.2 – State-wise findings on fertilizer quality control

Sl. No.	Name of State	Irregularities/short comings in the quality control labs
1.	Andhra Pradesh	• 41 to 57 per cent of the non-standard samples were declared as standard in re-analysis during 2006-09, casting doubts on the reliability and authenticity of the entire samples and the process itself. • For the years 2006-07 and 2007-08, recoveries recommended in respect of non-standard samples along with **Form J (**particulars of fertilizer samples) were not made available to audit. • For the year 2008-09, out of 329 non-standard cases, details of only 74 cases were furnished to Department of Fertilizer, GoI for recovery. • Legal action was yet to be initiated in 232 cases of non- standard

Sl. No.	Name of State	Irregularities/short comings in the quality control labs
		fertilizers as of November 2009. • The period of cases ranged from 1 to 5 years as seen in the records. However, case wise details of the samples were not made available to audit.
2.	Assam	• The fertilizer quality control laboratory at Guwahati did not achieve targets for testing of fertilizers during 2006-07 to 2008-09. The shortfall ranged from 59 to 93 per cent. • Samples were collected from a lot of very small quantity of fertilizer which ranged between 0.03 MT to 0.20 MT. • In respect of two cases, source of collection of quantity in the lot was not mentioned in Form 'J'.
3.	Bihar	• For 38 districts, there was only one quality control laboratory in Patna. Shortage of laboratories resulted in inadequate testing facilities. • Out of 18640 samples to be drawn in the state, only 1688 (9.05 per cent) samples were drawn, 1578 tested and 110 (6.5 per cent) left without analysis. • In the test-checked districts, the shortage in the samples actually drawn ranged between 36 and 99 per cent in 2006-07, 58 to 99 per cent in 2007-08 and 33 to 99 per cent in 2008-09. • During 2007-08 , out of 6.22 lakh MT of various kinds of fertilizers received in the test checked districts, only 416 samples were taken against 6217 required for testing and 17 were declared as non-standard. • Further in 2008-09 out of 7.46 lakh MT of all fertilizers received, only 464 samples were taken against 7464 required for testing and 10 were declared as non-standard. • In the test-checked districts, no samples were drawn from retail dealers/ co-operative societies, or Central Storage Scheme (CSS) warehouse functioning as buffer of the fertilizer company. • In the test-checked district, fertilizer inspectors were not posted, and the District Agriculture Officers/ Block Agriculture Officers were collecting the samples. • The test results of fertilizers declared as non- standard were not intimated to the dealers. Further, by the time samples were declared as non-standard, the stock had already been sold.

Sl. No.	Name of State	Irregularities/short comings in the quality control labs
4.	Chhattisgarh	• The FQCL, at Raipur is the only notified fertilizer testing laboratory in the State of Chhattisgarh. Against the sanctioned strength of 17 posts, only 10 posts were filled. • As per the Manual, against the 25 items of equipment for analysis of chemical fertilizers, only 17 items of equipment were available. • Shortages in analysis of samples ranged between 8 per cent and 32 per cent during the period 2006-09. • 3363 MT fertilizers (DAP, NPK and SSP - amounting to Rs.2.00 crore) declared non-standard were sold to the farmers.
5.	Gujarat	• There were 21 vacancies (Asstt. Director of Agriculture-2, Agriculture Officers-17, Chemist-2) in the three Fertilizer laboratories at Bardoli (4), Junagarh (10) and Gandhinagar (7). • It was noticed that laboratories had conducted scrutiny of only the main components (Urea-Total Nitrogen; DAP-Total Nitrogen, Ammonical Nitrogen, Ammonium Citrate, Phosphate; MOP-Potash) of the fertilizer only as against the requirement of FCO, 1985 that all components should be examined to certify fertilizer as of the prescribed standard. • There was delay in intimation to the dealers of the test results of fertilizers declared as non-standard, by which time, the stock had been sold. Hence, the non-standard fertilizer was used by the farmers without knowing the quality. • 124 court cases for the period 2006-07 to 2008-09 were pending in courts. There was no instance of seizure of the lot of non-standard fertilizer nor was any recovery of subsidy proposed in respect of non-standard fertilizer samples. This resulted in irregular payment of subsidy to the extent of Rs.9.86 crore.
6.	Haryana	• In the Quality Control laboratories at Hissar and Karnal, as against the staff strength of 27 posts, only 22 technical and supporting staff was in position. • There was a shortfall of 33 per cent in samples analysed during years 2006-07, 2007-08, and 2008-09 against the annual capacity of 3400 during 2006-08 and 5100 in 2008-09. • 34 samples collected during April 2006 to November 2008 were declared as non-standard but neither was any action taken to stop sale/use of non-standard fertilizers, nor was recoveries

Sl. No.	Name of State	Irregularities/short comings in the quality control labs
		proposed to the Department of Fertilizers. Further, in 23 other cases where the samples were found non-standard, information regarding initiation of action such as disallowance of subsidy, stoppage of sale, etc. was not furnished to audit.
7.	Himachal Pradesh	• Out of two Agriculture Development Officers deployed in the Quality Control laboratory at Sundernagar, one officer posted since November 2006 had not been imparted the requisite technical training at the Central Fertilizer Quality Control Laboratory, Faridabad. In the laboratory at Hamirpur, no Laboratory Assistants were provided during 2006-09. • Against the annual analysing capacity of 1000 samples in each laboratory, percentage achievement was 74, 65 and 60 during the years 2006-07 to 2008-09 respectively. • Although samples of Fertilizers were collected from the 1st sale point dealers, the results were never communicated to them.
8.	Jammu & Kashmir	• An Atomic Absorption Spectrophotometer (AAS) prescribed for analyzing micro-nutrients, purchased in February 2002 for the (Jammu) laboratory was unserviceable. In the Jammu laboratory, vacuum dessicator, Indian standard sieves, sample grinder, top pan balance and deionizer required for testing were not available in the laboratory. In the laboratory at Srinagar, water bath cum shaker, magnetic stirrer, sample grinder, glass water distillation apparatus and de-ionizer required for testing were either not available or were un-serviceable. • As per the Fertilizer (Control) Order 1985 (Sch.1), specification of various fertilizers had been indicated. For checking these specifications, the laboratory was required to conduct tests in respect of these fertilizers. However, audit check of the records and the tests conducted in the laboratory in respect of two districts of Jammu (excluding samples lifted from rake point) and Kathua for the year 2008-09 showed that all the tests were not carried out in the laboratory • Results in respect of 368 samples for the year 2006-07 to 2008-09 sent to the quality control laboratories were not received. The reasons for not analyzing these samples and non-intimation of results, if any, were sought from the laboratory, but were not intimated.
9.	Jharkhand	• Only one Quality Control Laboratory existed in Jharkhand. Out of 26 items of equipment, 13 were functional and two were lying

Sl. No.	Name of State	Irregularities/short comings in the quality control labs
		un-installed as of October 2009, and the remaining items of equipment were non-functional since 2007-08. • Against the analyzing capacity of 6045 samples (2015 sample per year) during 2006-09, only 2043 (34 per cent) samples were analysed. • 2586.75 MT of deteriorated DAP involving subsidy of Rs.10.81 crore was sold to farmers without quality tests.
10.	Karnataka	• The required number of technical and supporting staff was not in position. Against the sanctioned strength of 41 posts, 15 positions were vacant in the four laboratories in the State.
11.	Kerala	• As against eight sanctioned posts of analysts (four in each laboratory at Thiruvananthapuram and Pattambi), only seven persons were in position, of which three analysts were not trained at the Fertilizer Quality Control Laboratory and Training Institute, Faridabad and were thus, ineligible for appointment as Fertilizer Analyst as per clause 29A of FCO, 1985. • Shortfalls in testing of the samples ranged from 10 per cent to 36 per cent during 2006-09. • In 66 to 89 per cent of the non-standard cases of sub-standard fertilizers detected during 2006-07 to 2008-09, even preliminary reports were pending, defeating the very purpose of quality testing. • The sampling covered mostly retail dealers and the samples taken were those of straight fertilizers of reputed manufacturers. Samples from mixing units/mixtures/wholesale dealers were seldom taken. For example, all the 60 samples drawn during 2006-07 to 2008-09 in Alathur block and 47 samples out of 53 in Kanjirappally block were from retail dealers only. • A scrutiny of the register maintained by the Agriculture Department for recording the details of non standard fertilizer samples had revealed that 92 per cent of the total non-standard inorganic fertilizer samples for the years 2007-08 and 2008-09 were mixtures.
12.	Madhya Pradesh	• In the two laboratories i.e. Bhopal and Indore, 5 posts of technical staff were found to be vacant. There was shortfall of 24 to 66 per cent in testing of samples vis-à-vis capacity • 2637 MT of MAP of IPL, (received on 21.11.07) was declared non-standard, however, 947 MT had already been sold to the farmers and the remaining 1690 MT of MAP was still lying in the godowns.

Sl. No.	Name of State	Irregularities/short comings in the quality control labs
		• 1097.82 MT non-standard fertilizers were still lying in the godowns since last 1 to 5 years.
13.	Maharashtra	• It was noticed that the DDF had proposed deduction of 1671.80 MT only against 7168.48 MT of non- standard fertilizers of P&K while sending Proforma'B'. • There was a shortfall ranging from 26 per cent to 38 per cent in the analysis of samples in the selected laboratories during 2006-08
14.	Manipur	• There was no testing laboratory in the State, nor was any sample drawn by the CFQCTI, Faridabad or its regional laboratories.
15.	Meghalaya	• 14 samples were drawn by the District Agriculture Officers/ District Horticulture Officers of East Khasi Hills, West Khasi Hills and Jaintia Hills Districts during 2007-08 and 2008-09 of which 4 samples of 2007-08 and 3 samples of 2008-09 were declared as non-standard by the quality control laboratories.
16.	Nagaland	• Neither was there any quality control checking laboratory in the State, nor were samples of fertilizers collected from the distribution chain of dealers to end user during the last three years for quality checks.
17.	Orissa	• There was shortfall in the receipt of samples vis-à-vis the targets in two quality control laboratories at Bhubhaneswar and Sambalpur ranging from 9 to 22 per cent during 2006-09. • Recovery of subsidy of Rs.26.87 lakh was not made on the non-standard fertilizers sold to farmers.
18.	Punjab	• Non-standard 1250 MT of DAP and 234.20 MT of MAP was sold to farmers.
19.	Rajasthan	• Three test-checked Quality Control Laboratories had 18 analysts as per their sanctioned strength, but 4 analysts did not have the prescribed training from the Central Fertilizer Quality Control and Training Institute, Faridabad. • There was shortfall in the analysis of samples ranging from 11 to 38 per cent, vis-à-vis the capacity of the laboratories during 2006-09. • Out of 420 cases of non-standard samples, details of action taken for recovery of subsidy in 253 cases were not provided to audit.

Sl. No.	Name of State	Irregularities/short comings in the quality control labs
20.	Tamil Nadu	• In the 14 FCLs, only 26 posts out of 44 posts of analytical staff were filled up. • In different blocks of 3 test-checked districts of Kancheepuram, Dharmapuri, Thanjavaur, the shortfall in drawal of samples for testing ranged from 34 to 75 per cent during 2008-09. • The shortfall in receipt of samples in FCLs ranged from three per cent (Tiruchirappalli 2007-08) to 52 per cent (Kumbakonam 2008-09). • 2269.58 MT of straight/complex fertilizers declared as non-standard (DAP, NPK, MOP and SSP) was not seized during 2006-09.
21.	Tripura	• No samples were collected for testing from private wholesaler and retail dealers for fertilizer transported by road.
22.	Uttar Pradesh	• Targets of samples of fertilizer to be analyzed during 2006-07 to 2008-09 were not achieved and shortfall ranged from 24 to 37 per cent
23.	Uttarakhand	• Shortfall in the drawal of samples ranged between 31 per cent and 85 per cent during 2006-09. • In 13 cases, recoveries amounting to Rs 16.03 lakh on account of quantities declared non standard were not proposed, while issuing Proforma 'B' during 2006-09.
24.	West Bengal	• Against the sanctioned posts of 43 posts in the three labs, only 34 posts had been filled. • There were shortages of equipments in all the laboratories.

By contrast we noticed that in Andhra Pradesh, in order to maintain secrecy and transparency during the process of fertilizer analysis a Fertilizer Coding Centre (FCC) was established at Hyderabad during 2004. The FCC acts as a centralized coding centre for referring the samples to any one of the existing fertilizer analysis laboratories at random. The samples drawn by the Fertilizer Inspectors received at this Centre are assigned a secret code number, and referred to any of the existing five Laboratories. After analysis, the result sheet is sent by the Assistant Director of Agriculture (ADA), FCO Lab to the ADA, FCC who in turn decodes and incorporates the other particulars of the sample in the analysis report and sends the final report to the Fertilizer Inspector from whom the sample was received.

8 - Summary of Results of Dealer and Farmer Survey

8.1 Dealer Survey results

A survey of 1092 dealers was conducted by field audit teams responses from these dealers are summarised below; State-specific analysis is given in the respective State chapters.

Sl.No.	Questions	Response		
		Yes	No	Others
1.	Are you getting the required quantity and type of Fertilizer from your source (1st stocking point or wholesaler) in time?	449 (41%)	625 (57%)	18 (2%)
As many as 57 per cent of the dealers surveyed stated that they were not getting the required quantity and type of fertilizers in time.				
		No Limit	Limited	Others
2.	Do you give fertilizers to the farmers without any limit or is there some limit like 1 bag of DAP per acre.	816 (75%)	236 (22%)	40 (3%)
75 per cent of the surveyed dealers indicated that they were giving fertilizers to the farmers without any limits.				
		Yes	No	Others
3.	Are you facing any problems in transportation etc. in lifting your requirement of Fertilizers?	401 (37%)	676` (62%)	15 (1%)
37 per cent of the surveyed dealers indicated that they were facing problems in transportation in lifting their requirement of fertilizers. Separately, field audit scrutiny indicated that in many cases, retailers were recovering the additional costs incurred in transportation by charging prices higher than the stipulated MRPs.				
		Yes	No	Others
4.	Do you have adequate credit facilities so as to lift your requirement of Fertilizers?	595 (54%)	439 (40%)	58 (6%)
54 per cent of the surveyed dealers indicated that they had adequate credit facilities for lifting their requirement of fertilizers.				
		Yes	No	Others
5.	Are you able to supply Fertilizers as per demand to the farmers on time? What are your problems?	555 (51%)	512 (47%)	25 (2%)

Only 51 per cent of the surveyed dealers indicated that they were able to supply fertilizers as per demand to the farmers on time, while 47 per cent indicated that they were unable to do so.

		Yes	No	Others
6.	Are farmers demanding small quantity bags of Fertilizers from you?	442 (40%)	626 (57%)	24 (3%)

Only 40 per cent of the surveyed dealers indicated that farmers were demanding small quantity bags of fertilizers. This is, however, in direct contradiction to the responses from surveyed farmers, where a substantial majority (55 per cent) expressed their need for small quantity bags of fertilizers.

		Yes	No	Others
7.	Have any samples been selected in the last 3 years from your stock for Fertilizer quality testing by the Agriculture Department? What were the results?	570 (52%)	442 (40%)	80 (8%)

40 per cent of the surveyed dealers indicated that samples had not been selected in any of the last three years from their stock for fertilizer quality testing, thus clearly showing the inadequacy of arrangements for fertilizer quality testing.

8.2 Farmer survey results

A survey of 5498 farmers was conducted by field audit teams. Responses from these are summarised below; State-specific analysis is given in the relevant State chapters:-

Questions		Response			
		Cooperative	Dealer	Both	Others
1.	Are you buying Fertilizers from the authorised dealer/ co-operative society?	2484 (45%)	1550 (28%)	1121 (20%)	343 (7%)

45 per cent of the surveyed farmers stated that they were purchasing fertilizers from co-operative societies, 28 per cent from private dealers, and 20 per cent from both sources.

		Yes	No	Other
2.	Are the quantities of fertilizers sold to you rationed? E.g., 5 bags DAP/ration card, 1 bag of DAP per acre etc. Please indicate.	706 (13%)	4559 (83%)	233 (4%)

Only 13 per cent of the surveyed farmers indicated that the quantities of fertilizers sold to them were rationed.

	MRP	Higher than MRP	No comments

3.	What are the prices at which you have bought Fertilizers (a) urea (b) DAP © MOP (d) other Fertilizers in the last 1 or 2 seasons?	2268 (41%)	2496 (45%)	734 (14%)
		Yes	No	Others
4.	Did the dealer give you a receipt for your sales?	2794 (51%)	2559 (46%)	145 (3%)
		Yes	No	Others
5.	Do you know the maximum prices for Fertilizers fixed by Government?	2362 (43%)	3107 (56%)	29 (1%)

As many as 45 per cent of the surveyed farmers indicated that they had bought fertilizers at prices higher than the MRPs, while 56 per cent indicated they did not know the MRPs for fertilizers fixed by Government (the MRP list was shown by the audit team to the farmers). Further, 46 per cent of the surveyed farmers indicated that the dealers did not give receipts for the sales.

		Yes	No	Others
6.	Do you need Fertilizers in small quantity bags?	3039 (55%)	2408 (44%)	51 (1%)

59 per cent of the farmers faced problems for getting their full requirement of fertilizers in a timely fashion, while 55 per cent of the surveyed farmers expressed their need for fertilizers in small quantity bags. Also, 16 per cent of the surveyed farmers indicated that the dealers forced them to buy other items along with the fertilizers.

		Yes	No	Others
7.	Did you get your soil tested, to find out the exact requirement of different types of Fertilizers for your land, so that you get the maximum yield of crops?	1179 (21%)	4151 (76%)	168 (3%)

76 per cent of the surveyed farmers had not got their soil tested for scientifically ascertaining the requirement of fertilizers.

		Yes	No	Others
8.	Did you face any problems in getting your full requirement of fertilizers in time for the season?	3240 (59%)	2175 (39%)	83 (2%)
		Yes	No	Others
9.	Does the dealer force you to buy any other item along with the Fertilizers that you want?	872 (16%)	4515 (82%)	111 (2%)
		Yes	No	Others
10.	Do you have enough money to buy your full requirement of Fertilizers? What are your	2631	2833	34

	problems?	(48%)	(51%)	(1%)
51 per cent of the surveyed farmers indicated that they did not have enough money to buy their full requirement of fertilizers; this indicated a serious shortage of funds, which is further explained by their demand for small quantity bags.				
		Yes	No	Others
11.	Overall, are you satisfied with the supply of Fertilizers to you?	2964 (54%)	2383 (43%)	151 (3%)
		Yes	No	Others
12.	Have you faced any other problems in supply of Fertilizers?	2702 (49%)	2632 (48%)	164 (3%)
54 per cent of the farmers stated that they were satisfied with the supply of fertilizers. However, 49 per cent indicated that they had faced other problems in supply.				

9 State Specific Findings

9.1 Andhra Pradesh

9.1.1 Background

Andhra Pradesh has 23 districts covering three geographical regions viz. Coastal Andhra, Rayalaseema and Telangana. In Andhra Pradesh out of the gross cropped area of 144.89 lakh hectare covering agriculture, horticulture and plantations, the area covered under agriculture (field crops) is 120.44 lakh ha. The major crops sown in the state are rice, pulses, oilseeds; cotton and chillies etc.

Four districts (Guntur, Kadapa, Karimnagar and Warangal) and eight mandals (Amaravathi, Narasaraopet, Duvvur, Proddutur, Sircilla, Jagityal, Jangoan and Mahabubabad) i.e. two mandals in each district were selected for the detailed audit scrutiny.

9.1.2 Audit Findings

9.1.2.1 Unrealistic assessment of fertilizer

- Soil testing is necessary in order to ascertain the availability of primary and secondary nutrients in the soil so as to provide specific recommendations for the requirement of different fertilizers. However, out of the 120.44 lakh ha of land holding, the Department of Agriculture was conducting soil tests for approximately 4.60 lakh (4% only) land holdings per year only. At this rate, it would take about 26 years to get all the land holdings tested. Lack of soil assessment would adversely affect the yield.

- The assessment of requirement of fertilizers was not based on recommendations of panchayat samithis, but was done simply by adding 10 to 15 per cent to the highest consumption during the preceding five years. No procedures for assessment of fertilizer requirement were prescribed by the Commissioner and Director of Agriculture to be followed by the district / mandal level agriculture officers.

- In Guntur district, during 2008-09 (Kharif and Rabi seasons), due to shift in crop pattern[15] of major crops like maize, cotton and chillies, there was a sudden increase in fertilizer demand, which was not taken into consideration by the Department of Agriculture.

- In actual practice, farmers were using more than 4 to 6 times than the recommended doses, especially for commercial crops. This further confirms that the projection of requirement was neither scientific nor realistic.

9.1.2.2 Availability of Fertilizer including buffer stock

- 27000 MT of DAP was to be maintained as per the instructions of DoF dated 28.7.2008 during 2006-09. But no buffer stock of DAP was maintained upto September 2008 i.e., Kharif 2008.

[15]During 2008-09 paddy, 56233 ha. Chillies 5808 ha. Maize, 60201 ha and cotton 15902 ha were cultivated in more areas than normally cultivated.

- In Guntur district during 2008-09 (Kharif and Rabi seasons), adequate quantities of fertilizer were not supplied in time to the farmers which led to agitations by farmers.
- In the remaining three test checked districts (Kadapa, Karimnagar and Warangal) delay in supply of fertilizer was noticed.
- Though the department stated that delay in supply of fertilizer had no adverse effect on agriculture crops but during survey, farmers opined that the late application of fertilizers resulted in lesser yields.

9.1.2.3 Receipt of fertilizer and its distribution

The actual consumption was less than the requirement in all the fertilizer as given below:

Table 9.1- Difference between fertilizer consumption and requirement in Andhra Pradesh

(In Lakh MT)

Year	Product	Requirement	GOI Supply plan	Actual consumption	Area covered (in lakh ha)
2006-07	**DAP**	6.69	6.69	6.04	112.85
	UREA	28.29	28.29	22.29	
	Complex	19.64	19.64	15.45	
	MOP	5.21	5.21	4.03	
2007-08	**DAP**	8.24	8.24	6.94	119.68
	UREA	28.31	27.50	25.12	
	Complex	20.64	20.64	14.09	
	MOP	5.55	5.55	4.49	
2008-09	**DAP**	9.00	8.50	8.87	123.20
	UREA	29.50	27.50	27.33	
	Complex	23.00	18.50	15.81	
	MOP	6.00	5.85	6.03	

In Karimnagar district, to substitute Single Super Phosphate (SSP), the Joint Director of Agriculture had procured 2498.95 MTs of Triple Super Phosphate (TSP) during October 2008. However, only 763.60 MTs (31%) was utilized, and the balance 1635.35 MTs (69%) was lying in the godowns of AP Markfed without utilization, as of June 2009. According to the Department, the farmers were not willing to utilize TSP.

9.1.2.4 Huge variations in requirement, supply plan and actual receipts:

In two test checked districts (Karimnagar and Guntur) out of four, the quantities as per supply plan were less than the requirement projected by the district authorities as detailed below:

Table 9.2- Difference between supply plan and projected requirements in Andhra Pradesh

District	Product	Requirement (MT)	GOI Supply plan (MT)	Actual consumption (MT)	Area covered (in ha)
(1)	(2)	(3)	(4)	(5)	(6)
Guntur	DAP	89852	71580	84130	831838
	UREA	265088	145746	217874	
	Complex	212143	133840	174791	
	MOP	59715	42753	26480	
Karim nagar	DAP	61632	63101	67362	728700
	UREA	193095	254701	230082	
	Complex	86253	81503	81559	
	MOP	62256	45899	42077	
Warangal	DAP	40677	44232	45875	587988
	UREA	203250	177733	185042	
	Complex	93305	65545	62009	
	MOP	35405	46491	40026	
Kadapa	DAP	50661	31811	37158	429450
	Urea	50344	41104	63981	
	Complex	69892	57380	50489	
	MOP	26496	19066	17708	

However, the actual consumption of fertilizer was more than the supply plan. Inadequate supplies of fertilizer led to agitations by the farmers.

9.1.2.5 Transportation of fertilizer upto the Mandal level

The manufacturers were supplying the fertilizers up to the 1st stocking point/rake point only (which are located mostly at district headquarters). The dealers were lifting their quota from these points by incurring additional amount towards transportation and handling charges, which, in turn, were passed on to the farmers.

9.1.2.6 Availability of fertilizers at remote places

Even after issue of instructions by the district collector, Guntur regarding equitable distribution of fertilizers (DAP, MOP and other complex fertilizers) to all the dealers for easy access to farmers in remote areas also, the Mana Gromor Centres of Coromandel Fertilizers Ltd. (CFL) were allotted fertilizers more than the prescribed percentage. Consequently, the farmers were forced to rush to mandal headquarters where Mana Gromor centres exist, incurring additional expenditure on travel and transportation of fertilizer.

9.1.2.7 Consumption of fertilizers

There is no regulation with regard to quantity of fertilizer to be supplied by restricting it to recommended quantity per each crop. As a result, the use of chemical fertilizers is more than the recommended doses which resulted in higher subsidy burden on GOI and adverse effect by way of deterioration of soil fertility.

9.1.2.8 Quality control and testing of laboratories:

- 41 to 57 per cent of the non-standard samples were declared as standard in re-analysis during 2006-09, casting doubts on the reliability and authenticity of the entire samples and the process itself.
- For the years 2006-07 and 2007-08, recoveries recommended in respect of non standard samples along with **Form J** (particulars of fertilizers samples) were not made available to audit by the Commissioner and Director of Agriculture, Andhra Pradesh, Hyderabad.
- For the year 2008-09, out of 329 non standard cases, details of only 74 cases were furnished to Dept. of Fertilizer for recovery.
- Legal action was yet to be initiated in 232 cases of non standard fertilizers as of November 2009. The period of cases ranged from 1 to 5 years as seen from statistical returns. However, case wise details were not made available to audit.

9.1.2.9 Good Practices – Fertilizer Coding Centre

- In order to maintain secrecy during the process of fertilizer analysis a Fertilizer Coding Centre (FCC) was established at Hyderabad during 2004. The FCC acts as a centralized coding centre for referring the samples to any one of the existing fertilizer analysis laboratories at random. The samples drawn by the Fertilizer Inspectors received at this Centre are assigned a secret code number, and referred to any of the existing five Laboratories. After analysis, the result sheet is sent by the Assistant Director of Agriculture (ADA), FCO Lab to the ADA, FCC who in turn decodes and incorporates the

other particulars of the sample in the analysis report and sends the final report to the Fertilizer Inspector from whom the sample was received.

9.1.3 Results of dealer and farmer survey

9.1.3.1 Dealer Survey

Responses from 49 dealers are summarized below:-

Sl.No.	Questions	Response		
		Yes	No	
1.	Are you getting the required quantity and type of fertilizer from your source (1st stocking point or wholesaler) in time?	12	37	
Out of 49 dealers, 37 dealers stated that they were not getting the required quanity of fertilizers and there was delay in supply also.				
		No Limit	Limited	Others
2.	Do you give fertilizers to the farmers without any limiit or is there some limit like 1 bag of DAP per acre?	9	38	2
		Yes	No	
3.	Are you facing any problems in transportation etc. in lifting your requirement of fertilizers?	31	18	
Out of 49, 31 dealers stated that the company should supply the fertilizers directly to the dealer point instead of rake point to avoid extra financial burden on transportation and lifting charges.				
		Yes	No	Others
4.	Do you have adequate credit facilities so as to lift your requirement of fertilizers?	11	37	1
		Yes	No	
5.	Are you able to supply fertilizers as per demand to the farmers on time? What are your problems?	15	34	
34 dealers stated that they were facing problems in supply of fertilizers to farmers in time due to delay in receipt of fertilizers from the firms.				
		Yes	Others	
6.	Are farmers demanding small quantity bags of fertilizers from you?	1	48	
		Yes	No	
7.	Have any samples been selected in the last 3 years from your stock for fertilizer quality testing by the Agriculture Department? What were the results?	39	10	

Recommendations: Dealers

- The companies are not supplying fertilizers on Freight on Lorry (FOL) basis and all the companies' are supplying linked project which may be avoided.
- All fertilizers of all manufacturers may be supplied to all the dealers through AP Markfed.
- Farmers may be educated about proper utilisation of fertilizer and balanced use of bio/organic fertilizer.

9.1.3.2 Farmer Survey

Responses from 242 farmers are summarized below:-

	Questions	Response			
		Cooperative	Dealer	Both	No comments
1.	Are you buying fertilizers from the authorised dealer/ co-operative society?	89	86	65	2
		Yes	No		
2.	Are the quantity of fertilizers sold to you rationed? E.g., 5 bags DAP/ration card, 1 bag of DAP per acre etc. Please indicate.	167	75		
		MRP	Higher than MRP	No comments	
3.	What are the prices at which you have bought fertilizers (a) urea (b) DAP (c) MOP (d) other fertilizers in the last 1 or 2 seasons?	121	110	11	
		Yes	No		
4.	Did the dealer give you a receipt for your sales?	214	28		
		Yes	No		
5.	Do you know the maximum prices for fertilizers fixed by Government?	194	48		
		Yes	No		
6.	Do you have enough money to buy your full requirement of fertilizers?	179	63		
229 farmers stated that they did not have Kisan Credit Cards.					
		Yes	No	Yes, but Report not received	
7.	Did you get your soil tested, to find out the exact requirement of different types of fertilizers for your land, so	91	130	21	

	that you get the maximum yield of crops?		
130 farmers stated that soil was not tested from their land holdings.			
		Yes	No
8.	Did you face any problems in getting your full requirement of fertilizers in time for the season?	99	143
Out of 242 farmers, 97 farmers stated that they faced problems due to non availability of fertilizer in time and in required quantity.			
		Yes	No
9.	Does the dealer force you to buy any other item along with the fertilizers that you want?	41	201
		Yes	No
10.	Do you need fertilizers in small quantity bags?	25	217
		Yes	No
11.	Overall, are you satisfied with the supply of fertilizers to you?	178	64
		Yes	No
12.	Have you faced any other problems in supply of fertilizers?	72	170

9.1.3.3 Results of field visit to fertilizer dealers

Field visit to test-checked fertilizer dealers revealed instances of inadequate supply/ stock of fertilizers, sale of other items along with fertilizers (with the possibility of forced sale), and non-display of fertilizer prices, as revealed by the following photographs:

Inadequate supply of fertilizers-Kadapa district

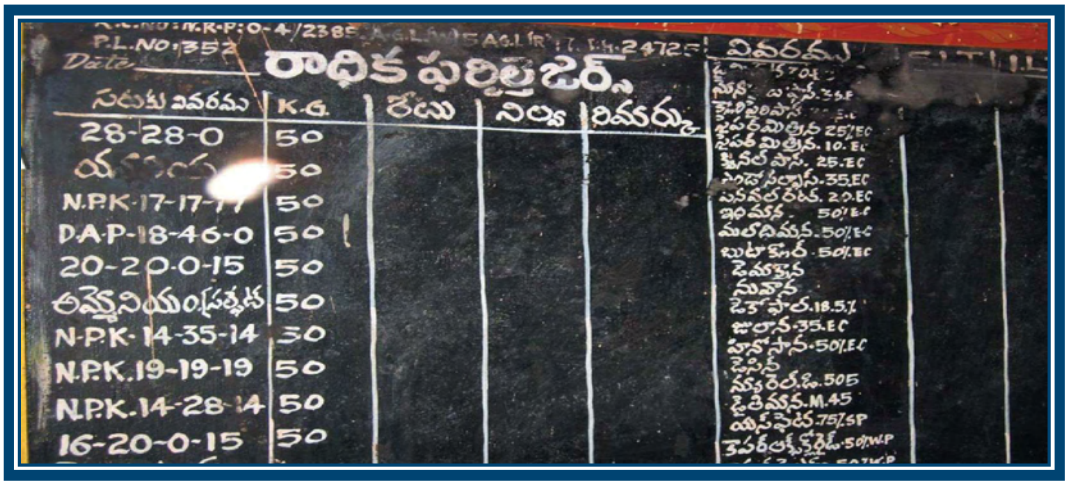
Inadequate supply of fertilizers - Karimnagar district

Inadequate supply of fertilizer, Jangaon block, Warangal district (Sl. No.5 dealer survey)

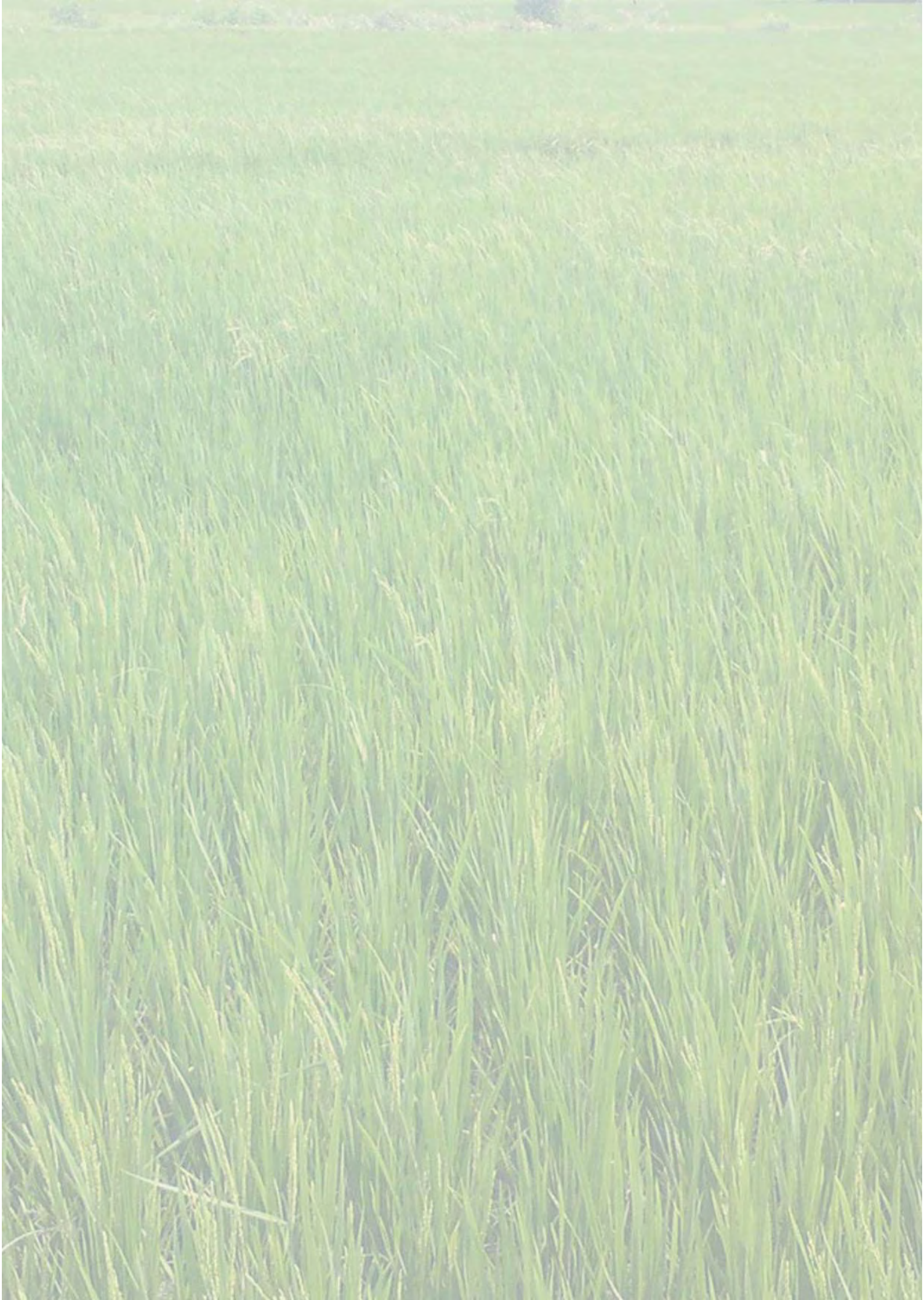
Sale of other items along with fertilizers –Amaravati District

Sale of other items along with fertilizers -Jagtial Block – Karimnagar District (Item No. 9 of farmer survey)

Sale of other items along with fertilizers- Jagtial Block, Karimnagar district (Item No. 9 of farmer survey)



Rates were not displayed on the board – Narasaraopet block, Guntur District



9.2 Assam

9.2.1 Background

Assam has 27 districts with a gross cropped area of 31.14 lakh hectare. Gross cropped area irrigated in the State decreased from 1.26 lakh hectare in 2006-07 to just 0.89 lakh hectares in 2007-08. Only 3.23 per cent of the croped area was irrigated in the State.

Records of the Director of Agriculture, four District Agriculture Officers (DAOs), five manufacturers of fertilizer, and 12 dealers and 60 farmers in each of the four sampled districts (Kamrup, Jorhat, Dhubri and Hailakandi) were selected for detailed audit scrutiny.

9.2.2 Audit findings

9.2.2.1 Assessment of fertilizer requirements

- The requirement projected was based on previous year's consumption.
- No norms/standards had been used for calculating the requirement of fertilizers based on the type of crop, irrigated/non-irrigated area, soil health and other local factors.
- During 2006-09, the gap between requirement projected in Zonal Input Conference and the actual sales ranged between 6 and 90 per cent in respect of DAP, MOP, SSP and Urea as per details given in the Table below:

Table 9.3 – Gap between requirement and actual sales in Assam

Manufacturer	Name of Product	Requirement (MT)	Availability/ consumption (MT)	Procurement / Quantity sold (MT)	Gap in MT (%) (Col. 3 – 5)	Excess (+)/Less (-) In MT (%) (Col. 4 – 5)
1	**2**	**3**	**4**	**5**	**6**	7
2006-07						
IPL,BVFCL, TCL, IFFCO, Teesta, PPL	DAP	35000	70544	20611	14389 (41)	**(+)49933 (71)**
	MOP	70000	82865	41306	28694 (41)	**(+)41559 (50)**
	SSP	38000	109675	15570	22430 (59)	**(+)94105 (86)**
	Urea	205000	194405	191474	13526 (7)	**(+)2931 (2)**
2007-08						
IPL, BVFCL, TCL IFFCO, Teesta	DAP	65000	74829	9530	55470 (85)	**(+)65299(87)**
	MOP	80000	92434	40408	39592 (49)	**(+)52026(56)**
	SSP	75000	113234	14887	60113 (80)	**(+)98347(87)**
	Urea	230000	195414	193343	36657 (16)	**(+)2071(01)**
2008-09						
IPL, BVFCL, TCL, IFFCO, Teesta	DAP	103000	68929	10446	92554 (90)	**(+)58483(85)**
	MOP	106000	95270	94301	11699 (11)	**(+)969 (01)**
	SSP	110000	94780	23464	86536(79)	**(+)71316 (75)**
	Urea	240000	223477	224589	15411 (6)	**(-) 1112(01)**
Total		**1357000**	**14,15,856**	**8,79,929**	**477071**	**(+)535927**

- There was excess availability of 5,35,927 MT of different categories of fertilizer as compared to quantity procured during 2006-09 which ranged between 1 and 87 percent.
- As per table the requirement for the 3 years was 13,57,000 MT where the availability (ie at the Ist stocking point) was 14,15,856 MT. Against this the quantity sold was only 8,79,929 MT. Hence there was an excess of 5,35,927 MT of different categories of fertilizer at the end of 2008-09.
- There was substantial mismatch between requirement and supply. Field visits also revealed excess stocking of fertilizer due to this mismatch, as indicated photographically below:

Excess stock of fertilizer at First Stocking point of ASWC, Teesta Beltola, Agro Industries Ltd., Guwahati

Excess stock of fertilizer First stocking point of BVFCL (Gopi Store) Dubri district

9.2.2.2 Distribution and Sale

- In the four selected districts (Kamrup, Dhubri, Jorhat and Hailakandi) less DAP was sold than the quantity allocated by 59 per cent, 99 per cent, 98 per cent and 95 per cent respectively. In Kamrup and Jorhat, urea was sold in excess of the allocation by 53 per cent and 26 per cent respectively. And in Dhubri and Hailakandi the actual sale was less than the allocation by 54 per cent and 59 per cent.
- In Kamrup, actual sale of MOP was 73 per cent more than allocation and in, Dhubri, Jorhat and Hailakandi, the actual sale was less than allocation by 73 per cent, 23 per cent and 100 per cent respectively.
- From the above, it is clearly evident that equitable distribution of fertilizers among districts could not be achieved by the Department due to lack of proper assessment of requirement monitoring of sales of fertilizers by the manufacturers/importers.

9.2.2.3 Short accountal of Fertilizers

Scrutiny of records of selected 48 dealers (22 whole sale and 26 retail sale) of 4 sampled districts with the records of manufacturers revealed that 5776.70 MT fertilizers (5116.70 MT Urea, 200.00 MT SSP and 460.00 MT DAP) valued Rs. 281.70 lakh shown as sold to seven whole sale dealers by the manufacturers were not received by the dealers during May 2008 to December 2008 as depicted below:

Table 9.4- Distribution of Fertilizer from 1st stockist point to Dealers for the year 2008-09

(Quantity in MT)

Name of District	Name of Dealers	Name of Manufacturers	Name of Product	Quantity sold by Manufac-turers	Quantity received by dealers	Difference Excess(+) Less (-)	Value (Rs. in lakh)
Hailakandi	Manikuddin Sodial	BVFCL	Urea	515	415	100	**5**
		IFFCO (NAFED)	Urea	185	100	85	**4**
	Azizur Rahman Barbhuyan	BVFCL	Urea	57.9	0	58	**3**
		IFFCO (NAFED)	Urea	20	0	20	**1**
	Abdul Matin Barbhuyan	BVFCL	Urea	240	203	37	**2**
		IFFCO (NAFED)	Urea	60	0	60	**3**
Dhubri	Mahamaya Agro Service	NAFED (IFFCO)	Urea	80	0	80	**4**
		NARAMAC(IFFCO)	Urea	705	0	705	**32**
Jorhat	Krishi Sarothi (Nitul Baruah)	BVFCL/NEFED	Urea	5984	4349	1635	**76**
	NAFED, Jorhat	IFFCO	Urea	1536	916	619	**21**
Kamrup	NAFED, Kamrup	IFFCO	Urea	3272	2195	1077	**52**
		IPL	Urea	454	182	272	**13**
	NEREMAC	IFFCO	Urea	2601	2233	368.55	**18**
		Total (Urea)		**15710**	**10593**	5116.7	231
Hailakandi	Manikuddin Sodial	NAFED (Ghy)	DAP	10	0	10	**1**
Kamrup	NEREMAC	IFFCO	DAP	555	105	450	**43**
		Total (DAP)		**565**	**105**	460	44
Dhubri	Mahamaya Agro Service	Teesta Agro Industries Ltd.	SSP	200	0	200	**7**
		Total (SSP)		**200**	**0**	200	**7**
		Grand Total		**16475**	**10698**	**5776.70**	**282**

Thus, manufacturers claimed subsidy without supplying 5776.70 MT fertilizers to the dealers. Also, the chances of black marketing cannot be ruled out.

9.2.2.4 Delay /Non -submission of Proforma A& B

- Proforma 'A' containing details of sales invoices and other supportive documents has to be submitted by the manufacturers/importers to the State Government within a period of 60 days of the calendar month of sales. There were delays, ranging between 13 and 105 days, beyond the prescribed period of 60 days in submission of Proforma 'A' by M/s Indian Potash Limited during 2007-08.

- Delay ranging between 27 and 174 days, beyond the prescribed period of 90 days was noticed in submission of Proforma 'B' by the Directorate of Agriculture to Department of Fertilizers in respect of M/s IPL during 2007-08.
- Further, in 2008-09, delays ranging between 15-252 days were noticed in submission of Proforma 'B' by Department in respect of M/s BVFCL, M/s IPL and Teesta Agro Industries Ltd.

As Proforma 'A' is the basic document for the certification of sale by the State Government for payment in the case of de-controlled fertilizers, delay in sending Proforma 'A' would consequently result in delay of the certification of sales through Proforma'B'. This fact was admitted by the State Agriculture Department.

9.2.2.5 Non-certification/Non-authentication of subsidy claims by the statutory auditor/authority of the company.

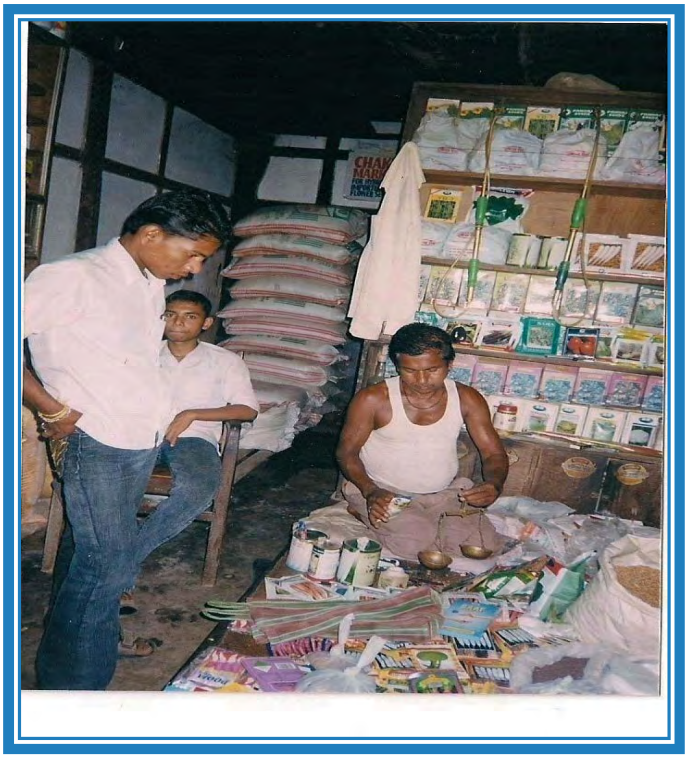
- Subsidy claims in Proforma 'A' for 57274.30 MT amounting to Rs. 118.67 crore of M/s IPL for the month of July 2008 to March 2009 did not contain signature of the Chief Executive or Authorized Signatory of the company, and were also not certified by the Statutory Auditor of the company during 2008-09.
- The claim of IFFCO in Proforma 'B' for the sale of 385 MT of DAP, involving subsidy of Rs. 21.61 Lakh, in June 2006 to STATFED was forwarded by the Director of Agriculture to the Department of Fertilizers without obtaining the lifting certificate from the buyer due to the closure of the organization (STATFED).

9.2.2.6 Buffer Stock

- Although IPL was required to maintain the prescribed buffer stock of 5000 MT of MOP during 2006-07, 5000 MT each of DAP and MOP during 2007-08 and 2008-09, yet it maintained the buffer stock of MOP 5000 MT only in March 2009 during the entire period of 2006-09.

9.2.2.7 Dealers without valid license

- Six retail dealers were carrying out the fertilizer business without valid license from the state agriculture department, while another four could not produce a copy of their license to the audit.



Audit Team visiting the premises of a retail dealer (Gopendra Mohan Roy), Lala block, Hailakandi District with an expired license

9.2.2.8 Quality Control

9.2.2.8.1 Shortfalls in testing of fertilizers by the Quality control laboratories

- The fertilizer quality control laboratory at Guwahati did not achieve targets for testing of fertilizers during 2006-07 to 2008-09, as per details given below. The shortfall ranged from 59 to 93 percent.

Table 9.5 – Shortfall in testing of fertilizer samples in Assam

Year	Target	No. of samples received for test		Total	Shortfall (Per cent)	No. of Sub-standard Samples
		From Assam	From Other States			
2006-07	500	10	24	34	466(93)	6
2007-08	500	137	27	164	336(67)	-
2008-09	500	162	44	206	294(59)	2

9.2.2.8.2 Improper furnishing of samples data

- Five samples were forwarded with a memorandum in Form 'J' (particulars of fertiliser samples) instead of Form 'K' (Memorandum to accompany fertilizer sample for analysis) by the DAO Jorhat. Samples were received after a delay ranging between 6 to 20 days.

- Samples were collected from lot of very small quantity of fertilizer which ranged between 0.03 MT to 0.20 MT.
- In respect of two cases, source of collection of quantity in the lot was not mentioned in Form 'J'.

9.2.2.9 Absence of control over dealers

- Checking of records of the manufacturers and wholesale dealers of four selected districts, it was seen that during May 2008 to December 2008, the dealers had purchased 32158.866 MT of various types of controlled and decontrolled fertilizers and sold 30361.486 MT fertilizers to retail dealers. But no wholesale dealer except NAFED, NERAMAC & Agri. Fertilizer Marketing Co-op Society Ltd. of Kamrup district could furnish details of sale of fertilizer to retail dealers. One retail dealer (Krishi Mahal, Dhubri) maintained only receipts of fertilizer without any details of sale.
- The distribution of fertilizers from first stockist point to retail dealers could not be checked as systematic records showing receipt and sale to farmers were not kept by all retail dealers. Thus, the veracity of sale to farmers by the retail dealers of fertilizer could not be verified. The probability of black marketing of fertilizer could not be ruled out.

9.2.2.10 Monitoring

- Director of Agriculture and the District/Block level officers were responsible for monitoring availability of fertilizers and checking the quality of fertilizer, to verify stock at first stocking points as well as dealers' records and also to collect samples for testing quality of fertilizers supplied.
- During scrutiny, no such monitoring reports were available for verification.
- Scrutiny of records of laboratory at Guwahati revealed that target set for testing the samples were not achieved due to non-collection of samples by the field level officers.

9.2.3 Results of dealer and farmer survey

9.2.3.1 Dealer Survey

Responses from 48 dealers are summarized below:-

Sl.No.	Questions	Response		
		Yes	No	Others
1.	Are you getting the required quantity and type of fertilizer from your source (1st stocking point or wholesaler) in time?	16	31	1
30 dealers stated that they were not getting required quantity of fertilizer in time.				

		No Limit	Limited	Others
2.	Do you give fertilizers to the farmers without any limiit or is there some limit like 1 bag of DAP per acre.	35	6	7
		Yes	No	
3.	Are you facing any problems in transportation etc. in lifting your requirement of fertilizers?	18	30	
		Yes	No	
4.	Do you have adequate credit facilities so as to lift your requirement of fertilizers?	10	38	
		Yes	No	Others
5.	Are you able to supply fertilizers as per demand to the farmers on time? What are your problems?	8	37	3
		Yes	No	Others
6.	Are farmers demanding small quantity bags of fertilizers from you?	26	18	4
		Yes	No	Yes, report not received
7.	Have any samples been selected in the last 3 years from your stock for fertilizer quality testing by the Agriculture Department? What were the results?	11	36	1

9.2.3.2 Farmer Survey

Responses from 240 farmers are summarised below:-

Questions		Response			
		Cooperative	Dealer	Both	Others
1.	Are you buying fertilizers from the authorised dealer/ co-operative society?	2	194	2	42
		Yes	No	Others	
2.	Are the quantity of fertilizers sold to you rationed? E.g., 5 bags DAP/ration card, 1 bag of DAP per acre etc. Please indicate.	4	232	4	
		MRP	Others		
3.	What are the prices at which you have bought fertilizers (a) urea (b) DAP © MOP (d) other fertilizers in the last 1 or 2 seasons?	0	240		
		Yes	No		
4.	Did the dealer give you a receipt for your sales?	12	228		
		Yes	No	No comments	

5.	Do you know the maximum prices for fertilizers fixed by Government?	6	233	1
		Yes	No	Others
6.	Do you have enough money to buy your full requirement of fertilizers? What are your problems?	27	211	2
		Yes	No	Others
7.	Did you get your soil tested, to find out the exact requirement of different types of fertilizers for your land, so that you get the maximum yield of crops?	23	216	1
		Yes	No	
8.	Did you face any problems in getting your full requirement of fertilizers in time for the season?	174	66	
		Yes	No	No comments
9.	Does the dealer force you to buy any other item along with the fertilizers that you want?	36	196	8
		Yes	No	
10.	Do you need fertilizers in small quantity bags?	220	20	
		Yes	No	Others
11.	Overall, are you satisfied with the supply of fertilizers to you?	61	165	14
		Yes	No	No comments
12.	Have you faced any other problems in supply of fertilizers?	168	64	8

From the above survey responses, it is evident that out of 240 farmers, 194 farmers were buying the fertilizer from private dealers. They were all paying higher prices than MRP. 228 farmers did not get receipts, 216 stated that no soil tests were conducted, 174 stated that they were not getting the required quantity and 221 farmers were in the favour of small quantity bags of fertilizer.

9.3 Bihar

9.3.1 Background

Bihar has 38 districts; total geographical area is 93.6 Lakh hectares. The gross cropped area is 75.82 lakh hectares. Major crops grown are paddy, wheat, lentils, sugarcane, and jute. Six districts and 12 blocks in Bhagalpur (Goradih, Sultanganj), Chapra (Chapra and Nagra), Darbhanga (Baheriand Manigachi), Gaya (Gayasadar, Khijar Sarai), Motihari (Raxaul, Dhaka) and Purnea (Baisi and Srinagar) were selected for detailed audit scrutiny.

9.3.2 Audit Findings

9.3.2.1 Assessment of fertilizer

- No norms were laid down for calculating the requirement of fertilizer based on type of crop, irrigated/ non-irrigated area, soil health and other local factors.
- The requirement of various types of fertilizers was projected at the Directorate level only considering the previous years' consumption data (without input from district and lower levels) and not based on the irrigated/non-irrigated area, soil health and other local factors. This requirement was generally based on adding 10 to 20 per cent tothe highest consumption of the last 3 years.
- Even the previous year's consumption data was not realistic as break up of consumption data at the district level was not available.
- The assessed requirement of fertilizer was not properly broken down Block wise. The supply at district level was broken down block wise not on the basis of cultivable land, but on the basis of number of Panchayats in the block without any documentation.
- Consumption was based on the basis of supply made by the fertilizer company.

9.3.2.2 Availability of fertilizer

- Farmers/ dealers complained that there were shortages and they had problem in procuring fertilizer during crop period. However, no norms were fixed to regulate the sale of fertilizer.
- Farmers also complained that they had to pay much higher rates for purchase of fertilizer, and were not getting the required quantity, which affected the crop adversely.
- Our field audit revealed shortage of fertilizer during the crop period in several areas as given below:

Non-availability of fertilizers at Adarsh Madhuban KSSSS, Madhuban, Motihari District

Non-availability of fertilizers at Shekhar Fert., Bheldi, Parsa, Chapra District

Non-availability of fertilizers at Bajrang Traders, Kumari Devi Chok, Motihari District

Non-availability of fertilizers at Aman Krishi Kendra, Goradih Block, Bhagalpur District

9.3.2.3 Verification of stock

- Verification of sales was never done in the four selected districts.
- Certification was done and bills were verified on the basis of quantities entered in the stock registers of the buffer stock. However no physical verification of stock was conducted.

- The stipulated procedure for verification of sales beyond Ist stock point upto farmers level were not followed.
- No certification was done of the fertilizers received by whole sale from rake points in other districts.
- There were discrepancies between the quantity as per despatch (101126.10 MT) data of the companies at the district level and quantity of fertilizers received (79932.60 MT) by the first stocking point dealers in the test checked districts during the period April 2008 to December 2008, the difference being 21193.45 MT of fertilizer involving subsidy of Rs.14.60 crore as given below:

Table 9.6 – Discrepancies in Despatch Data in Bihar

Sl.No	Name of Manufacturer	Product	Qty despatched (MT)	Qty received (MT)	Difference (MT)	Amount (Rs. in Crore)
1.	KRIBHCO, Hazira	Urea	1373.60	1151.40	222.20	0.12
2.	Indogulf, Jagdishpur(IGFL)	Urea	36543	24521.20	12021.80	6.24
3.	RCF, Thal	Urea	15284.8	13408.35	1876.45	1.87
		MOP	1321.80	767.20	554.60	1.13
6.	KSFL	Urea	18319.5	14611.85	3707.65	3.10
7.	Nagarjuna Fertilizer Chemicals Ltd.,	Urea	5144.4	3825.6	1318.8	0.32
8.	TCL	Urea	5185.7	4356.6	829.1	0.54
9.	IPL	DAP	6557.7	6526.1	31.6	0.10
		Urea	10461.80	10332.35	129.45	0.15
10.	PPL	MOP	933.75	431.95	501.80	1.03
	Total		**101126.05**	**79932.6**	**21193.45**	**14.60**

9.3.2.4 Buffer Stock

- 15000 MT DAP (2006-07), 30000 MT DAP for 2007-09, 9000 MT MOP for 2006-09 and 50000 MT Urea also was to be maintained as buffer stock, but was not always available which resulted in crisis of fertilizers at peak crop season.

9.3.2.5 Quality control

- For 38 districts, there was only one quality control laboratory in Patna. Shortage of laboratories resulted in inadequate testing facilities.
- Out of 18640 samples to be drawn in the state, only 1688 (9.05 per cent) samples were drawn, 1578 tested and 110 (6.5 per cent) left without analysis.

- In the test-checked districts, the shortage in the samples actually drawn ranged between 36 and 99 per cent in 2006-07, 58 to 99 per cent in 2007-08 and 33 to 99 per cent in 2008-09.
- During 2007-08 , out of 6.22 lakh MT of various kinds of fertilizers received in the test checked districts, only 416 samples were taken against 6217 required for testing and 17 were declared as non standard.
- Further in 2008-09 out of 7.46 lakh MT of all fertilizers received, only 464 samples were taken against 7464 required for testing and 10 were declared as non standard.
- In the test-checked districts, no samples were drawn from retail dealers/ co-operative societies, or Central Storage Scheme (CSS) warehouse functioning as buffer of the fertilizer company.
- In the test-checked district, fertilizer inspectors were not posted, and the District Agriculture Officers/ Block Agriculture Officers were collecting the samples.
- The test results of fertilizers declared as non-standard were not intimated to the dealers. Further, by the time samples were declared as non-standard, the stock had already been sold.
- 23.25 MT of sub-standard (SSP) fertilizer was lying in the godown at Purnea since November 2008.

9.3.2.6 Soil testing

- Shortfall in soil testing vis-à-vis targets ranged between 28 and 36 per cent during 2006-07 to 2008-09.

9.3.3 Results of dealer and farmer survey

9.3.3.1 Dealer Survey:

Responses from 70 dealers are summarized below:-

Sl.No.	Questions	Response		
		Yes	No	
1.	Are you getting the required quantity and type of fertilizer from your source (1st stocking point or wholesaler) in time?	24	46	
		No Limit	Limited	Others
2.	Do you give fertilizers to the farmers without any limiit or is there some limit like 1 bag of DAP per acre.	64	3	3
		Yes	No	
3.	Are you facing any problems in transportation etc. in lifting your requirement of fertilizers?	45	25	

		Yes	No
4.	Do you have adequate credit facilities so as to lift your requirement of fertilizers?	14	56
		Yes	No
5.	Are you able to supply fertilizers as per demand to the farmers on time? What are your problems?	20	50
		Yes	No
6.	Are farmers demanding small quantity bags of fertilizers from you?	54	16
		Yes	No
7.	Have any samples been selected in the last 3 years from your stock for fertilizer quality testing by the Agriculture Department? What were the results?	8	62

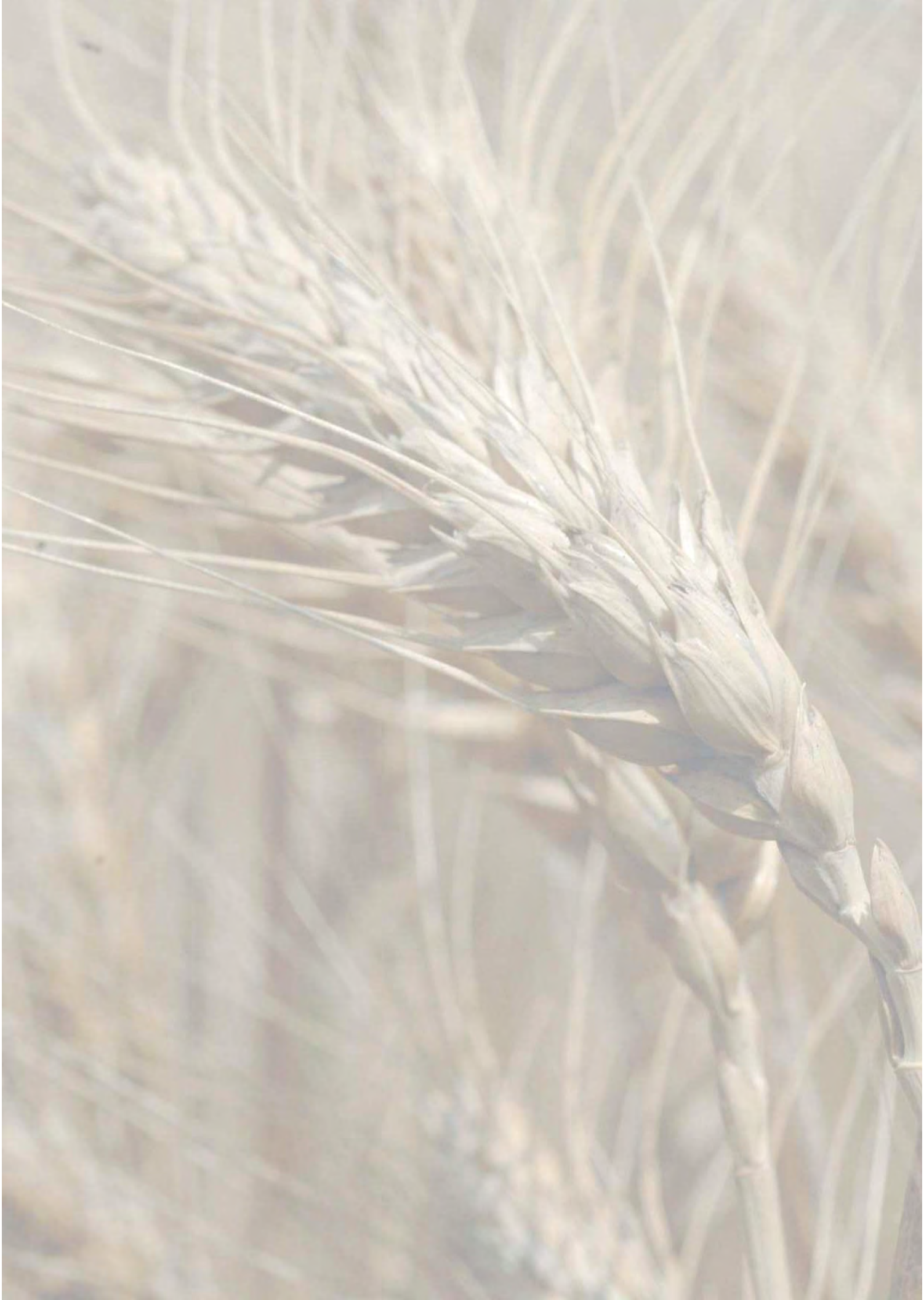
9.3.3.2 Farmer Survey:

Responses from 360 farmers are summarized below:-

Sl.No.	Questions	Response			
		Cooperative	Dealer	Both	Others
1.	Are you buying fertilizers from the authorised dealer/ co-operative society?	5	70	31	254*
		Yes	No		
2.	Are the quantities of fertilizers sold to you rationed? E.g., 5 bags DAP/ration card, 1 bag of DAP per acre etc. Please indicate.	0	360		
		MRP	Higher than MRP	No Comments	
3.	What are the prices at which you have bought fertilizers (a) urea (b) DAP © MOP (d) other fertilizers in the last 1 or 2 seasons?	0	93	267	
		Yes	No		
4.	Did the dealer give you a receipt for your sales?	3	357		
		Yes	No		
5.	Do you know the maximum prices for fertilizers fixed by Government (Audit team may show the MRP list of various fertilizers to the farmer)?	10	350		
		Yes	No		
6.	Do you have enough money to buy your full requirement of fertilizers? What are your problems?	72	288		

		Yes	No
7.	Did you get your soil tested, to find out the exact requirement of different types of fertilizers for your land, so that you get the maximum yield of crops?	2	358
		Yes	No
8.	Did you face any problems in getting your full requirement of fertilizers in time for the season?	325	35
		Yes	No
9.	Does the dealer force you to buy any other item along with the fertilizers that you want?	103	257
		Yes	No
10.	Do you need fertilizers in small quantity bags?	349	11
		Yes	No
11.	Overall, are you satisfied with the supply of fertilizers to you?	35	325
		Yes	No
12.	Have you faced any other problems in supply of fertilizers?	242	118

From the above survey response, it is evident that out of 360, 254 farmers were buying the fertilizers from the unregistered dealers. 253 farmers were buying the fertilizer from private dealer, due to this, were paying higher price than MRP. 349 farmers did not get receipts, 349 farmers stated that no soil tests were conducted, 298 farmers stated that they were not getting the required quantity and 346 farmers were in the favour of small quantity bags of fertilizers. 93 farmers stated that they had to pay more than the MRP and 92 farmers stated that they were not getting the fertilizer in time. Further, 57 farmers stated that due to non availability of shop nearby, they had to cover long distance to procure the fertilizers.



9.4 Chhattisgarh

9.4.1 Background

Chhattisgarh has gross cropped area of 57.32 lakh ha. Paddy is the principal crop and the central plains of Chhattisgarh are known as the rice bowl of central India. Other major crops are coarse grains, wheat, maize, groundnut, pulses and oilseeds.

Audit scrutiny covered the four districts (Raipur, Durg, Bilaspur and Sarguja) and eight blocks, as also the Fertilizer Quality Control Laboratory (FQCL) situated at Raipur.

9.4.2 Audit findings

9.4.2.1 Assessment of fertilizer

- No norms/standards or guidelines were laid down for calculating requirement of fertilizers. The assessment of requirement was done on the basis of actual consumption of fertilizers in the last few years, increased by a certain percentage. Thus, the assessment was not made on a scientific basis.

9.4.2.2 Availability of fertilizer

- There were excess/short supply of fertilizers against the targets in three of the four selected districts as detailed below:

Table 9.7 – Gap between demand and availability of fertilizers in Chhatisgarh

(Quantity in MT)

Period	District	Target (Demand) (MT) A	Stockings (Availability) (MT) B	Distribution (MT) C	Difference between demand and availability (A-B)
Kharif 2006	**Durg**	97,300	99756	97,952	2,456
	Raipur	1,20,035	1,71,173	1,37,386	51,138
	Bilaspur	97,175	99,360	95,912	2,185
Rabi 2006-07	**Durg**	25,995	45,943	23,527	19,948
	Raipur	60,075	47,442	26,516	**-12,633**
	Bilaspur	30,370	43,930	30,271	13,560
Kharif 2007	**Durg**	1,40,330	1,20,616	1,11,672	**-19,714**
	Raipur	1,80,595	1,82,229	1,62,492	1,634
	Bilaspur	1,13,835	99,740	1,14,823	**-14,095**
Rabi 2007-08	**Durg**	30,201	49,797	28,701	19,596
	Raipur	34,200	61,761	34,794	27,561

Kharif 2008	**Bilaspur**	32,800	39,690	31,831	6,890
	Durg	1,26,150	1,17,869	1,15,847	**-8,281**
	Raipur	1,73,050	1,88,545	1,69,199	15,495
Rabi 2008-09	**Bilaspur**	1,10,550	1,20,168	1,11,533	9,618
	Durg	34,586	60,122	28,367	25,536
	Raipur	44,370	84,252	42,162	39,882
	Bilaspur	29,901	44,273	33,192	14,372

(Source: Data supplied by District Offices and compiled by Audit.)

- No rationing system was followed for sale of fertilizers.
- Our field audit showed excess stocking of fertilizers (excess of projected requirement over consumption) in Dhamdha Block , Durg District, as per the photographic evidence depicted below:

Excess stocking of fertilizer at Dani Krishi Kendra-Dhamdha Block, Durg District

9.4.2.3 Verification of Sales

- There were delays in the receipt of Proforma A from the manufacturers/importers and subsequent certification and issue of Proforma B. The delay in issuing Proforma B ranged from 30 to 200 days.
- The verification was done on the basis of entries in the stock registers and bill books of the dealers, which was then reported by the DDAs to the DA. No physical verification of stock was, however, found to have been carried out. Also, there was neither any process of verification of sales beyond the first point sale i.e. upto the farmer level, nor did any check exist for examining the genuineness of the party to which the sale was made.

9.4.2.3.1 Non-maintenance of Buffer Stock

- Although the Govt. of India had directed maintenance of buffer stock of 5000 M.T. for the Kharif 2009, this was not maintained due to the shortage in supplies.

9.4.2.4 Quality Control

The FQCL, at Raipur is the only notified fertilizer testing laboratory in the State of Chhattisgarh.

9.4.2.4.1 Shortage of manpower and equipment

- Against the sanctioned strength of 17 posts, only 10 posts were filled.
- As per the Manual, against the 25 items of equipment for analysis of chemical fertilizers, only 17 items of equipment were available.
- Shortages in analysis of samples ranged between 8 per cent and 32 per cent during the period 2006-09 as summarized below:-

Table 9.8 – Shortfall in testing of samples in Chhatisgarh

Year	Target	samples received	Achievement	Shortfall	%age shortfall
2006-07	3675	3386	3367	308	8.38
2007-08	5626	3404	3371	2255	13.02
2008-09	3670	2516	2503	1167	31.68

(Source: Data furnished by DDA, FQCL and compiled by audit)

9.4.2.4.2 Sale of non-standard fertilizers

- It was noticed that by the time the intimation of the samples being declared non-standard fertilizers was sent to the dealers/retailers and the stop sale orders issued to ban the sale of balance quantity of non-standard fertilizers, the stock had already been sold. The value of such stock was Rs.2.00 crore (Rs 0.36 crore in Durg, Rs.1.11 crore in Raipur, Rs 0.25 crore in Bilaspur & 0.28 crore in Surguja).

9.4.2.5 Other Findings

9.4.2.5.1 Sale of fertilizers by cooperative societies without valid registration under FCO

- In the four selected districts, all the 588 Co-operative Societies (Durg-182, Raipur-206, and Surguja-64 and Bilaspur-136) were engaged in the business of retail sale of fertilizers without any certificate of registration from the appropriate authority, which was against the provisions of FCO. No action had been initiated by the State Government.
- In response, the Dy. Directors of Agriculture in Durg and Surguja districts stated that action was being initiated.

9.4.2.5.2 Unauthorized sale of fertilizers by private dealers.

- As per clause 8 and 19 (a) of FCO, the registration of the dealer is to be cancelled if he is found selling non-standard fertilizer. In Durg district, the following five private dealers whose registration certificates were cancelled for selling non-standard fertilizers, continued to sell fertilizers.

Table 9.9 – Private dealers with cancelled registration certificates in Durg District, Chhatisgarh

Sl	Name of dealer/retailer	Date of issue of cancellation of Registration
1	Ms. Agrawal Commercial Co., Durg	7919 dated 3-11-08
2	Ms. Baghmar Krishi Kendra, Dondi	9957 dated 25-12-07
3	Ms. Sushil Krishi Kendra, Dhamdha	175 dated 4-1-08
4	Ms. Krishi Vikas Kendra, Durg	9953 dated 29-12-07
5	Ms. Greenfield, Durg	298 dated 9-1-09

9.4.2.6 Wastage of subsidy on non-saleable fertilizers and other losses.

- It was noticed that a quantity of 268.875 MT of non-saleable fertilizers (DAP, SSP, Complex) was lying in the various Krishi Upaj Mandies, Sangrahan Kendra since March 1994.

9.4.3 Results of dealer and farmer survey

9.4.3.1 Dealer Survey

Responses from 48 dealers are summarized below:-

Sl. No.	Questions	Response		
		Yes	No	
1.	Are you getting the required quantity and type of fertilizer from your source (1st stocking point or wholesaler) in time?	8	40	
		No Limit	Limited	Others
2.	Do you give fertilizers to the farmers without any limit or is there some limit like 1 bag of DAP per acre.	21	24	3
		Yes	No	
3.	Are you facing any problems in transportation etc. in lifting your requirement of fertilizers?	3	45	
		Yes	No	Others
4.	Do you have adequate credit facilities so as to lift your requirement of fertilizers?	33	9	6

		Yes	No	Others
5.	Are you able to supply fertilizers as per demand to the farmers on time? What are your problems?	34	12	2
		Yes	No	Others
6.	Are farmers demanding small quantity bags of fertilizers from you?	10	36	2
		Yes	No	Others
7.	Have any samples been selected in the last 3 years from your stock for fertilizer quality testing by the Agriculture Department?	42	5	1

As can be seen, most of the dealers indicated that they were not getting the required amount of fertilizers. However, the majority indicated that they were limiting the quantity of fertilizers. Welcome feature was that the majority of dealers had undergone testing of samples from their stocks during the past three years.

9.4.3.2 Farmer Survey:

Responses from 240 farmers are summarized below:-

Sl. No.	Questions	Response		
		Cooperative	Dealer	Both
1.	Are you buying fertilizers from the authorised dealer/ co-operative society?	156	56	28
		Yes	No	Others
2.	Are the quantity of fertilizers sold to you rationed? E.g., 5 bags DAP/ration card, 1 bag of DAP per acre etc. Please indicate.	77	146	17
		MRP	Other	No Comments
3.	What are the prices at which you have bought fertilizers (a) urea (b) DAP (c) MOP (d) other fertilizers in the last 1 or 2 seasons?	210	13	17
		Yes	No	
4.	Did the dealer give you a receipt for your sales?	194	46	
		Yes	No	No response
5.	Do you know the maximum prices for fertilizers fixed by Government (Audit team may show the MRP list of various fertilizers to the farmer)?	147	84	9
		Yes	No	Others
6.	Do you have enough money to buy your full requirement of fertilizers? What are your problems?	72	162	6

		Yes	No	Yes, but Report not received
7.	Did you get your soil tested, to find out the exact requirement of different types of fertilizers for your land, so that you get the maximum yield of crops?	38	201	1
		Yes	No	Others
8.	Did you face any problems in getting your full requirement of fertilizers in time for the season?	57	178	5
		Yes	No	No response
9.	Does the dealer force you to buy any other item along with the fertilizers that you want?	26	205	9
		Yes	No	Other
10.	Do you need fertilizers in small quantity bags?	120	113	7
		Yes	No	Others
11.	Overall, are you satisfied with the supply of fertilizers to you?	206	27	7
		Yes	No	Others
12.	Have you faced any other problems in supply of fertilizers?	49	177	14

As can be seen above, most of the farmers are aware of MRPs of fertilizers and have purchased fertilizers at MRPs. Most of them did not face problems in getting their full requirement of fertilizers. However, most farmers did not have enough money to buy their full requirement and did not get their soil tested.

9.5 Gujarat

9.5.1 Background

Gujarat has 26 districts, with a total geographical area of 196024 Sq.km. The cropped area is 122.02 lakh hectares. The principal crops are wheat, bajra, rice, maize, groundnut, mustard, sesame, pigeon pea, green gram, gram, cotton and sugarcane. Gujarat is the largest producer of castor, tobacco, isabgul, and the second largest producer of sesame seeds, cotton and groundnut.

Four districts [16](Ahmedabad, Junagadh, Surat, and Kutch), eight blocks[17], 48 dealers and 124 farmers were selected for detailed audit scrutiny, as also three Fertilizer Quality Control Laboratories.

9.5.2 Audit Findings

9.5.2.1 Assessment of fertilizer requirements

- No norms/standard were laid down for assessing the requirement of fertilizer based on the type of crops, irrigated/non-irrigated area, soil health and other local factors.
- The year-wise assessment, consumption and shortfall/ excess in assessment (crop wise) for the period 2006-08 is depicted as under :

Table 9.10 – Gap between assessment and consumption in Gujarat

Year	Assessment		Consumption		Shortfall (+) / Excess (-)in Assessment (-)	
	Kharif	Rabi	Kharif	Rabi	Kharif	Rabi
			2006-07			
UREA	700000	730000	774639	800124	74639	70124
DAP	275000	275000	275296	281015	296	6015
MOP	65000	95000	58755	90802	(-)6245	(-)4198
			2007-08			
UREA	850000	900000	878644	927057	28644	27057
DAP	275000	300000	306896	363027	31896	63027
MOP	70000	100000	83360	95769	13360	(-)4231

[16] Ahmedabad, Junagadh, Surat, Kutch

[17] Ahmedabad: Sanand, Bavla; Junagadh: Junagadh, Keshod; Surat: Kamrej, Bardoli; Kutch: Bhuj, Bhachau.

- The estimates were prepared by increasing the actual consumption of the previous year by a certain percentage, although there were no written instructions/office orders to this effect.
- Fertilizer requirement for the district were not sent by the Dy. Director of Agriculture of the concerned district for the Zonal Agriculture Input Conference. These were prepared at the State level without such inputs from lower levels.
- Further, no meetings with the farmers/ co-operatives and other stakeholders at district level were held for assessment of the fertilizers. Also, the Panchayat Samitis/block Samitis were not involved in the assessment of fertilizer requirement.
- The variation between requirement and actual supply ranged between 1 per cent (Urea Kharif 2008-09) to 23 per cent (DAP Kharif 2008-09). During survey of dealers, farmers and the Co-operative societies, the farmers complained of short supply and stated that they had to purchase fertilizer from other blocks.

9.5.2.2 Availability of Fertilizer:

9.5.2.2.1 Non-receipt of fertilizer

- There were discrepancies between the quantity of despatch data of the companies at the district level and the quantity of fertilizers received by the first stocking point dealers in the test checked districts during the period April 2008 to December 2008 of 2837 MT of fertilizer involving subsidy of Rs 2.13 crore as shown below:

Table 9.11 – Discrepancies in despatch data in Gujarat

Sl.No.	Name of Unit	Product	Qty despatched (MT)	Qty received (MT)	Difference in Qty (In MT)	Subsidy amount (Rs. In crore)
1	KRIBHCO,Hazira	Urea	4216	1636	2580	1.37
2	HINDALCO	DAP	214	0	214	0.66
3	IFFCO, Kalol	Urea	33	0	33	0.07
4	GNVFC	NPK	10	0	10	0.03
	Total		**4473**	**1636**	**2837**	**2.13**

9.5.2.2.2 Absence of system of ensuring sale to genuine farmers

- No norms were fixed by the State Government to regulate sale of fertilizer so as to ensure authenticity of sales to genuine farmers, especially in view of the complaints of short supply.
- In 126 cases of nine dealers, the sales were being effected without considering purchaser identification and the requirement as per land holding in order to ascertain that sales were being made to genuine farmers for agriculture purposes. ***Annexe 9.1***

9.5.2.2.3 Irregular sale to manufacturer of NPK fertilizers resulted in payment of subsidy of Rs. 82.95 crore.

- Three dealers sold 36250 MT fertilizer (urea, DAP, MOP and complex) during 2007-10 (upto September 2009) to their sister concerns against wholesale/retail license for manufacturing different NPK fertilizers not subsidised under FCO and for which no MRP had been fixed by the Government. Sale of subsidised fertilizers to manufacturers of NPK fertilizer resulted in irregular payment of subsidy of Rs. 82.95 crore.

9.5.2.2.4 Non-maintenance of Buffer Stock

- As per the instructions of Government of India Department of Fertilizer Order dated 28-07-2008, M/s Indian Potash Ltd had to maintain buffer stock of 5000 MT each of DAP and MOP during 2008-09. However, this buffer stock was not maintained.

9.5.2.3 Verification of sales by State Government

9.5.2.3.1 Process of verification of Sales

- In respect of first point sales in the State, on receipt of copy of proforma 'A' from the units, the Director of Agriculture sends 20 per cent randomly selected sales to the Deputy Director of Agriculture of the District for verification of receipt by the dealers. However, the Agriculture Officer of the block was just signing the statement received from the manufacturer. No sales invoices, delivery challan, physical verification of stock etc. had been verified by the Agriculture Officer of the block, as the State Government had granted relaxation from submission of delivery challans to GSFC, GNFC, IFFCO, and KRIBHCO, which were the major manufacturing companies in State.
- Further, no verification of subsequent sales (beyond first point sales) up to the farmers' level had been carried out.

9.5.2.3.2 Delay in submission of Proforma 'B'

The State Government was required to certify and submit Proforma 'B' within 30 days. However, there were delays in submission of Proforma 'B' (as of May 2009) by the Director of Agriculture in respect of the following four units for:

- Rashtriya Chemical Fertilizers (RCF)
- NIRMA Ltd(from April 2008 onwards)
- Tungbhadra Fertilizer Ltd(from June 2008 onwards)
- Shriram Fertilizers and Chemicals Ltd. (from October 2008 onwards)

9.5.2.4 Quality Control

9.5.2.4.1 Inadequate staff

- There were 21 vacancies (Asstt. Director of Agriculture-2, Agriculture Officers-17, Chemist-2) in the three Fertilizer laboratories at Bardoli (4), Junagarh (10) and Gandhinagar (7).

9.5.2.4.2 Delay in intimation of test results to the dealer

- Survey of dealers revealed that there was delay in intimation to the dealers of the test results of fertilizers declared as non-standard, by which time, the stock had been sold. Hence, the non-standard fertilizer was used by the farmers without knowing the quality.

9.5.2.4.3 Non-conduct of test of all components

- It was noticed that laboratories had conducted scrutiny of only the main components (Urea-Total Nitrogen; DAP-Total Nitrogen, Ammonical Nitrogen, Ammonium Citrate, Phosphate; MOP-Potash) of the fertilizer only as against the requirement of FCO, 1985 that all components should be examined to certify fertilizer as of the prescribed standard.

9.5.2.4.4 Non follow-up of fertilizers declared as non-standard

- 124 court cases for the period 2006-07 to 2008-09 were pending in courts. There was no instance of seizure of the lot of non standard fertilizers nor was any recovery of subsidy proposed in respect of non-standard fertilizer samples. This resulted in irregular payment of subsidy to the extent of Rs.9.86 crore.

9.5.3 Results of dealer and farmer survey

9.5.3.1 Dealer Survey

Responses from 48 dealers are summarized below:-

Sl.No.	Questions	Response		
		Yes	No	
1.	Are you getting the required quantity and type of fertilizer from your source (1st stocking point or wholesaler) in time?	39	9	
		No Limit	Limited	Others
2.	Do you give fertilizers to the farmers without any limit or is there some limit like 1 bag of DAP per acre?	37	6	5
		Yes	No	Others
3.	Are you facing any problems in transportation etc. in lifting your requirement of fertilizers?	2	45	1
		Yes	No	Others

4.	Do you have adequate credit facilities so as to lift your requirement of fertilizers?	21	18	9
		Yes	No	Others
5.	Are you able to supply fertilizers as per demand to the farmers on time? What are your problems?	31	14	**3**
		Yes	No	Others
6.	Are farmers demanding small quantity bags of fertilizers from you?	5	40	3
		Yes	No	
7.	Have any samples been selected in the last 3 years from your stock for fertilizer quality testing by the Agriculture Department? What were the results?	29	19	

Most of the dealers indicated that they were getting the required quantity of fertilizers and were able to supply fertilizers without limit to farmers. In a majority cases, samples of stocks had been selected for quality tests during the last three years.

9.5.3.2 Farmer Survey

Responses from 240 farmers are summarized below:-

	Questions	Response		
		Cooperative	Dealer	
1.	Are you buying fertilizers from the authorised dealer/ co-operative society?	228	12	
		Yes	No	Others
2.	Is the quantity of fertilizers sold to you rationed? E.g., 5 bags DAP/ration card, 1 bag of DAP per acre etc. Please indicate.	3	234	3
		MRP	Higher than MRP	No comments
3.	What are the prices at which you have bought fertilizers (a) urea (b) DAP © MOP (d) other fertilizers in the last 1 or 2 seasons?	229	0	11
		Yes	No	
4.	Did the dealer give you a receipt for your sales?	240	0	
		Yes	No	
5.	Do you know the maximum prices for fertilizers fixed by Government (Audit team may show the MRP list of various fertilizers to the farmer)?	199	41	
		Yes	No	Others
6.	Do you have enough money to buy your full requirement of fertilizers? What are your problems?	212	27	1
		Yes	No	
7.	Did you get your soil tested, to find out the	110	130	

	exact requirement of different types of fertilizers for your land, so that you get the maximum yield of crops?			
		Yes	No	No comments
8.	Did you face any problems in getting your full requirement of fertilizers in time for the season?	97	142	1
		Yes	No	
9.	Does the dealer force you to buy any other item along with the fertilizers that you want?	13	227	
		Yes	No	
10.	Do you need fertilizers in small quantity bags?	10	230	
		Yes	No	
11.	Overall, are you satisfied with the supply of fertilizers to you?	222	18	
		Yes	No	
12.	Have you faced any other problems in supply of fertilizers?	58	182	

The vast majority of farmers indicated that they know the MRPs and bought fertilizers at the MRPs. However, the majority did not get their soil tested to find out the exact requirement of different types of fertilizers.

Our field audit revealed adamaged godown in Sanand block, Ahmedabad District as depicted below:

Damaged fertilizer godown of GSFC in Sanand block, Ahmedabad District

Our field audit revealed despite availability of stock (as depicted below), the farmers were facing shortage in Sanand block , Ahmedabad District (as indicated in the farmers survey):

Availability of fertilizer stock at Balaji Enterprises, Sanand block, Ahmedabad District


IMPORTED

9.6 Haryana

9.6.1 Background

Haryana has 21 districts divided under four divisions namely Ambala, Rohtak, Gurgaon and Hissar. The total geographical area of the state is 44.20 lakh ha. The cropped area of the state is 36.20 lakh ha. The main crops cultivated are rice, wheat, vegetables, temperate fruits, tropical fruits, exotic vegetables and herbal and medicinal plants.

Four districts viz. Faridabad, Hissar, Karnal and Sonepat and eight blocks (two from each district), viz. Ballabgarh, Faridabad, Barwala, Hansi-I, Indri, Nissing, Gannaur and Mundlana were selected for detailed audit scrutiny.

9.6.2 Audit findings

9.6.2.1 Assessment of fertilizer requirement

- Requirement was calculated season-wise (Kharif/Rabi) based on the previous year's consumption. Panchayat Samitis/Block Samitis, etc. were not involved in assessment of the fertilizer requirement. Assessment was for the whole district, and, not based on geographical factors and soil composition which would vary across blocks.
- The availability of Urea and DAP in the State was more than the projected requirement and consumption was more or less equal to requirement during 2006-09. In respect of NPK and MOP, except in 2007-08, availability was lower than the projected requirement, and consumption was far below the requirement.

Details of requirement, availability and consumption of fertilizers during 2006-07 to 2008-09 were as under:

Table 9.12 – Requirement, availability and consumption of fertilizers in Haryana

(In MT)

	Urea	DAP	MOP	NPK
	2006-07			
Requirement	17,50,000	5,60,000	40,000	55,000
Availability	18,47,610	7,00,919	27,085	38,208
Consumption	16,71,016	4,90,985	22,610	29,071
Percentage of availability against requirement	105.58	125.16	67.71	69.47
Percentage of consumption against availability	90.44	70.05	83.48	76.09
Percentage of consumption against requirement	95.49	87.68	56.53	52.86
	2007-08			

	Urea	DAP	MOP	NPK
Requirement	18,50,000	5,75,000	45,000	55,000
Availability	21,78,666	6,85,948	37,142	51,808
Consumption	18,28,838	5,15,263	29,028	38,581
Percentage of availability against requirement	117.77	119.30	82.54	94.20
Percentage of consumption against availability	83.94	75.12	78.15	74.47
Percentage of consumption against requirement	98.86	89.61	64.51	70.15
	2008-09			
Requirement	20,25,000	6,00,000	46,000	64,500
Availability	20,02,057	8,50,062	51,757	34,410
Consumption	17,89,204	6,60,121	38,396	29,102
Percentage of availability against requirement	98.87	141.68	112.52	53.35
Percentage of consumption against availability	89.37	77.66	74.19	84.57
Percentage of consumption against requirement	88.36	110.02	83.47	45.12

9.6.2.2 Short supply of DAP in peak consumption period

Availability of DAP was more than requirement during 2006-09 in the State. However, it was observed that, in Karnal district, against the requirement of 34500 MT of DAP during the main sowing seasons of wheat i.e. October - November 2008, the availability and sale of DAP were 29787 MT and 21416 MT respectively.

9.6.2.3 Non-maintenance of Buffer stock

It was observed that no Buffer Stock of MOP (7000 MT each) was maintained during 2006-09. In the case of DAP, buffer stock of 31,666 MT and 11,330 MT only was maintained against the prescribed limit of 35000 MT and 40000 MT respectively during the year 2006-07 and 2007-08.

9.6.2.4 Quality Control

- In the Quality Control laboratories at Hissar and Karnal, as against the staff strength of 27 posts, only 22 technical and supporting staff were in position.
- There was a shortfall of 33 per cent in samples analysed during years 2006-07, 2007-08, and 2008-09 against the annual capacity of 3400 during 2006-08 and 5100 in 2008-09.
- 34 samples collected during April 2006 to November 2008 were declared as non-standard but neither was any action taken to stop sale/use of non-standard fertilizers, nor were recoveries proposed to the Department of Fertilizers. Further, in 23 other

cases where the samples were found non-standard, information regarding initiation of action such as disallowance of subsidy, stoppage of sale, etc. was not furnished to audit.

9.6.2.5 Discrepancies in fertilizer receipts

- Verification of details of despatch of fertilizer of M/s IPL revealed that against the despatch of DAP of 5376.65 MT in September 2008, the actual receipt was 5285.25 MT in Palwal district, resulting in short supply of 91.40 MT and excess subsidy of Rs.0.28 crore.

9.6.3 Results of dealer and farmer survey

9.6.3.1 Dealer Survey:

Responses from 51 dealers are summarized below:-

Sl.No.	Questions	Response		
		Yes	No	Others
1.	Are you getting the required quantity and type of fertilizer from your source (1st stocking point or wholesaler) in time?	24	26	1
		No Limit	Limited	Others
2.	Do you give fertilizers to the farmers without any limit or is there some limit like 1 bag of DAP per acre?	28	22	1
		Yes	No	No comments
3.	Are you facing any problems in transportation etc. in lifting your requirement of fertilizers?	6	44	1
		Yes	No	Others
4.	Do you have adequate credit facilities so as to lift your requirement of fertilizers?	28	21	2
		Yes	No	
5.	Are you able to supply fertilizers as per demand to the farmers on time? What are your problems?	34	17	
		Yes	No	Others
6.	Are farmers demanding small quantity bags of fertilizers from you?	7	43	1
		Yes	No	Others
7.	Have any samples been selected in the last 3 years from your stock for fertilizer quality testing by the Agriculture Department? What were the results?	33	15	3

As can be seen, the majority of fertilizer dealers were not getting the required quantity and type of fertilizers, and a large proportion were also adopting limits for sale of fertilizers to farmers.

9.6.3.2 Farmer Survey

Responses from 242 farmers are summarized below:-

S.No.	Questions	Response		
		Cooperative	Dealer	Both
1.	Are you buying fertilizers from the authorised dealer/ co-operative society?	192	28	22
		Yes	No	Others
2.	Are the quantity of fertilizers sold to you rationed? E.g., 5 bags DAP/ration card, 1 bag of DAP per acre etc. Please indicate.	65	173	4
		MRP	Others	
3.	What are the prices at which you have bought fertilizers (a) urea (b) DAP (c) MOP (d) other fertilizers in the last 1 or 2 seasons?	2	240	
		Yes	No	Others
4.	Did the dealer give you a receipt for your sales?	218	22	2
		Yes	No	Others
5.	Do you know the maximum prices for fertilizers fixed by Government (Audit team may show the MRP list of various fertilizers to the farmer)?	215	25	2
		Yes	No	
6.	Do you have enough money to buy your full requirement of fertilizers? What are your problems?	168	74	
		Yes	No	Yes, but Report not received
7.	Have you got your soil tested, to find out the exact requirement of different types of fertilizers for your land, so that you get the maximum yield of crops?	99	142	1
		Yes	No	Others
8.	Did you face any problems in getting your full requirement of fertilizers in time for the season?	53	183	6
		Yes	No	Others
9.	Does the dealer force you to buy any other item along with the fertilizers that you want?	29	204	9

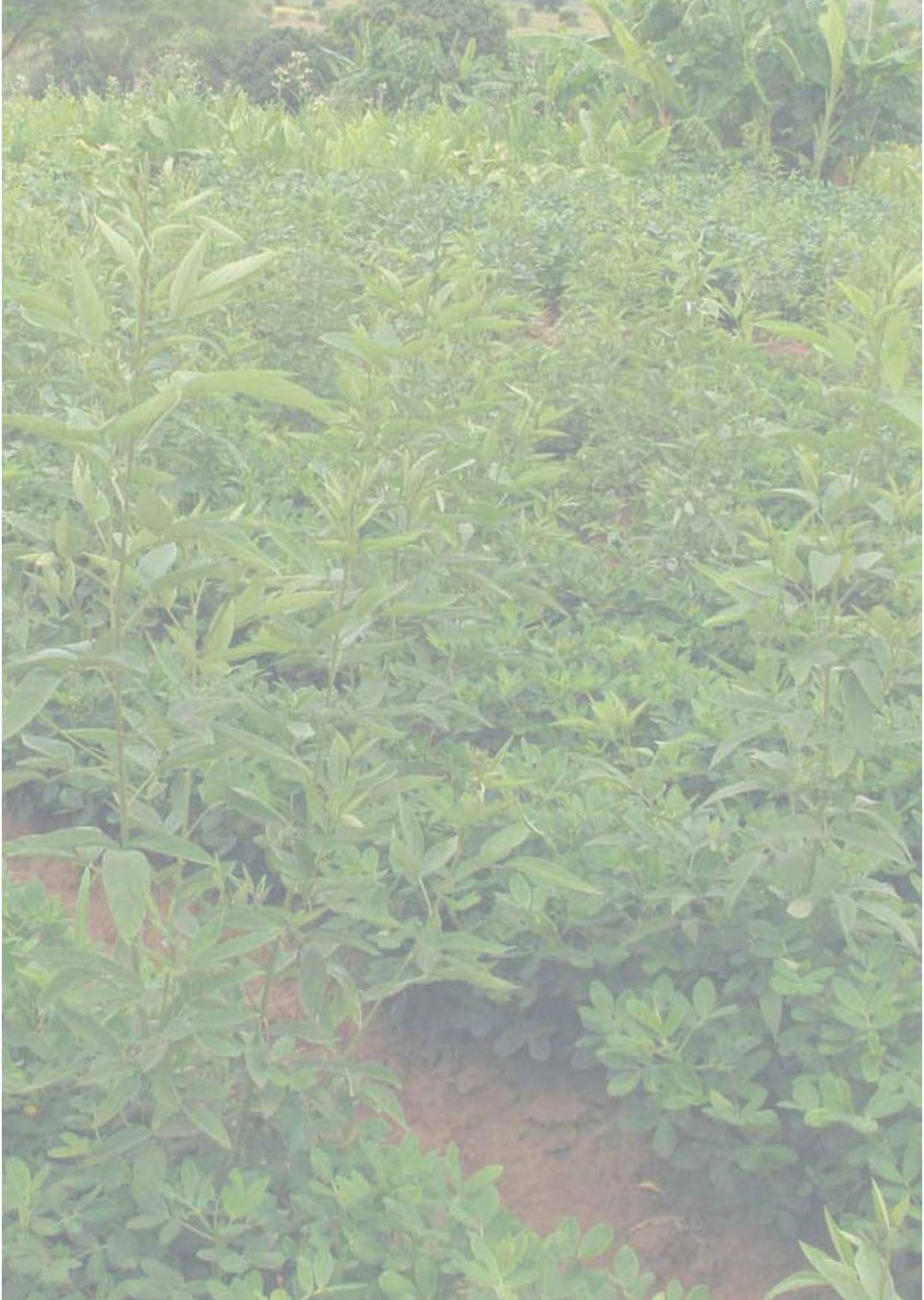
		Yes	No	Others
10.	Do you need fertilizers in small quantity bags?	31	205	6
		Yes	No	Others
11.	Overall, are you satisfied with the supply of fertilizers to you?	208	24	10
		Yes	No	Others
12.	Have you faced any other problems in supply of fertilizers?	62	172	8

The vast majority of farmers did not buy fertilizer on the MRPs and also did not get their soil tested for finding out the exact requirement of fertilizers.

Our field audit revealed excess availability of fertilizer stock over the requirement at Faridabad District, and keeping wheat instead of fertilizers in the godown at Gannaure, Sonepat District, as depicted below photographically:

Excess availability of fertilizers at Shri Balaji Khad Bhandar, Faridabad

Stocking of wheat instead of fertilizers at Gannaur, Sonepat District



9.7 Himachal Pradesh

9.7.1 Background

Himachal Pradesh has 12 districts. Out of the total geographical area of 55.67 lakh hectares, the net sown area is 5.83 lakh hectares. Agriculture is the main occupation. The principal crops are wheat, barley, pulses, gram, oilseeds, vegetables, potato and ginger.

Two districts and two blocks in each district - Kangra (Baijnath and Kangra) and Kinnaur (Kalpa and Nichar) - and two Fertilizer Quality Control Laboratories (Hamirpur and Sundernagar) were selected for detailed audit scrutiny.

9.7.2 Audit findings

9.7.2.1 Assessment of Fertilizer requirements

- The assessment of requirement of Fertilizers for the State was being done by the Department on the basis of the previous year's sales reported by HIMFED and IFFCO. The requirements so assessed were being presented at the Zonal Input Conference on fertilizers.
- The State Agriculture Department stated (in March 2010) in the exit conference that it was difficult to assess the actual requirements keeping in view the climate conditions of the State. The reply is not acceptable as unrealistic assessment of fertilizer had led to shortages of fertilizers.

9.7.2.2 Norms to regulate sale of Fertilizer

- The State Government had not devised any norms to regulate the sale of Fertilizers such as Calcium Ammonium Nitrate (CAN), Muriate of Potash (MoP), Single Super Phosphate (SSP) and Ammonium Sulphate (AS), for which GoI is providing subsidy. However, in respect of Urea and NPK Fertilizers, since the State Government was providing additional subsidy of Rs. 200 and Rs. 500 per MT respectively, it had stipulated a norm of three bags of the above categories of Fertilizers per ration card per cropping season.

9.7.2.3 Availability and shortages of Fertilizers

- During 2006-09, against the requirement of 3,53,400 MTs of different types of Fertilizers, actual supply was 3,21,133 MTs resulting in an overall shortage of 32,267 MTs.
- Supply of 19430 MTs of NPK 10:26:26 was received during Rabi 2007-08 (7221 MTs) and Kharif-Rabi 2008-09 (12209 MTs) without any requirement. During Rabi 2008-09 against the requirement of 7500 MTs of NPK 15:15:15, actual supply received was 12863 MTs. This indicates that the farmers were compelled to purchase these categories against short supply of NPK 12:32:16.

  State Agriculture Department accepted the audit findings (in March 2010) in the exit conference.

- Field audit also revealed excess supply of fertilizers over requirement, as depicted below photographically.

HIMFED Store, Shongtong. Kinnaur- Excess supply without any requirement

HIMFED, Indora- Excess supply over requirement

9.7.2.4 Sales of Fertilizers

9.7.2.4.1 Verification of sales by the State Governments

- Bills for subsidy claims for supplier and manufacturers of Fertilizers were certified on the basis of receipt of Fertilizers certified by the 1st sale points of HIMFED and by the member Cooperative Societies of IFFCO, and not on the basis of physical verification of receipts of Fertilizers/stock entries thereof.
- In Kangra block, test check of records of four out of six member societies of IFFCO revealed that the quantity of Fertilizers shown as sold/released to them by IFFCO had not reached the premises/stores of the said Societies as its stock and issue/sales entries could not be verified from their records viz. respective registers/ledgers. The details of such cases involving subsidy amounting to Rs. 8.18 lakh (GOI: Rs. 8.07 lakh; State Government: 0.11 lakh) are given as under:

Table 9.13 – Unverifiable sales in Kangra block, Himachal Pradesh

Sr. No.	Name of Societies	Fertilizer	Year	Quantity of Fertilizer in MTs			Amount of subsidy involved (In Rupees)				
				Quantity sold/ released by IFFCO	Actual qty. received as per records of societies	Excess qty. shown by IFFCO as sold	No. of bags	GOI		State Govt.	
								Basic rate per bags	Amount	Rate per bag	Amount
1.	Ichhi	Urea	2008-09	87	62	25	500	704	3,52,000	10	**5,000**
2.	Sahoura	Urea	2008-09	62	47	15	300	704	2,11,200	10	**3,000**
3.	Dagwar Mandal	Urea	2008-09	32	29	3	60	704	42,240	10	**600**
4.	(i) Ghurkhari Kachyayari	Urea	2008-09	37	34.5	2.5	50	704	35,200	10	**500**
	(ii) Ghurkhari Kachyayari	NPK -GR-2	2007-08	5	-	5	100	1660	1,66,000	25	**2,500**
					Total:	50.5			8,06,640		**11,600**

Source: Data compiled by audit from the records of IFFCO and concerned IFFCO member societies

9.7.2.4.2 Non-accounting and irregular sale of fertilizers

- The Agriculture Department had not prescribed any procedure to verify the stock position and sale accounts either at the 1st sale points or at sub-dealers, depot holder's level. During field survey, the following irregularities in sale of Fertilizers at 1st sale point, subdealers and depot holders were noticed in audit.
- In Kalpa block (Kinnaur district) between February 2007 and March 2009, 143.75 MT of different type of Fertilizers was sold by the Incharge Shongtong godown of HIMFED (1st sale point) to four dealers as per details given in ***Annexe 9.2***. Records of these dealers revealed that neither were any entries made in the stock register, nor were any sales account maintained in support of fertilizers further supplied by them to the farmers.
- During survey, the farmers of the Kalpa block stated (June-July 2009) that the dealers were involved in unauthorised private sale of Fertilizers at higher prices than the MRP on the pretext of purchasing it from undisclosed sources outside Kinnaur district and no action was taken by any authority to check such malpractices. In the absence of any proof of receipt and sales, the possibility of diversion of Fertilizers to the open market for black marketing by these sub-dealers after purchasing it from the 1st sale point could not be ruled out. The subsidy involved in this case was Rs. 30.14 lakh (GOI: Rs. 29.59 lakh; State Government: Rs. 0.55 lakh).
- Shortage of 30.250 MT of fertilizer valued at Rs. 3.04 Lakhs was noticed at first sale point of HIMFED at Shongtong (Kinnaur district) in May 2009. The shortages were not investigated as of November 2009.
- Short deposit of sale proceed of Rs. 6.04 lakh by Incharge of Shongtong godown was also noticed.

9.7.2.4.3 Sale of Fertilizer without recording identification of farmers

- At the HIMFED godown at Jeori (1st sale point of Nichar block), 76.2 MTs of Fertilizers involving subsidy of Rs 7.22 lakh was shown to have been sold to individuals/farmers without recording their particulars/identification (ration card number etc.) The possibility of sale of Fertilizers in the black market could not be ruled out.

9.7.2.4.4 Sale of Fertilizers at prices exceeding Maximum Retail Price (MRP)

- Telangi Fruit Processing & Marketing Sabha Limited, Telangi (a sub-dealer in Kinnaur district) had sold 815 bags of different Fertilizers at prices higher than the MRP during November 2008 to March 2009, resulting in over charging of Rs. 0.28 lakh from the farmers.

9.7.2.4.5 Sale of Fertilizers at higher rate by 1st sale point

- The incharge of 1st sale point at Shongtong (Kinnaur district), sold 145 bags (7.250 MT) of NPK 10:26:26 to the Telangi Fruit Processing and Marketing Sabha Ltd. in November

2008 at the rate of Rs. 386.85 per bag against the sale rate of Rs. 327.85 per bag (excluding subsidy and commission). Again in March 2009, 70 bags (3.500 MTs) of NPK 15:15:15 were also sold to the above sub-dealer at the rate of Rs. 256 per bag against the sale rate of Rs. 226.50 per bag (excluding subsidy and commission).

9.7.2.5 Quality Control

- Out of two Agriculture Development Officers deployed in the Quality Control laboratory at Sundernagar, one officer posted since November 2006 had not been imparted the requisite technical training at the Central Fertilizer Quality Control Laboratory, Faridabad. In the laboratory at Hamirpur, no Laboratory Assistants were provided during 2006-09.
- Against the annual analysing capacity of 1000 samples in each laboratory, percentage achievement was 74, 65 and 60 during the years 2006-07 to 2008-09 respectively.
- Although samples of Fertilizers were collected from the 1st sale point dealers, the results were never communicated to them.

9.7.3 Results of dealer and farmer survey

9.7.3.1 Dealer Survey

Responses from 30 dealers are summarized below:-

Sl.No.	Questions	Response		
		Yes	No	Others
1.	Are you getting the required quantity and type of Fertilizer from your source (1st stocking point or wholesaler) in time?	0	25	5
		No Limit	Limited	Others
2.	Do you give fertilizers to the farmers without any limit or is there some limit like 1 bag of DAP per acre?	25	0	5
		Yes	No	Others
3.	Are you facing any problems in transportation etc. in lifting your requirement of Fertilizers?	2	24	4
		Yes	No	Others
4.	Do you have adequate credit facilities so as to lift your requirement of Fertilizers?	26	0	4
		Yes	Others	
5.	Are you able to supply Fertilizers as per demand to the farmers on time? What are your problems?	26	4	

		Yes	Others	
6.	Are farmers demanding small quantity bags of Fertilizers from you?	26	4	
		Yes	No	Yes, report not received
7.	Have any samples been selected in the last 3 years from your stock for Fertilizer quality testing by the Agriculture Department? What were the results?	0	23	7

Most of the dealers indicated that they were not getting the required quantity and type of fertilizers and their samples had not been selected for quality fertilizers.

9.7.3.2 Farmer Survey

Responses from 124 farmers are summarized below:-

Sl.No.	*Questions*	*Response*		
		Cooperative	Dealer	Both
1.	Are you buying Fertilizers from the authorised dealer/ co-operative society?	99	19	6
		Yes	No	
2.	Are the quantities of fertilizers sold to you rationed? E.g., 5 bags DAP/ration card, 1 bag of DAP per acre etc. Please indicate.	1	123	
		MRP	Higher than MRP	No comments (MRP not known)
3.	What are the prices at which you have bought Fertilizers (a) urea (b) DAP (c) MOP (d) other Fertilizers in the last 1 or 2 seasons?	25	32	67
		Yes	No	
4.	Did the dealer give you a receipt for your sales?	0	124	
		Yes	No	
5.	Do you know the maximum prices for Fertilizers fixed by Government (Audit team may show the MRP list of various Fertilizers to the farmer)?	1	123	
		Yes	No	
6.	Do you have enough money to buy your full requirement of Fertilizers? What are your problems?	59	65	

		Yes	No	Yes, but Report not received
7.	Did you get your soil tested, to find out the exact requirement of different types of Fertilizers for your land, so that you get the maximum yield of crops?	0	88	36
		Yes	No	No comments
8.	Did you face any problems in getting your full requirement of Fertilizers in time for the season?	122	1	1
		Yes	No	
9.	Does the dealer force you to buy any other item along with the Fertilizers that you want?	0	124	
		Yes	No	
10.	Do you need Fertilizers in small quantity bags?	124	0	
		Yes	No	
11.	Overall, are you satisfied with the supply of Fertilizers to you?	1	123	
		Yes	No	
12.	Have you faced any other problems in supply of Fertilizers?	123	1	

Most of the farmers did not know the MRPs of fertilizers and bought fertilizers at prices higher than MRP. All of them wanted fertilizers in small quantity bags, and most of them did not get their soil tested for assessing the exact requirement of fertilizers.

Our field audit showed numerous deficiencies in depiction of rates, stock etc. by the dealers, shortages despite availability of fertilizers, and considerable demand for fertilizers, as depicted below photographically.

Non-indication of rates, stock as on date, phone no. for complaint etc. at HIMFED Store, Paprola, and Kangra District.Most of the farmers were not aware of the MRP fixed by Government of India (Sl. No 2).

HIMFED Store, Paprola, Kangra District - though the supply was more than the requirement, yet the farmers were not getting the required quantity as perfarmers' survey (sl. No. 11 and 12)

Persons waiting for their requirement of IFFCO fertilizers outside the Ichhi CAS Society, Ichhi, Gaggal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9.8 Jammu & Kashmir

9.8.1 Background

Jammu and Kashmir has a geographical area of 2.22 lakh Kms and has three distinct regions comprising Kashmir Valley, Jammu Division and Ladakh. The total cultivable area according to revenue records (March 2007) was 24.16 lakh hectares, out of which 7.42 lakh hectares (31 per cent) was the net sown area. The main crops are rice, wheat, maize, tobacco, pulses and grape seed etc.

Four districts, Jammu, Kathua, Anantnag and Baramulla and eight blocks Marh, R.S.Pura, Banoti, Hiranagar, Shahbad, Shangus, Pattan and Uri were selected for detailed audit scrutiny.

9.8.2 Audit Findings

9.8.2.1 Assessment of fertilizer

- The fertilizer requirement in Kashmir Division is being assessed on the basis of fertilizer dosages recommended by the Sher-e-Kashmir University of Agriculture, Sciences and Technology (SKUAST), for cultivation of agricultural/horticulture crop, on area basis. In Jammu Division, the assessment was being done on the basis of cropped area and the previous year's off-take.
- However, no orders/instructions had been issued to district/block level Agricultural Offices for assessment of fertilizer requirements. For assessment at the district/block level, there was nothing on record to indicate that meetings were held with the farmers and there was involvement of panchayat samiti / block samiti in the assessment.
- Based on the dosages of fertilizer recommended by SKUAST for paddy and maize on area basis, the requirement for these two crops alone worked out to 41360 MT of Urea, 29920 MT of DAP and 8840 MT of MOP. However, the total requirements of the Kashmir Division projected to Government of Jammu and Kashmir was 40200 to 40650 MT of Urea, 15675 to 17500 MT of DAP and 4000 to 5565 MT of MOP during the three kharif seasons.

In respect of Jammu Division the positions of cropped area, projections and off take of fertilizers were as under:

Table 9.15 – Cropped area, requirement and offtake of fertilizers in Jammu Division

Season	Cropped Area in hectares	Projections			Off take previous seasons		
		UREA	DAP	MOP	UREA	DAP	MOP
		←----------Metric Tonne ----------→					
Kharif 2006	392702	33000	15200	4300	20711	7273	402
Kharif 2007	392616	40420 (95%)	31700 (391%)	11961 (2875%)	15711	6943	336
Kharif 2008	367290	25000 (59%)	15000 (116%)	5000 (1388%)	15890	5381	227
Rabi 2006-07	303878	30000	17500	5000	15802	14087	440
Rabi 2007-08	314909	25000 (58%)	15000 (6%)	4000 (1036%)	16546	12718	508
Rabi 2008-09	331675	25000 (51%)	16250 (28%)	4000 (687%)	19927	13227	526

Percentage denote increases/decreases of projections compare to off take of previous seasons

- In Kharif crop, though the cropped area declined from 392702 Hectares (2006) to 392616 Hectares (2007) and 367290 Hectares (2008), yet the projections in respect of Urea increased from 33000 MT (2006) to 40420 MT (2007) but decreased to 25000 MT (2008).
- In respect of DAP, the projections increased from 15200 MT (2006) to 35700 MT (2007) and decreased to 15000 MT (2008) which resulting in uneven projections of DAP against the previous years' off take, ranging from 391 per cent to 116 per cent during Kharif 2007 and Karif 2008.
- For MOP, the projection increased from 4300 MT (2006) to 11961 MT (2007) and decreased to 5000 MT (2008). These projections were far in excess of the previous years off take, ranged from 2875 per cent to 1388 per cent during Kharif 2007 and 2008 respectively and 1036 to 687 per cent in respect of Rabi Crop.

From the above it is evident that the assessment of requirement was not based on any scientific method or even the previous year's consumption.

- The two Directorates of Horticulture in Kashmir and Jammu Divisions reported the area under horticultural crops year wise and the requirements of fertilizers projected on land use basis to the administrative department for the different seasons as given below. However, the same was not included in the data furnished in the zonal conferences.

Table 9.16 – Requirement of fertilizers for horticultural crops

Sl. No	Particulars	2006				2007				2008			
		Jammu		Kashmir		Jammu		Kashmir		Jammu		Kashmir	
1	Actual area(hec)	88191		107925		93471		101038		99199		134791	
2	Requirement (MT)	Rab	Khr	Rab	Khr	Rab	Khr	Rab	Khr	Rab	Khr	Rab	Khr
	UREA	315	258	7825	7825	376	395	8524	8524	400	423	8801	8801
	DAP	458	-	10253	-	596	-	11080	-	450	-	13200	-
	MOP	168	170	15829	-	228	230	25573	-	202	210	26401	-

In short, the overall assessment of requirement of fertilizers projected by the State at the Zonal Input Conferences was deficient and adhoc, and lacked a scientific basis.

9.8.2.2 Sale of subsidized fertilizer to cattle feed manufacturing units involving primary subsidy of Rs.91.09 Lakh.

- Records of Jammu and Kashmir Agro Industries Development Corporation Limited showed that 162 MT of Urea (IFFCO, Chambal & NFL) involving subsidy of Rs.22.81 lakh was irregularly sold during 2006-09 to its Cattle Feed Manufacturing Unit at Jammu. Five private cattle feed manufacturing units of Jammu Division had also purchased 484.920 MT of Urea from various retail dealers during 2006-2009 involving subsidy of Rs. 68.28 lakh as detailed below:

Table 9.17- Irregular sale of fertilizer to private cattle feed manufacturers

Sl.No	*Name of Cattle Feed Manufacturer*	*Quantity in MT*	*Subsidy involved (Rs. Lakh).*
1	***M/s Shalimar Cattle Feeds Pvt. Ltd., Bari Brahamna, Jammu***	***313.900***	***44.20***
2	***M/s Shaktiman Cattle Feeds Pvt. Ltd., Bari Brahamna, Jammu.***	***5.350***	***0.75***
3	***M/s Kashmir Feed Industries (Regd), Bari Brahamna, Jammu.***	***49.900***	***7.03***
4	***M/s Himalaya Poultry & Cattle Feed, Bari Brahamna, Jammu.***	***15.400***	***2.17***
5	***M/s S.S. Industries, Gangyal, Jammu***	***100.370***	***14.13***
	Total	***484.920***	***68.28***

Audit scrutiny showed that no dealer had maintained the records of sales; hence the factual position about the correctness of these sales and the name of the manufacturers could not be ascertained.

- Irregular sale of 646.92 MT of subsidized fertilizers by the lifting agency and dealers involving subsidy of Rs.91.09 lakh had been pointed out to the State Government (November 2009). Reply is awaited.

9.8.2.3 Verification of sales

- First point sales only were being verified as per the lifting certificates issued by the lifting agencies M/s Jammu & Kashmir Cooperative and Marketing Federation (JAKFED), Agro Industries Development Corporation Ltd. (AIDCL) and Cooperative Marketing Societies (CMS).

9.8.2.4 Quality Control

Audit scrutiny revealed deficiencies in testing infrastructure in the Quality Control Laboratories in Jammu and Srinagar:

- An Atomic Absorption Spectrophotometer (AAS) prescribed for analyzing micro-nutrients, purchased in February 2002 for the (Jammu) laboratory was unserviceable. In the Jammu laboratory, vacuum dessicator, Indian standard sieves, sample grinder, top pan balance and deionizer required for testing were not available in the laboratory. In the laboratory at Srinagar, water bath cum shaker, magnetic stirrer, sample grinder, glass water distillation apparatus and de-ionizer required for testing were either not available or were un-serviceable.

- As per the Fertilizer (Control) Order 1985 (Sch.1), specification of various fertilizers had been indicated. For checking these specifications, the laboratory was required to conduct tests in respect of these fertilizers. However, audit check of the records and the tests conducted in the laboratory in respect of two districts of Jammu (excluding samples lifted from rake point) and Kathua for the year 2008-09 showed that all the tests were not carried out in the laboratory as detailed below:

Table 9.18 – Shortfall in quality testing

Name of District	Type of Fertilizer	Samples tested	Tests required to be conducted	Tests actually conducted	Tests not conducted	Details of tests not conducted
Jammu	UREA 46% N	56	224	168	56	Biuret per cent by weight
-do-	DAP 18-46-0	70	490	280	210	1. Moisture % by weight. 2. Total Nitrogen in the form of Urea. % by weight 3. Water soluble phosphate % by weight.
-do-	MOP	5	20	10	10	1. Moisture % by weight. 2. Sodium as NaCl % by wheight.

Kathua	UREA 46% N	22	88	65	23	Biuret per cent by weight & Total Nitrogen in one case.
-do-	DAP 18-46-0	4	28	16	12	1. Moisture % by weight. 2. Total Nitrogen in the form of Urea. % by weight 3. Water soluble phosphate % by weight.
-do-	MOP	9	36	18	18	1. Moisture % by weight. 2. Sodium as NaCl % by wheight.
-do-	NPK12:32:16	40	320	160	160	1. Moisture % by weight. 2. Ammoniacal nitrogen % by wheight. 3. Nitrogen in the form of Urea % by weight. 4. Water soluble phosphate % by weight.

- Results in respect of 368 samples for the year 2006-07 to 2008-09 sent to the quality control laboratories were not received. The reasons for not analyzing these samples and non-intimation of results, if any, were sought from the laboratory, but were not intimated.

- One sample of DAP of IFFCO collected from Panthal, Udhampur District on 22 August 2007 and received in the laboratory on 27 August 2007 was analysed only on 24 September 2007 beyond the stipulated limit of 30 days. The results indicated that the sample was not according to the specification in respect of particle size.

9.8.2.5 Unauthorized business of fertilizers

- The Jammu and Kashmir Co-operative Supply and Marketing Federation, the main lifting agency in the State has no valid license. License for carrying on the business was only issued to the federation in November 2009, after the omission was pointed out (October 2009).

- Most of the Co-operative Marketing Societies and some private dealers dealing with sale of fertilizers do not have valid licenses as required under the FCO 1985. In certain cases it was noticed that the Societies / Dealers having retail license were doing sale of fertilizers as wholesale dealers.

- Stock registers as required under clause 35 (1) (a) in form – N of the Fertilizer (Control) Order 1985 had not been maintained by the dealers.

- Cash memos in support of sale of fertilizers in Form – M required to be issued by the dealer as per clause 5 of Fertilizer (Control) Order 1985 had not been maintained and no cash / credit memos were issued.

- Purchase bills in support of purchase of fertilizers were not available with the dealers (except those functioning as lifting agencies). Only challans showing the quantity of material received were available with the dealers in some cases.

9.8.3 Results of dealer and farmer survey

9.8.3.1 Dealer Survey

Responses from 47 dealers are summarized below:-

Sl.No.	Questions	Response		
		Yes	No	
1.	Are you getting the required quantity and type of fertilizers from your source (1st stocking point or wholesaler) in time?	10	37	
		No Limit	Limited	Others NA
2.	Do you give fertilizers to the farmers without any limit or is there some limit like 1 bag of DAP per acre.	44	0	3
		Yes	No	
3.	Are you facing any problems in transportation etc. in lifting your requirement of fertilizers?	14	33	
		Yes	No	
4.	Do you have adequate credit facilities so as to lift your requirement of fertilizers?	25	22	
		Yes	No	
5.	Are you able to supply fertilizers as per demand to the farmers on time? What are your problems?	8	39	
		Yes	Others	
6.	Are farmers demanding small quantity bags of fertilizers from you?	26	21	
		Yes	No	
7.	Have any samples been selected in the last 3 years from your stock for fertilizers quality testing by the Agriculture Department? What were the results?	37	10	

As can be seen above, most of the dealers indicated that were not getting the required quantity of fertilizers in time, and, in true, were not able to supply fertilizers as per demand. They also confirmed demand from farmers of supply of fertilizers in small bags.

9.8.3.2 *Farmer Survey*

Responses from 240 farmers are summarized below:

Sl.No.	Questions	Response		
		Cooperative	Dealer	Both
1.	Are you buying fertilizers from the authorised dealer/ co-operative society?	0	0	240
		Yes	No	
2.	Are the quantity of fertilizers sold to you rationed? E.g., 5 bags DAP/ration card, 1 bag of DAP per acre etc. Please indicate?	0	240	
		MRP	Higher than MRP	Others
3.	What are the prices at which you have bought fertilizers (a) urea (b) DAP (c) MOP (d) other fertilizers in the last 1 or 2 seasons?	0	238	2
		Yes	No	
4.	Did the dealer give you a receipt for your sales?	9	231	
		Yes	No	
5.	Do you know the maximum prices for fertilizers fixed by Government (Audit team may show the MRP list of various fertilizers to the farmer)?	97	143	
		Yes	No	
6.	Do you have enough money to buy your full requirement of fertilizers? What are your problems?	185	55	
		Yes	No	
7.	Did you get your soil tested, to find out the exact requirement of different types of fertilizers for your land, so that you get the maximum yield of crops?	12	228	
		Yes	No	
8.	Did you face any problems in getting your full requirement of fertilizers in time for the season?	191	49	
		Yes	No	
9.	Does the dealer force you to buy any other item along with the fertilizers that you want?	0	240	
		Yes	No	

10.	Do you need fertilizers in small quantity bags?	138	102
		Yes	No
11.	Overall, are you satisfied with the supply of fertilizers to you?	54	186
		Yes	No
12.	Have you faced any other problems in supply of fertilizers?	206	34

Survey results revealed that almost all the farmers were purchasing the fertilizer at prices higher than the MRP, and were not getting the receipt were not getting the receipt for their purchase. Most of them did not know the MRP, their soil was not tested. Most of them were in favour of small quantity bags.

9.9 Jharkhand

9.9.1 Background

Jharkhand has 24 districts with a total of 18.04 Lakh hectares of net sown area covering 25 percent of the total geographical area. 92 per cent of the total cropped area is unirrigated. The agricultural economy of the State is characterized by dependence on nature, low investment, low productivity, mono-cropping with paddy as the dominant crop, inadequate irrigation facilities and small and marginal holdings.

Three districts and six blocks, namely Ranchi (Ormanjhi and Bundu), East Singhbhum (Ghatshila and Jamshedpur Sadar) and Deoghar (Sarath and Deoghar Sadar) were selected for detailed audit scrutiny.

9.9.2 Audit findings

9.9.2.1 Incorrect assessment of fertilizer requirement

- During 2006-09, the assessment of fertilizer requirement was prepared in consultation with the lead fertilizer supplier i.e IFFCO and other manufacturers. There was no correlation between the dose prescribed by Birsa Agricultural University (BAU)/Directorate of Agriculture (DoA) and that projected by the DoA in the Zonal Agriculture Input Conference. The District and Block Agricultural Officers and farmers were not involved in the assessment process. The gap between the two ranged from 31 to 92 per cent during 2006-09, as indicated below ***(Table 9.19 A):***

Table 9.19 – Gap between requirement as per prescribed doses and consumption

	Requirement of fertilizers	Urea (MT)	DAP(MT)	SSP (MT)	MOP(MT)
		Year 2006-07			
A	As prescribed by DoA/BAU	2,72,109	1,76,976	87,404	74,113
B	As placed by department	1,84,000	1,15,000	5,500	7,000
C	Shortage in quantity & in percentage (A-B)	88,109 32%	61,976 35%	81,904 94%	67,113 91%
D	Available	1,69,678	78,151	4,775	704
E	Consumption	1,62,437	67,733	4,310	704
F	Shortfall in consumption (A-E)	1,09,672 (40%)	1,09,243 (62%)	83,094 (95%)	73,409 (99%)

	Year 2007-08				
A	As prescribed by DoA/BAU	2,81,035	1,76,988	98,644	77,318
B	As placed by department	2,00,000	77,700	7,050	6,950
C	Shortage in quantity & in percentage (A-B)	81,035 (20%)	99,288 (56%)	91,594 (93%)	70,368 (91%)
D	Available	1,69,295	77,997	5,673	10,341
E	Consumption	1,53,592	74,244	5,436	8,652
F	Shortfall in consumption (A-E)	1,27,443 (45%)	1,02,744 (58%)	93,208 (94%)	68,667 (89%)
	Year 2008-09				
A	As prescribed by DoA/BAU	2,89,265	2,00,979	1,09,665	81,215
B	As placed by department	2,00,000	1,05,000	1,00,000	13,000
C	Shortage in quantity & in percentage (A-B)	89,265 (31%)	95,979 (48%)	99,665 (91%)	68,215 (84%)
D	Available	1,62,147	82,971	01	16,334
E	Consumption	1,48,773	80,342	01	13,750
F	Shortfall in consumption (A-E)	1,40,492 (49%)	1,20,637 (60%)	1,09,664 (100%)	67,465 (83%)

Table 9.19 A - Total shortfall during 2006-09

Year		Urea (MT)	DAP(MT)	SSP(MT)	MOP(MT)
2006-09	Total shortfall in quantity i.e. shortage in quantity indented *vis- a- vis* the prescribed quantity	2,58,409 (31%)	2,57,243 (46%)	2,73,163 (92%)	2,05,696 (88%)
2006-09	Total shortfall in consumption i.e. shortage in quantity consumed *vis-à-vis* the prescribed quantity	3,77,607 (45%)	3,32,624 (60%)	2,85,966 (97%)	2,09,541 (90%)

Note: Year wise calculation of fertilizers as per recommendation of DoA/BAU prescribed in Kisan Diary 2008 and Booklet Kharif 2009.

- The consumption of fertilizers has almost kept pace with the availability of fertilizers in the state which indicates that inadequate projection of requirement and consequent non-availabaility of adequate supply of fertilizers is the root cause of poor consumption of fertilizers in the state which adversely affects the productivity of crops. Also inadequate availability of fertilizers is fraught with the risk of black marketing.
- SSP, being an important fertilizer, was recommended for particular crops for better yield. However, against the requirement of 1.09 Lakh MT of SSP during 2008-09, the supply and consumption was nil.

9.9.2.2 Non fixation of norms for sale of fertilizers

- No norms were fixed by the Government to regulate the sale of fertilizer, so as to ensure its sale to genuine farmers.

9.9.2.3 Diversion of fertilizers

- Test check of 25 cases revealed that 12689 MT of de-controlled fertilizers were despatched during 2008-09 from Hatia, Daltonganj, Koderma and Jasidih rake points/notional warehouses to other districts where the rake point was co-terminus with the district and was in operation. Instead of despatching the fertilizers to the block headquarters in its coverage area, they were despatched to other districts. The possibility of this practice creating temporary shortage in a particular area and consequently abetting black marketing and hoarding could not be ruled out.

9.9.2.4 Verification of Sales

- There were substantial delays in the issue of Proforma B by the State Government ranging from 6 days to 723 days.
- There were no processes for verification of sales beyond the 1st stocking point sale upto the end users viz. the farmers.
- Verification was done on the basis of details in Proforma 'A' and Stock register of dealers.
- Proforma 'A' of Tata Chemical Limited (TCL) for the month of August 2008, for supply/sale of 1457.35 MT of fertilizers (i.e. DAP imported 741.200 MT, Indigenous DAP Grade II 243.150 MT, MOP 168 MT and NPK 10:26:26-305 MT) involving subsidy of Rs.5.29 crore, was irregularly certified almost seven months in advance i.e. in January 2008 by the DoA. This casts doubts on the authenticity of the process for certification of Profroma 'A'.

9.9.2.5 Quality control

- Only one Quality Control Laboratory existed in Jharkhand. Out of 26 items of equipment, 13 were functional and two were lying un-installed as of October 2009, and the remaining items of equipment were non-functional since 2007-08.

- Against the analyzing capacity of 6045 samples (2015 sample per year) during 2006-09, only 2043 (34 per cent) samples were analysed.

9.9.2.6 Other interesting points

9.9.2.6.1 Non-strengthening of Dealers' network

- None of the fertilizers companies, except IFFCO, were adequately represented by their authorized dealers in the State.
- Despite the instruction of the DOA to the fertilizer companies to establish dealers network in all the districts / blocks, the fertilizer companies failed to establish the dealers netwok in all the district/blocks. The fertilizer trade in the entire State was controlled by just 15 to 39 dealers. There were no dealers in the districts of Dhanbad, Simdega, Jamtara, Dumka and Pakur. This placed the fertilizers in these districts at the mercy of dealers from other districts.

9.9.2.6.2 Sale of non-standard fertilizers

- Test check of records of 1st stock point of IFFCO at Ranchi revealed that 2586.75 MT of DAP, involving subsidy amounting to Rs. 10.81 crore, arrived at Hatia rake point on 22 July 2008, and was left in the open on the platform and exposed to rain for four days from 22 – 25 July 2008. The quality of DAP deteriorated, and the DAP was sold without any quality test, resulting in irregular supply of non-standard fertilizer to the farmers.

9.9.2.6.3 Irregular sale of fertilizers to NGOs

- In Ranchi district, 725.30 MT of different types of fertilizers were sold by M/s Krishi Vikas Kendra and M/s Vidya Beej Bhandar, dealers to NGOs during 2008-09. Audit could not ascertain whether the fertilizers were sold to NGOs for agricultural purpose or not. Thus, mis-utilisation of fertilizers for purpose other than agriculture or diversion could not be ruled out.

9.9.2.6.4 Doubtful sale of fertilizers

- Test check of records revealed that 978.10 MT of different types of fertilizers, involving subsidy of Rs.2.25 crore was purchased by M/s Green Centre, Ranchi a dealer representing four manufacturer/companies during the period from April 2008 to December 2008. However, the invoices did not bear the registration number of the vehicle which transported the fertilizers to the dealer's godown. Thus, the possibility of adjustment of sale, only to claim the fertilizer subsidy, could not be ruled out.

9.9.2.6.5 Short receipt of fertilizers

- It was noticed that a PPL rake (RR no.212001374 dated 22-8-2008) of fertilizers was received at Hatia rake point (25 August 2008), from which 76 MT (MOP), 37 MT(NPK 10) and 37 MT (NPK 20) was allocated by the company to the District Godown, Madhupur

but the same was not found included in the buffer stock. This resulted in short accountal of fertilizers involving subsidy of Rs.48.90 lakh.

9.9.2.6.6 Non Functional Rake points

- The State Government approved eight rake points for the State, out of which, four, namely Tata Junction, Sahibganj, Hazaribagh and Dhanbad, were nonfunctional. There was a strong possibility of supply of fertilizers being adversely affected in districts where rakes were not functional and consequent increase in price burden on end users.

9.9.3 Results of dealer and farmer survey

9.9.3.1 Dealer Survey

Responses from 22 dealers are summarized below:-

Sl. No.	Questions	Response		
		Yes	No	
1.	Are you getting the required quantity and type of fertilizer from your source (1st stocking point or wholesaler) in time?	13	9	
		No Limit	Limited	
2.	Do you give fertilizers to the farmers without any limit or is there some limit like 1 bag of DAP per acre?	21	1	
		Yes	No	
3.	Are you facing any problems in transportation etc. in lifting your requirement of fertilizers?	14	8	
		Yes	No	
4.	Do you have adequate credit facilities so as to lift your requirement of fertilizers?	6	16	
		Yes	No	Others
5.	Are you able to supply fertilizers as per demand to the farmers on time? What are your problems?	9	10	3
		Yes	No	
6.	Are farmers demanding small quantity bags of fertilizers from you?	16	6	
		Yes	No	Yes, report not received
7.	Have any samples been selected in the last 3 years from your stock for fertilizer quality testing by the Agriculture Department? What were the results?	16	4	2

Most of the dealers indicated problems in transportation for lifting, as well as inadequate credit facilities.

9.9.3.2 Farmer Survey

Responses from 190 farmers are summarized below:-

Sl.No.	Questions	Response			
		Cooperative	Dealer	Both	others
1.	Are you buying fertilizers from the authorised dealer/ co-operative society?	11	155	22	2
		Yes	No	Others	
2.	Are the quantity of fertilizers sold to you rationed? E.g., 5 bags DAP/ration card, 1 bag of DAP per acre etc. Please indicate.	5	183	2	
		MRP	Higher then MRP	No comments	
3.	What are the prices at which you have bought fertilizers (a) urea (b) DAP (c) MOP (d) other fertilizers in the last 1 or 2 seasons?	0	0	190	
		Yes	No	Only from cooperative	
4.	Did the dealer give you a receipt for your sales?	10	167	13	
		Yes	No		
5.	Do you know the maximum prices for fertilizers fixed by Government (Audit team may show the MRP list of various fertilizers to the farmer)?	4	186		
		Yes	No	No comments	
6.	Do you have enough money to buy your full requirement of fertilizers? What are your problems?	20	169	1	
		Yes	No	Yes, but Report not received	
7.	Did you get your soil tested, to find out the exact requirement of different types of fertilizers for your land, so that you get the maximum yield of crops?	4	183	3	
		Yes	No	Others	
8.	Did you face any problems in getting your full requirement of fertilizers in time for the season?	109	67	14	
		Yes	No	Others	

9.	Does the dealer force you to buy any other item along with the fertilizers that you want?	10	174	6
		Yes	No	
10.	Do you need fertilizers in small quantity bags?	172	18	
		Yes	No	Others
11.	Overall, are you satisfied with the supply of fertilizers to you?	79	110	1
		Yes	No	No comments
12.	Have you faced any other problems in supply of fertilizers?	134	54	2

As seen above, the vast majority of farmers did not know the MRPs for fertilizers did not have enough money to buy their full requirement of fertilizers, did not get their soil tested for finding out the exact requirement of fertilizers, and needed small quantity bags of fertilizer.

9.10 Karnataka

9.10.1 Background

Karnataka has 29 districts with a total geographical area of 191791 sq. km and cropped area of 100.69 lakh hectares. The major crops are cereals, pulses, cotton, and commercial crops like oilseeds, sugarcane and tobacco. Four districts (Chickmagalur, Haveri, Mandya, and Udupi) and eight blocks (two in each district) were randomly selected for detailed audit scrutiny.

9.10.2 Audit Findings

9.10.2.1 Assessment of fertilizer requirement

- The criteria for calculating the requirement were previous year's district wise consumption, best season consumption, seasonal conditions, crop coverage and diversification and discussions with lead fertilizer unit as well as other manufacturers during monthly meetings. However, in the test checked districts the requirement was projected on the basis of previous year's consumption data as well as by increasing 10 per cent. Consumption data was based on the supplies made by the manufacturers at the district level. Hence, the projection of fertilizer was not realistic/scientific.

9.10.2.2 Availability of fertilizer

- There are no norms to regulate sale of fertilizers. Only during short / delayed supply, were the sales monitored by the staff of the Agriculture Department.
- There was substantial variation between the assessed requirement and supply of fertilizers during the period 2006-07 to 2008-09. The shortfall in respect of supply of Urea, DAP, MOP, and Complexes ranged from 5 per cent to 59 per cent and the excess supply over requirement ranged between 2.34 per cent to 26.37per cent.

Table 9.20 – Variation between assessed requirement and supply of fertilizers

(Quantity in MT)

Year	Urea			DAP			NPK		
	Required	Supply	Difference in per centage	Required	Supply	Difference in per centage	Required	Supply	Difference in per centage
2006-07	1225000	1253628	-2.34	580000	437584	24.55	1113000	786711	29.32
2007-08	1350000	1281988	5.04	605000	764511	-26.37	1117000	799204	28.45
2008-09	1375000	777616	43.45	820000	567696	30.77	1120000	459218	59

Year	MOP			Others		
	Required	Supply	Difference in per centage	Required	Supply	Difference in per centage
2006-07	383000	358013	6.52	200411	121755	39.25
2007-08	455000	504622	-10.91	195100	165862	14.99
2008-09	515000	278800	45.86	218000	90802	58.35

- In some districts, shortages of fertilizers were reported.

9.10.2.3 Verification of stock

- There were delays in issue of Proforma 'B', ranging from 1 to 85 days, as summarised below:

Table 9.21 – Delays in issue of Proforma 'B'

Month	Name of the Company	Date of submission of proforma'A'	Date of submission of Proforma 'B'	Delay in days
April 2008	M/s Deepak Fertilizers	9-5-2008	28.10.2008	82
April 2008	M/s Fertilizer & Chemicals Travancore Ltd.	12-7-2008	28.10.2008	17
April 2008	M/s GSFC Ltd.	29-7-2008	28.10.2008	1
April 2008	M/s IFFCO Ltd.	3-7-2008	28.10.2008	26
April 2008	M/s IPL Ltd.	28-5-2008	28.10.2008	63
April 2008	M/s M.C.F. Ltd.	20-6-2008	28.10.2008	40
April 2008	M/s R.C.F. Ltd.	6-5-2008	28.10.2008	85
April 2008	M/s ZIL Ltd.	28-6-2008	28.10.2008	32
May 2008	M/s Coromandal Fertilizers Ltd.	4.7.2008	28.10.2008	25
July2008	M/s Coromandal Fertilizers Ltd.	23.9.2008	15-12-2008	NIL
July2008	M/s Deepak Fertilizers	6-9-2008	15-12-2008	10
July2008	M/s Fertilizer & Chemicals Travancore Ltd.	17-9-2008	15-12-2008	NIL
July2008	M/s IFFCO Ltd.	28-8-2008	15-12-2008	18
July2008	M/s IPL Ltd	14-8-2008	15-12-2008	32
July2008	M/s M.C.F. Ltd.	22-8-2008	15-12-2008	24

Month	Name of the Company	Date of submission of proforma'A'	Date of submission of Proforma 'B'	Delay in days
July2008	M/s R.C.F. Ltd.	21-8-2008	15-12-2008	25
July2008	M/s ZIL Ltd.	5-8-2008	15-12-2008	51
August 2008	M/s GSFC Ltd.	15.9.2008	15-12-2008	1
October 2008	M/s Coromandal Fertilizers Ltd.	4-12-2008	9.4.2009	36
October 2008	M/s Deepak Fertilizers	21-11-2008	9.4.2009	49
October 2008	M/s Fertilizer & Chemicals Travancore Ltd.	29-11-2008	9.4.2009	41
October 2008	M/s GSFC Ltd.	29-11-2008	9.4.2009	41
October 2008	M/s IFFCO Ltd.	17-11-2008	9.4.2009	53
October 2008	M/s IPL Ltd.	18-11-2008	9.4.2009	52
October 2008	M/s M.C.F. Ltd.	15-12-2208	9.4.2009	25
October 2008	M/s R.C.F. Ltd.	18-12-2008	9.4.2009	22
October 2008	M/s ZIL Ltd.	1-12-2008	9.4.2009	39

- In the test checked period in the test checked districts, it was noticed that physical verification of stock was not conducted.

9.10.2.4 Quality control

- The required number of technical and supporting staff was not in position. Against the sanctioned strength of 41 posts, 15 positions were vacant in the four laboratories in the State, as summarised below:

Table 9.22 – Shortage of staff in quality control laboratories in Karnataka

Sl.No.	Post	Sanctioned	Filled	Vacant
1	Deputy Director	4	3	1
2	Agricultural Officers	21	12	9
3	Laboratory Assistant	8	5	3
4	Laboratory Attenders	8	6	2

9.10.3 Results of dealer and farmer survey

9.10.3.1 Dealer Survey

Responses from 48 dealers are summarized below:

Sl.No.	Questions	Response		
		Yes	No	
1.	Are you getting the required quantity and type of fertilizer from your source (1st stocking point or wholesaler) in time?	5	43	
		No Limit	Limited	
2.	Do you give fertilizers to the farmers without any limit or is there some limit like 1 bag of DAP per acre.	43	5	
		Yes	No	
3.	Are you facing any problems in transportation etc. in lifting your requirement of fertilizers?	26	22	
		Yes	No	
4.	Do you have adequate credit facilities so as to lift your requirement of fertilizers?	45	3	
		Yes	No	
5.	Are you able to supply fertilizers as per demand to the farmers on time? What are your problems?	47	1	
		Yes	No	
6.	Are farmers demanding small quantity bags of fertilizers from you?	37	11	
		Yes	No	Yes, but report not received
7.	Have any samples been selected in the last 3 years from your stock for fertilizer quality testing by the Agriculture Department? What were the results?	30	6	12

Most dealers did not receive the required quantity of fertilizer in time, while 22 dealers' were having problems in lifting the fertilizer, as it was not supplied at the door step of the dealer. Most dealers also stated that farmers were demand of small bags of fertilizers.

The dealers requested fertilizer to be supplied on F.O.R. basis in order to avoid subsequent problems like loading and unloading etc.

9.10.3.2 Farmer Survey

Responses from 240 farmers are summarized below:-

	Questions	Response		
		Cooperative	Dealer	Both
1.	Are you buying fertilizers from the authorised dealer/ co-operative society?	112	66	62
		Yes	No	
2.	Are the quantity of fertilizers sold to you rationed? E.g., 5 bags DAP/ration card, 1 bag of DAP per acre etc. Please indicate?	9	231	
		MRP	Higher than MRP	Others
3.	What are the prices at which you have bought fertilizers (a) urea (b) DAP (c) MOP (d) other fertilizers in the last 1 or 2 seasons?	110	129	1
		Yes	No	Both
4.	Did the dealer give you a receipt for your sales?	155	83	2
		Yes	No	
5.	Do you know the maximum prices for fertilizers fixed by Government?	195	45	
		Yes	No	Others
6.	Do you have enough money to buy your full requirement of fertilizers? What are your problems?	76	163	1
		Yes	No	Others
7.	Did you get your soil tested, to find out the exact requirement of different types of fertilizers for your land, so that you get the maximum yield of crops?	62	177	1
		Yes	No	
8.	Did you face any problems in getting your full requirement of fertilizers in time for the season?	168	72	
		Yes	No	
9.	Does the dealer force you to buy any other item along with the fertilizers that you want?	20	220	
		Yes	No	
10.	Do you need fertilizers in small quantity bags?	174	66	

		Yes	No
11.	Overall, are you satisfied with the supply of fertilizers to you?	105	135
		Yes	No
12.	Have you faced any other problems in supply of fertilizers?	145	95

Farmer survey results revealed that most of the farmers stated that they were getting the fertilizer at prices higher than the MRP and were also facing problems in getting sufficient quantity of fertilizers in time. Most farmers were also in favour of small quantity bags.

9.11 Kerala

9.11.1 Background

Kerala has 14 districts with total net cropped area of 21.05 lakh hectares (2007-08), covering 54.16 percent of the total geographical area. The main crops of the State are spices, rubber, coconut, plantain and paddy.

Two districts (Kottayam and Palakkad) and two blocks in each district (Kaduthuruty, Kanjirappally, Alathur and Palakkad) were selected for detailed audit scrutiny, besides two Quality Control Laboratories at Pattambi and Thiruvananthapuram.

9.11.2 Audit findings

9.11.2.1 Assessment of fertilizer requirements

- The assessment of requirement was not based on type of crop, increase/decrease in crop area, cropping pattern, area under irrigation etc. Instead, it was calculated by adding five per cent to the highest consumption during the last five years up to 2007-08. During 2008-09, the requirement was calculated by taking 10 per cent increase over the consumption during the previous seasons, except for DAP for which an increase of 25 per cent was taken.
- Consumption was calculated on the basis of receipt of fertilizer by whole sellers/retailers during the season. The total of the subsidy claims/sales reports submitted by the manufacturers was taken as the consumption for the season.

9.11.2.2 Availability and consumption

- Shortfall in DAP and MOP ranged between 5 per cent and 25 per cent, and excess ranged between 12 per cent and 33 per cent of the requirement during 2006-09. Shortfall in other complex fertilizers was more pronounced and it ranged between 44 to 76 per cent as detailed below:

Table 9.23 – Shortfall in availability of fertilizers

(Quantity in MT)

Item	Year	Requirement	Receipt	% of excess/short receipt
Urea	2006-07	146032	136120	-6.79
	2007-08	138600	138597	-
	2008-09	147500	155511	+5.43
DAP	2006-07	16877	22545	+33.58
	2007-08	22798	17061	-25.16
	2008-09	25500	24063	-5.64
MOP	2006-07	129631	123508	-4.72
	2007-08	130685	110149	-15.71

	2008-09	133000	150085	+12.85
Factomphos & other 20:20	2006-07	130736	140683	+7.61
	2007-08	150605	117767	-21.80
	2008-09	156000	166515	+6.74
Other complexes				
(10:26:26, 15:15:15, 17:17:17, 19:19:19, Single Super Phosphate and Ammonium Sulphate)	2006-07	56238	13312	-76
	2007-08	36177	11430	-68
	2008-09	21300	11860	-44

Year wise details of receipt and consumption of urea, DAP, MOP and complexes for the period 2006-09 are as depicted below:

Table 9.24–Receipt and consumption of fertilizers

(Quantity in MT)

Item	Year	Receipt	Consumption	Difference
Urea	2006-07	136120	125422	10698
	2007-08	138597	133831	4766
	2008-09	155511	162702	(-)7191
DAP	2006-07	22545	24015	(-)1470
	2007-08	17061	17760	(-)699
	2008-09	24063	26043	(-)1980
MOP	2006-07	123508	118416	5092
	2007-08	110149	116446	(-)6297
	2008-09	150085	150956	(-)871
Factomphos & other 20:20	2006-07	140683	131996	8687
	2007-08	117767	131127	(-)13360
	2008-09	166515	149177	17338
Other complexes				
(10:26:26, 15:15:15, 17:17:17, 19:19:19)	2006-07	13312	13754	(-)442
	2007-08	11430	11050	380
	2008-09	11860	14405	(-)2545

- From the above table it is evident that the consumption of DAP was higher than the receipt during all the three years as well as in MOP during 2007-09, Factomphos, 20:20 during 2007-08 and other complexes during 2006-07 and 2008-09.

- In the case of the selected districts, there were variations between requirement and consumption of almost all fertilizers during 2008-09 showing that the supply was not based on assessed requirement as follows:

Table 9.25 – Variation between requirement and consumption of fertilizers

(Quantity in MT)

District	Urea			MOP			DAP			NPK Complexes*		
	Requirement	Consumption	Difference	Requirement	Consumption	Difference	Requirement	Consumption	Difference	Requirement	Consumption	Difference
Kottayam	17649	20979	3330	19241	19281	40	5854	9845	3991	14257	23151	8894
Palakkad	21505	27919	6414	13560	19420	5860	3813	880	-2933	32136	40640	8504

NPK complexes include 17:17:17, 10:26:26, Factomphos, 20:20, Rock Phosphate, Ammonium Sulphate, SSP and 15:15:15

Source: Directorate of Agriculture

- Further, most of DAP and the major portion of urea and MOP were sold to mixing units. A wholesale dealer in Palakkad was selling the urea, MOP and DAP to the mixing units in Ernakulam. The details of the quantity of urea, DAP and MOP sold to mixing units in the case of certain dealers test checked for the period April 2008 to December 2008 were as under:

Table 9.26 – Fertilizers sold to mixing units

(Quantity in MT)

District		Urea		DAP		MOP	
	Unit	Total sale	Purchased by mixing units	Total sale	Purchased by mixing units	Total sale	Purchased by mixing units
Kottayam	FACT Kumaranalloor	4181.90	2362.00 (56.48%)	2741.00	2681.00 (97.81%)	1710.00	1009.00 (59%)
	A wholesale dealer in Kottayam *	1369.35	889.80 (65%)	417.35	415.80 (99.63%)	760.80	347.00 (45.61%)
Palakkad	FACT Depot	6475.75	154.00 (2.38%)	260.00	40.00 (15.38%)	3322.80	70.00 (2.11%)
	A wholesale dealer in Palakkad	4964.65	2200.00 (44.31%)	181.15	181.15 (100%)	1874.35	650.00 (35%)

Of the sale effected to mixing units, major portion was to a mixing unit under the same management.

- The MRP of the different grade of mixture fixed by the association of mixing units, in the State are much higher than that fixed by the GOI as per details given below:

Table 9.27- Differences in MRPs of mixtures in Kerala

MRP fixed by GOI		MRP fixed by Mixing Units		
Product	Price (Rs)	Product	Price (Rs) w.e.f Aug 2008	Price (Rs) w.e.f Oct 2008
20:20:0:13	6295	18:18:(18):18	9800	9800
15:15:15:0	5121	20:0:10	6060	5785
17:17:17:0	5804	12:12:6	8300	6910
19:19:19:0	6487	10:10:4	7480	6300
		12:12:12	8700	7588
		10:10:10	7860	6690
		15:10:6	8040	6925

The State Government has no role in fixing the price of the mixtures. Clearly, a large portion of subsidised fertilizer supplies is going into fertilizer mixture sold at relatively higher prices, thus unduly benefiting the mixing units by breaking the "subsidy chain". Furthermore, the farmers are not getting good quality fertilizers at in the subsidized price, thereby defeating the Government of India's prime objective that the subsidy should be benefit the farmers.

9.11.2.3 Verification of subsidy claims

- Delays ranged from 10 to 60 days beyond the prescribed time limit of 90 days in submission of Proforma 'B' to Department of Fertilizer.

9.11.2.4 Cross border transportation

- There were reports of illegal cross border transportation of fertilizer to other states in the print/visual media. However, no report, as of October 2009, was available in the Directorate on action taken at the districts.

9.11.2.5 Quality Control

- As against eight sanctioned posts of Fertilizer Analysts (four in each laboratory at Thiruvananthapuram and Pattambi), only seven persons were in position, of which three Analysts were not trained at the Quality Control Laboratory and Training Institute, Faridabad and were thus, ineligible for appointment as Fertilizer Analyst as per Clause 29 A of FCO, 1985.
- Shortfalls in testing of the samples ranged from 10 per cent to 36 per cent during 2006-09 as depicted below:

Table 9.28 – Shortfall in testing of quality samples

Year	Quality Control Lab, Thiruvananthapuram				
	Capacity/Target fixed	Received	Tested[18] (% age of Target)	Non standard	Rejected without testing #[19]
2006-07	2790	2333	2266(81%)	136	166
2007-08	2790	2107	1907(68%)	21	109
2008-09	2790	2395	2415(87%)	65	78

Year	Quality Control Lab, Pattambi					
	Capacity	Target fixed	Recd	Tested* (% over targets)	Non standard	Rejected without testing #
2006-07	2500	2210	2255	2261(90%)	243	159
2007-08	2500	2230	1703	1594(64%)	114	57
2008-09	2500	2230	1864	1838(74%)	150	59

- In 66 to 89 per cent of the non-standard cases of sub-standard fertilizers detected during 2006-07 to 2008-09, even preliminary reports were pending, defeating the very purpose of quality testing. Also, there were no specific systems/criteria in sampling procedures so as to periodically cover all the wholesale/retail dealers/mixing units.
- The sampling covered mostly retail dealers and the samples taken were those of straight fertilizers of reputed manufacturers. Samples from mixing units/mixtures/wholesale dealers were seldom taken. For example, all the 60 samples drawn during 2006-07 to 2008-09 in Alathur block and 47 samples out of 53 in Kanjirappally block were from retail dealers only.
- A scrutiny of the register maintained by the Agriculture Department for recording the details of non-standard fertilizer samples had revealed that 92 per cent of the total non-standard inorganic fertilizer samples for the years 2007-08 and 2008-09 were mixtures. Hence, quality of mixer fertilizers produced by the mixing units was not upto the standard.
- The department was aware of the low quality products of mixing units; however, no steps were taken to improve the quality of the mixtures produced by them or to take immediate action against erring units. Further, a major portion of the urea, MOP and

[18] Including carried over from previous years.

[19] Since not received in prescribed form.

DAP received in the State on the basis of the requirement submitted by the Director of Agriculture was utilised by the mixing Units in the State to produce low quality mixtures at higher prices.

- Dealer-wise details of samples taken from Kaduthuruthy block (77 samples) and Palakkad Block (66 samples) were not received by audit.
- Hence, the quality of fertilizers distributed in the State could not be ensured, because of lack of follow up action and inadequate coverage in sampling.

9.11.3 Results of dealer and farmer survey

9.11.3.1 Dealer Survey

Responses from 24 dealers are summarized below:-

Sl.No.	Questions	Response		
		Yes	No	
1.	Are you getting the required quantity and type of fertilizer from your source (1st stocking point or wholesaler) in time?	12	12	
		No Limit	Limited	Others
2.	Do you give fertilizers to the farmers without any limit or is there some limit like 1 bag of DAP per acre.	3	20	1
		Yes	No	
3.	Are you facing any problems in transportation etc. in lifting your requirement of fertilizers?	9	15	
		Yes	No	
4.	Do you have adequate credit facilities so as to lift your requirement of fertilizers?	11	13	
		Yes	No	
5.	Are you able to supply fertilizers as per demand to the farmers on time? What are your problems?	8	16	
		Yes	No	
6.	Are farmers demanding small quantity bags of fertilizers from you?	12	12	
		Yes	No	Results were not recd
7.	Have any samples been selected in the last 3 years from your stock for fertilizer quality testing by the Agriculture Department? What were the results?	17	4	3

Most of the dealers indicated that they were not able to supply fertilizers as per demand to farmers, and were also limiting supplies to farmer. They were also facing problems in transportation in requirement of fertilizers.

9.11.3.2 Farmer Survey

Responses from 120 farmers are summarized below:-

Sl. No.	Questions	Response		
		Cooperative	Dealer	
1.	Are you buying fertilizers from the authorised dealer/ co-operative society?	115	5	
		Yes	No	
2.	Are the quantity of fertilizers sold to you rationed? E.g., 5 bags DAP/ration card, 1 bag of DAP per acre etc. Please indicate.	12	108	
		MRP	Higher than MRP	No comments
3.	What are the prices at which you have bought fertilizers (a) urea (b) DAP (c) MOP (d) other fertilizers in the last 1 or 2 seasons?	49	16	55
		Yes	No	No comments
4.	Did the dealer give you a receipt for your sales?	92	25	3
		Yes	No	
5.	Do you know the maximum prices for fertilizers fixed by Government?	43	77	
		Yes	No	
6.	Do you have enough money to buy your full requirement of fertilizers? What are your problems?	86	34	
		Yes	No	
7.	Did you get your soil tested, to find out the exact requirement of different types of fertilizers for your land, so that you get the maximum yield of crops?	73	47	
		Yes	No	
8.	Did you face any problems in getting your full requirement of fertilizers in time for the season?	46	74	
		Yes	No	No Comments
9.	Does the dealer force you to buy any other item along with the fertilizers that you want?	28	80	12

		Yes	No
10.	Do you need fertilizers in small quantity bags?	89	31
		Yes	No
11.	Overall, are you satisfied with the supply of fertilizers to you?	109	11
		Yes	No
12.	Have you faced any other problems in supply of fertilizers?	11	109

Most of the farmers indicated that they did not know the MRPs for fertilizers, and needed fertilizers in small quantities. Overall, they were satisfied with the supply of fertilizers.

9.12 Madhya Pradesh

9.12.1 Background

Madhya Pradesh has 50 districts, with a total geographical area of 307.56 lakh hectares, and gross cropped area is 204.19 lakh hecares. Out of this, the gross irrigated area is 58.28 lakh hectares. The State is divided into 5 crop zones[20]. There are four types of soils in Madhya Pradesh, namely shallow and medium black soil, deep medium black soil, alluvial soil and mixed red and black soil. The major crops are rice, wheat, soya bean, jowar, maize, BT cotton and gram.

Seven districts and two blocks in each districts i.e., Betul (Betul, Multai), Bhopal (Fanda, Berasia), Chhatarpur (Chhatarpur, Naugaon), Indore(Indore, Sanwer), Khandwa (Khandwa, Pandhana), Ratlam (Jaora,Ratlam) and Satna (Sohawal, Rampur Baghelan) were selected for detailed audit scrutiny, in addition to, two fertilizer quality control laboratories at Bhopal and Indore .

9.12.2 Audit Findings

9.12.2.1 Assessment of fertilizer requirements

- No circulars/ guidelines for assessing the requirement of fertilizers were issued by the Director of Agriculture to the district offices. No norms/standards were laid down for calculating the requirement of fertilizers based on the type of crop, irrigated/non-irrigated area, soil health and other local factors, discussions/meetings with Panchayat Samiti, Block Samiti, suggestions of farmers, number of major, medium, small and marginal farmers etc. In many cases, demands were not even sent from the district level, and even when the districts sent the demands, the figures were changed at the Directorate level.
- The demand for the fertilizers sent by the selected districts (2006-07 to 2008-09) and the final demand decided by the Directorate of Agriculture, Bhopal is given as under:

Table9.29 – Discrepancies in projected demand in Madhya Pradesh

(In MT)

Year	Name of the District	Demand sent by the DDAs (Fig in MT in terms of N, P, K)		Final demand decided by the Directorate (In MT)	
		Kharif	Rabi	Kharif	Rabi
2006-07 to 2008-09	Betul	Nil	12385	10288	14225
		12324	15221	12067	15437
		12110	16446	15494	16536
2006-07 to 2008-09	Bhopal	1522	Nil	5147	13469
		1773	14792	5122	14191
		4543	15254	6901	14528
2006-07 to 2008-09	Chhaterpur	4502	28448	5424	24991
		5644	26312	8488	24860
		6100	Nil	10034	26477
2006-07 to 2008-09	Indore	10670	Nil	12410	37416

[20] Five crops zones are Rice zone, Wheat rice zone, Wheat zone, Wheat-jowar zone and Cotton jowar zone.

		23626	41908	24446	45026
		33845	40433	40883	38035
2006-07 to 2008-09	Khandwa	Nil	Nil	25088	18350
		Nil	Nil	24363	22161
		25267	Nil	25205	15497
2006-07 to 2008-09	Ratlam	19482	26226	19496	22145
		21905	22963	21905	26631
		23555	23702	30820	24649
2006-07 to 2008-09	Satna	Nil	Nil	9674	25292
		14058	Nil	13910	25111
		14211	30496	14762	25987

- In response to audit enquiry, the Deputy Directors of Agriculture (DDsA) of the test checked districts stated that demands were decided on the basis of previous year's consumption.
- During 2006-07 to 2008-09, in some seasons, consumption was much higher than demand ranging from 2.43 per cent to 66.7 per cent and in some other seasons, demand was much higher than consumption, ranging from 17 per cent to 47 per cent.

Table 9.30 – Variation between demand and consumption

(In MT)

Name of the District	Year and Season	Demand of DDAs (Fig. in terms of N, P, K)	Consumption	Excess consumption over demand
Chhatarpur	Rabi 2008-09	26477	30320	3843* (15%)
	Rabi 2006-07 &2007-08	49851	26402	23449 (47%)
	Kharif 2006,2007 and 2008	23946	13268	10678 (45%)
Indore	Kharif 2006	12410	20680	8270* (66.7%)
	Kharif 2007	24446	32980	8534* (34%)
	Rabi 2006-07	37416	39890	3393* (9%)
Ratlam	Kharif 2006	19496	19970	474* (2.43%)
	Kharif 2007	21905	23956	2051* (9.3%)
	Kharif 2008, Rabi 2006-07 to 2008-09	104235	69874	34361 (32%)
Betul	Kharif 2006 to Rabi 2008-09	84047	68609	15438 (18%)
Bhopal	Kharif 2006,2007 and 2008	17170	9746	7424 (43%)
	Rabi 2006-07 to 2008-09	42188	34993	7195 (17%)
Khandwa	Kharif 2006 to Rabi 2008-09	130664	102575	28089 (21%)

Excess demand over consumption.

(Source- Information collected from DDsA of respective districts)

- During the verification of godowns and the scrutiny of records provided by the DDsA, it was found that huge quantity of closing stock as on March 2009 was dumped in the godowns. In the test checked seven districts, 32463[21] MT of fertilizer was lying with the private wholesalers at the end of March 2009. Of this, 727 MT of Urea was lying in company account in Ratlam.

9.12.2.2 Consumption of fertilizer

- In some seasons, per hectare consumption of fertilizers was much above the recommended dosage ranging from 9 per cent to 162 per cent in the selected districts while in some other seasons, per hectare consumption was much lower than the recommended dosage which ranged from 7 per cent to 97 per cent.

Table 9.31 – Variation between recommended dosage and actual dosage (Quantityin MT)

Name of the District	Year and Season	Recommended dosage in terms of N:P:K (kg/hectare)	Actual dosage used in terms of N:P:K	Excess dosage over recommended dosage (Kg/hectare)
Chhatarpur	Kharif 2008	85.61	100.87	18%
	Rabi 2007-08	79.70	97.72	18.02 (22.6%)
	Rabi 2008-09	77.33	202.67	125.34 (162.08%)
Indore	Rabi 2006-07	145.15	227.09	81.95 (56%)
	Rabi 07-08	144.7	199.77	55 (38%)
	Rabi 08-09	105.75	192.2	86.47 (81%)
	Kharif 2007	121.95	143.32	21.37 (17.53)
	Kharif 2008	122.07	133.25	11.18 (9.15%)
Khandwa	Rabi 06-07	167	226	59 (35.39%)
Ratlam	Rabi 06-07	61.38	110.36	49 (79%)
	Rabi 07-08	59.81	97.67	37.86 (63.3%)
Betul	Kharif 2006	120.68	25.3	95.38 (79%)
	Rabi 2007-07	151.85	87.4	64.45 (42.44%)
	Kharif 2007	124.8	27.22	97.58 (78.18%)
	Rabi 07-08	153.4	88.6	64.8 (42%)
	Kharif 2008	123.96	28.69	95.27 (76.85%)
	Rabi 08-09	144.1	89.53	54.57 (37.86%)
Bhopal	Rabi 06-07	131.05	120.56	10.49 (8%)
	Rabi 07-08	126	118.61	7.39 (5.8%)
	Kharif 2006	119.4	28.56	90.84 (76%)
	Kharif 2007	119.03	33.83	85.2 (71%)
	Kharif 2008	119.7	36.71	82 (69%)
Chhatarpur	Kharif 2007	81.08	34.20	46.88 (58%)
	Rabi 2006-07	122.27	110.09	12.18 (10%)
Indore	Kharif 2006	121.76	90.58	31.18 (25%)
Khandwa	Kharif 2006	142	65	77 (54%)

[21] Bhopal-10500 MT, Indore-4465 MT, Satna-4031 MT, Khandwa-2863 MT, Betul-6573 MT, Ratlam- 2418 MT, Chhatarpur- 1613 MT

	Kharif 2007	134.99	65.63	69.36 (51.5%)
	Rabi 07-08	164	141	23 (14%)
	Kharif 2008	135	81.23	53 (39.82%)
	Rabi 08-09	169.1	144.1	25 (14%)
Ratlam	Kharif 2006	151.31	67.2	84.11 (55.5%)
	Kharif 2007	150.53	78.2	72 (48%)
	Kharif 2008	147.5	62.1	85.4 (57%)
Satna	Kharif 2006	98	38	60
	Rabi 06-07	109	74.36	34.64 (32%)
	Kharif 2007	104	43	61 (58%)
	Rabi 07-08	111.8	98.35	13.45 (12%)
	Kharif 2008	102	68.8	33.2 (33%)
	Rabi 08-09	112.56	64.30	48.26 (42%)

Source: Informatin collected from DDsA of respective districts.

- The proportion of actual usage of N:P:K was not balanced and not as per recommendations, as detailed below, resulting in imbalanced application of nutrients and consequential adverse effects on the soil.

Table 9.32–Imbalanced application of nutrients

Name of the District	Recommended proportion (In terms of %)			Actual Usage (In terms of %)		
	N	P	K	N	P	K
Betul	41.5%	41.5%	15%	65.5%	27.5%	5.6%
Bhopal	32.54%	52.3%	15%	54.53%	42.37%	3.09%
Chhatarpur	42.2%	49%	9.6%	51%	48%	0.9%
Indore	32.54%	52.1%	15.34%	50.52%	38.8%	10.66%
Khandwa	44.97%	38.76%	16.24%	53.77%	32.2%	13.58%
Ratlam	40.34%	45.98%	13.61%	51.44%	38.66%	10.39%
Satna	41.44%	44.99%	13.56%	54.2%	42.33%	2.01%

Source: Informatin collected from DDsA of respective districts.

9.12.2.3 Compilation of Consumption Data

- Fertilizers sold in Cooperative sectors (District Marketing Officer, MP Agro and Oil Federation) and in private sector through wholesalers was treated as final consumption, although these agencies were the wholesalers (Ist sale points) and not the retailers (last sale points).
- DDsA of the districts reported consumption of 5.76 lakh MT, whereas the District Marketing Officers reported consumption of 6.37 lakh MT (a total of cash sales and sales to cooperative society retailers and not farmers). On the other hand, the consumption

reported by the cooperative banks was 5.82 Lakh MT, instead of 5.76 Lakh MT of actual sales to the farmers.

Table 9.33 – Discrepancies in sales figures

Name of the District	Period	Sale figures of DDA (A)	Sale figures of DMO			Sale figures of Co- operative society (actual)			
			Cash sales (B1)	Sale to society (B2)	Total (B3)	(C)	(A-B3)	(B2-C)	Remaining stock as on 31.03.09 in society's godown (MT)
Betul	2006-07 to 2008-09	78680 MT	7986.55	68589.30	76575.85	70395.7 MT	2104.15	-1806.4	1483.8
Bhopal		39449.05	2880.515	37301.485	40182	42130.4	-732.95	-4828.92	1323.85
Chhatarpur		52904	6939	50290	57229	43246	4325	7044	1443
Indore		201792	18861.2	182930.8	201792	169248	Nil	13682.8	7556
Khandwa		80049	598	89442	90040	83667	-9991	5775	4621
Ratlam		109360	5627.7	101783.7	107411.4	127141	-1948.6	-25357.3	1998
Satna		63616	18171.6	45102.6	63274.26	43998.9	341.74	1103.7	483.3
Total		575850.05	61060.625	575439.885	636504.51	579827	60654.46	-4387.12	18908.95

- As on 31.03.09, 18909 MT of fertilizer was lying in the godowns of the cooperative societies, which had already been reported as sold by the DDsA. In short, the reported data on consumption of fertilizer was unreliable.
- The same dealer could have the license for retail as well as wholesale sale. In such cases, the stock of wholesale accounts may be transferred to the retail account. Thus, though the figures depicted sale of fertilizers, stock was often still lying in the retail account. This provided an opportunity for wholesalers to create a fabricated crisis of fertilizers shortage, which could lead to black marketing. Many surveyed farmers complained that they had to pay higher prices than the prescribed rate during the crisis.
- There was a huge difference between the consumption data provided by the Director of Agriculture, Bhopal and the DDsA of the districts.

Table 9.34 – Differences between consumption data

(In MT)

Year	District	Consumption data of Director of Ag., Bhopal (in terms of N,P and K)	Consumption data reported by DDsA of the districts (In terms of N,Pand K)	Difference
2006-07 to 2008-09	Betul	72402	68609	3793
	Bhopal	53120	44739	8381
	Chhatarpur	65725	69990	29281
	Indore	519712	468374	51338
	Khandwa	110249	102575	7674
	Ratlam	137505	113800	23705
	Satna	82903	75081	7822

9.12.2.4 Availability of fertilizer

- During dealer/farmer's survey, the cooperative societies and the farmers complained that during the peak season, farmers faced a shortage of fertilizers and they had to rush from one block to another and had to pay higher prices (Rs.350 to Rs. 500 per bag of Urea) for purchasing the fertilizers.

9.12.2.5 Usage of standard subsidized fertilizers as raw material for manufacturing mixture of fertilizers

- In Bhopal district, mixture plants had purchased huge quantity of standard fertilizers (Urea, DAP, MOP, SSP) from companies as dealers and also from other dealers and used it as raw material for preparing N, P, K mixtures which were sold at higher prices, thus breaking the "subsidy" chain.
- The details of fertilizers purchased by one mixture plant during last three years were as under:

Table 9.35 – Details of fertilizers purchased by one mixture plant

Name of the Mixture Plant	Year	Quantity purchased (MT)
AP India Biotech Pvt. Ltd., Deewanganj, Raisen	2007-08	5138.84
	2008-09	5658.76
	Up to 31.10.09	948.65

- In contrast, the farmer's survey revealed that there was demand for standard fertilizers i.e. Urea, DAP, MOP etc. and not for mixtures.
- In the scrutiny of bills of private dealers, it was found that on the bills only 'farmers' was written instead of the farmer's name and address. In the absence of the same, the genuineness of the sale could not be verified.

- During survey, dealers stated that the companies did not provide the fertilizers on FOR (freight on road) basis and they had to bear freight charges, due to which the cost of fertilizers went above the MRP.

9.12.2.6 Verification of despatch data

- During the verification of the supply of fertilizers by the manufacturing companies to the first sale points of the districts during the period May 2008 to December 2008 vis-à-vis the despatch data, a difference of 177.3 MT was noticed involving subsidy of Rs.71 lakh.

Table9.36 – Discrepancies in Despatch Data

Manufacturer	Product	Qty Despatched (MT)	Qty Received (MT)	Difference(MT)	Amount (Rs. in Crore)
IPL	MOP	2957.3	2932.25	25.05	0.03
	DAP	91096.35	90944.10	152.25	0.68
Total		**94053.65**	**93876.35**	**177.3**	**0.71**

9.12.2.7 Verification of sales

- It was noticed that there was no system in place to verify the authenticity of sales to genuine farmers. Physical verification of the stock was not conducted, except for district Indore.
- There were no guidelines to limit the sale of fertilizer. No records relating to identification and land holding of the farmers were being verified for the cash sales of fertilizers. Thus, any person could purchase any quantity of fertilizer in cash from private dealers, institutional agencies and cooperative societies.
- There were 115 cases in which the limit of 60 days for Proforma 'A' was not adhered to by the Companies (May-08 to December-08)
- In 51 cases, Proforma 'B' were not sent to Govt. of India within the prescribed limit of 90 days by Directorate (May-08 to December-08).
- Due to non-physical verification of the stock of godowns/ first stocking points of the selected districts, it was noticed that 1097.818 MT damaged fertilizers (due to seepage) was still lying in the godowns since last one to five years for which the subsidy had already been taken by the Manufacturer.

Table 9.37 – Damaged fertilizers lying in godowns

Name of the supplier	Name of the product	Quantity (MT)	Receipt Date
	District Ratlam		
GNVFC	Narmada Urea	8.7	03.09.2009
CFCL	Urea	0.75	23.09.09
GNVFC	N. Urea	12.7	05/08 to 12/08
KRIBHCO	Imported Urea	426.868	-do-
NFL	Urea	0.550	Old stock
Sriram Fertilizers	Urea	2.50	15.09.09
Total		**452.068**	
	District- Indore		
Shriram	Urea	12.75	Old Stock
GSFC	Ammonium Sulphate	198.75	Old Stock
KRIBHCO	Urea	4.5	Old Stock
IFFCO	Urea	12	Old Stock
Kribhco and IFFCO	Urea	1	Old Stock
SPEAK	DAP	6.8	06.08.2000
Total		**235.8**	
	District- Betul		
Birla Balwan & IPL	DAP	2	Last 6 months
NFL	UREA	4.2	Last three years
Mixture	Mixture	2.6	-
Nirma	Super Phosphate	55	9.11.09 (Seepage)
RCF	UREA	105	10.11.09 (seepage)
KRIBHCO	Urea	2.35	12.10.09
Total		**171.15**	
	District- Bhopal		
IFFCO	Urea	3.25	1.25 MT from 31.03.07 & 2 MT from 21.07.09
KRIBHCO	Urea	.65	
Total		**3.90**	
	District-Khandwa		
IFFCO (Mark Fed. Godown)	10:26:26	67	
	12:32:16	31.55	
	Mixture of all companies	.35	Seepage
IPL (Godown)	DAP	2.1	Seepage and damaged
	MOP	10.65	
	Urea	8	
	SSP	99	
Total		**218.65**	

District-Satna			
Seepage of all companies	Urea	10.8.50	Last 5 years
DMO Godown Sherganj	Urea	2.3	Last 5 years
IPL godown, Pateri	Urea	1	Seepage
Agrawal Brothers	Urea	1	Seepage
	DAP	1.1	Seepage
Total		**16.25**	
Grand Total		**1097.818**	

(*Source- Information collected from stock position of first sticking points of respective districts)*

9.12.2.8 Buffer Stock

- Buffer stock was not being maintained by the institutional agencies.

9.12.2.9 Quality control

- In the two laboratories i.e. Bhopal and Indore, 5 posts of technical staff were found to be vacant. There was shortfall of 24 to 66 percent in testing of samples vis-à-vis capacity as detailed below:

Table 9.38 – Shortfall in testing of samples

District	Year	Capacity	Samples tested	Shortfall
Bhopal	06-07	2000	1520	480 (24%)
	07-08	2000	1269	731 (36%)
	08-09	2000	887	1113(55%)
Indore	06-07	2500	1178	1322 (52%)
	07-08	2500	957	1543 (61.72%)
	08-09	2500	848	1652 (66%)

9.12.2.9.1 Delay in intimation of test results

- 2637 MT of MAP of IPL, (received on 21.11.07) was declared non-standard, however, 947 MT had already been sold to the farmers and the remaining 1690 MT of MAP was still lying in the godowns.

9.12.2.10 Other Findings

9.12.2.10.1 Sale of adulterated fertilizers without registration certificate

- In Satna district, a dealer was selling duplicate adulterated fertilizer in the bags of standard companies. An FIR against the dealer was launched by the Agriculture Department, and the matter was under trial at the time of audit.

9.12.2.10.2 Usage of subsidized fertilizer (Urea) for non-agricultural purpose

- In Bhopal, subsidized fertilizer (Urea) was irregularly sold to a distillery, which was not for agriculture purposes and farmers.

9.12.2.10.3 Trading of fertilizers without having valid license

- In district Chhattarpur, 113 cooperative societies were selling fertilizers since 1998, but none of the societies had a valid license for the trade of fertilizers. During 2006-09, these societies sold 57763 MT of Urea/ Super Phosphate/DAP/12:32:16/ Potash.

9.12.3 Results of dealer and farmer survey

9.12.3.1 Dealer Survey

Responses from 78 dealers are summarized below:-

Sl.No.	Questions	Response		
		Yes	No	Others
1.	Are you getting the required quantity and type of fertilizer from your source (1st stocking point or wholesaler) in time?	33	44	1
		No Limit	Limited	Others
2.	Do you give fertilizers to the farmers without any limit or is there some limit like 1 bag of DAP per acre.	45	29	4
		Yes	No	
3.	Are you facing any problems in transportation etc. in lifting your requirement of fertilizers?	16	62	
		Yes	No	Others
4.	Do you have adequate credit facilities so as to lift your requirement of fertilizers?	51	18	9
		Yes	No	Others
5.	Are you able to supply fertilizers as per demand to the farmers on time? What are your problems?	34	42	2
		Yes	No	Others
6.	Are farmers demanding small quantity bags of fertilizers from you?	12	64	2
		Yes	No	Yes, but report not received

7.	Have any samples been selected in the last 3 years from your stock for fertilizer quality testing by the Agriculture Department? What were the results?	59	14	5

Most of the dealers indicated that they were not getting the required quantity and type of fertilizers, and, in turn, were not able to supply fertilizers as per demand to farmers in time.

9.12.3.2 Farmer Survey

Responses from 295 farmers are summarized below:-

Sl No.	Questions	Response		
		Cooperative	Dealer	Both
1.	Are you buying fertilizers from the authorised dealer/ co-operative society?	234	51	10
		Yes	No	Others
2.	Are the quantity of fertilizers sold to you rationed? E.g., 5 bags DAP/ration card, 1 bag of DAP per acre etc. Please indicate.	28	266	1
		MRP	Others	
3.	What are the prices at which you have bought fertilizers (a) urea (b) DAP (c) MOP (d) other fertilizers in the last 1 or 2 seasons?	138	157	
		Yes	No	Others
4.	Did the dealer give you a receipt for your sales?	200	78	17
		Yes	No	
5.	Do you know the maximum prices for fertilizers fixed by Government (Audit team may show the MRP list of various fertilizers to the farmer)?	32	263	
		Yes	No	Others
6.	Do you have enough money to buy your full requirement of fertilizers? What are your problems?	107	187	1
		Yes	No	Yes but report not received

7.	Did you get your soil tested, to find out the exact requirement of different types of fertilizers for your land, so that you get the maximum yield of crops?	59	230	6
		Yes	No	
8.	Did you face any problems in getting your full requirement of fertilizers in time for the season?	161	134	
		Yes	No	Others
9.	Does the dealer force you to buy any other item along with the fertilizers that you want?	69	210	16
		Yes	No	
10.	Do you need fertilizers in small quantity bags?	135	160	
		Yes	No	Others
11.	Overall, are you satisfied with the supply of fertilizers to you?	156	137	2
		Yes	No	Others
12.	Have you faced any other problems in supply of fertilizers?	153	138	4

Most of the farmers did not know the MRP, and were not buying fertilizers at MRP had also not got their soil tested for assessing the requirement of fertilizer. A significant proportion also complained that dealers we items along with fertilizers.

9.12.3.3 Field visits

Field visit by audit teams revealed instances of opened fertilizer bags and damaged fertilizers, as evidenced below:

Fertilizer lying as if condemned (Betulganj block, Betul District)

Fertilizer bags kept opened (Khandwa block, Khandwa District)

Damaged fertilizer (Khandwa block, Khandwa District)

Damaged fertilizer (Ratlam block, Ratlam District)

9.13 Maharashtra

9.13.1 Background

Maharashtra has 35 districts with a total geographical area of 308000 Sq. Km, gross cropped area of 226.55 Lakh hectares (2008-09), and net sown area of 174.47 Lakh hectares. The main crops cultivated are rice, wheat, jowar, bajra, sugarcane and cotton.

Five districts and ten blocks i.e., Amaravati (Anjangaoin Surji, Chikhaldara), Latur (Chakur, Nilanga), Osmanabad (Tuljapur, Lohara), Pune (Bhor, Junner) and Sangli (Kadegaon, Palus) and three Fertilizer Testing Laboratories situated atAmravati, Aurangabad, and Pune were selected for detailed scrutiny.

9.13.2 Audit findings

9.13.2.1 Assessment of fertilizer requirements

- As per instruction issued by the Commissionerate of Agriculture (CoA), the district wise demand of fertilizers in Kharif and Rabi seasons was to be assessed based on maximum consumption of fertilizers during the last three years, cropping pattern and irrigation facility in the district.
- However, it was seen in audit that the Agricultural Officers had collected the sale data of previous years from the dealers concerned and furnished them to the ADOs who in turn sent the information to the Deputy Director of Fertilizer (DDF), Pune instead of assessing the requirement as per the instructions of the CoA.
- An analysis of data revealed that excess supply compared to the maximum consumption of the last three years was made in respect of all fertilizers for the year 2006-07. For the year 2007-08, there was short supply for Urea, DAP, MOP, SSP and Complexes. In 2008-09, excess supply was seen in respect of Urea, DAP and MOP, while there was short supply of SSP and Complexes. The short supply of fertilizer ranged from 8 to 54 per cent during 2007-08.
- The excess supply of fertilizers ranges from 11 to 28 percent during 2006-07 and 11 to 23 percent during 2008-09. The short supply of fertilizer ranged from 8 to 54 per cent during 2007-08.

Table 9.39 Short/ excess supply of fertilizers

Year	DEMAND/REQUIREMENT (in M.T.)					SUPPLY (in M.T.)				
	I					II				
	Urea	DAP	MOP	SSP	Complexes	Urea	DAP	MOP	SSP	**Complexes**
2006-07 (Kharif)	194000	78500	21700	78000	163900	175082	75762	21185	57823	**116711**
2006-07 (Rabi)	160000	56100	34650	57700	154220	131476	51634	33464	42672	**101804**

2006-07	**354000**	**134600**	**56350**	**135700**	**318120**	**306558**	**127396**	**54649**	**100495**	**218515**
2007-08 (Kharif)	222000	97500	25300	85900	176640	169782	66364	27226	43388	**133795**
2007-08 (Rabi)	174100	67800	38060	52800	159150	116379	34588	32843	22732	**67366**
2007-08	**396100**	**165300**	**63360**	**138700**	**335790**	**286161**	**100952**	**60069**	**66120**	**201161**
2008-09 (Kharif)	230000	121000	30800	92000	210250	184337	76311	30627	29616	**107364**
2008-09 (Rabi)	184500	86000	42500	52000	189200	184832	76262	49241	47707	**97515**
2008-09	**414500**	**207000**	**73300**	**144000**	**399450**	**369169**	**152573**	**79868**	**77323**	**204879**

Year	Maximum consumption during the last three years					Excess/short supply (II-III)				
	III					IV				
	Urea	DAP	MOP	SSP	Complexes	Urea	DAP	MOP	SSP	**Complexes**
2006-07 (Kharif)	140040	51721	15387	45797	100040	35042	24041	8052	12026	**16671**
2006-07 (Rabi)	123753	40601	27309	43598	111039	7723	11033	6155	-926	**-9235**
2006-07	**263793**	**92322**	**42696**	**89395**	**211079**	**42765**	**35074**	**14207**	**11100**	**7436**
2007-08 (Kharif)	174816	75673	21356	61811	130898	-5034	-9309	5870	-18423	**2897**
2007-08 (Rabi)	135505	44374	33439	46442	111808	-19126	-9786	-6853	-17453	**-44442**
2007-08	**310321**	**120047**	**54795**	**108253**	**242706**	**-24160**	**-19095**	**-983**	**-35876**	**-41545**
2008-09 (Kharif)	187441	79369	26347	64541	133677	-3104	-3058	4280	-34925	**-26313**
2008-09 (Rabi)	140012	43860	35516	44540	113720	44820	32402	13725	3167	**-16205**
2008-09	**327453**	**123229**	**61863**	**109081**	**247397**	**41716**	**29344**	**18005**	**-31758**	**-42518**

- *No norms were prescribed for regulating the sale of fertilizers.*

9.13.2.2 Delay in submission of Proforma 'A' and Proforma 'B'.

There was delay in submission of Proforma 'A' by the manufacturers ranging from 3 to 105 days and 3 to 88 days in submission of Proforma 'B' by the DDF.

9.13.2.3 Excess/Short supply of fertilizers in contravention to monthly supply plan.

- On the basis of the allotments finalised in the Zonal Conferences, district- wise supply plan was finalized at the Commissionerate level and uploaded on the online Fertilizer Monitoring System (FMS). However, the companies did not supply fertilizers as per the supply plan during the years 2006-07 to 2008-09, which resulted in uneven supply of various kinds of fertilizers, as given below:

Table 9.40 – Uneven supply of fertilizers

2006-07 (Kharif & Rabi)

(Quantity in MT)

Sr. No.	Fertilizers Grade	Requirement	Monthly Plan	Despatch Data	Excess/Short (e-d)
(a)	(b)	(c)	(d)	(e)	(f)
1	DAP	625000	625000	654353	**29353**
2	MOP	300000	300000	280704	**-19296**
3	NPK	1359000	1359000	1171156	**-187844**
4	SSP	655000	655000	665155	**10155**
5	**Urea**	**1900000**	**1900000**	**1985361**	**85361**

2007-08 (Kharif & Rabi)

(Quantity in MT)

Sr. No.	Fertilizers Grade	Requirement	Monthly Plan	Despatch Data	Excess/Short (e-d)
(a)	(b)	(c)	(d)	(e)	(f)
1	DAP	705000	613500	552642	**-60858**
2	MOP	305000	305000	326352	**21352**
3	NPK	1377000	1278760	1209083	**-69677**
4	SSP	725000	725000	436721	**-291279**
5	**Urea**	**2120000**	**2150000**	**2130697**	**-19303**

2008-09 (Kharif & Rabi)

(In MT)

Sr. No.	Fertilizers Grade	Requirement	Monthly Plan	Despatch Data	Excess/Short (e-d)
(a)	(b)	(c)	(d)	(e)	(f)
1	DAP	860000	878524	941670	**63146**
2	MOP	372700	494292	496018	**1726**
3	NPK	6965000	1225618	1009404	**-216214**
4	SSP	6965000	12908	44895	**31987**
5	**Urea**	**2325000**	**2226912**	**2121100**	**-105812**

9.13.2.4 Non verification of fertilizer stock

- As per the instructions issued by the CoA, 20 per cent stock verification of fertilizers was required to be conducted by ADOs within 30 days from the date of supply of fertilizer to the district. However, this was not done in the test-checked districts i.e., Amravati, Latur, Osmanabad and Pune for certain lots, which ultimately led to non-submission of reports to the DDF during the period 2006-09, as detailed in ***Annexe 9.3***. The DDF proposed to release the balance Proforma 'B' to the DoF without verification of these supplies, which is in contravention of the COA instructions.

9.13.2.5 Differences between the stock shown in invoices and entry in stock book of dealers

- Scrutiny of records of various wholesalers/retailers in the test checked districts revealed that in 11 cases, the quantity of fertilizers shown in the invoices as furnished by the manufacturers and also by some wholesalers did not agree with the quantity of fertilizers shown in the stock books of certain dealers. It was observed that either less quantity of fertilizers was shown in the stock books or the quantities of fertilizers that were shown as despatched as per invoices were not recorded at all in the stock books. When the dealers were asked to furnish the bill books (sale details) to verify the sale of fertilizers of that particular lot, they did not provide those to audit. In the absence of verification of the bills, chances of irregular sale of fertilizers in the black market cannot be ruled out. Details are indicated in ***Annexe 9.4.***

9.13.2.6 Difference between closing stock and opening stock

- Scrutiny of records of dealers in sampled districts revealed that certain quantity of fertilizers remained unsold by the dealers as on 31 March 2009. However, while carrying forward, either nil balance or less quantity was shown in the stock registers as on 01 April 2009. Thus, chances of black marketing could not be ruled out as detailed in ***Annexe 9.5***

9.13.2.7 Sale of DAP at higher rate than the MRP

- A Co-operative society, M/s Nilanga Taluka Shetkari Sahakari Kharedi Vikri Sangh Ltd., Nilanga, District Laturhad sold (June 2008 and August 2008) 196 bags (50 Kg each) of DAP at the rate ofRs 500 per bag instead of MRP of Rs 486 per bag on the ground that it had made its own arrangement for transportation from Latur to Nilanga by incurring Rs 1275 and added the same to the cost of fertilizer.

9.13.2.8 Non issue of bills in form 'M' for sale of fertilizer

- In Amravati, it was revealed that 19 MT of DAP and Urea was sold (June 2008) for Rs. 1,58,600 without issue of printed cash memo(form 'M').

9.13.2.9 Quality Control.

- It was noticed that the DDF had proposed deduction of 1671.80 MT only against 7168.48 MT of non-standard fertilizers of P&K while sending Proforma 'B'.
- There was shortfall ranging from 26 per cent to 38 per cent in the analysis of samples in the selected laboratories during 2006-08 as depicted below:

Table 9.41 – Shortfall in testing

Year	Name of the Laboratory	Annual analyzing capacity	No. of samples analysed	Shortfall	Short fall in Per cent
1	2	3	4	5	6
2006-07	Amaravati	3600	2244	1356	38
	Aurangabad	3100	2041	1057	34
	Pune	4200	3075	1125	27
2007-08	Amaravati	3600	2222	1378	38
	Aurangabad	3100	2252	848	27
	Pune	4200	3097	1103	26

9.13.3 Results of dealer and farmer survey

9.13.3.1 Dealer Survey

Responses from 69 dealers are summarized below:-

Sl.No.	Questions	Response		
		Yes	No	Others
1.	Are you getting the required quantity and type of fertilizer from your source (1st stocking point or wholesaler) in time?	26	43	
		No Limit	Limited	
2.	Do you give fertilizers to the farmers without any limit or is there some limit like 1 bag of DAP per acre?	65	4	
		Yes	No	
3.	Are you facing any problems in transportation etc. in lifting your requirement of fertilizers?	40	29	
		Yes	No	
4.	Do you have adequate credit facilities so as to lift your requirement of fertilizers?	52	17	
		Yes	No	
5.	Are you able to supply fertilizers as per demand to the farmers on time? What are your problems?	26	43	

		Yes	No
6.	Are farmers demanding small quantity bags of fertilizers from you?	18	51
		Yes	No
7.	Have any samples been selected in the last 3 years from your stock for fertilizer quality testing by the Agriculture Department? What were the results?	56	13

Most of the dealers indicated that they were not getting the required quantity of fertilizers and, in turn, were not able to supply fertilizers as per demand to the farmers in time.

9.13.3.2 Farmer Survey

Responses from 300 farmers are summarized below:-

Questions		Response		
		Cooperative	Dealer	Both
1.	Are you buying fertilizers from the authorised dealer/ co-operative society?	36	238	26
		Yes	No	
2.	Are the quantity of fertilizers sold to you rationed? E.g., 5 bags DAP/ration card, 1 bag of DAP per acre etc. Please indicate.	0	300	
		MRP	Others	
3.	What are the prices at which you have bought fertilizers (a) urea (b) DAP (c) MOP (d) other fertilizers in the last 1 or 2 seasons?	246	54 (More than MRP)	
		Yes	No	
4.	Did the dealer give you a receipt for your sales?	293	7	
		Yes	No	
5.	Do you know the maximum prices for fertilizers fixed by Government (Audit team may show the MRP list of various fertilizers to the farmer)?	228	72	
		Yes	No	
6.	Do you have enough money to buy your full requirement of fertilizers? What are your problems?	157	143*	

		Yes	No
7.	Did you get your soil tested, to find out the exact requirement of different types of fertilizers for your land, so that you get the maximum yield of crops?	116	184
		Yes	No
8.	Did you face any problems in getting your full requirement of fertilizers in time for the season?	183	117
		Yes	No
9.	Does the dealer force you to buy any other item along with the fertilizers that you want?	70	230
		Yes	No
10.	Do you need fertilizers in small quantity bags?	67	233
		Yes	No
11.	Overall, are you satisfied with the supply of fertilizers to you?	147	153
		Yes	No
12.	Have you faced any other problems in supply of fertilizers?	183	117

Farmer survey results revealed that out of 240, 54 farmers purchased fertilizer at more than the MRP (Urea ranging Rs.252 to Rs.350 per bag and DAP from Rs.500 to Rs.600 per bag). 72 farmers did not know the MRP. 184 farmers stated that soil tests were not conducted and they were not at all aware that the soil can be tested also. 70 farmers stated that they were forced to buy other items than fertilizer. 67 farmers stated that they required small quantity bags. 183 farmers stated that they were not satisfied because they are not getting the fertilizer in time. 143 farmers stated that they had purchased fertilizers by taking loans from money lenders and banks.


NATIONAL FERTILIZERS LIMITED
किसान यूरिया
किसान की पहली पसन्द
WEIGHT:GROSS 50.13 Kg. NET 50 Kg.

9.14 Manipur

9.14.1 Background

Manipur has a geographical area of 22,327 sq km comprising four valley districts (Imphal East, Imphal West, Thoubal and Bishnupur) and of five hill districts (Ukhrul, Senapati, Tamenglong, Churachandpur and Chandel). The cropped area is 2.24 lakh hectares. The main crops are horticultural crops like fruits (banana, pineapple, citrus etc) and vegetable, spices, aromatic and medicinal plants and floriculture.

Two districts and four blocks i.e., Thoubal (Thoubal, Kakching) and Chandel (Chakpinkarong, Chandel), were selected for detail scrutiny.

9.14.2 Audit Findings

9.14.2.1 Assessment of fertilizer

- The requirement of fertilizers was projected on the basis of previous years' consumption.
- The gap between assessed requirement and consumption of urea in the state during the years 2006-07 to 2008-09 ranged from 41 to 59 per cent. By contrast, consumption of DAP and SSP during 2006-07 exceeded the assessed requirement by 13 and 9 per cent respectively. There was no consumption of MAP against the assessed requirement of 410 MT (2006-07) and 400 MT (2008-09). This casts doubts on the reliability of the assessed requirements.

9.14.2.2 Availability of Fertilizer

- The allocation and availability of urea in the State during 2006-07 to 2008-09 was as follows:

Table 9.42 – Allocation and availability of urea in Manipur

(Quantity in MT)

Year	ECA allocation			Availability of urea			Consum-ption	Shortfall in availability	Percentage of shortfall in availability
	Kharif	Rabi	Total	Kharif	Rabi	Total			
2006-07	37000	14200	51200	25249	3021	28270	28342	22930	45
2007-08	35000	10500	45500	24467	6754	31221	28762	14279	31
2008-09	20000	12500	32500	16812	2232	19044	19142	13456	41

(Source: Departmental records)

- The shortfall in availability of urea during 2006-07 to 2008-09 ranged from 31 to 45 per cent. Also, as can be seen above, the consumption broadly traced the availability, which further confirms the deficiency in assessment of requirement.

- The allocation and availability of urea in the selected districts of Thoubal and Chandel during 2006-07 to 2008-09 are as shown below:

Table 9.43 – Allocation and availability of urea in Thoubal and Chandel districts

(Quantity in MT)

Year		ECA allocation			Availability of urea			Excess/ shortfall
		Kharif	Rabi	Total	Kharif	Rabi	Total	
2006-07	Thoubal	8630	3400	12030	10727	1835	12562	532
	Chandel	-	300	300	-	-	-	(-) 300
2007-08	Thoubal	5120	3900	9020	8383	2408	10791	1771
	Chandel	100	72	172	-	-	-	(-) 172
2008-09	Thoubal	0	0	0	5940	1224	7164	

(Source: Departmental records)

* No district-wise allocation for the year 2008-09 was made by the Department.

- In Thoubal district, the availability of urea during 2006-07 to 2007-08 was in excess of the allocation. By contrast, no urea was lifted during 2006-07 to 2008-09 in Chandel district.

9.14.2.3 Verification of Sales

- In respect of decontrolled fertilizers, first point sales reported through proforma B were verified only on the basis of affidavits from the dealer. In respect of urea, verification was made by obtaining delivery challans from the dealers. However, the State Government did not adopt any mechanism for verification of sales beyond the first point sales up to the farmers' level; also, no physical verification of stock was conducted.

9.14.2.4 Quality Control

- There was no testing laboratory in the State, nor was any sample drawn by the CFQCTI, Faridabad or its regional laboratories.

9.14.2.5 Non Issue of Receipts

- The dealers did not issue cash or credit memos to the purchasers, which was in violation of Clause 5 of FCO 1985.

9.14.2.6 Non Display of stock position and Price List

- Test check of 12 dealers (wholesale or retail) revealed that none of them displayed the stock position and price list of the fertilizers in their respective places of business, in violation of clause 4 of the Fertilizer Control Order.

9.14.2.7 Non-disposal of Confiscated fertilizers

- The Sub-Divisional Police Officer, Chandel under FIR No. 20 (10) 2008 seized (October 2008) 93.50 MT of fertilizers (Urea: 61.50 MT; Potash: 32 MT) worth Rs.4.40 lakh[22] at Molnom village of Chandel district, while being smuggled to Myanmar. The Additional Deputy Commissioner, Chandel ordered (20.11.2008) the fertilizers seized in 12 trucks had been confiscated under Section 6A of Essential Commodities Act, 1955 and the same be unloaded at Kakching Police Station (Thoubal District) for onward handing over to the Director of Agriculture for final disposal or sale by auction. The fertilizers were still lying in Kakching Police Station (November 2009).

Confiscated fertilizers of 93.50 MT lying at Kakching Police Station (Thoubal District)

[22] 1230xRs.241.50+640xRs.222.75

9.14.3 esults of dealer and farmer survey

9.14.3.1 Dealer Survey

Responses from 15 dealers are summarized below:-

Sl.No.	Questions	Response	
		Yes	No
1.	Are you getting the required quantity and type of fertilizer from your source (1st stocking point or wholesaler) in time?	0	15
		No Limit	Limited
2.	Do you give fertilizers to the farmers without any limit or is there some limit like 1 bag of DAP per acre.	4	11
		Yes	No
3.	Are you facing any problems in transportation etc. in lifting your requirement of fertilizers?	9	6
		Yes	No
4.	Do you have adequate credit facilities so as to lift your requirement of fertilizers?	1	14
		Yes	No
5.	Are you able to supply fertilizers as per demand to the farmers on time? What are your problems?	0	15
		Yes	No
6.	Are farmers demanding small quantity bags of fertilizers from you?	13	2
		Yes	No
7.	Have any samples been selected in the last 3 years from your stock for fertilizer quality testing by the Agriculture Department? What were the results?	0	15

The dealers indicated that they were not receiving adequate quantity of fertilizers and were in turn not able to supply fertilizers as per demand to farmers. Further, no samples had been selected for quality tests.

9.14.3.2 Farmer Survey

Responses from 120 farmers are summarized below:-

	Questions	Response	
		Coop	Pvt.Dealer
1.	Are you buying fertilizers from the authorised dealer/ co-operative society?	0	120
		Yes	No
2.	Are the quantities of fertilizers sold to you rationed? E.g., 5 bags DAP/ration card, 1 bag of DAP per acre etc. Please indicate.	0	120
		MRP	Others
3.	What are the prices at which you have bought fertilizers (a) urea (b) DAP (c) MOP (d) other fertilizers in the last 1 or 2 seasons?	0	120
		Yes	No
4.	Did the dealer give you a receipt for your sales?	4	116
		Yes	No
5.	Do you know the maximum prices for fertilizers fixed by Government (Audit team may show the MRP list of various fertilizers to the farmer)?	16	104
		Yes	No
6.	Do you have enough money to buy your full requirement of fertilizers? What are your problems?	17	103
		Yes	No
7.	Did you get your soil tested, to find out the exact requirement of different types of fertilizers for your land, so that you get the maximum yield of crops?	1	119
		Yes	No
8.	Did you face any problems in getting your full requirement of fertilizers in time for the season?	103	17
		Yes	No
9.	Does the dealer force you to buy any other item along with the fertilizers that you want?	10	110
		Yes	No
10.	Do you need fertilizers in small quantity bags?	104	16
		Yes	No
11.	Overall, are you satisfied with the supply of fertilizers to you?	31	89
		Yes	No
12.	Have you faced any other problems in supply of fertilizers?	103	17

Not single surveyed farmers had bought fertilizers at the MRP. The vast majority faced problems in getting their full requirement of fertilizers, did not have enough money to buy their full requirement of fertilizers and demand supply of fertilizers in small quantity bags.

9.15 Meghalaya

9.15.1 Background

Meghalaya has 7 districts with a total area of 22429 Sq km. The cropped area is 2.13 lakh hectares. The main crops of the State are rice and maize, horticulture crops like orange, lemon, pinapple, guava, litchi, banana, Jackfruit, etc., and cash crops like Potato, Ginger, Turmeric, Black Pepper, Cotton, Jute, Mustard and Grape seed etc.

Two districts and two blocks in each district - East Khasi Hills (Khadarshnong-Laitkroh and Pynursla) and West Garo Hills (Selsella and Dalu) - were selected for detailed audit scrutiny.

9.15.2 Audit Findings

9.15.2.1 Assessment of fertilizer

- No specific norms/standards had been laid down for assessment of the requirement of fertilizers based on the type of crop, irrigated/ non-irrigated area, soil health and other local factors. The requirement of various types of fertilizers was projected on the basis of previous year's consumption data received from MECOFED and other wholesale dealers in the State.

9.15.2.2 Availability of Fertilizer requirement

- There were substantial variations between the assessed requirement and actual supply of fertilizers during 2006-09. The year-wise details of shortfall in supply of fertilizers are given below:

Table 9.44 – Shortfall in supply of fertilizers

Year	Requirement /MT			Actual Supply/MT			Shortfall/MT (%)		
	Urea	DAP	MOP	Urea	DAP	MOP	Urea	DAP	MOP
2006-07	6300	3120	625	5440	2482	397	860	638	228
							(-14)	(-20)	(-36)
2007-08	6550	3850	930	4885	1589	547	1665	2261	383
							(-25)	(-59)	(-41)
2008-09	7850	4150	1490	7400	3850	976	450	300	514
							(-6)	(-7)	(-35)

Source: Information furnished by the Director of Agriculture

- The variation/shortfall between the requirement and actual supply of Urea, DAP and MOP during 2006-07 to 2008-09 ranged between 6 per cent and 25 per cent in respect of Urea, 7 per cent and 59 per cent in respect of DAP and 35 per cent and 41 per cent in respect of MOP.

9.15.2.3 Verification of Sale

- Verification of monthly sales of decontrolled fertilizers was done on the basis of certificates of sales submitted by MECOFED and purchase certificate in respect of private Wholesale Dealers submitted by the District Agriculture Officers concerned.
- No process for verification of sales beyond the first point sales upto the farmer levels existed, so as to ensure authenticity of sale to genuine farmers.

9.15.2.4 Delay in submission of Proforma A

- There were delays beyond the admissible limit of 60 days in submission of Proforma 'A' by M/S Teesta Agro Industries Limited, Jalpaiguri, West Bengal against the sale of Single Super Phosphate (SSP) for the months of May, June, August and September 2006 and December 2006 to March 2007 to the Director of Agriculture, Meghalaya in September 2007, the delays ranged between 15 and four months.

9.15.2.5 Quality Control

- 14 samples were drawn by the District Agriculture Officers/ District Horticulture Officers of East Khasi Hills, West Khasi Hills and Jaintia Hills Districts during 2007-08 and 2008-09 of which 4 samples of 2007-08 and 3 samples of 2008-09 were declared as non-standard by the quality control laboratories. It was, however, observed that no documentation of the test results was made. Besides, neither was the entire quantity of confiscated fertilizers, nor any recovery from concession in respect of the non-standard fertilizer samples proposed by the DAO. Thus, the non-standard fertilizers were used as such by the farmers, without knowing the quality of fertilizers.

9.15.3 Results of dealer and farmer survey:

9.15.3.1 Dealer Survey

Responses from 18 dealers are summarized below:-

Sl.No.	*Questions*	*Response*	
		Yes	No
1.	Are you getting the required quantity and type of fertilizer from your source (1st stocking point or wholesaler) in time?	15	3
		No Limit	Limited
2.	Do you give fertilizers to the farmers without any limit or is there some limit like 1 bag of DAP per acre?	5	13
		Yes	No
3.	Are you facing any problems in transportation etc. in lifting your requirement of fertilizers?	16	2
		Yes	No

4.	Do you have adequate credit facilities so as to lift your requirement of fertilizers?	6	12
		Yes	No
5.	Are you able to supply fertilizers as per demand to the farmers on time? What are your problems?	3	15
		Yes	No
6.	Are farmers demanding small quantity bags of fertilizers from you?	5	13
		Yes	No
	Have any samples been selected in the last 3 years from your stock for fertilizer quality testing by the Agriculture Department? What were the results?	1	17

Most dealers indicated that they were facing problems in transportation of fertilizers as well as credit facilities, and were, in turn, unable to supply fertilizers as per demand to the farmer. Samples in respect of only one out of 18 dealers had been selected for quality testing.

9.15.3.2 Farmer Survey

Responses from 116 farmers are summarized below:-

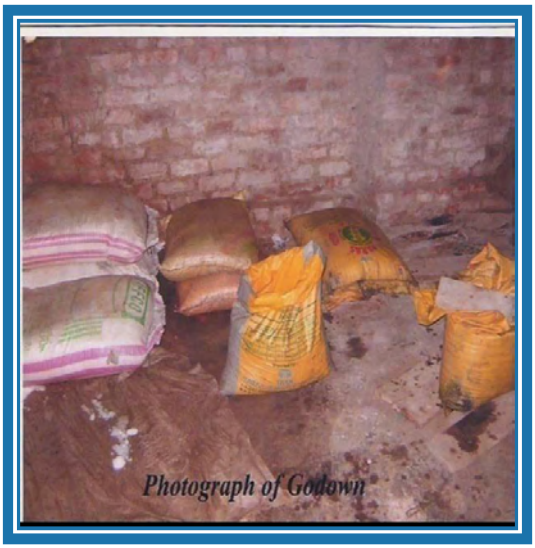
Sl. No.	Questions	Response			
		Cooperative	Dealer	Both	Others
1.	Are you buying fertilizers from the authorised dealer/ co-operative society?	32	77	0	7
		Yes	No		
2.	Are the quantity of fertilizers sold to you rationed? E.g., 5 bags DAP/ration card, 1 bag of DAP per acre etc. Please indicate.	0	116		
		MRP	Others		
3.	What are the prices at which you have bought fertilizers (a) urea (b) DAP (c) MOP (d) other fertilizers in the last 1 or 2 seasons?	0	116		
		Yes	No		
4.	Did the dealer give you a receipt for your sales?	54	62		
		Yes	No		
5.	Do you know the maximum prices for fertilizers fixed by Government (Audit team may show the MRP list of various fertilizers to the farmer)?	30	86		
		Yes	No		

6.	Do you have enough money to buy your full requirement of fertilizers? What are your problems?	0	116	
		Yes	No	
7.	Did you get your soil tested, to find out the exact requirement of different types of fertilizers for your land, so that you get the maximum yield of crops?	49	67	
		Yes	No	
8.	Did you face any problems in getting your full requirement of fertilizers in time for the season?	65	51	
		Yes	No	
9.	Does the dealer force you to buy any other item along with the fertilizers that you want?	0	116	
		Yes	No	
10.	Do you need fertilizers in small quantity bags?	75	41	
		Yes	No	
11.	Overall, are you satisfied with the supply of fertilizers to you?	39	77	
		Yes	No	Others
12.	Have you faced any other problems in supply of fertilizers?	38	49	29

All the surveyed farmers indicated that they were purchasing fertilizers at rates other than the MRP and also indicated that did not have enough money to buy their full requirement of fertilizers. Most of them also indicated that they needed fertilizers in small quantity bags.

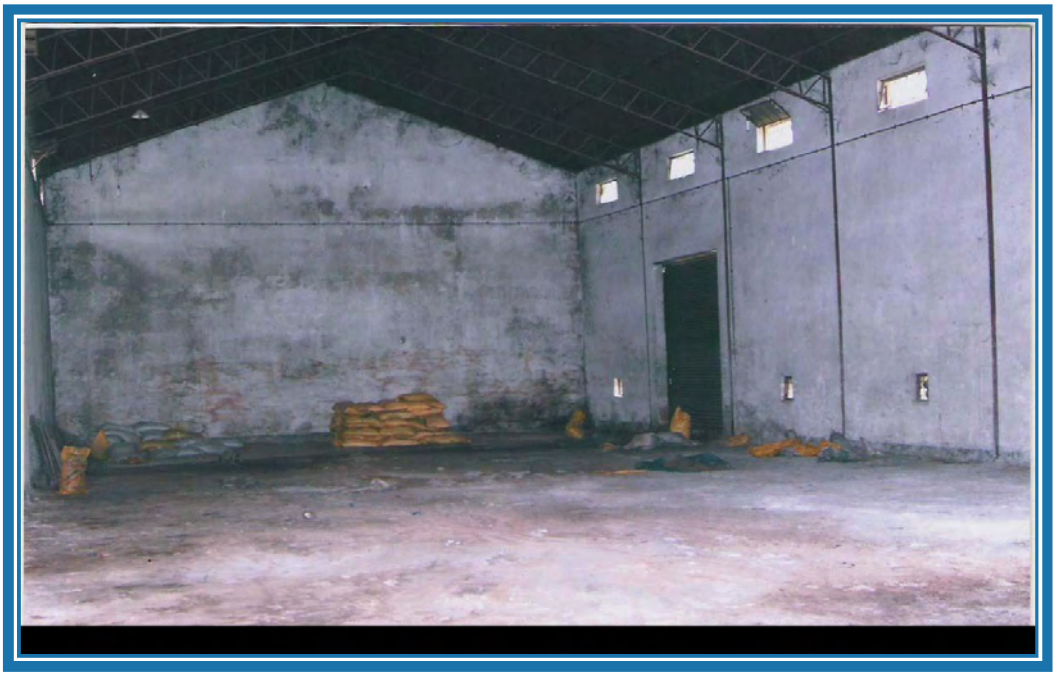
9.15.3.3 Field visit

Field visit by our audit teams revealed instances of open fertilizer bags, dilapidated godowns, as well as empty godown (indicating non-availaibility of fertilizers), as depicted below:



A whole sale godown at Rajabala, West Garo Hill district - Fertilizer remained open

Mawlongghat, Shillong - Dilapidated Godown



M/s MECOFED, Mawlong, Shillong- Non- availability of Fertilizer

9.16 Nagaland

9.16.1 Background

- Nagaland has a geographical area of 16579Sq.Km, and cropped area is 3.22 lakh hectares. Topography is very severe with hill ranges, deep gorges and steep terrain, and about 65 to 70 *per cent* of the population is dependent on agriculture for their livelihood. The major land use pattern is shifting cultivation, locally known as 'JHUM'. Hence, use of chemical fertilizers is minimal.

9.16.2 Audit Findings

9.16.2.1 Assessment of fertilizer requirement

- The assessment of requirement was made on the basis of the sales data collected from dealers in the State. Assessment and consumption of fertilizers for the period from 2006-07 to 2008-09 were as follows:

Table 9.45 – Assessment and consumption of fertilizers

(Quantity in MT)

Name of fertilizer	Season	2006-07			2007-08			2008-09		
		Assessed Requirement	Consump-tion	Percen-tage*	Assessed Require-ment	Consum-ption	Percen-tage*	Assessed Require-ment	Consum-ption	Percent-age*
Urea	Kharif	414	279	67	400	312	78	400	356	89
	Rabi	714	233	33	487	404	83	300	200	67
DAP	Kharif	234	223	96	350	249	71	300	268	89
	Rabi	534	257	48	314	258	82	240	165	69
MOP	Kharif	42	62	148	100	128	128	130	93	72
	Rabi	117	62	53	137	113	82	135	76	56
SSP	Kharif	74	74	100	100	95	95	100	111	111
	Rabi	132	37	28	112	104	92	77	50	65

**Percentage indicates consumption over assessed requirement.*

(Source: Departmental figures)

- The average consumption with reference to assessed requirement varied from 33 to 89 *per cent* in the case of Urea and from 48 to 96 *per cent* in respect of DAP during the period from 2006-07 to 2008-09. Pattern of consumption vis-à-vis assessed requirement of MOP and SSP showed a mixed trend of shortfall and excess consumption during these years.

9.16.2.2 Ineffective monitoring of sales and distribution

Against the assessed requirement of 1972 MT of DAP during 2006-07 to 2008-09, the Department submitted a consumption report for 1420 MT. However, the manufacturer claimed subsidy for only 70 MT of DAP, which was also certified by the Department. Thus, the Department submitted exaggerated consumption report of 1350.300 MT to GOI.

Chances of the existence of black marketing of fertilizer in the State also cannot be ruled out.

- Cross verification of data collected (May 2008 to December 2008) from the dealers with the assessment made by the department further revealed that there was variation between assessment and consumption as detailed below:

Table9.46 – Variation between assessment and consumption of fertilizers (Quantity in MT)

Name of fertilizer	Assessment made by the department	Consumption (Departmental figure)	Consumption as per the verification	Difference (4-3)
1	2	3	4	5
Urea	520	344	945.55	601.55
DAP	380	227	487.77	260.77
MOP	210	113	180.25	67.25
SSP	135	94	132.41	38.41

No mechanism was put in place by the Agriculture Department to monitor the position of lifting, sale and distribution of fertilizers.

9.16.2.3 Non formulation of fertilizer policy

- The State Government did not formulate any norms to regulate the sale of fertilizers. Bulk sales were also noticed from the dealers located at Dimapur.
- The Department while accepting the facts (October 2009) stated that decontrolled fertilizer like DAP was not available with the company (IFFCO) during the seasons and the dealers had to depend on the dealers of Assam for supply which caused cost escalation.

9.16.2.4 Verification of Sales

- Procedures such as independent verification of sales by obtaining copies of sales invoices, delivery challans, sales tax payment receipts, stock registers, physical verification of stock etc. were not carried out by the Department before forwarding claims for subsidy.

9.16.2.5 Sale of Fertilizer above the MRP

- The prices paid by the farmers exceeded the Government notified MRP with the excess ranging from 141 to 288 per cent in respect of urea, 171 to 235 per cent in respect of DAP and 213 to 359 per cent in respect of MOP, as tabulated below:

Table 9.47 – Sale of fertilizers above MRP

(Rs per MT)

Fertilizers	2008-09		2008-09 Selling price as per farmers response			
	MRP	SP (as per the dealers response)	Kohima District		Dimapur District	
			Jakhama Block	Kohima Block	Nuiland Block	Dhansiripar Block
Urea	Rs.4830	Rs.6800 to Rs.8000	Rs.10000	#	Rs.8500	Rs.12000
DAP	Rs.9350	Rs.16000 to Rs.17500	Rs.18000	#	Rs.18000	Rs.22000
MOP	Rs.4455	Rs.9500 to Rs.11000	Rs.10000	#	Rs.16000	Rs.12000

 # During Survey, farmers replied that they did not use chemical fertilizers.

9.16.2.6 Quality Control

- Neither was there any quality control checking laboratory in the State, nor were samples of fertilizers collected from the distribution chain of dealers to end user during the last three years for quality checks. Thus the prescribed objective of providing quality fertilizers to the farmers in Nagaland could not be ensured.

9.16.2.7 Non-existence of monitoring mechanism

- District level stock points/primary godowns were not open by any of the fertilizer manufacturing units in the State.

9.16.3 Results of dealer and farmer survey

9.16.3.1 Dealer Survey

Responses from 3 dealers are summarized below:-

Sl.No.	Questions	Response	
		Yes	No
1.	Are you getting the required quantity and type of fertilizer from your source (1st stocking point or wholesaler) in time?	2	1
		No Limit	Limited
2.	Do you give fertilizers to the farmers without any limit or is there some limit like 1 bag of DAP per acre?	3	0
		Yes	No
3.	Are you facing any problems in transportation etc. in lifting your requirement of fertilizers?	3	0

		Yes	No
4.	Do you have adequate credit facilities so as to lift your requirement of fertilizers?	3	0
		Yes	No
5.	Are you able to supply fertilizers as per demand to the farmers on time? What are your problems?	3	0
		Yes	No
6.	Are farmers demanding small quantity bags of fertilizers from you?	3	0
		Yes	No
7.	Have any samples been selected in the last 3 years from your stock for fertilizer quality testing by the Agriculture Department? What were the results?	0	3

9.16.3.2 Farmer Survey

Responses from 80 farmers are summarized below:-

	Questions	Response		
		Cooperative	Dealer	Others
1.	Are you buying fertilizers from the authorised dealer/ co-operative society?	1	55	24
		Yes	No	Others
2.	Are the quantity of fertilizers sold to you rationed? E.g., 5 bags DAP/ration card, 1 bag of DAP per acre etc. Please indicate.	1	55	24
		MRP	No	Others
3.	What are the prices at which you have bought fertilizers (a) urea (b) DAP (c) MOP (d) other fertilizers in the last 1 or 2 seasons?	0	1	79
		Yes	No	Others
4.	Did the dealer give you a receipt for your sales?	14	64	2
		Yes	No	
5.	Do you know the maximum prices for fertilizers fixed by Government (Audit team may show the MRP list of various fertilizers to the farmer)?	4	76	
		Yes	No	Others
6.	Do you have enough money to buy your full requirement of fertilizers? What are your problems?	3	76	1

		Yes	No	Others
7.	Did you get your soil tested, to find out the exact requirement of different types of fertilizers for your land, so that you get the maximum yield of crops?	1	78	1
		Yes	No	Others
8.	Did you face any problems in getting your full requirement of fertilizers in time for the season?	30	19	31
		Yes	No	Others
9.	Does the dealer force you to buy any other item along with the fertilizers that you want?	2	44	34
		Yes	No	Others
10.	Do you need fertilizers in small quantity bags?	52	2	26
		Yes	No	Others
11.	Overall, are you satisfied with the supply of fertilizers to you?	7	35	38
		Yes	No	Others
12.	Have you faced any other problems in supply of fertilizers?	34	16	30

In addition to purchase at higher than MRPs, the vast majority of farmers also indicated their preference for small quantity bags, since they did not have enough money for buying their full requirement of fertilizers. Further, they did not get their soil tested to assess the exact requirement of fertilizers.

9.17 Orissa

9.17.1 Background

Orissa has 30 districts, with a total geographical area of 155707 Sq. km. The cropped area is 57.37 lakh hectares. Rice, pulses, oil seeds, jute, roselle, sugarcane, coconut and turmeric are the important crops. There are also cash crops like tea, cotton and rubber. The state contributes one- tenth of the rice production in India.

Five districts (Bolangir, Jharsuguda, Naupada, Jagatsinghpur and Mayurbhanj) and 10 blocks i.e. two blocks in each district (Agalpur, Puintala, Jharsuguda, Lakhanpur, Boden, Naupada, Balikuda, Nuagaon, Badasahi and Shyamakhunta) were selected for detailed audit scrutiny.

9.17.2 Audit Findings

9.17.2.1 Assessment of Fertilizer requirement

- Though the assessment of fertilizer requirements at the district level was finalised after a strategy committee meeting held by the District Collector in the presence of representatives of different fertilizer manufacturers and the District Agricultural Officers (but without any involvement of the farmers), the Directorate of Agriculture who consolidated the assessments, projected the State's requirement by adding 5 to 10 per cent of quantity to the previous years' consumption.
- Soil-testing reports aimed at use of balanced doses of fertilizer as per the soil health condition were not considered while preparing the assessment of fertilizer requirements.

9.17.2.2 Demand and supply of fertilizers

- The supply and actual consumption of fertilizers per hectare consumption shown in the Zonal Agriculture Input Conference was not realistic, as would be seen from the following details:

Table 9.48 – Assessment, allocation, receipt and consumption of fertilizers in Orissa

(Quantity in MT)

Year	Assessment	Allocation	Actual receipt	Consumption	Less consumption against assessment
2006-07	886384	871600	860286	819646	66738 (8%)
2007-08	1143700	1077600	908332	909859	233841 (20 %)
2008-09	1369370	1143320	1019801	1052232	317138 (23%)

In fact, the consumption was closer to the allocation rather than the project requirements.

9.17.2.3 Sale of fertilizer at higher price.

- In Mayurbhanj and Bolangir districts, various types of fertilizers were sold at rates higher than the MRP fixed and the excess ranged between Rs 12.66/kg and Rs 72.66/kg. During beneficiary interviews, it transpired that 6 dealers were found selling fertilizers beyond MRP.

9.17.2.4 Non maintenance of separate account

- Certain wholesalers, who acted as retailers, did not issue separate sale receipts but issued a single receipt to a group of farmers for the total sale of that day and did not maintain separate accounts for wholesale and retail sales. Further, they refused to release quantity to other registered retailers.
- The wholesalers of Jagatsinghpur, Bolangir, Mayurbhanj and Jharsuguda released their entire/maximum quantity to their own retail point and maintained complete monopoly of trading in the district.
- Out of 23 dealers, nine dealers transferred the entire quantity to their own retail account as given below:

Table9.49 –Transfer of quantity to own retail account

Sl No.	District	Name of the Dealer	Wholesale FCO No	Valid up to	Retail FCO No	Valid up to	Location
1	J.S.Pur	A.K.Roy	3/1.4.05	22.7.11	2/08-09	22.7.11	Balikuda
2		Maneka Bhandar	3/24.6.2002	31.3.11	2/08-09	31.3.11	Naugaon
3		Archana Bhandar	5/1.4.05	31.3.11	3/04-05	31.3.11	Naugaon
4		K.V.Nigam	6/1.4.05	31.3.11	4/04-05	31.3.11	Naugaon
5	Mayur-bhanj	A.P.Saha	25/00-01	1.5.12	4/00-01	7.8.09	Baripada
6		R.K.Saha	30/96-97	31.3.11	1/07-08	31.3.11	Baripada
7		Anupama Entp.	45/03-04	11.8.09	46/03-04	10.8.09	Baripada
8	Bolangir	Sahoo Trading	206/07-08	12.3.11	205/07-08	12.3.11	Bolangir
9		Gopal Fert. Store	146/07-08	29.10.11	147/07-08	27.11.08	Club Para
10		K.K.Chapadia	35/08-09	3.6.12	7/08-09	5.7.11	Patnagarh
11		Garg Fertilizer	90/08-09	12.5.12	8/08-09	30.3.09	Kantabanji
12		Samaleswari Fert.	210/07-08	26.3.11	155/07-08	3.8.10	Tusra
13		Krushi Seva Kendra	2/08-09	31.3.11	158/07-08	3.8.10	Agalpur
14		S.Kumar M. Kumar	70/06-07	31.8.12	15/07-08	16.10.10	Jharsguda

Sl No.	District	Name of the Dealer	Wholesale FCO No	Valid up to	Retail FCO No	Valid up to	Location
15	Jhar suguda	Jhadeswar Marketing C.S.	46/05-06	31.8.11	45/05-06	31.8.11	Jharsguda
16		Shiv Prasad Shyam Sunder	67/81-82	31.3.11	68/81-82	31.3.11	Jharsguda
17		Shiv Sunder Aloo Bhandar	87/07-08	22.6.10	88/07-08	22.6.10	Jharsguda
18		D.P.Agrawala	12/72-73	31.3.11	58/76-77	31.3.11	Jharsguda
19	Nuapada	Lakhmania Brothers, Kh.Road	35/08-09	13.7.2011	177/07-08	03.7.2010	Kh.Road
20		Tej Raj Pareshmal Khariar Road	1/04-05 Ren 19/07-08)	24.4.2010	26/07-08	31.5.2010	Kh. Road
21		Atul Steels Khariar Road	84/06-07		173/07-08	9.4.2010	Khaariar Road
22		Sharma Fertilizer Raj Khariar	110/06-07	6.1.2010	3/05-06	7.6.2008	Raj Khariar (Not renewed)
23		**S.K.Trivedi, Raj Khariar**	**36/08-09**	**7.7.2011**	**90/06-07**	**23.8.2009**	Raj Khariar (Not renewed)

9.17.2.5 Existence of unregistered dealers engaged in fertilizer trading.

- Four co-operative societies (Jharsuguda-3 and Agalpur-1) and one dealer in Agalpur block in Bolangir were engaged in sale of fertilizers without any FCO registration certificate and on the basis of co-operative license for pesticide sale.

9.17.2.6 Tagging of other products with sale of fertilizer

- One manufacturer, M/s CFL forcibly tagged 5 kg of sulphur to every 100 kg of Gromor (GAP), and one kg Mahazinc to every 100 kg of NFCL Urea to the dealers. The dealers, in turn, sold Gromor to the farmers at a cost of Rs. 500 /- to Rs.550/- per bag, including the cost of sulphur as against the MRP of Rs. 389/- per bag, and Nagarjuna Urea at Rs. 260 including the cost of Mahazinc, against MRP of Rs.250.80 per bag. During survey, the farmers expressed displeasure against short supply of Gromor and the need to pay extra cost

9.17.2.7 Verification of sales by State Government (before payment of concession):

- No reports of verification of sales certified in Proforma B were maintained and made available by the Director of Agriculture to audit. Shortage of 65.550 MT fertilizers at

Markfed additional storage point Balikuda block was noticed by the MARKFED authorities during physical verification **(*Annexe 9.6*),** against which payment of subsidy of Rs.13.40 lakh was received by manufacturer. Markfed ordered recovery of Rs. 4.07 lakh against the Sales Assistant and an amount of Rs.0.35 lakh has been recovered (August 2009).

9.17.2.8 Quality control

- There was shortfall in the receipt of samples vis-à-vis the targets in two quality control laboratories at Bhubhaneswar and Sambalpur ranging from 9 to 22 percent during 2006-09 as detailed below:

Table9.50 – Shortfall in receipt and analysis of samples

Year	No. of samples targeted		Samples received and analysed		Declared non – standard	
	Bhubaneswar	Sambalpur	Bhubaneswar	Sambalpur	Bhubaneswar	Sambalpur
2006-07	2050	1450	1726 (84%)	1126 (78%)	41	36
2007-08	2050	1450	1714 (84%)	1282 (88%)	50	27
2008-09	2050	1450	1639 (80%)	1318 (91%)	34	26

Scrutiny of records revealed that the following irregularities in the sample testing during 2006-09:

- 41 samples drawn in November 2007 were sent to the laboratory on 31.12.2007 and 25 samples collected during 3.9.08 to 30.9.08 were sent on 29.10.2008 i.e much after the prescribed period of 7 days.
- In District Bolangir, against the target of 200 samples for each year only 93, 61 and 24 samples were submitted to the laboratory during 2006-09 respectively.
- In Jharsuguda and Nuapada districts, no samples were collected during 2006-09.
- The Dy. Director of Agriculture (DDA), Cuttack in November 2008 intimated to the DDA (QC) that 5 MT. of PPL 18:46 sample drawn from M/s L.N. Fertilizer, Kendrapara on 6.9.2008 was declared non-standard and the report was received only on 10 October 2008, by which time the entire quantity was fully consumed by the farmers. No recovery/seizure was suggested.
- Similarly from M/s CFL railway rake point, Cuttack, a sample was drawn on 1.9.2008 out of the total stock of 100 MT of NPK 10:26:26 and declared as non-standard on 4.10.08, but the entire stock was sold and confirmation of total receipt was furnished.

9.17.2.9 Inter district transfer of 30 MT IFFCO Urea.

- One wholesale dealer of Kesinga in Kalahandi district had issued an invoice in time in favour of a party from village Alatura under M.Rampur for 600 bags of IFFCO urea, but the fertilizer was unloaded in the godown premises of a third party named as M/s Ruzul Enterprises at Priyadarshni Market complex Saintala (Bolangir district). An FIR on the matter stands registered in the Saintala Police Station; however, progress in the matter was awaited (September 2009).

9.17.3 Results of dealer and farmer survey

9.17.3.1 Dealer Survey

Responses from 60 dealers are summarized below:-

Sl.No.	Questions	Response		
		Yes	No	
1.	Are you getting the required quantity and type of fertilizer from your source (1st stocking point or wholesaler) in time?	32	28	
		No Limit	Limited	
2.	Do you give fertilizers to the farmers without any limit or is there some limit like 1 bag of DAP per acre?	60	0	
		Yes	No	Other
3.	Are you facing any problems in transportation etc. in lifting your requirement of fertilizers?	14	44	2
		Yes	No	
4.	Do you have adequate credit facilities so as to lift your requirement of fertilizers?	37	23	
		Yes	No	
5.	Are you able to supply fertilizers as per demand to the farmers on time? What are your problems?	60	0	
		Yes	No	
6.	Are farmers demanding small quantity bags of fertilizers from you?	9	51	
		Yes	No	Yes, report not received
7.	Have any samples been selected in the last 3 years from your stock for fertilizer quality testing by the Agriculture Department? What were the results?	0	37	23

All the dealers indicated that they were able to supply fertilizers as per demand, and although samples were selected in some cases, the test reports were in no case received in time.

9.17.3.2 Farmer Survey

Responses from 309 farmers are summarized below:-

Sl.No.	Questions	Response	
		Cooperative/Dealer	Others
1.	Are you buying fertilizers from the authorised dealer/ co-operative society?	286	23
		Yes	No
2.	Are the quantity of fertilizers sold to you rationed? E.g., 5 bags DAP/ration card, 1 bag of DAP per acre etc. Please indicate.	0	309
		MRP	Higher than MRP
3.	What are the prices at which you have boughtfertilizers (a) urea (b) DAP (c)MOP (d) other fertilizers in the last 1 or 2 seasons?	236	73
		Yes	No
4.	Did the dealer give you a receipt for your sales?	63	246
		Yes	No
5.	Do you know the maximum prices for fertilizers fixed by Government (Audit team may show the MRP list of various fertilizers to the farmer)?	236	73
		Yes	No
6.	Do you have enough money to buy your full requirement of fertilizers? What are your problems?	193	116
		Yes	No
7.	Did you get your soil tested, to find out the exact requirement of different types of fertilizers for your land, so that you get the maximum yield of crops?	40	269
		Yes	No
8.	Did you face any problems in getting your full requirement of fertilizers in time for the season?	59	250

		Yes	No
9.	Does the dealer force you to buy any other item along with the fertilizers that you want?	90	219
		Yes	No
10.	Do you need fertilizers in small quantity bags?	173	136
		Yes	No
11.	Overall, are you satisfied with the supply of fertilizers to you?	273	36
		Yes	No
12.	Have you faced any other problems in supply of fertilizers?	59	250

Most of the farmers indicated that they are buying fertilizers at the MRP, but have not got their soil tested for assessing the requirement of fertilizers. They also wanted fertilizers in small quantity bags. A significant proportion complained about dealers forcing them to buy other items along with the fertilizers.

9.18 Punjab

9.18.1 Background

Punjab has 20 districts, with a total geographical area of 50.36 lakh hectares. The cropped area is 41.70 lakh hectares (83 per cent) out of which 40.60 lakh hectares (97 per cent) are irrigated. Cropping intensity in the State is 189 *per cent,* with a consumption of 213 Kg of fertilizers per hectare.

Four districts and two blocks in each district - Amritsar (Chogawan, Verka), Bathinda (Rampura Phul, Bathinda), Faridkot (Faridkot, Kot Kapura) and Ludhiana (Ludhiana, Khanna)- were selected for detailed audit scrutiny, along with the two fertilizer quality control laboratories at Faridkot and Ludhiana.

9.18.2 Audit findings

9.18.2.1 Assessment of requirement of fertilizers

- The assessment of requirement of fertilizers was not being received from all the Chief Agriculture Officers (CAOs) regularly in the office of the Director of Agriculture. Instead, the Director of Agriculture used the data of previous year's consumption with minor adjustments for calculating the requirement of fertilizers for the subsequent year.
- Soil tests were being carried out regularly, but the analytical reports of these tests were not considered while assessing the fertilizer requirement.
- Panchayat Samiti/Block Samiti, farmers' co-operatives and other stakeholders at district level were not involved in the assessment of the fertilizer requirement.
- The available data of assessment of requirement in respect of Amritsar and Ludhiana Districts for the period 2007-09 revealed that there were wide variations ranging from (-) 61 per cent to 93 per cent in respect of major fertilizers between the projections furnished by the CAOs and that of the Director of Agriculture, which showed that the requirement and consumption figures supplied by the districts were not used for ultimate district wise projection at the Zonal Conference.

The actual consumption (supply) of MOP and NPK complex was far below the requirement assessed on the pattern of previous year's consumption.

Table 9.51 – Consumption and Requirement of MOP and NPK Complex

(Quantity in MT)

Year	MOP					NPK (Complex)			
	Season	Assessed Require-ment	Consump-tion	Difference	Percent diff.	Assessed Require-ment	Consump-tion	Difference	Percent diff
2006-07	Kharif	55000	32543	22457	41	30000	20206	9794	**33**
	Rabi	35000	15858	19142	55	66000	48989	17011	**26**
	Total	90000	**48401**	41599	**46**	96000	**69195**	26805	**28**
2007-08	Kharif	60000	40954	19046	32	31000	19362	11638	**38**
	Rabi	35000	16210	18790	54	66000	8878	57122	**87**
	Total	95000	57164	37836	**40**	97000	**28240**	68760	**71**
2008-09	Kharif	60000	58032	1968	3	31000	25895	5105	**16**
	Rabi	35000	23444	11556	33	70000	23522	46478	**66**
	Total	**95000**	**81476**	**13524**	**14**	**101000**	**49417**	**51583**	**51**

- The variation between the projected requirement and consumption (actual supply) was 46, 40 and 14 per cent for MOP and 28, 71 and 51 per cent for NPK (Complex) for the years 2006-07 to 2008-09 respectively.

9.18.2.2 Quality control

- The annual sample testing capacity of the two laboratories is 3500 samples. The details of samples drawn, tested/retested and action taken on the test reports are given in the following table:

Table 9.52 – Shortfall in drawing and testing of samples

Year	Number of Samples taken	Declared non-standard	Declared passed on retesting	Declared non-standard on retesting	Cases filed in the court	Cases referred to police	Issued warning	No. of seizures made
2006-07	3429	45	20	25	20	2	3	2
2007-08	3524	90	38	52	6	35	11	15
2008-09	3146	15	10	5	0	4	0	0
Total	10099	150	68	82	26	41	14	17

- Out of 150 samples (1.5 per cent) originally declared non-standard, 82 samples were finally proved non-standard during 2006-09.

- During 2006-07, out of the 25 cases declared non-standard, subsidy to the tune of 40.150 MT of DAP and 8.70 MT of ASP (20:20:0) was recommended for disallowance in respect of only five cases only. Legal proceedings were started in the remaining 20 cases.
- During 2007-08, out of the 52 non-standard declared cases, seizures were actually made in 14 cases. In six cases (out of 14) of non-standard samples of DAP, recommendation for disallowance of subsidy to GOI was made in respect of 187.95 MT, which was lying with the dealers at the time of drawing samples,whereas the total billed quantity of the sample fertilizer was 1062.40 MT. Similarly, in respect of the remaining eight non-standard samples of MAP, recommendation for disallowance of subsidy was made for 71.20 MT, the quantity lying with the dealers, whereas the billed quantity was 163.00 MT.
- In respect of the five cases declared non-standard during 2008-09, neither subsidy was disallowed, nor any legal proceedings were initiated.
- In respect of eight cases declared as non-standard during December 2007 and January 2008 in Jalandhar, the stop sale orders were issued as late as July 2009. The stop sale orders were meaningless, as by that time the whole stock lying with the dealers had already been sold.
- Due to the long prescribed time period of 52 days for drawal of samples, their despatch to the laboratory for analysis and reporting back the results, the department failed/could not stop the sale of 1250.35 MT of non-standard DAP and 234.20 MT of MAP to the farmers in time, which were part of 6732.45 MT of DAP and 2519.55 MT of MAP received at various rake points at Ludhiana, Jalandhar and Bathinda. This defeated the very purpose of timely quality checks to ensure the supply of quality fertilizers to the farmers.

9.18.2.3 Verification of Stock

- Except Amritsar District, no periodical checking of the stocks was done in the other three districts (i.e. Bathinda, Faridkot and Ludhiana), which was attributed by the Department to shortage of technical field staff.

9.18.3 Results of dealer and farmer survey

9.18.3.1 Dealer Survey

Responses from 48 dealers are summarized below:-

Sl.No.	Questions	Response		
		Yes	No	Others
1.	Are you getting the required quantity and type of fertilizer from your source (1st stocking point or wholesaler) in time?	40	5	3
		No Limit	Limited	

2.	Do you give fertilizers to the farmers without any limit or is there some limit like 1 bag of DAP per acre?	48	0	
		Yes	No	Others
3.	Are you facing any problems in transportation etc. in lifting your requirement of fertilizers?	4	42	2
		Yes	No	Others
4.	Do you have adequate credit facilities so as to lift your requirement of fertilizers?	46	1	1
		Yes	No	
5.	Are you able to supply fertilizers as per demand to the farmers on time? What are your problems?	38	10	
		Yes	No	
6.	Are farmers demanding small quantity bags of fertilizers from you?	0	48	
		Yes	No	
7.	Have any samples been selected in the last 3 years from your stock for fertilizer quality testing by the Agriculture Department? What were the results?	48	0	

9.18.3.2 Farmer Survey

Responses from 240 farmers are summarized below:-

	Questions	Response		
		Cooperative	Dealer	
1.	Are you buying fertilizers from the authorised dealer/ co-operative society?	240	0	
		Yes	No	
2.	Are the quantity of fertilizers sold to you rationed? E.g., 5 bags DAP/ration card, 1 bag of DAP per acre etc. Please indicate.	0	240	
		MRP	Others	
3.	What are the prices at which you have bought fertilizers (a) urea (b) DAP (c) MOP (d) other fertilizers in the last 1 or 2 seasons?	240	0	
		Yes	No	Others
4.	Did the dealer give you a receipt for your sales?	238	0	2
		Yes	No	
5.	Do you know the maximum prices for fertilizers fixed by Government (Audit team may show the MRP list of various fertilizers to the farmer)?	240	0	

		Yes	No	
6.	Do you have enough money to buy your full requirement of fertilizers? What are your problems?	201	39	
		Yes	No	
7.	Did you get your soil tested, to find out the exact requirement of different types of fertilizers for your land, so that you get the maximum yield of crops?	240	0	
		Yes	No	Others
8.	Did you face any problems in getting your full requirement of fertilizers in time for the season?	239	0	1
		Yes	No	
9.	Does the dealer force you to buy any other item along with the fertilizers that you want?	0	240	
		Yes	No	
10.	Do you need fertilizers in small quantity bags?	0	240	
		Yes	No	No Comments
11.	Overall, are you satisfied with the supply of fertilizers to you?	222	15	3
		Yes	No	No Comments
12.	Have you faced any other problems in supply of fertilizers?	0	230	10

The surveys of dealers and farmers did not show up significant deficiencies.

9.19 Rajasthan

9.19.1 Background

Rajasthan has 33 districts with a geographical area of 342 lakh hectares. The total sown area during 2008-09 was 152 lakh hectares. The principal crops are food grains, oilseeds, cotton and sugarcane.

Five districts and ten blocks (two blocks in each district) Alwar (Behror, Thanagazi), Chittorgarh (Bhoopalsagar, Chittorgarh), Jaipur (Amber, Sanganer), Jhalawar (Jhalrapatan, Manoharthana), Sriganganagar (Sriganganagar, Srikaranpur) - were selected for detailed scrunity. Three fertilizer testing laboratories were also selected for scrutiny.

9.19.2 Audit findings

9.19.2.1 Assessment of fertilizer requirements

- Requirement was being assessed at the Directorate level, keeping in view the consumption of fertilizers in the previous five years and total area sown in the State assuming normal rain fall. However, the assessed requirement was not based on assessments at the district/ block level, casting doubts on its robustness.

9.19.2.2 Availability of fertilizer

- No norms were prescribed to regulate sale of fertilizer.
- The farmers were advised to use fertilizers as per recommendations made in the Soil Health Card. However, Soil Health Cards were issued only to five per cent of farmers against total number of land holders of the State as detailed below:

Table 9.53 – Issue of soil health cards

S. No.	Year	Total No .of land holders	Total No. of cards issued during the year	Percentage of cards to total land holders
1	2006-07	58,19,203	3,20,443	5.50
2	2007-08	58,19,203	3,00,047	5.15
3	2008-09	58,19,203	3,00,345	5.16

- Actual supply of fertilizers was less than the assessed requirement, with the gap ranging from 1 per cent to 24 per cent during the period of 2006-07 to 2008-09 (except kharif-2006 for which details were not provided by the Department) as detailed below:-

Table 9.54 – Variation between supply and requirement of fertilizers

Season	Requirement of fertilizers (MT)	Actual supply (MT)	Variation (MT)	Percentage of variation
Rabi- 2006-07	12,21,000	12,12,057	(-) 8,943	1
Kharif- 2007	10,40,000	9,21,988	(-) 1,18,012	11
Rabi- 2007-08	15,40,000	11,69,633	(-) 3,70,367	24
Kharif- 2008	10,60,000	10,47,737	(-) 12,263	1
Rabi- 2008-09	14,28,000	11,07,099	(-) 3,20,901	22

- The fertilizer-wise position of lesser supply against requirement in the case of major four fertilizers (Urea, DAP, SSP and MOP) ranged from two per cent to 84 per cent during the same period. However, in some cases, actual supply was in excess of requirement, with the excess ranging from five percent to 73 per cent during this period, as indicated in ***Annexe 9.7***.

9.19.2.3 Short supply

- Short supply against the supply plan ranged from 4 per cent to 20 per cent during this period as detailed below:-

Table 9.55 – Short supply vis-a-vis supply plan

S. No.	Season	Supply plan (MT)	Actual supply (MT)	Short(-)/ Excess(+) supply (MT)	Percentage of Short supply
1.	Rabi- 2006-07	13,40,000	12,12,057	(-) 1,27,943	10
2.	Kharif- 2007	10,10,000	9,21,988	(-) 88,012	9
3.	Rabi- 2007-08	10,95,648	11,69,633	(+) 73,895	-
4.	Kharif- 2008	13,06,697	10,47,737	(-) 2,58,960	20
5.	Rabi- 2008-09	11,57,733	11,07,099	(-) 50,634	4

- Shortage in Month-wise actual supply against supply plan ranged from two to 31 per cent (Urea), from 2 to 100 per cent (DAP), from 18 to 99 per cent (SSP) and from 1 to 100 per cent (MOP) during the period October 2007 to March 2009. ***(Annexe 9.8)***.

9.19.2.4 Verification of sales by State Government (before payment of concession)

- First Point sales were being verified on the basis of stock registers, bills of company and other records. However, no mechanism for verification of sales beyond first sale point upto farmer level had been evolved.

9.19.2.4.1 Delay in sending proforma 'A' and 'B'

- Proforma 'A' were received at the Directorate of Agriculture with delays ranging from two to 49 days, three to 254 days and 12 to 47 days for DAP, SSP and MOP respectively after the prescribed period of sixty days during 2006-07 to 2008-09 as detailed below:

Table 9.56 – Delays in receipt of Proforma 'A'

S.No	Fertilizer	Subject	2006-07	2007-08	2008-09	Total
1.	DAP	Proforma 'A' delayed	2 (4 to 5 days)	4 (18 to 49 days)	7 (2 to 47 days)	13 (2 to 49 days)
2.	SSP	Proforma 'A' delayed	24 (3 to 254 days)	18 (3 to 82 days)	24 (5 to 218 days)	66 (3 to 254 days)
3.	MOP	Proforma 'A' delayed	1 (12 days)	Nil	2 (17 to 47 days)	3 (12 to 47 days)

- Proforma B was sent to the GOI with delays ranging 3 to 588, 3 to 543 and 4 to 185 days for DAP, SSP and MOP respectively against the prescribed period of 90 days from receipt of Proforma-'A' during 2006-07 to 2008-09 as detailed below:

Table 9.57 – Delay in sending proforma 'B'

S.No	Fertilizer	Subject	2006-07	2007-08	2008-09	Total
1	DAP	Proforma 'B' delayed	68 (4 to 588 days)	62 (3 to 197 days)	25 (5 to 150 days)	155 (3 to 588 days)
2	SSP	Proforma 'B' delayed	99 (14 to 543 days)	100 (3 to 511 days)	61 (8 to 25 days)	260 (3 to 543 days
3	MOP	Proforma 'B' delayed	11 (4 to 127 days)	12 (5 to 185 days)	3 (7 to 58 days)	26 (4 to 185 days)

- Proforma 'B' in respect of DAP of 4.31 lakh MT, SSP of 1.51 lakh MT and MOP of 0.34 lakh MT was sent to the GOI during 2006-07 to 2008-09, without verification. The actual verification reports from DDAs were obtained after sending the Proforma 'B' or even not obtained till November 2009. The details are as under:

Table 9.58 – Irregular Proforma B without verification reports

Sl. No	Fertilizer	Subject	Unit	2006-07	2007-08	2008-09	Total
1	DAP	Quantity of proforma 'B' sent	M.T.	4,35,775	3,66,754	5,48,803	13,51,332
		Unverified quantity included in proforma 'B'	M.T.	1,41,337	75,741	2,13,822	4,30,900
2	SSP	Quantity of proforma 'B' sent	M.T.	1,99,025	1,73,389	1,74,567	5,46,981
		Unverified quantity included in proforma 'B'	M.T.	51,931	55,859	42,789	1,50,579
3	MOP	Quantity of proforma 'B' sent	M.T.	8,996	19,735	18,856	47,587
		Unverified quantity included in proforma 'B'	M.T.	4,849	12,996	15,807	33,652

9.19.2.5 Buffer Stock

- The prescribed stock of urea was not maintained during 8 out of 14 months from September 2007 to March 2009, excluding the lean period of February to April as relaxed by the GOI. The shortage in the State ranged from 38 to 95 per cent as detailed below:-

Table9.59 – Shortage in buffer stock

(In MT)

Sl.No	Month of shortage	Balance prescribed	Maximum balance kept inclusive of receipt and issue	Shortage	Percentage of shortage
1	Sept-07	50,000.00	11,751.20	38,248.80	76
2	Jan-08	50,000.00	4,116.00	45,884.00	92
3	Aug.-08	49,418.65	30,451.00	18,967.65	38
4	Sep.-08	49,418.65	20,254.40	29,164.25	59
5	Oct-08	49,418.65	20,153.75	29,264.90	59
6	Nov.-08	49,418.65	19,129.25	30,289.40	61
7	Dec.-08	49,418.65	18,314.00	31,104.65	63
8	Jan-09	49,418.65	2,466.40	46,952.25	95

- The location-wise position of buffer stock was more adverse in Jodhpur, Banswara, Jaipur and Pali (Sumerpur) districts, where shortage ranged from 80 to 100 per cent during the peak season of requirement (September 2008 to January 2009).

9.19.2.6 Quality Control

- Three test checked Quality Control Laboratories had 18 analysts as per their sanctioned strength, but 4 analysts were not having the prescribed training from the Central Fertilizer Quality Control and Training Institute, Faridabad.
- There was shortfall in the analysis of samples ranging from 11 to 38 per cent, vis-à-vis the capacity of the laboratories during 2006-09 as detailed below:

Table 9.60 –Shortfall in analysis of samples

S.No.	Year	Capacity of labs (No. of samples)	Actual number of samples analyzed	Total distribution of fertilizers (MT)
1	2006-07	8,000	4,951 (62%)	19,92,618
2	2007-08	8,000	7,123 (89%)	20,63,971

9.19.3 Results of dealer and farmer survey

9.19.3.1 Dealer Survey

Responses from 64 dealers are summarized below:-

Sl.No.	Questions	Response		
		Yes	No	
1.	Are you getting the required quantity and type of fertilizer from your source (1st stocking point or wholesaler) in time?	11	53	
		No Limit	Limited	
2.	Do you give fertilizers to the farmers without any limiit or is there some limit like 1 bag of DAP per acre.	64	0	
		Yes	No	
3.	Are you facing any problems in transportation etc. in lifting your requirement of fertilizers?	33	31	
		Yes	No	Others
4.	Do you have adequate credit facilities so as to lift your requirement of fertilizers?	15	43	6
		Yes	No	
5.	Are you able to supply fertilizers as per demand to the farmers on time? What are your problems?	15	49	

		Yes	No
6.	Are farmers demanding small quantity bags of fertilizers from you?	39	25
		Yes	No
7.	Have any samples been selected in the last 3 years from your stock for fertilizer quality testing by the Agriculture Department? What were the results?	44	20

Dealer survey results revealed that most of them are not receiving the required quantity of fertilizers and were also facing problems in transportation in lifting the fertilizers. In turn, they were not able to supply the fertilizers as per the demands of the farmer. A significant proportion of dealers did not have samples taken for testing in the last 3 years.

9.19.3.2 Farmer Survey

Responses from 300 farmers are summarized below:-

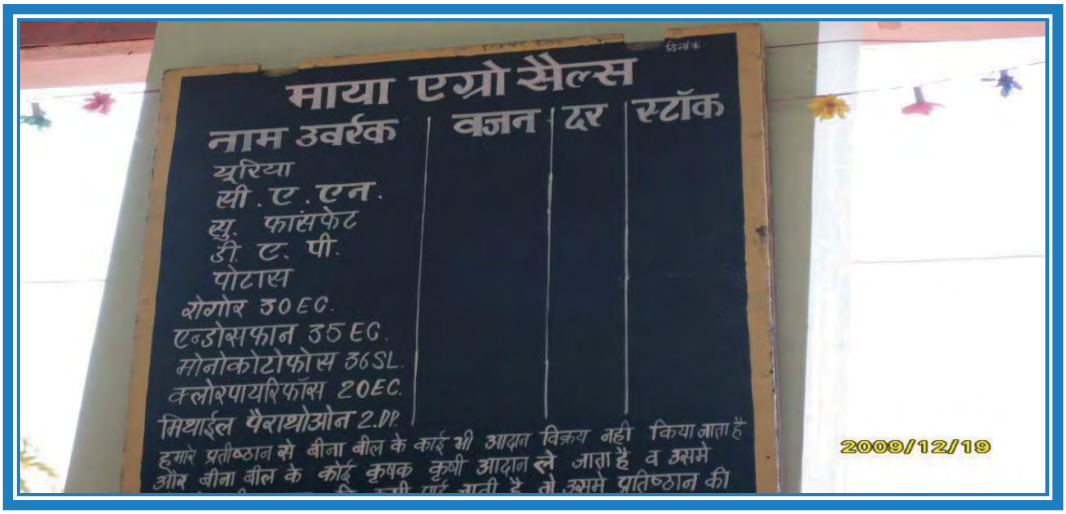
	Questions	Response		
		Cooperative	Dealer	Both
1.	Are you buying fertilizers from the authorised dealer/ co-operative society?	47	116	137
		Yes	No	
2.	Are the quantity of fertilizers sold to you rationed? E.g., 5 bags DAP/ration card, 1 bag of DAP per acre etc. Please indicate.	0	300	
		MRP	Higher than MRP	
3.	What are the prices at which you have bought fertilizers (a) urea (b) DAP © MOP (d) other fertilizers in the last 1 or 2 seasons?	100	200	
		Yes	No	
4.	Did the dealer give you a receipt for your sales?	111	189	
		Yes	No	
5.	Do you know the maximum prices for fertilizers fixed by Government (Audit team may show the MRP list of various fertilizers to the farmer)?	63	237	
		Yes	No	

6.	Do you have enough money to buy your full requirement of fertilizers? What are your problems?	134	166	
		Yes	No	Yes, but Report not received
7.	Did you get your soil tested, to find out the exact requirement of different types of fertilizers for your land, so that you get the maximum yield of crops?	3	286	11
		Yes	No	
8.	Did you face any problems in getting your full requirement of fertilizers in time for the season?	241	59	
		Yes	No	
9.	Does the dealer force you to buy any other item along with the fertilizers that you want?	156	144	
		Yes	No	
10.	Do you need fertilizers in small quantity bags?	193	107	
		Yes	No	
11.	Overall, are you satisfied with the supply of fertilizers to you?	76	224	
		Yes	No	
12.	Have you faced any other problems in supply of fertilizers?	242	58	

The vast majority of farmers were getting fertilizer at prices higher than the MRP ranging as follows: Urea Rs. 252 to Rs.400, DAP Rs.487 to 680, SSP Rs.198 to Rs.270 where the MRP of these fertilizers are Rs.251/- Rs. 486/- and SSP Rs.197/- per bag respectively. 286 farmers stated that their soil was not tested, and 11 stated that reports of soil tests were not received. 241 farmers stated that they were not getting the required quantity and in time. 156 farmers stated that they were forced to purchase other products like Zinc, Potash, pesticides etc. 193 farmers preferred small quantity bags.

9.19.3.3 Field visits

Field visits by our audit teams revealed instances of non-display of rates and available stock, as well as shortages (as reflected in survey responses) despite availability of stock.



Rates and quantity in stock as on date were not displayed in board – Bhankrota, Jaipur.
(Sl. No. 5 of Farmer survey)

Rates and quantity in stock as on date were not displayed in board – Sri Ganganagar(Sl. No. 5 of Farmer survey)

Rates and quantity in stock as on date were not displayed in board – Sriganganagar.(Sl. No. 5 of Farmer survey)

Despite the availability of stock the farmers faced shortages – M/s Balkishan Omprakash, Sriganganagar. (Sl.No. 8 of farmer survey)

9.20 Tamil Nadu

9.20.1 Background

- The state of Tamil Nadu has 32 Districts with a total geographical area of 130058 Sq.Km. The gross cropped area in 2007-08 was 58.15 Lakh hectares, and net cropped area was 50.61 Lakh hectares. The gross irrigated area was 32.52 Lakh hectares, while the net irrigated area was 28.64 Lakh hectares. The principal crops grown are paddy, cholam, cumbu, ragi, pulses, sugarcane, groundnut (dry), and cotton.
- Five districts (Dharmapuri, Kancheepuram, Madurai, Thanjavur and Tiruchirappalli), 10 blocks (two block in each district), and 3 Fertilizer Control Laboratories (Kancheepuram, Thanjavur at Kumbakonam and Tiruchirappalli) were selected for detailed audit scrutiny. In addition, a survey of 30 farmers and six dealers in each block was conducted.

9.20.2 Audit Findings

9.20.2.1 Assessment of fertilizer requirement

- Joint Directors of Agriculture (JDA) finalised the requirement of the fertilizers in each district based on cropped area and recommendations made by the Tamil Nadu Agriculture University, Coimbatore in consultation with the Assistant Director of Agriculture (ADA) of the block concerned. However, no documentation was available in the JDA office or at Block ADA's office. At the state level, the requirement was calculated by adding a certain percentage to the highest consumption (supply made to First Stock Point) in the best Rabi/Kharif season in a district, which was then projected at the Zonal Conference.
- No discussions were held with block samitis or farmers for finalizing the district level requirement.
- The percentage of short supply of fertilizers vis-à-vis assessed requirements ranged from 3 to 26 (Urea), 12 to 20 (DAP), 2 to 24 (MOP), 14 to 66 (SSP) and 9 to 56 (NPK Complexes). The percentage of excess supply vis-à-vis assessed requirements ranged from 3 to 9 (Urea), 10 to 28 (DAP), 11 to 34 (MOP).

9.20.2.2 Availability and distribution of fertilizers

- During 2007-08 there was acute shortage of DAP in the State due to stoppage of production and reduction in import of DAP. Hence, based on GoI direction, Tamil Nadu Marketing Federation (TANFED) was nominated as the nodal agency for procuring DAP from the importers, which was distributed to the farmers through Primary Agricultural Co-operative Banks (PACBs). PACBs insisted on production of land holdings certificate from the revenue officials each season for the purchase of DAP by farmers. Farmers found it very difficult in getting the certificate as the land possessed by the farmers was on lease and certificate was issued in the name of the land owner. Hence, though DAP was available, farmers could not get the same and had to use low nutrient value

complex fertilizers in the place of DAP. In certain PACBs, only members of the PACB were given the fertilizer.

9.20.2.3 Soil Testing

- The organic matter content in most of the soils of Tamil Nadu is low and widespread deficiency of micronutrients was noticed all over the State. The Government of Tamil Nadu, therefore, decided in 2006 to distribute soil health cards for the farm holdings (80 Lakh) in a phased manner to adopt the practice of application of macro and micro nutrients based on the soil test reports. However, out of the total 80 lakh farm holdings in the State, so far only 13.67 lakh (17.09 per cent) Soil Health Cards were issued during 2006-09. (4.72 Lakh-2006-07, 5.06 Lakh-2007-08 and 3.89 Lakh -2008-09).
- There are 19 stationary and 16 mobile soil testing laboratories (STL) in the State. The annual target of soil testing for Stationary STL is 5,28,000 and for Mobile STL 2,88,000. In case of 19 stationary STL, the shortfall in staff ranged between 46 and 54 percent
- The percentage of short drawal of soil samples ranged from 2 to 84. The position in 2008-09 was very alarming with short drawal ranging from 63 per cent to 84 per cent in six blocks Lalgudi, Manachanallur (Tiruchirappalli district); Kattankulathur, Acharapakkam (Kancheepuram district) and Palacode, Morappur (Dharmapuri district).
- The details of performance of STLs in the sampled districts for the period 2006-09 are given below:

Table 9.61 – Performance of Soil Testing Laboratories in Tamil Nadu

Target	Tiruchirappalli			Kancheepuram			Dharamapuri		
	33000			33000			26400		
Year	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09
OB	-	2946	8811	3733	4086	4984	6354	8463	12637
Receipt	32571	29600	11346	17049	24917	8304	27684	27882	7369
Rect from other STLs	-	4553	-	3879	-	-	-	-	-
Analysis	25576	22265	19747	20575	24019	4858	11872	21179	6459
Transfer to other STL	4049	6023	-	-	-	-	13703	2559	10047
Closing balance	2946	8811	410	4086	4984	3446	8463	12637	3500

- From the above it is clear that the STLs did not receive sufficient number of samples during the year 2008-09. The three STLs had closing balance of soil samples 2006-07

15495, 2007-08 26432 and 2008-09 7356. The closing balance represented 20 per cent, 32 per cent and 27 per cent respectively of the receipts in the laboratories for the concerned year. This closing balance was apart from the transfer made to other STLs. The period of closing balance ranged from one month to six months. This indicated that the soil samples were not tested and soil health cards issued immediately to the farmer for adopting the recommendation for his next season. A scrutiny of STL records indicated that the soil results were issued only after one or two seasons from the month of receipt.

9.20.2.4 Receipt of soil samples from the field units

- The target for the receipt of soil samples from the agricultural field offices and their actual receipt in respect of sample districts are given below:

Table 9.62 – Receipt of soil samples

District	2006-07			2007-08			2008-09		
	Target	Receipt	Shortfall	Target	Receipt	Shortfall	Target	Receipt	Shortfall
Tiruchirappalli	21600	10620	10980(51)	21600	5983	15617(72)	21600	6165	15435(71)
Kancheepuram	28320	17049	11271(40)	28320	19713	8607(30)	28320	5797	22523(80)
Dharmapuri	13440	6442	6998(52)	13440	11014	2426(18)	13440	3793	9847(72)

(Figures in the bracket denotes percentage of shortfall)

- The percentage of short receipt of soil samples during 2006-07 to 2008-09 ranged from 18 to 80. The position during 2008-09 was very alarming and the short receipt ranged from 71 per cent to 80 per cent in the above three districts.

9.20.2.5 Non verification of sales/stock

- No physical verification of stock was done by the block officials. In certain cases the stock was moved out to the retailers by the first stock point without even unloading the stock and invoices were sent subsequently. Hence even if the supply details were received on the same day the physical verification could not be done as verification beyond the first stock point was not carried out by the block officials.

9.20.2.6 Supply of concessional fertilizers to physical and granulation mixing units.

- The state Government did not report the quantum of concessional fertilizers consumed by the mixing units, except Salem District, to GOI. During 2007-08 to 2008-09, the mixing units utilised 5.46 lakh MTs various fertilizers, which were procured at concessional rates meant for farmers, thus breaking the “subsidy chain”.

- The percentage of Standard mixture found non-standard ranged from 34 to 53. Non standard mixture was not seized, as the entire quantity had already been sold to farmers.

9.20.2.7 Quality control

- There are 14 Fertilizer Control Laboratories (FCL) functioning in the State with an analyzing capacity of 17,500 samples for enforcing quality control. In the 14 FCLs, only 26 posts were filled against 44 posts of analytical staff.
- In the different blocks of 3 test-checked districts of Kancheepuram, Dharmapuri, Thanjavaur, the shortfall in drawal of samples for testing ranged from 34 to 75 per cent during 2008-09.
- The shortfall in receipt of samples in FCLs ranged from three percent (Tiruchirappalli 2007-08) to 52 per cent (Kumbakonam 2008-09).
- The results were communicated to the block after 20 to 30 days from the receipt of samples, by which time, stock was sold out. No deduction was made in respect of standard mixtures which were declared as non-standard.
- 2269.58 MT of straight/complex fertilizers declared as non-standard (DAP, NPK, MOP and SSP) was not seized during 2006-09.

9.20.3 Results of dealer and farmer survey

9.20.3.1 Dealer Survey

Responses from 60 dealers are summarized below:-

Sl.No.	Questions	Response		
		Yes	No	Others
1.	Are you getting the required quantity and type of fertilizer from your source (1st stocking point or wholesaler) in time?	33	24	3
		No Limit	Limited	
2.	Do you give fertilizers to the farmers without any limiit or is there some limit like 1 bag of DAP per acre.	51	9	
		Yes	No	Other
3.	Are you facing any problems in transportation etc. in lifting your requirement of fertilizers?	20	39	1
		Yes	No	Others
4.	Do you have adequate credit facilities so as to lift your requirement of fertilizers?	26	31	3

		Yes	No	Yes, with condition
5.	Are you able to supply fertilizers as per demand to the farmers on time? What are your problems?	28	24	8
		Yes	No	Others
6.	Are farmers demanding small quantity bags of fertilizers from you?	28	28	4
		Yes	No	Yes, report not received
7.	Have any samples been selected in the last 3 years from your stock for fertilizer quality testing by the Agriculture Department? What were the results?	41	15	4

9.20.3.2 Farmer Survey

Responses from 300 farmers are summarized below:-

	Questions	Response			
		Cooperative	Dealer	Both	Others
1.	Are you buying fertilizers from the authorised dealer/ co-operative society?	60	95	139	6
		Yes	No	Others	
2.	Are the quantity of fertilizers sold to you rationed? E.g., 5 bags DAP/ration card, 1 bag of DAP per acre etc. Please indicate.	165	105	30	
		MRP	Others	No comment	
3.	What are the prices at which you have bought fertilizers (a) urea (b) DAP (c) MOP (d) other fertilizers in the last 1 or 2 seasons?	0	285	15	
		Yes	No	Others	
4.	Did the dealer give you a receipt for your sales?	269	15	16	
		Yes	No		
5.	Do you know the maximum prices for fertilizers fixed by Government (Audit team may show the MRP list of various fertilizers to the farmer)?	122	178		

		Yes	No	Others
6.	Do you have enough money to buy your full requirement of fertilizers? What are your problems?	134	162	4
		Yes	No	Yes, but Report not received
7.	Did you get your soil tested, to find out the exact requirement of different types of fertilizers for your land, so that you get the maximum yield of crops?	61	231	8
		Yes	No	Others
8.	Did you face any problems in getting your full requirement of fertilizers in time for the season?	108	175	17
		Yes	No	Others
9.	Does the dealer force you to buy any other item along with the fertilizers that you want?	16	278	6
		Yes	No	Others
10.	Do you need fertilizers in small quantity bags?	173	120	7
		Yes	No	Others
11.	Overall, are you satisfied with the supply of fertilizers to you?	246	20	34
		Yes	No	Others
12.	Have you faced any other problems in supply of fertilizers?	45	231	24

The vast majority of farmers indicated that they were buying fertilizers at prices other than MRPs. While the majority of surveyed farmers did not face problems in getting their requirement of fertilizers, most did not have enough money to buy their full requirement of fertilizers and needed fertilizers in small quantity bags.

9.21 Tripura

9.21.1 Background

The State has 4 districts and a total area of 10,492 sq km. Net cultivated area is 2.8 lakh hectares and irrigated area is 61000 hectares. The major horticulture/plantation crops are pineapple, oranges, coconut, tea, rubber, forest plantations etc. Fruit crops in the State are grown without application of any chemical fertilizer.

Besides the concession given by the Govt. of India, the burden of farmers is further shared by the State Govt. by providing concession in the form of subsidy @ Rs. 420/- per MT for urea; @ Rs. 380 per MT for SSP; @ Rs. 500/- per MT for MOP and Rs. 760/- per MT for DAP for sale through Govt. channel only.

Two Districts - West Tripura and North Tripura, - and two blocks[23] in each District were selected for detailed scrutiny.

9.21.2 Audit Findings

9.21.2.1 Assessment of fertilizer requirement

- Assessment of requirement of fertilizer was done while preparing the Perspective Plan at every Agriculture Sub Division based on the standard recommended dose, and 3 years average consumption for the period ending 1996-97. However, the plan was revised in 2004-05 as the target so fixed was quite high. For example the projected requirement of fertilizer for the year 2004-05 was reduced from 111156 MT (575 kg per hectare) to 46000 MT (130 kg per hectare) in the revised perspective plan.
- No norms/standards had been laid down for calculating the requirement of fertilizers based on the type of irrigated/non-irrigated area, soil health and other local factors.

9.21.2.2 Un-utilized fertilizer stocks

- There was a substantial gap between the requirements as assessed in the revised perspective plan and actual consumption of fertilizer, which varied between 30 to 52 per cent during the last 3 years as given below:

[23] Dukli, Kalyanpur Block, Panisagar and Kadamtala

Table 9.63 – Gap between requirement and actual consumption of fertilizers in Tripura

(Quantity in MT)

Year	Item	Urea	RP	MOP	SSP	Total
2006-07	Requirement	31145	6600	5500	12375	55620
	Consumption	20865	1931	4165	12237	39198
	Difference	10280	4669	1335	138	16422
	Variation (%)	**33.01**	**70.74**	**24.27**	**1.12**	**29.53**
2007-08	Requirement	33740	7200	6000	13500	60440
	Consumption	15877	5296	3656	8505	33334
	Difference	17863	1904	2344	4995	27106
	Variation (%)	**52.94**	**26.44**	**39.07**	**37.00**	**44.85**
2008-09	Requirement	37370	8000	6700	15000	67070
	Consumption	15976	5078	4626	6185	31865
	Difference	21394	2922	2074	8815	35205
	Variation (%)	**57.25**	**36.53**	**30.96**	**58.77**	**52.49**

- While preparing the Perspective Plan, the District Officers were not asked to communicate the District-wise requirements for inputs placed before the GOI before/during Rabi and Kharif Zonal Conferences.

9.21.2.3 Verification of reported data

- The department had not adopted any system for regulating distribution of fertilizer to the farmers. Sales were made without any verification of farmer's identification and quantum of land holding, despite complaints of delayed supplies.

9.21.2.4 Availability and Shortages

- During surveys, retail dealers and farmers complained that due to delay in supply of fertilizer, the farmers had to buy fertilizers at higher rate than MRP from the market
- There were substantial variations between the allocations and actual supply of urea as detailed in table below:

Table 9.64 – Variation between requirement and actual supply of urea

Year	BVFCL ECA allocation	IFFCO ECA allocation	Actual Lifting by Govt. channel	Actual lifting by Co-op channel	Actual lifting Private Channel	Per centage of lifting Col.4 over Col .2	Per centage of lifting Col.5 over Col .3	Per centage of lifting Col.6 over Col .2
1	2	3	4	5	6	7	8	9
2006-07	26000	4000	5474	2102	13190	21	53	50.71
2007-08	22600	2000	3750	3501	8626	17	175	38.16
2008-09	22500	5000	2481	4391	9104	11	88	40.46

9.21.2.5 Verification of Sales

- There were delays, ranging from 1-12 months in the receipt of 'Proforma A' during 2006-09 from the units.
- On the basis of the stock entry certificate, Proforma 'B' is certified and sent to the Govt. of India. However, no evidence of actual verification of stores by the Inspectors was noticed.

9.21.2.6 Quality Control

- No samples were collected for testing from private wholesaler and retail dealers for fertilizer transported by road, thereby leaving the fertilizers transported by road out of quality assurance. Only samples collected from railway rakes were tested from Central Fertilizer Quality and Training Institute, Faridabad.
- There was delay in getting the test results of fertilizer. By the time the results were received, the fertilizer had already been sold.
- 27% to 42% of samples tested during the last 3 years were found to be non-standard.
- No proposal for recovery of Rs.3.33 crore was initiated by the State Govt. during the last 3 years (2006-09) on account of supply of sub standard fertilizers.

9.21.3 Results of dealer and farmer survey

9.21.3.1 Dealer Survey

Responses from 24 dealers are summarized below:-

Sl.No.	Questions	Response		
		Yes	No	
1.	Are you getting the required quantity and type of Fertilizer from your source (1st stocking point or wholesaler) in time?	8	16	
		No Limit	Limited	Others
2.	Do you give fertilizers to the farmers without any limit or is there some limit like 1 bag of DAP per acre?	18	5	1
		Yes	No	
3.	Are you facing any problems in transportation etc. in lifting your requirement of Fertilizers?	12	12	
		Yes	No	
4.	Do you have adequate credit facilities so as to lift your requirement of Fertilizers?	7	17	
		Yes	No	
5.	Are you able to supply Fertilizers as per demand to the farmers on time? What are your problems?	5	19	
		Yes	No	
6.	Are farmers demanding small quantity bags of Fertilizers from you?	19	5	
		Yes	No	Yes but not recd
7.	Have any samples been selected in the last 3 years from your stock for Fertilizer quality testing by the Agriculture Department? What were the results?	4	19	1

Dealers survey result revealed that out of 24 dealers, 12 dealers stated that they were facing problems in transportation for lifting the fertilizer, 19 dealers stated that they could not supply the fertilizer in time as per the demand of farmers. Further, 19 dealers stated that samples were not taken from their stock.

9.21.3.2 Farmer Survey

Responses from 120 farmers are summarized below:-

	Questions	Response			
		Cooperative	Dealer	Both	Others
1.	Are you buying Fertilizers from the authorised dealer/ co-operative society?	6	34	77	3
		Yes	No	Others	
2.	Are the quantity of fertilizers sold to you rationed? E.g., 5 bags DAP/ration card, 1 bag of DAP per acre etc. Please indicate.	0	119	1	
		MRP	Others	No comments	
3.	What are the prices at which you have bought Fertilizers (a) urea (b) DAP (c) MOP (d) other Fertilizers in the last 1 or 2 seasons?	0	118	2	
		Yes	No	No comment	
4.	Did the dealer give you a receipt for your sales?	1	118	1	
		Yes	No	Others	
5.	Do you know the maximum prices for Fertilizers fixed by Government (Audit team may show the MRP list of various Fertilizers to the farmer)?	64	55	1	
		Yes	No	Others	
6.	Do you have enough money to buy your full requirement of Fertilizers? What are your problems?	7	109	4	
		Yes	No	Yes, but Report not received	
7.	Did you get your soil tested, to find out the exact requirement of different types of Fertilizers for your land, so that you get the maximum yield of crops?	17	70	33	
		Yes	No	Others	
8.	Did you face any problems in getting your full requirement of Fertilizers in time for the season?	103	12	5	
		Yes	No	Others	
9.	Does the dealer force you to buy any other item along with the Fertilizers that you want?	3	114	3	

		Yes	No	Others
10.	Do you need Fertilizers in small quantity bags?	117	0	3
		Yes	No	Others
11.	Overall, are you satisfied with the supply of Fertilizers to you?	8	79	33
		Yes	No	Others
12.	Have you faced any other problems in supply of Fertilizers?	47	59	14

The vast majority of farmers stated that they were buying fertilizers at prices other than MRP, and faced problems in getting their full requirement of fertilizers. They also needed fertilizers in small quantity bags, since they do not have enough money to buy their full requirement of fertilizers.

9.22 Uttar Pradesh

9.22.1 Background

Uttar Pradesh has 71 Districts, with a geographical area of 242 lakh hectares. The net cultivated area is 166 lakh hectares, out of which 132 lakh hectares is irrigated. The total gross cropped area is 254 lakh hectares.

Agriculture is the main source of livelihood of more than half of the state's total working force. The main crops of the state are paddy and wheat.

Seven districts and two blocks in each district were selected for detailed audit scrutiny, as given below:

Table 9.65 – Districts and blocks selected for detailed audit scrutiny

Serial No.	Name of Region	Name of the district selected	Name of the Blocks
1	Eastern U.P.	Barabanki	**Dariyabad and Siddhaur**
2		Gorakhpur	**Bansgaon and Belghat**
3		Varanasi	**Harhua and Pindra**
4	Western U.P.	Aligarh	**Bijauli and Ekrabad**
5		Bulandshahar	**Bulandshahr and Unchagaon**
6		Moradabad	**Dilari and Moondapandey**
7	**Disrtict touching international boarder**	**Lakhimpur Kheri**	**Lakhimpur and Mohammadi**

Out of four fertilizer quality control laboratories, three laboratories were selected for audit scrutiny.

9.22.2 Audit findings

9.22.2.1 Assessment of Requirement of subsidized fertilizers

- The assessment of requirement of fertilizer at the district level was not done in the test checked districts except in Gorakhpur for 2008-09, that too, only on the basis of cropped area, without holding meetings with farmers, co-operatives etc. and without taking into account the factors such as cropping patterns etc.
- Instead, the assessment of fertilizer requirement for the state was projected by the Agriculture Department by increasing the previous year's consumption of fertilizer. The consumption and assessed requirement of fertilizer for the years 2006-09 was as follows:

Table 9.66 – Requirement and offtake of fertilizers in UP

(In lakh MT)

Name of product	Offtake by farmers (Lakh MT)	Requirement (Lakh MT)	Increase/decrease of requirement over last year's offtake by farmers	
	2005-06	2006-07		Percentage
Urea	45.98	50	(+)4.02	9
Ammonium Sulphate	0.15	0.3	(+)0.15	100
MOP	1.67	2.3	(+)0.63	38
DAP	12.17	14.5	(+)2.33	19
SSP	3.03	2.75	(-)0.28	9
NPK complex	7.34	8.7	(+)1.36	19
	2006-07	2007-08		
Urea	51.67	55	(+)3.33	6
Ammonium Sulphate	0.12	0.2	(+)0.08	67
MOP	1.24	3	(+)1.76	142
DAP	13.21	15	(+)1.79	14
SSP	2.7	3	(+)0.30	11
NPK complex	6.93	8.75	(+)1.82	26
	2007-08	2008-09		
Urea	52.54	57	(+)4.46	8
Ammonium Sulphate	0.08	0.2	(+)0.12	150
MOP	1.16	2.5	(+)1.34	116
DAP	13.24	16	(+)2.76	21
SSP	1.34	3	(+)1.66	124
NPK complex	7.05	10.5	(+)3.45	49
	2008-09	2009-10		
Urea	54.57	55	(+)0.43	1
Ammonium Sulphate	0.24	0.3	(+)0.06	25
MOP	2.46	1.85	(-)0.61	25
DAP	14.46	17	(+)2.54	18
SSP	2.39	3	(+)0.61	26
NPK complex	7.06	8.5	(+)1.44	20

9.22.2.2 Availability and distribution of fertilizer

- In the test checked districts, availability of fertilizer was not as per the month wise supply plan uploaded by the various fertilizer companies during April 2008, to December 2008, as detailed below:
- Short supply of DAP in Barabanki and Lakhimpur Kheri ranged between 7 to 78 per cent and excess supply of DAP in Aligarh, Bulandshahr, Gorakhpur Moradabad and Varanasi ranged between 6 to 139 per cent.
- Short supply of Urea against supply plan in Barabanki, Bulandshahar Gorakhpur and Lakhimpur Kheri ranged between 8 to 71 per cent and excess supply of urea in Aligarh, Moradabad and Varanasi ranged between 6 to 75 per cent.
- Short supply of MOP in Barabanki, Lakhimpur Kheri and Moradabad ranged between 41 to 100 per cent and excess supply of MOP in Aligarh, Bulandshahar, Gorakhpur and Varanasi ranged between 159 to 722 per cent.
- Short supply of NPK in Aligarh, Barabanki, Bulandshahr, Lakhimpur Kheri and Moradabad ranged between 18 to 100 per cent and excess supply of NPK in Gorakhpur and Varanasi ranged between 126 to 148 per cent.
- In seven test checked districts the actual supply of DAP was in excess of the supply ranging by 6 per cent to 139 per cent. In case of urea in these districts, excess actual supply against the supply plan ranging from 6 per cent 75 per cent during April 2008 to December 2008. Likewise in MOP, the excess actual supply ranging from 41 per cent to 722 per cent. Excess actual supply of NPK was ranging from 18 per cent to 148 per cent. Details are in ***Annexe 9.9.***
- There was inappropriate use of fertilizer nutrients during 2006-07 to 2008-09 which resulted in very high consumption of nitrogenous fertilizer in Bulandshahar and Varanasi (2006-07), Barabanki, Bulandshahar, Gorakhpur, Moradabad and Varanasi (2007-08), Barabanki, Bulandshahar, Gorakhpur, Moradabad and Varanasi (2008-09), ranging between 148 kg to 300 kg per hectare. There was high consumption of Phosphates in Varanasi district in all the three years. ***(Annexe 9.10)***
- P and K nutrients were used in very low quantity in all the test checked districts, except Varanasi, ranging between 21 to 56 kg per hectare and 3 kg to 22 kg per hectare respectively.Further, the consumption ratio of N P K fertilizer nutrients was very low and inappropriate in the districts of Bundelkhand Region during 2006-07 to 2008-09. This would indicate short supply in these districts. (***Annexe 9.11)***

9.22.2.3 Verification of fertilizer sales

- There were delays in submission of Proforma 'B' by the Directorate of Agriculture to DoF, ranging from one month to two years in the test checked districts.

- In four test checked districts, namely Aligarh, Bulandshahar, Lakhimpur Kheri and Varanasi, physical verification was not conducted during 2008-09, while in the remaining three districts i.e. Barabanki, Gorakhpur and Moradabad, physical verification of stock was done only at the time of raid and collection of samples of fertilizer.
- Sale and purchase of fertilizer, in wholesale from one district to another district were noticed during 2008-09 in six test checked districts in contravention of the State Government Orders.

9.22.2.4 Quality Control and Testing

- Targets of samples of fertilizer to be analyzed during 2006-07 to 2008-09 were not achieved and shortfall ranged from 24 to 37 per cent as detailed below:

Table 9.67 – Shortfall in testing of samples in Uttar Pradesh

Year	At State level		Shortfall (in percent)
	Target	Achievement	
2006-07	15000	11433	24
2007-08	15000	10072	33
2008-09	15000	9454	37

- In the test checked laboratories, the targets of sample analysis of fertilizer during 2006-07 to 2008-09 were not achieved, and shortfall ranged from 13 to 72 per cent.

Table9.68 – Shortfall in testing of samples in test-checked laboratories

Name of the laboratories	Target	2006-07		2007-08		2008-09	
		Ach.	Short fall (in %)	Ach.	Short fall (in %)	Ach.	Short fall (in %)
Alambagh, Lucknow	5500	5541	--	4771	13	4178	24
Rehman Kheda, Lucknow	1500	490	67	415	72	743	50
Varanasi	3000	2389	20	2404	19	2388	20

- Testing equipments in three test checked laboratories (Alambagh, Rehmankhere and Varanasi) were not in proper working conditions as they had become very old and some of them were declared unusable. In Alambagh and Rehmankhera laboratories, six items of equipment were lying unusable and in Varanasi, 25 items of equipment were lying unusable.
- 4 technical staff were short against the sanctioned strength of 8 Assistant Analysts in the three laboratories at Alambagh, Rehmankhera and Varanasi.

9.22.2.5Other Points

- In Sadhan Sahkari Samiti, Hardoi, block Bijauli, Aligarh non-saleable 37 bags of DAP and 40 bags of Urea and in Sadhan Sahkari Samiti, Bilpur, block Bijauli, Aligarh, non-saleable 132 bags of Urea were dumped for the last 20 years.
- In Kisan Seva Sahkari Samiti, Khanpur, Bulandshahar, non-saleable 303 bags of Urea were dumped for more than 20 years.

Non-saleable bags of urea in Kisan seva sahkari samiti, Khanpur, Bulandshahar

Non saleable fertilizers lying in the FSS godown at Khanpur

Fertilizer kept in a very poor condition (moisture) - SSS Dewradbabu, Bansgaon block, Gorakpur District

9.22.3 Results of dealer and farmer survey

9.22.3.1 Dealer Survey

Responses from 84 dealers are summarized below:-

Sl.No.	Questions	Response		
		Yes	No	Others
1.	Are you getting the required quantity and type of fertilizer from your source (1st stocking point or wholesaler) in time?	52	30	02
		No Limit	Limited	Others
2.	Do you give fertilizers to the farmers without any limiit or is there some limit like 1 bag of DAP per acre?	63	18	3
		Yes	No	Others
3.	Are you facing any problems in transportation etc. in lifting your requirement of fertilizers?	28	54	2
		Yes	No	Others
4.	Do you have adequate credit facilities so as to lift your requirement of fertilizers?	74	7	3
		Yes	No	Others
5.	Are you able to supply fertilizers as per demand to the farmers on time? What are your problems?	63	19	2
		Yes	No	Others
6.	Are farmers demanding small quantity bags of fertilizers from you?	27	55	2

		Yes	No	Yes , report not received
7.	Have any samples been selected in the last 3 years from your stock for fertilizer quality testing by the Agriculture Department? What were the results?	32	50	2

Dealer survey results revealed that out of 84 dealers, 30 stated that they were not getting the required type and quantity in time, 27 dealers stated that farmers were demanding small quantity bags, 50 dealers stated that samples were not tested from their stock and 58dealers stated that they faced scarcity in supply of DAP at peakcrop season.

9.22.3.2 Farmer Survey:

Responses from 420 farmers are summarized below:-

	Questions	Response		
		Cooperative	Dealer	Both
1.	Are you buying fertilizers from the authorised dealer/ co-operative society?	131	66	223
		Yes	No	
2.	Are the quantity of fertilizers sold to you rationed? E.g., 5 bags DAP/ration card, 1 bag of DAP per acre etc. Please indicate.	135	285	
		MRP	Higher than MRP	
3.	What are the prices at which you have bought fertilizers (a) urea (b) DAP (c) MOP (d) other fertilizers in the last 1 or 2 seasons?	415	05	
		Yes	No	
4.	Did the dealer give you a receipt for your sales?	266	154	
		Yes	No	
5.	Do you know the maximum prices for fertilizers fixed by Government (Audit team may show the MRP list of various fertilizers to the farmer)?	136	284	
		Yes	No	Others
6.	Do you have enough money to buy your full requirement of fertilizers? What are your problems?	392	21	7
		Yes	No	
7.	Did you get your soil tested, to find out the exact requirement of different types of fertilizers for your land, so that you get the maximum yield of crops?	19 (but they did not get any results)	401	

		Yes	No
8.	Did you face any problems in getting your full requirement of fertilizers in time for the season?	268	152
		Yes	No
9.	Does the dealer force you to buy any other item along with the fertilizers that you want?	12	408
		Yes	No
10.	Do you need fertilizers in small quantity bags?	207	213
		Yes	No
11.	Overall, are you satisfied with the supply of fertilizers to you?	303	117
		Yes	No
12.	Have you faced any other problems in supply of fertilizers?	303	117

Survey of 420 farmers revealed that 135 stated that the fertilizer supply was rationed, 284 farmers did not know the MRP. 401 farmers stated that their soil was not tested and 19 stated that their soils were tested but results were not received. 268 farmers stated that they were facing problems in getting the required quantity, while 207 stated that they preferred small quantity bags. 152 farmers stated that they had to face problem in getting DAP in the peak season.

9.23 Uttarakhand

9.23.1 Background

Uttarakhand has 13 districts, with a total geographical area of 53483 Sq. Km. The net sown area is 765150 Hectares out of which the net irrigated area is 345020 Hectares (2006-07). The principal crops grown in the State are rice, wheat, barley, maize, sugarcane, pulses and oil seeds.

Three districts i.e. Pithoragarh, Dehradun, and Udhamsingh Nagar and six blocks[24] (two blocks in each district) were selected for detailed audit scrutiny. In addition, two fertilizer quality control laboratories at Rudrapur and Srinagar were selected for audit scrutiny.

9.23.2 Audit findings

9.23.2.1 Assessment of fertilizer requirement

- The assessment of requirement of fertilizers in the State, at all levels, was based on consumption of last year/ season instead of type of crop, irrigated/ non-irrigated area and other local factors. Thus, the assessment could not be termed as scientifically determined.
- Panchayat Samiti and Blcok Samiti were not involved in the assessment of fertilizer requirement.
- No data regarding per hectare consumption of fertilizer was available in the State, apart from the consolidated report in the Zonal Conference booklet.

9.23.2.2 Verification of sales by State Government

- Verification was done only at the first stocking point itself. No process for verification of sale up to the farmer level existed.

9.23.2.3 Delay in Proforma B

- There were delays in issue of Proforma-'B'. The details are as under:

Table 9.69- Delays in issue of proforma B

Year	DAP	Complex	SSP	MOP
	Period of delay (range in days)			
2006-07	7 to 319	6 to 165	5 to 671	7 to 330
2007-08	8 to 385	8 to 113	107 to 390	50 to 385
2008-09	21 to 292	26 to 293	14 to 293	26 to 264

[24] Gangolihat, Munsyari,Sahaspur, Doiwal, Khatima and Gadarpur

9.23.2.4 Quality Control

Shortfall in the drawal of samples for the two selected quality control laboratories ranged between 31 per cent and 85 per cent during 2006-09, as depicted below.

Table 9.70 – Shortfall in drawal of samples for test checked quality control laboratories

Name of laboratory	2006-07			2007-08			2008-09		
	Capacity No.of samples	Actually drawn	Shortfall	Capacity No.of samples	Actually drawn	Shortfall	Capacity No.of samples	Actually drawn	Shortfall
FQCL, Rudrapur	400	278	122 (31%)	400	198	202 (51%)	400	155	245 (61%)
FQCL, Pauri	400	206	194 (49%)	400	125	275(69%)	400	61	339(85%)

An analysis of the drawal of samples from Dehradun and Pithoragarh districts revealed substantial shortfalls, as depicted below:

Table 9.71 – Shortfall in drawal of samples in Dehradun District

Year	Target	Achievement	Shortfall w r t target
2006-07	100	57	43 (43%)
2007-08	100	21	79 (79%)
2008-09	100	22	78 (78%)

Table 9.72 – Shortfall in drawal of samples in Pithoragarh District

Year	Target	Achievement	Shortfall w. r. t. target	Lots received	Shortfall w. r. t. lots received
2006-07	20	4	16 (80%)	NA	NA
2007-08	20	7	13 (66%)	NA	NA
2008-09	20	2	18 (90%)	16	14 (87%)

- In 13 cases, recoveries amounting to Rs 16.03 lakh on account of quantities declared non standard were not proposed, while issuing Proforma 'B' during 2006-09.
- The laboratory at Srinagar, Pauri was in poor condition, and few of the equipment were being used by the soil testing analysts, as no fertilizer analyst was posted there.

Bricks lying atop non functional Atomic Absorption Spectrophotometer at Srinagar, Pauri laboratory

9.23.2.5 Other points

- The store room for fertilizers at Dasaithal, Gangolihat was damp and poorly lit while scrap items were found kept with fertilizer bags at Oligaon, Gangolihat (as seen in the photographs).

Damp and poorly lit store at Dasaithal, Gangolihat, Pithoragarh District

Fertilizer Bags lying with scrap item at Oligaon, Gangolihat, Pithoragarh District

- One hundred seventy bags of NPK at Dineshpur and 10 bags of NPK at Udham Singh Nagar of unknown manufacturing origin were seized and FIRs lodged.

Confiscated NPK -12:24:12 at KSS, Khatima South, Udham Singh Nagar District

9.23.3 Results of dealer and farmer survey

9.23.3.1 Dealer Survey

Responses from 36 dealers are summarized below:-

Sl.No.	Questions	Response		
		Yes	No	Others
1.	Are you getting the required quantity and type of fertilizer from your source (1st stocking point or wholesaler) in time?	27	7	2
		No Limit	Limited	Others
2.	Do you give fertilizers to the farmers without any limiit or is there some limit like 1 bag of DAP per acre.	12	22	2
		Yes	No	Others
3.	Are you facing any problems in transportation etc. in lifting your requirement of fertilizers?	6	28	2
		Yes	No	Others
4.	Do you have adequate credit facilities so as to lift your requirement of fertilizers?	32	2	2
		Yes	No	Others
5.	Are you able to supply fertilizers as per demand to the farmers on time? What are your problems?	33	1	2
		Yes	No	Others
6.	Are farmers demanding small quantity bags of fertilizers from you?	18	16	2
		Yes	No	Yes, but report not recd.
7.	Have any samples been selected in the last 3 years from your stock for fertilizer quality testing by the Agriculture Department? What were the results?	15	19	2

A majority of dealers indicated that they were limiting sales of fertilizer to farmers and samples had not been selected for quality tests.

9.23.3.2 Farmer Survey

Responses from 180 farmers are summarized below:-

	Questions	Response			
		Cooperative	Dealer	Both	Others
1.	Are you buying fertilizers from the authorised dealer/ co-operative society?	169	1	6	4
		Yes	No	Others	

2.	Are the quantity of fertilizers sold to you rationed? E.g., 5 bags DAP/ration card, 1 bag of DAP per acre etc. Please indicate.	31	2	147
		MRP	Other than MRP	No comments
3.	What are the prices at which you have bought fertilizers (a) urea (b) DAP © MOP (d) other fertilizers in the last 1 or 2 seasons?	147	16	17
		Yes	No	Others
4.	Did the dealer give you a receipt for your sales?	123	45	12
		Yes	No	Others
5.	Do you know the maximum prices for fertilizers fixed by Government (Audit team may show the MRP list of various fertilizers to the farmer)?	71	93	16
		Yes	No	Others
6.	Do you have enough money to buy your full requirement of fertilizers? What are your problems?	74	100	6
		Yes	No	Yes, report not received
7.	Did you get your soil tested, to find out the exact requirement of different types of fertilizers for your land, so that you get the maximum yield of crops?	28	141	11
		Yes	No	Others
8.	Did you face any problems in getting your full requirement of fertilizers in time for the season?	68	110	2
		Yes	No	Others
9.	Does the dealer force you to buy any other item along with the fertilizers that you want?	10	162	8
		Yes	No	Others
10.	Do you need fertilizers in small quantity bags?	115	63	2
		Yes	No	Others
11.	Overall, are you satisfied with the supply of fertilizers to you?	124	51	5
		Yes	No	Others
12.	Have you faced any other problems in supply of fertilizers?	61	98	21

Most of the farmers indicated that they did not have enough money to buy the full requirement of fertilizers, did not get their soil tested, and needed fertilizers in small quantity bags.

9.24 West Bengal

9.24.1 Background

West Bengal has 18 districts with net sown area (52.94 lakh hectares) constituting 61 *per cent* of the total geographical area, the number of farmers in the state is 69.91 lakhs and as of 2008-09, the gross cropped area was 98.01 Lakh Hectare. Rice is the principal crop along with maize, pulses, oilseeds, wheat, barley, potato, vegetables, jute, tea, tobacco and sugarcane.

Four districts – Bardhaman and Paschim Medinipur in South Bengal and Malda and Jalpaiguri in North Bengalregions) and two blocks in each district were selected for detailed audit scrutiny. In addition, six dealers and 30 farmers in each of the eight selected blocks in four districts were surveyed. Performance of three Fertilizer Testing Laboratories at Tollygunge, Medinipur and Berhampure was also reviewed.

9.24.2 Audit findings

9.24.2.1 Assessment of fertilizer requirements

- The State Government had fixed norms of consumption of fertilizers per hectare, based on types of crops to be cultivated. However, the same norm was fixed for all blocks in a district, irrespective of soil health and irrigation facility. Although block wise requirement of fertilizers for each season was assessed on the basis of type of crops grown, this was not projected at the state level.
- The requirement of fertilizers for each season was assessed on the basis of previous years' consumption in consultation with Lead Fertilizer Supplier and Fertilizer Association of India, but was not based on the type of crops to be cultivated and soil fertility level.
- Per hectare consumption of fertilizers in Bardhaman and Malda districts was much more than the State average during each of the years from 2006-07 to 2008-09. The per hectare consumption in Jalpaiguri district was much less than the State average, although it increased by 95 *per cent* in 2008-09 as compared to the consumption in 2007-08.

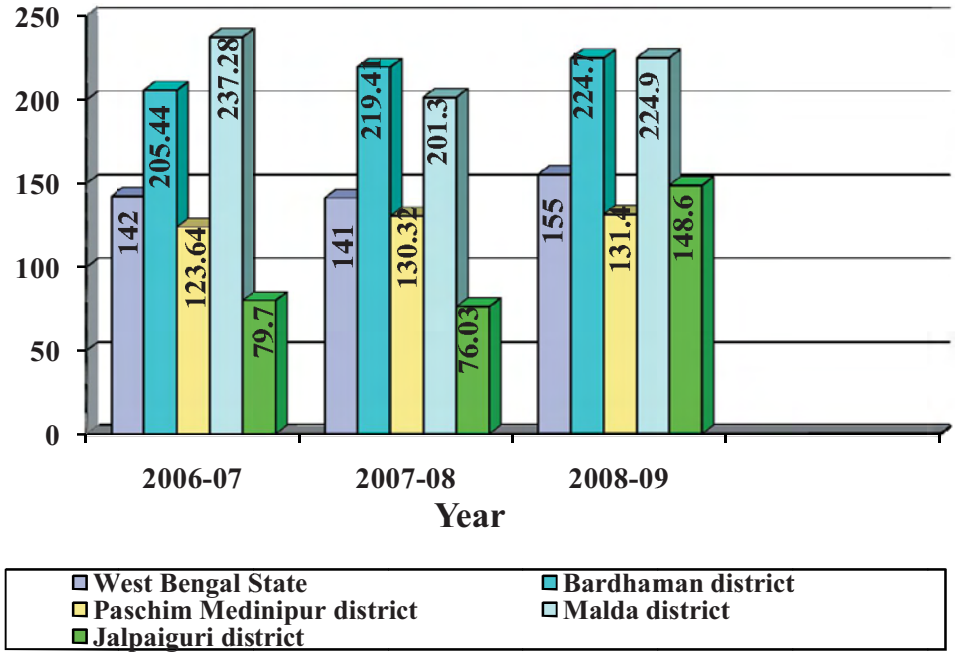


Figure 9.1 – Variation in consumption of fertilizers across districts in West Bengal

- In the absence of soil testing, farmers were not aware of required dose of fertlisers to be applied on their land. As a result, farmers were using fertilizers more than the required doses resulting in high rate of per hectare consumption.

9.24.2.2 Verification of subsidy claims

- No physical verification of receipt of fertilizers was conducted by the Deputy Director of Agriculture.
- There was no process for verification of sales beyond the first sale point up-to the farmer level. There was also no mechanism for physical verification of stock of fertilizers at the dealers' point.
- There were no norms to ration/regulate sale of fertilizers to ensure equitable distribution of fetilisers to farmers.
- There were discrepancies between the quantity of despatch data of the companies at district level and the quantity of fertilizers received by the first stocking point dealers in the test checked districts during the period from May 2008 to December 2008. A difference of 24174.85 MT was noticed involving an amount of Rs. 64.93 crore subsidy as shown in ***Annexe 9.12***. Fertilizer subsidy was, however, paid by GoI on the basis of the quantities of fertilizers received in districts by first stocking point dealers as certified by

DDsA of respective districts without conducting physical verification of the quantities of fertilizers actually received by first stocking point dealers.

9.24.2.3 Availability and shortage of fertilizers

- Requirement vis-à-vis supply of different categories of fertilizers during the years from 2006-07 to 2008-09 were as under:

Table 9.73 – Requirement and supply of fertilizers in West Bengal

(In '000 MT)

	2006-07			2007-08			2008-09		
	Requirement	Supplied	% of shortfall	Requirement	Supplied	% of shortfall	Requirement	Supplied	% of shortfall
Urea	1200	1166	3	1255	1167	7	1300	1165	10
DAP	410	374	9	451	378	16	486	380	22
MOP	358	286	20	364	276	24	415	459	-11
SSP	450	374	17	445	301	32	445	371	17
NPK*	618	597	1	706	642	9	749	722	4
Total	3036	2797	7	3221	2764	14	3395	3097	9

(Source: Minutes of Zonal Agricultural Input Conference on Fertilizers)

**Complex fertilizer containing mixture of N, P and K in various proportions.*

- There was short supply in respect of each item of fertilizer during each of the years 2006-07 to 2008-09 (except in case of MOP during 2008-09) as compared to the requirements.
- In case of complex fertilizer (NPK), the shortfall in supply was less significant during 2006-07 while in other cases, the shortfall varied from 3 to 33 per cent of requirement during each of the years 2006-07 to 2008-09.
- There was skewed distribution i.e. lesser supply in distant and disjointed districts having no rake points in comparison to requirement, and in sharp contrast, higher supply in districts having better accessibility.
- All the districts, except one, (Uttar Dinajpur- border district) received fertilizers much less than the requirements**,** irrespective of availability of rake points.

9.24.2.4 Sale of fertilizers at higher rate

- Manufacturers were supplying fertilizers up to the rake points and dealers were lifting their quota from rake points to their godowns by incurring additional expenditure towards transportation and handling charges. However, prices paid by farmers, as indicated through the farmers' survey, were substantially higher than MRPs.The price list and daily stock position were not displayed in the dealers' shops. As a result, farmers were not aware of MRPs and availability of stock of fertilizers.

Table9.74 – Prices of fertilizers vis-a-vis MRP

Category	MRP per bag of 50 Kg (Rs)		Procurement price per bag of 50 Kg (Rs)
	Up to 17.06.2008	w.e.f 18.06.2008	
Urea	251.00	251.00	250.00 to 300.00
DAP	486.00	486.00	485.00 to 600.00
MOP	231.66	231.66	250.00 to 300.00
NPK 10:26:26	434.00	374.00	400.00 to 500.00
SSP (P)	177.00	177.00	280.00 to 340.00

(Source: GoWB order No. 1372 (20)-Inpt/12F-04/08 dated 28.07.2008 and survey reports)

9.24.2.5 Diversion of fertilizer to other districts

- Records of dealers revealed that three dealers in Bardhaman district sold 950 MT of fertilizers to dealers in other districts as detailed in ***Annexe 9.13***. Although fertilizers were allotted district-wise on the basis of assessed requirement of each district, inter district sale of fertilizers was not restricted.

9.24.2.6 Smuggling of fertilizers

- 548.331 MT of fertilizers worth Rs 177.89 lakh were seized by the Border Security Force (BSF) during January to September 2008.

Table9.75 – Seizure of smuggled fertilizer in West Bengal

District	Quantity seized (MT)	Value of seized fertilizers (Rupees in lakh)
Murshidabad	323.757	105.03
Nadia	28.391	9.21
North and South 24 Parganas	53.502	17.36
Maldah and Dakshin Dinajpur	142.681	46.29
Total	**548.331**	**177.89**

(Source: Report of Inspector General of South Bengal Frontier Headquarters, BSF)

- There was no restriction in issuing licences to dealers in border area (740 licenses had been issued to various dealers in the border areas for procurement and sale of fertilizers and foodgrains). In certain cases, four to five members of a family had been issued dealer permits (in the names of wife, sons, daughters, etc) without any justification. Thus, issue of large number of permits and inflow of disproportionate quantity of goods

to the border areas, facilitated smuggling of goods (including fertilizer) across the border. The Department had no monitoring mechanism over the performance of dealers in border areas, in order to prevent smuggling of fertilizers across the border.

9.24.2.7 Verification of sales by State Government

- Receipts of fertilizers in the districts were certified by the Department only on verification of stock registers of first stocking point dealers. There was no system of physical verification of stocks at any level.
- There were delays ranging from 2 to 94 days beyond the stipulated 60 days in receipt of proforma 'A' from the manufacturers during April 2006 to December 2008.
- There were delays ranging from 1 to 665 days (after the allowable time limit of 90 days) in sending proforma 'B' to DOF by the Directorate of Agriculture in respect of fertilizers received during April 2006 to December 2008.

9.24.2.8 Discrepancy in sale of fertilizers

- The Stock Registers of both the whole sale dealers and retailers were not maintained properly. Leakage of fertilizers beyond the targeted beneficiary could not be ruled out, as there were discrepancies between quantities of fertilizers received by retail dealers and those recorded in the registers of wholesale dealers from whom the fertilizers were purchased.
- There was no mechanism to reconcile the sales and receipts of fertilizers amongst the dealers at various levels (wholesalers, retailers etc).

9.24.2.9 Non -maintenance of Buffer Stock (Urea)

- The shortfall in maintenance of buffer stock in each month during the peak periods (May to December) ranged from 61 to 99 per cent and 40 per cent to 77 per cent during the years 2007 and 2008 respectively.
- Buffer stock was required to be maintained at 10 specified locations; however it was maintained at only six specified locations, while four locations had been changed.
- The buffer stock of the required quantity of 50000 MT of urea was not maintained during the peak season. Further, the required stock of 5000 MT of Urea was not maintained at each buffer stocking point, and the stock varied from 1000 to 4000 MT. There was no stock at some specified stocking points.

9.24.2.10 Quality control Lab

There are three Fertilizer Quality Control Laboratories (at Tollygunge, Behrampore and Medinipur) in West Bengal. We found that:

- Against the sanctioned posts of 43 posts in the three labs, only 34 posts havd been filled.
- There were shortages of equipment in all the laboratories, as depicted below:

Table 9.76 – Shortage of equipment in quality control laboratories

Sl No.	Name of equipment required as per norm	*Available (Yes) or Not available (No)*		
		Tollygunge	**Medinipur**	**Berhampore**
1	Spectrophotometer	Yes	Yes	No
2	Muffle Furnace	Yes	Yes	No
3	Karl Fischer titrator	No	Yes	No
4	Water bath- cum-shaker	No	Yes	No
5	Kjeldhal Digestion and Distillation unit.	Yes	Yes	No
6	Magnetic Stirrer	No	No	Yes
7	Vacuum Dessicator	Yes	No	No
8	Indian Standard Sieves	No	No	No
9	Sample Grinder	Yes	No	No
10	Top Pan Balance	Yes	Yes	No
11	Deioniser	No	No	No
12	Atomic Absorption Spectrophotometer	Yes	Yes	No

(Source: Replies furnished by Agricultural Chemists of FQCLs)

- Only 52 to 73 per cent of the capacity of each of the three laboratories was utilized during 2006-07 to 2008-09. The percentage of samples declared non-standard to number of samples tested ranged from 4 to 16.
- Show cause notice and warning were issued to the dealers in all 649 cases of non-standard samples. However, in 2006-07, in all 216 cases, no action was initiated. In 2007-08, out of 198 cases, in only three cases, stocks were seized and prosecution launched.In 2008-09, out of 235 cases, in three cases, stocks were seized and prosecution launched.

- In the four test checked districts, only 54 per cent of targeted of samples were collected during 2006-09 as shown below:

Table 9.77 – Shortfall in collection of samples

Test checked Districts	Year	Target of collection of samples	Number of samples collected and sent for testing	Percentage of samples sent for testing to target of collection	Number of samples analyzed	Number of samples found non-standard
(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
Bardhaman	2006-07	550	234	43	59	1
	2007-08	550	201	37	50	0
	2008-09	550	168	31	42	5
Total		**1650**	**603**	37	**151**	**6**
Jalpaiguri	2006-07	-	No record	No record	No record	No record
	2007-08	-	No record	No record	No record	No record
	2008-09	130	66	51	66	7
Total		**130**	**66**	**51**	**66**	**7**
Paschim Medinipur	2006-07	254	248	98	248	18
	2007-08	254	206	81	206	18
	2008-09	254	131	52	131	2
Total		**762**	**585**	**77**	**585**	**38**
Malda	2006-07	173	124	72	124	2
	2007-08	208	153	74	153	2
	2008-09	208	161	77	161	8
Total		**589**	**438**	**74**	**438**	**12**
Grand total		**3131**	**1692**	**54**	**1240**	**63**

(Source: Figures furnished by DDsA of selected districts)

9.24.2.11 Production of foodgrains

- Although the per hectare consumption of fertilizer in Bardhaman district increased by 7 *per cent* in 2007-08 and 9 per cent in 2008-09 as compared to the consumption in 2006-07, yield per hectare decreased by 4 per cent and 8 per cent during the respective years.
- Similarly, the yield per hectare decreased by 4 per cent in Malda district during 2008-09 despite 12 per cent increase in per hectare consumption of fertilizer as compared to the year 2007-08.
- In Jalpaiguri district, the yield per hectare decreased by 10 per cent in 2007-08 although there was minor decrease (5 per cent) in fertilizer consumption during 2007-08 as compared to 2006-07, whereas per hectare consumption of fertilizer increased by 86 per cent in 2008-09 even though the yield per hectare decreased by 7 per cent as compared to 2006-07. Further, the yield in Jalpaiguri was much less than the State average during each of the years 2006-09.

Table 9.78 below indicates the production of food grains and yield rate vis-à-vis per hectare consumption of fertilizer (NPK) in the selected districts as well as in the State as a whole during the years from 2006-07 to 2008-09:

Table 9.78 – Comparison of production of foodgrains and fertilizer consumption

Selected districts	Years	Production of food grains (in thousand tonnes)			Yield Rate (in kg per hectare)	Consumption of fertilizer per hectare (kg)
		Cereals	Pulses	Total foodgrains		
West Bengal State	2006-07	15820.5	154.4	15974.9	2510	142
	2007-08	15902.6	158	16060.5	2521	141
	2008-09	16167.1	129.7	16296.8	2493	155
Bardhaman district	2006-07	1973.6	1.4	1975	3043	205.44
	2007-08	1865.5	0.8	1866.3	2917 (- 4%)	219.41 (7%)
	2008-09	1881.9	1.5	1883.4	2804(-8%)	224.70 (9%)
Paschim Medinipur district	2006-07	1815.9	3.4	1819.3	2576	123.64
	2007-08	1816.5	4.3	1820.8	2747	130.32
	2008-09	1863.5	3.0	1866.5	2569	131.40
Malda district	2006-07	613.0	22.5	635.5	2667	237.28
	2007-08	643.1	24.2	667.3	2890	201.30
	2008-09	803.4	17.9	821.3	2762(4%)	224.90(-12%)
Jalpaiguri district	2006-07	475.5	2.1	477.6	1823	79.70
	2007-08	437.2	2.2	439.4	1633(10%)	76.03 (5%)
	2008-09	453.7	2.2	455.9	1704 (-7%)	148.60 (86%)

Percentge indicates the increase and decrease of yield.

(Source: Economic Review)

9.24.3 Results of dealer and farmer survey

9.24.3.1 Dealer Survey

Responses from 48 dealers are summarized below:-

Sl.No.	Questions	Response		
		Yes	No	
1.	Are you getting the required quantity and type of fertilizer from your source (1st stocking point or wholesaler) in time?	7	41	
		No Limit	Limited	
2.	Do you give fertilizers to the farmers without any limit or is there some limit like 1 bag of DAP per acre?	48	0	
		Yes	No	
3.	Are you facing any problems in transportation etc. in lifting your requirement of fertilizers?	30	18	
		Yes	No	Not required
4.	Do you have adequate credit facilities so as to lift your requirement of fertilizers?	15	21	12
		Yes	No	
5.	Are you able to supply fertilizers as per demand to the farmers on time? What are your problems?	7	41	
		Yes	No	
6.	Are farmers demanding small quantity bags of fertilizers from you?	31	17	
		Yes	No	Yes , report not received
7.	Have any samples been selected in the last 3 years from your stock for fertilizer quality testing by the Agriculture Department? What were the results?	8	26	14

Survey of 48 dealers revealed that 30 dealers stated that they were facing problems in transportation, because they had to lift fertilizers directly from rake points at their own cost and accordingly they sold the fertilizers tothe farmers at prices higher than MRP. 31 dealers stated that farmers were preferring small quantity bags, 26 dealers stated that samples

were not taken for testing from their stock, and 14 stated that sample test reports were not received.

9.24.3.2 Farmer Survey

Responses from 240 farmers are summarized below:-

	Questions	Response		
		Cooperative	Dealer	Both
1.	Are you buying fertilizers from the authorised dealer/ co-operative society?	233	6	1
		Yes	No	
2.	Are the quantity of fertilizers sold to you rationed? E.g., 5 bags DAP/ration card, 1 bag of DAP per acre etc. Please indicate.	3	237	
		MRP	Others	
3.	What are the prices at which you have bought fertilizers (a) urea (b) DAP (c) MOP (d) other fertilizers in the last 1 or 2 seasons?	0	240	
		Yes	No	Others
4.	Did the dealer give you a receipt for your sales?	11	154	75
		Yes	No	
5.	Do you know the maximum prices for fertilizers fixed by Government (Audit team may show the MRP list of various fertilizers to the farmer)?	9	231	
		Yes	No	
6.	Do you have enough money to buy your full requirement of fertilizers? What are your problems?	56	184	
		Yes	No	Yes, but Report not received
7.	Did you get your soil tested, to find out the exact requirement of different types of fertilizers for your land, so that you get the maximum yield of crops?	31	175	34
		Yes	No	
8.	Did you face any problems in getting your full requirement of fertilizers in time for the	171	69	

	season?			
		Yes	No	
9.	Does the dealer force you to buy any other item along with the fertilizers that you want?	128	112	
		Yes	No	
10.	Do you need fertilizers in small quantity bags?	176	64	
		Yes	No	Others
11.	Overall, are you satisfied with the supply of fertilizers to you?	74	162	4
		Yes	No	
12.	Have you faced any other problems in supply of fertilizers?	164	76	

Farmer survey results revealed that out of 240 farmers, 232 did not know the MRP, 175 farmers stated that their soil was not tested, while 34 did not get the test reports. 176 farmers demanded small quantity bags. Almost all the farmers stated that artificial crisis were created by dealers during peak seasons and they were forced to purchase fertilizers at rates much higher than even normal market prices which were more than MRP. 162 farmers stated that they were not satisfied with the supply of fertilizers.

10 Conclusion

Fertilizer subsidy has been a key component of the country's strategy for improved agricultural productivity for more than five decades. In spite of massive amounts of expenditure by GoI on fertilizer subsidy/ concession – Rs. 2,70,648 crore over the seven year period 2003-10, with expenditure in 2008-09 peaking at Rs. 96,603 crore before coming down to Rs. 61,636 crore in 2009-10, annual production of fertilizers increased only marginally from 284 MT in 2003-04 to 298 MT in 2008-09. Changes in the subsidy regime, have failed to incentivize significant increase in domestic production of fertilizer. The introduction of the New Pricing Scheme (NPS) for urea resulted in a substantial shift from naphtha-based urea production to gas-based urea production, but did not result in a significant increase in the capacity or production of urea. Even the weighted average cost of production of urea increased substantially. As regards phosphatic fertilizers, despite substantial capacity addition, production of DAP came down substantially (with production of only NPK complexes showing a substantial increase). Even the indigenous production of phosphatic fertilizers is largely based on imported raw materials/ intermediates. The country's requirement of potassic fertilizers is met fully through imports. Overall, the increased consumption of fertilizer is, thus, largely met through increased fertilizer import.

The process for detailed assessment of fertilizer requirements was flawed, with the general practice (as observed through field audit) being merely projections of increases of 5 to 10 per cent over the previous season's/ year's requirement. These projections did not have inputs from the District and lower levels, and were generally not based on relevant factors such as the proportion of irrigated area, soil health, type of crops grown etc. Further, first point sales were being treated as consumption for purposes of passing on fertilizer subsidy. Stocks held in each state were also not taken into account.

There were significant deficiencies in planning of fertilizer supplies, with several instances of both over-supply and under-supply at the district and lower levels, with consequential excesses/shortages of the required fertilizers at the time when the farmers needed the same. Even the prescribed checks for verification of sales of "decontrolled fertilizers" (i.e. other than urea) by the State Governments were largely restricted to first-point sales, and were not performed at block and lower levels and to the ultimate consumers i.e.,the farmers. There was no physical verification of sales and stocks (even on a sample/ percentage basis). There were also no systems for reconciling the despatch of fertilizers to first level stocking points, available in the Department of Fertilizers' Fertilizer Monitoring System (FMS), with actual receipts at these points, let alone at block and lower levels. Monitoring mechanisms in respect of dealers were deficient, with numerous reports of sales by unregistered dealers/ dealers with expired licenses.

The consumption of subsidized fertilizers by "mixing units" in different States represents a major flaw in the "subsidy chain", since these units consume subsidized fertilizers, but sell

mixtures at higher rates and are subject to varying levels of license/ regulation/ self-regulation in different States (without any Central control).

We also found significant deficiencies in quality control over subsidized fertilizers in terms of inadequate/ poor infrastructure, lack of adequate skilled manpower, and huge shortfalls in testing of fertilizer samples. Even the limited testing of fertilizer samples actually conducted did not achieve the desired results because of delays in testing, analysis and reporting, as a result of which the balance stock of sub-standard fertilizers had already been sold to unsuspecting farmers by then. Our surveys of dealers and farmers also confirmed deficiencies in terms of timely supply of fertilizers based on actual requirement at stipulated prices to the ultimate beneficiaries (viz. the farmers).

Based on our above audit findings, we find it difficult to derive assurance that the huge expenditure incurred on fertilizer subsidy payments to manufacturers/ importers of fertilizers actually result in full availability of high quality fertilizers as per requirement at the stipulated subsidised prices in a timely manner to the farmers. Consequently, Government needs to review the measures taken to incentivize increased production of fertilizers, ensure better assessment of fertilizer requirements on a scientific and systematic basis, enforce rigorous verification of receipt/ consumption of fertilizers at the lowest level, and put in place effective measures for quality control. This sector at present suffers from lack of adequate and effective mechanisms for monitoring at all levels to ensure that the fertilizer subsidy has the desired outcome of providing adequate, good quality, timely fertilizer at a reasonable price to the farmer.

(K.R. SRIRAM)
Principal Director of Audit
Economic and Service Ministries

Dated: 8th June, 2011

Countersigned

(VINOD RAI)
Comptroller and Auditor General of India

Dated: 4th July, 2011

Annexe 3.1

(Para 3.1.3)

Audit Sample

Central Level (PDA ESM Teams)

The audit sample for the teams of PDA ESM was as follows:

- 100% of units for collection of production and movement/ despatch data for the Rabi 2008 Season (April 2008 to December 2009).
- Checking of subsidy claims in respect of 6 urea manufacturing units i., NFL Bathinda, RCF,Thal, ZIL, Goa, KSFL, Shahjahanpur, KRIBHCO, Hazira and IFFCO, Kalol. Besides, four DAP/ complexes manufacturing units i.e., ZIL, Goa, PPL Paradeep, GSFC, Vadodaraand IFFCO, Kandla and 2 SSP units i.e., Rama Phosphates and Chemtec Fertilizers was done.
- Handling of fertilizer import operations at one port (Kandla)
- Import operations through one canalizing agency (IPL), records were not provided to audit.

The audit sample for the teams of the State PAGs/ AGs was as follows:

- State wise districts selected for scrutiny of assessment of requirement, verification of despatch data, availability/consumption, quality control etc.

Sl. No.	State	Name of selected districts	No. of quality control laborat-ories	No. of dealers surveyed	No. of farmers surveyed
1.	Andhra Pradesh	Guntur, Kadapa, Karimnagar and Warangal (4 Districts), and eight blocks i.e. Narsaraopet, Amaravathi, Duvvur, Proddutur, Sircilla, Jagtial, Jangaon and Mahabubabad	3	49	242
2.	Assam	Jorhat, Hailakandi, Kamrup, and Dhubri (4 Districts), and eight blocks i.e., Central Jorhat, Titabor, Algapur, Lala, Boko, Hajo, Agomoni, and Mahamaya	1	48	240
3.	Bihar	Chapra, Dharbanga, Motihari (East Champaran), Bhagalpur, Purnea and	1	70	360

Sl. No.	State	Name of selected districts	No. of quality control laborat-ories	No. of dealers surveyed	No. of farmers surveyed
		Gaya (6Districts) and 12 blocks Chapra, Nagra, Baheri, Manigachi, Raxaul, Dhaka, Goradhi, Sultanganj, Baisi, Srinagar, Gayasadar and Khijar Sarai			
4.	Chhatisgarh	Raipur, Surguja, Durg and Bilaspur (4 Districts) and eight blocks Arang, Abhanpur, Surajpur, Lundra, Dhamdha, Patan, Bilha and Mungeli	1	48	240
5.	Gujarat	Kutch, Ahmedabad, Surat and Junagarh (4 Districts) and eight blocks i.e. Bhachau, Bhuj, Bavla, Sanand,Kamrej, Bardoli , Jungadh and Keshod	3	48	240
6.	Haryana	Faridabad, Hisar, Karnal, and Sonepat (4 Districts) and eight blocks i.e. Faridabad, Ballabhgarh, Hansi I, Barwala, Indri, Nissing, Mundlana and Gannaur	2	51	242
7.	Himachal Pradesh	Kangra and Kinnaur (2 Districts) and four blocks i.e, Baijnath, Kangra, Kalpa and Nichar	2	30	124
8.	Jammu & Kashmir	Jammu, Kathua, Anantnag and Baramulla (4 Districts), and eight blocks i.e. Marh, R.S.Pura, Banoti,Hiranagar, Shahbad, Shangus, Pattan and Uri	2	47	240
9.	Jharkhand	Deoghar, East Singhbhum and Ranchi (3 Districts) and six blocks i.e, Deoghar Sadar, Sarath, Jamshedpur, Ghatshila, Ormanjhi and Bundu	1	22	190
10.	Karnataka	Haveri, Uduppi, Mandya, and Chikmagalur (4 Districts) and eight blocks ie. Hanagal, Shiggaon, Udupi, Karkala, Pandavapura, Maddur, Chikmangalur and Narasimharajapura	4	48	240
11.	Kerala	Kottayam and Palakkad (2 Districts) and four blocks i.e.Kanjirapally, Kaduthuruthy, Alathur and Palakkad	2	24	120

Sl. No.	State	Name of selected districts	No. of quality control laborat-ories	No. of dealers surveyed	No. of farmers surveyed
12.	Madhya Pradesh	Satna, Indore, Chhatarpur, Betul, Khandwa, Bhopal and Ratlam (7 Districts) and 10 blocks i.e. Sohawal, Rampur Baghelan, Indore, Sanwer, Chhatarpur, Naugaon, Betul, Multai, Khandwa, Pandhana,Fanda, Berasia,Jarora and Ratlam	2	78	295
13.	Maharashtra (Nagpur)	Sangli, Latur, Pune. Amravati and Osmanabad (5 districts) and Kadegaon, Palus, Chakur,Nilanga,Bhor, Junner, Anajangaon Surji, Shikhaldara, Lohara and Tuljapur	3	69	300
14.	Manipur	Thoubal and Chandel (2 Districts) and four blocks i.e.,Thoubal, Kakaching, Chakpinkarong and Chandel	--	15	120
15.	Meghalaya	East Khasi Hills and West Garo Hills (2 Districts) and four blocks Khadarshnong-Laitkroh, Pynursla, Selsella and Dalu	--	18	120
16.	Nagaland	Kohima and Dimapur (2 Districts) and four blocks i.e. Jakama, Kohima, Nuiland and Dhasripar	--	3	80
17.	Orissa	Bolangir, Jharsuguda, Nuapada, Jagatsinghtpur and Mayurbhanj (5 Districts) and ten blocks i.e. Agalpur, Puintala, Jharsuguda, Lakhanpur, Boden, Nuapada, Balikuda, Nuagaon, Badasahi and ShyamaKhunta	2	60	3-0
18.	Punjab	Ludhiana, Faridkot, Bathinda and Amritsar (4 districts) and eight blocks i.e. Ludhiana, Khanna, Faridkot, Kot Kapura,Rampura Phul, Bathinda, Chogwan and Verka	2	48	240
19.	Rajasthan	Ganganagar, Alwar, Jaipur, Chittorgarh and Jhalawar (5 Districts) and ten blocks Sriganganagar, Srikaranpur, Behror, Thanagaji, Amber, Sanganer, Chittorgarh, Bhopal Sagar, Jhalarpatan	3	64	300

Sl. No.	State	Name of selected districts	No. of quality control laborat-ories	No. of dealers surveyed	No. of farmers surveyed
		and Manoharthana			
20.	Tamil Nadu	Kancheepuram, Madurai, Thanjavur, Dharmapuri and Thiruchirapalli (5 Districts) and ten blocks i.e. Kattangulathur, Acharapakkam, Vadipatti, T.Kallupatti, Papanasam, Thiruvidaimaruthur, Morapur, Palacode, Manachanallur and Lalgudi	3	60	300
21.	Tripura	West Tripura and North Tripura (2 districts) and four blocks i.e. Kalyanpur, Dukli, Kadamtala and Panisagar	--	24	120
22.	Uttar Pradesh	Barabanki, Gorakhpur, Varanasi, Aligarh, Bulandshahr, Moradabad, Lakhimpur Kheri (7 Districts) and 14 blocks i.e. Dariyabad, Sidhaur, Bansgaon, Belghat, Harahua, Pindra, Bijauli, Ekrabad, Bulandshahr, Unchagaon, Dilari, Moondapandey, Lakhimpur and Mohammadi	3	84	420
23.	Uttarakhand	Dehradun, Udhamsingh Nagar and Pithoragarh (3 districts) and six blocks i.e. Doiwala, Sahaspur, Gadanpur, Khatima, Gangolighat and Munsyari	2	36	180
24.	West Bengal	Malda, Jalpaiguri, Bardhaman and West Medinipur (4 districts) and eight blocks Habibpur, Kaliachak III, Moynaguri, Rajganj, Bhatar, Raina I, Garbeta III and Keshpur	2	48	240

Annexe 4.1

(Para 4.3)

State-wise prescribed Buffer Stock *(Quantity in MT)*

Sl.No	State	DAP		MOP	Urea*
		2006-07	2007-09	2006-09	
1	Andhra Pradesh	10000	17000	9000	50000
2	Assam	0	5000	5000	0
3	Bihar	15000	30000	9000	50000
4	Chhattisghargh	0	5000	0	0
5	Gujarat	0	5000	5000	50000
6	Haryana	35000	40000	7000	50000
7	J&K	5000	5000	0	0
8	Jharkhand	0	2500	2500	0
9	Karnataka	10000	20000	7000	50000
10	MP	20000	30000	7000	50000
11	Maharashtra	10000	25000	10000	50000
12	Punjab	40000	55000	7000	50000
13	Rajasthan	10000	18000	2000	50000
14	Tamil Nadu	10000	15000	7500	50000
15	Uttar Pradesh	25000	60000	15000	50000
16	Uttaranchal	0	2500	0	0
17	West Bengal	10000	15000	7000	50000
18	Orissa	0	0	0	50000
	Total	200000	350000	100000	650000

* *Buffer stock for Urea for NPS III period*

Annexe 5.1

(Para 5.3.5)

Variation in Pre-set energy norms within NPS Groups

Energy figures in G cal/MT Urea (Plant)

Sl.No	Name of Units	NPS II Pre set Energy with effect from. 1.4.2004 to 30.09.2006	NPS III Pre set Energy with effect from. 1.10.2006 to 31.03.2010	Actual energy consumption				
				2004-05	2005-06	2006-07	2007-08	2008-09
Group I: Pre 1992 Gas								
1	BVFCL Namrup III	12.688	12.688	14.495	13.914	13.224	12.102	17.679
2	IFFCO, Aonla-I	5.938	5.690	5.710	5.594	5.648	6.682	5.676
3	INDOGULF-Jagdishpur	5.874	5.534	5.411	5.364	5.041	5.536	5.402
4	KRIBHCO-Hazira	5.952	5.952	5.835	5.866	5.945	5.892	5.914
5	NFL –Vijaypur	5.952	5.952	5.807	5.795	5.754	5.808	5.834
Group II-Post-1992 gas								
1	NFCL-Kakinada-I	5.712	5.712	5.689	5.61	5.569	5.531	5.536
2	CFCL-Gadepan-I	5.712	5.621	5.654	5.606	5.607	5.615	5.670
3	TCL-Babrala	5.507	5.417	5.21	5.109	5.163	5.151	5.295
4	KSFL Shahjahanpur	5.712	5.712	5.976	5.823	5.784	5.746	5.769
5	NFCL Kakinada II	5.712	5.712	5.703	5.674	5.675	5.656	5.667
6	IFFCO-Aonla II	5.660	5.522	5.534	5.484	5.502	5.508	5.515
7	NFL-Vijaypur-II	5.712	5.712	5.464	5.488	5.415	5.524	5.526
Group III: Pre-1992 Naphtha								
1	SFC-Kota	7.847	7.847	7.841	7.875	7.840	7.766	7.707
2	IFFCO-Phulpur I	7.847	7.584	7.573	7.373	7.038	6.803	6.841
3	MCFL-Mangalore	7.356	7.356	6.867	6.986	6.650	6.744	6.712

Sl.No	Name of Units	NPS II Pre set Energy with effect from. 1.4.2004 to 30.09.2006	NPS III Pre set Energy with effect from. 1.10.2006 to 31.03.2010	Actual energy consumption				
				2004-05	2005-06	2006-07	2007-08	2008-09
4	MFL -Madras	8.337	8.337	7.742	8.062	7.872	7.774	7.896
5	SPIC-Tuticorin	7.475	7.382	7.064	7.013	6.947	0	0
6	ZIL, Goa	7.585	7.308	7.215	7.098	6.802	6.839	6.894
Group -IV: Post-1992 Naphtha								
1	IFFCO-Phulpur II	5.883	5.883	6.012	5.788	5.760	5.791	5.948
2	CFCL-Gadepan II	5.678	5.678	5.601	5.550	5.597	5.545	5.560
Group V: FO/LSHS								
1	GNVFC-Bharuch	7.989	7.989	7.866	7.727	7.936	7.848	7.969
2	NFL-Nangal	9.517	9.517	9.518	9.566	9.507	9.505	9.505
3	NFL-Bhatinda	10.221	10.221	9.708	9.641	9.616	9.608	9.606
4	NFL-Panipat	9.654	9.654	9.653	9.863	9.976	9.917	10.483
Group -VI:Mixed feedstock								
1	GSFC-Baroda	6.935	6.935	6.308	6.209	6.311	6.327	6.532
2	IFFCO-Kalol	6.836	6.607	6.323	6.155	5.954	5.925	5.919
3	RCF-Thal	7.004	6.938	6.470	6.499	6.502	6.554	6.471
1	BVFCL-Namrup II	--	--	--	--	20.226	17.974	22.624

Annexe 6.1

(Para 6.1.2)

Subsidy/Concession claims scrutinized by audit

Sl.No.	Name of Unit/Product	Total amount (In Rs. crore)	No. of claims
1.	Rama Phosphate (SSP)	42	32
2.	Chambal Fertilizers and Chemicals Limited, Gadepan (Urea)	185	18
3.	Sriram Fertilizers and Chemicals, Kota(Urea)	679	21
4.	Gujarat State Fertilizers and Chemicals Ltd.(DAP, NPK,AS)	876	63
5.	Mangalore Chemicals and Fertilizers Limited(Urea)	936	23
6.	Nagarjuna Fertilizers and Chemicals Limited(Urea)	1065	62
7.	KrishakBharati Cooperative Limited, Hazira (Urea)	1491	53
8.	Mosaic India Private Limited(DAP)	1549	45
9.	KribhcoShyamFertiliser Limited, Shahjahanpur (Urea)	1790	82
10.	National Fertiliser Limited(Urea)	2483	100
11.	Rashtriya Chemicals Fertiliser, Thal (Urea)	4416	67
12.	Paradeep Phosphates Limited (DAP, MOP)	4456	71
13.	M/s Zuari Industries Limited, Goa (Urea, DAP)	4983	119
14.	Indian Farmers Fertilizers Cooperative Ltd.(Urea, DAP)	11846	122
15.	M/s Indian Potash Limited (Urea,DAP,MOP)	17561	101
	Total	54,358	979

Annexe 6.2

(Para 6.9)

Discrepancy between despatch and first stocking point receipt

Verification of Ist stocking point records for the period 2008-09 test checked revealed that 0.49 lakh MT of fertilizers valuing Rs.83.14crorewere despatched by the manufacturing units but not received at Ist stocking points in various states as per details given below:-

Sl.No	Name of Manufacturer	Product	Quantity despatched (MT)	Quantity received (MT)	Qty not received (MT)	Amount (Rs. in Crore)
West Bengal						
1.	Tata Chemicals Ltd,(TCL)	MOP	21441.00	18492.60	2948.40	5.01
2.	Rashtriya Chemical Fertilizer Ltd., (RCF)	MOP	2609.70	2453.90	155.80	1.01
3.	IFFCO	NPK	32962.05	19724.25	13237.80	39.44
4.	Paradeep Phosphate Ltd., (PPL) Paradeep	DAP MOP NPK	2166.90 2615.80 2519.80	1851.60 2040.05 2435.50	315.30 575.75 84.30	1.40 0.85 0.10
5.	M/s India Potash Ltd (IPL)	DAP MOP	8914.00 17492.30	6707.10 12841.70	2206.90 4650.60	4.42 12.70
	Total		90721.55	66546.70	24174.85	64.93
Bihar						
1.	KRIBHCO, Hazira	Urea	1373.60	1151.40	222.20	0.12
2.	Indogulf, Jagdishpur	Urea	36543	24521.20	12021.80	6.24
3.	RCF	Urea MOP	15284.80 1321.80	13408.35 767.20	1876.45 554.60	1.87 1.13
4.	KSFL	Urea	18319.50	14611.85	3707.65	3.10
5.	Nagarjuna Fertilizer Chemicals Ltd.,	Urea	5144.40	3825.60	1318.80	0.32
6.	TCL	Urea	5185.70	4356.60	829.10	0.54
7.	IPL	DAP Urea	6557.70 10461.80	6526.10 10332.35	31.60 129.45	0.10 0.15

Sl.No	Name of Manufacturer	Product	Quantity despatched (MT)	Quantity received (MT)	Qty not received (MT)	Amount (Rs. in Crore)
8.	PPL	MOP	933.75	431.95	501.80	1.03
	Total		101126.05	79932.60	21193.45	14.60
Madhya Pradesh						
1	IPL	MOP DAP	2957.30 91096.35	2932.25 90944.10	25.05 152.25	0.71
	Total		94053.65	93876.35	177.3	0.71
Haryana						
1	IPL	DAP	5376.65	5285.25	91.4	0.28
	Total		5376.65	5285.25	91.4	0.28
Gujarat						
1	KRIBHCO	Urea	4216	1636	2580	1.37
2	HINDALCO	DAP	214	0	214	0.66
3	IFFCO	Urea	33	0	33	0.07
4	GNVFC	NPK	10	0	10	0.03
	Total		4473	1636	2837	2.13
Jharkhand						
1	PPL	MOP NPK	76 74	0 0	76 74	0.19 0.30
	Total		150	0	150	0.49
	Grand Total		295900.90	247276.90	48624.00	83.14

Annexe 9.1 - Gujarat

(Para 9.5.2.2.2)

High value sales without identification of purchasers

Name of dealer	District	No. of cases of high value sales
Shree Sardar Bardoli Taluka Khedut Sahkari Kharid Vechan Sangh Limited, Bardoli	Surat	25
The Digas Seva Sahkari Mandli Limited, Digas	Surat	12
The Kamrej Vibhag Co-operative Fruit and Vegetable Growers Society Limited, Kamrej Char Rasta	Surat	12
Chikhali Dungar Vibhag Seva Sahkari Mandli , Chikhali Dungar	Surat	7
Khoj Vibhag Seva Sahkari Mandli Limited	Surat	16
Parth Agro Centre, Lakhod (Bhuj)	Kachchh	15
M/s Madhapar S.S.M., Bhuj	Kachchh	13
Agri Business Centre, Naranpar(Bhuj)	Kachchh	19
Desalpar Seva Sahkari Mandali Ltd., Desalpar (Bhuj)	Kachchh	7
Total		**126**

Annexe 9.2 – Himachal Pradesh

(Para 9.7.2.4.2)

Unverifiable sales in Kalpa block, Kinnaur District

Sr. No.	Name of the sub-dealers	No. & date of Cash Memo issued by 1st sale point of HIMFED at Shongtong		Quantity of fertiliser sold (in bags)		Subsidy involved			
				Kind	Qty.	State Govt.		GOI	
						Basic rate per bag	Amount Rs.	Rate per bag	Amount Rs.
1.	M/s KCHC, Kalpa (M/s Krish Custum Hiring centre)	74795	19/04/2007	Urea	25	10	250	704	**17,600**
		74770	03/04/2007	NPK 12:32:16	2	25	50	284	**568**
		74793	17/04/2007	NPK 15:15:15	27	25	675	160	**4,320**
		74796	19/04/2007	-do-	10	25	250	160	**1,600**
		74769	03/04/2007	MOP	6	-	-	298	**1,788**
		74768	03/04/2007	SSP	6	-	-	48	**288**
		74792	17/04/2007	-do-	18	-	-	48	**864**
		74521	23/02/2007	CAN	15	--	-	-	**-**
		74520	23/02/2007	MOP	23	-	-	298	**6,854**
		74519	23/02/2007	SSP	50	-	-	48	**2,640**
		Total:			**182**		**1,225**		36,522
2.	M/s Kavita Agro Chemical, Sangla	26600	29/01/2009	CAN	100	-	-	-	**-**
		32153	30/01/2009	CAN	50	-	-	-	**-**
		32154	30/01/2009	Urea	100	10	1,000	704	**70,400**
		32177	04/03/2009	-do-	300	10	3,000	704	**2,11,200**
		32191	20/03/2009	NPK 10:26:26	164	25	4,100	1590	**2,60,760**
		32152	30/01/2009	NPK 15:15:15	40	25	1,000	1015	**40,600**
		32157	30/01/2009	NPK 15:15:15	100	25	2,500	1015	**1,01,500**
		32189	20/03/2009	NPK	293	25	7,325	1015	**2,97,395**

Sr. No.	Name of the sub-dealers	No. & date of Cash Memo issued by 1st sale point of HIMFED at Shongtong		Quantity of fertiliser sold (in bags)		Subsidy involved			
				Kind	Qty.	State Govt.		GOI	
						Basic rate per bag	Amount Rs.	Rate per bag	Amount Rs.
				15:15:15					
		32151	30/01/2009	NPK 12:32:16	100	25	2,500	1660	**1,66,000**
		Total:			**1247**		**21,425**		11,47,855
3.	M/s Ajit Agro Chemical, Reckong Peo	32187	20/03/2009	Urea	267	10	2,670	704	**1,87,968**
		10853	17/04/2008	NPK 10:26:26	170	25	4,250	1590	**2,70,300**
		10856	21/04/2008	NPK 10:26:26	139	25	3,475	1590	**2,21,010**
		32184	19/03/2009	NPK 10:26:26	300	25	7,500	1590	**4,77,000**
		32182	20/03/2009	NPK 15:15:15	500	25	12,500	1015	**5,07,500**
		Total:			**1376**		**30,395**		16,63,778
4.	The Telangi Fruit Processing & Marketing Sabha Ltd	026559	27/11/2008	NPK 10:26:26	70	25	1,750	1590	**1,11,300**
		Grand Total			2875		54,795		29,59,455

Note: One bag of fertiliser has 50 Kgs and total quantity of 2875 bags worked out to 143.75 MTs and total subsidy of Rs 30.14 lakh (Rs 29.59 lakh + Rs 0.55 lakh).

Annexe 9.3

(Para 9.13.2.4)

Supply of fertilizers not verified by the ADOs

District- I Amravati

Names of the Fertilizer company	Grade	Month of supply	Statement of invoices received by ADO	Quantity (in M.T.)
Vasant Fertilizer	S.S.P.	12/08	13.1.09	**600**
B.E.C.	S.S.P.	12/08 03/09	12.1.09 13.4.09	**352** **517**
Deepak Fertilizers	23 :23 :0	02/09	16.3.09	**13.00**
Deepak Fertilizers	MOP	12/08	13.1.09	**755**
GSFC	DAP	12/08	28.1.09	**823**
GSFC	20 :20 :13	01/09	11.2.09	**580**
Coromandal	DAP	12/08	19.1.09	**284**
Hindalco	MAP	01/09 11/08	09.3.09 23.12.08	**831.400** **818.40**
IPL	MOP	08/08 11/08 12/08	06.10.08 28.01.09 28.01.09	**189.450** **472** **1083**
IFFCO	DAP	10/08 12/08	06.12.08 16.02.09	**2394.400** **2523.75**
IFFCO	10 :26 :26	01/09	16.02.09	**1402.15**
RCF	15 :15 :15	02/09	05.03.09	**1250**
District- II Latur				
Arti fertilizers	S.S.P.	3/06	20.4.06	**114**
Godawari.	10 :26 :26	5/06	5.7.06	**62**
Arti fertilizers	SSP	6/06	18.7.06	**1857**

Names of the Fertilizer company	Grade	Month of supply	Statement of invoices received by ADO	Quantity (in M.T.)
Shiva	SSP	7/06	18.8.06	**138**
Hindalco	DAP	7/06	14.9.06	**34**
GSFC	DAP	7/06	8.11.06	**393.350**
Rama phosphate	SSP	8/06	1.11.06	**12**
Hindalco	DAP	9/06	19.1.07	**37**
Deepak fertilizers	23 :23 :0	11/06	14.12.06	**45**
Shiva	SSP	12/06	19.1.07	**52**
Arti fertilizers	SSP	12/06	2.2.07	**46**
Deepak Fertilizer	23 :23 :0	1/07	12.2.07	**32**
Arti fertilizers	SSP	1/07	28.2.07	**161**
Liberty	SSP	1/07	2.3.07	**80**
Liberty	SSP	1/07	16.3.07	**100**
RCF	15 :15 :15	2/07	7.3.07	**460.75**
Liberty	SSP	2/07	16.3.07	**151**
Balaji Fertilizer	SSP	2/07	16.3.07	**9**
IFFCO	12 :32 :16	2/07	22.3.07	**55**
RKR	SSP	2/07	5.4.07	**349**
Rama phosphate	SSP	3/07	20.4.07	**23**
RKR	SSP	3/07	20.4.07	**134**
Deepak Fertilizer	MOP	8/07	23.4.07	**16**
IFFCO	10 :26 :26	3/07	23.4.07	**35**
Arti fertilizers	SSP	3/07	9.5.07	**16**
GSFC	20 :20 :0	3/07	17.5.07	**959**
Vasant	SSP	4/07	28.5.07	**9**

Names of the Fertilizer company	Grade	Month of supply	Statement of invoices received by ADO	Quantity (in M.T.)
Shiva	SSP	4/07	22.5.07	**27**
RKR	SSP	4/07	22.5.07	**232**
ZIL	DAP	1/09	21.3.09	**1549.950**
ZIL	MOP	2/09	25.5.09	**50**
ZIL	DAP	3/09	25.5.09	**360.350**
ZIL	DAP	3/09	25.5.09	**1378.350**
ZIL	MOP	3/09	25.5.09	**1171.250**
ZIL	**12 :32 :16**	**3/09**	**25.5.09**	**354**

District- III Pune

Name of the Fertilizer companies	Grade	Month/ year of the invoices	Statement of invoices received	Quantity in M.T.
Bharat Fertilizer	SSP	12/06	27.12.06	**20**
Arti Fertilizer	SSP	4/06	29.6.06	**362**
RCF	SSP	12/06	10.1.07	**231**
Zuari	19x19x19	6/07	29.9.07	**2000.250**
		8/07	29.9.07	**5**
		10/07	7.12.07	**168**
		12/07	24.1.08	**342.150**
	DAP	10/07	7.12.07	**1717.500**
	12x32x16	7/08	29.9.07	**1346.600**
	MOP	3/08	7.4.08	**613**
		6/07	17.7.07	**28**
	10x26x26	9/07	10.10.07	**1641.5**
		10/07	22.11.07	**51.650**

Name of the Fertilizer companies	Grade	Month/ year of the invoices	Statement of invoices received	Quantity in M.T.
		1/08	25.2.08	**1505.280**
HINDALCO	DAP	8/07	10.10.07	**135**
		11/07	28.12.07	**205**
		12/07	7.12.08	**691**
		2/08	15.4.08	**585**
IPL	MOP	1/08	26.2.08	**274**
Zuari	12x32x16	3/09	18.7.09	**1458**
	DAP	2/09	18.7.09	**1353**
		3/09	18.7.09	**1541.400**
	MOP	1/09	20.3.09	**412.700**
		2/09	18.7.09	**1700**
		3/09	18.7.09	**2552**
RCF	MOP	3/09	8.4.09	**45**
GFCL	12x32x16	12/08	19.1.09	**21**
IPL	DAP	9/08	19.9.08	**118.150**
IPL	DAP	11/08	18.12.08	**131**
Liberty Phosphate	SSP	3/09	18.12.08	**1339**
GSFC	**12x32x16**	**12/08**	**20.1.09**	**141**

District- IV Osmanabad

Name of the Fertilizer companies	Grade	Month/ year of the invoices	Statement of invoices received	Quantity in M.T.
Iffco	DAP	2/07	22.02.07	**50**
	10:26:26	2/07	20.03.07	**179**
	12:32:16	2/07	20.03.07	**107**
	12:32:16	3/07	19.04.07 19.04.07	**10**
	10:26:26	3/07	19.04.07	**63**

Name of the Fertilizer companies	Grade	Month/ year of the invoices	Statement of invoices received	Quantity in M.T.
	DAP DAP	3/07 3/07	30.05.07	**23** **10**
Coromandal	10:26:26 10:26:26 10:26:26 10:26:26 10:26:26 DAP 10:26:26	12/06 10/06 1/07 2/07 3/07 10/07 11/07	23.01.07 23.01.07 20.01.07 21.05.07 21.05.07 27.12.07 07.12.07	**64.500** **60** **10** **20** **140** **10** **20**
Gujarat Fertilizer	DAP DAP DAP	8/06 10/06 3/07	14.11.06 20.12.06 19.04.07	**19** **287** **247**
Deepak	MOP 10:26:26	10/06 11/06	17.11.06 17.11.06	**42** **10**
RKR	SSP	10/06 1/07 2/07	14.11.06 01.03.07 10.04.07	**10** **191** **206**
Shiva	SSP	5/06 11/06 1/07 2/07 3/07	07.07.06 02.01.07 21.02.07 20.03.07 03.05.07	**27** **9** **35** **156** **197**
Arti	**SSP**	**6/06** **1/07** **2/07** **10/07**	**02.09.06 03.03.07** **22.03.07 02.01.08**	**9** **31** **16** **16**

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Annexe 9.4

(Para 9.13.2.5)

Sr. No,	Name of suppliers/ Wholesalers	Grade/ manufacturer of fertilizers	Invoice No./ Date	Short supply (in MT)	Name of dealers to whom supply was made	Remarks
1.	Santosh Agro Agencies, Pune	SSP(P)/ Deepak Fertilizers	08-3204/ 24.1.09	3	M/s C.N.Batewara, Urali Kanchan, Tal-Haveli, Dist;- Pune	**Entry was not found in the stock book of the dealer.**
2.	Rama Krishi Rasayan, Pune	SSP (Granulated)	SO476/0020/ 22.5.08	3	M/s Shri Krushi Seva Kendra, Kadegaon, Dist.- Sangli	**Entry was not found in the stock book of the dealer.**
3.	DMO, Osmanabad	DAP/IPL	416/31.5.08	6	M/s Sai Krushi Seva Kendra, Tuljapur	**Entry was not found in the stock book of the dealer.**
		Urea/Kribhco	986/30.9.08	85		
		10x26x26/ IFFCO	986/30.9.08	5		
		Urea(GNVFC)	986/30.9.08	10		
4.	Uma Traders Nanded	SSP(G)/ Shiva	5008Y-283 17.6.08	10		
5.	M/s Krishi Vastu Bhandar, Osmanabad	MOP/ IPL	11863/ 19.10.08	2		
6.	M/sLaxmichand, Krishi Seva Kendra, O'bad	MOP(ZIL)	5917/4.6.08	2		
7.	Zuari Industries Limited, Goa	Urea (JK)	271012796, 271012797& 271012798 Dt.13.11.08	10	Ashok Krishi Seva Kendra, Nalegaon, Taluka- Chakur, Dist.- Latur	**Out of 30 MT, only 20MT urea had been taken in the stock book.**
8.	DMO, Sangali	10x26x26/ Iffco	381/ 10.7.08	30	M/s Narsingh Fertilizer & Chemicals Sangali	**Entry had not been found in the stock book of the dealer.**
		10x26x26/ Iffco	764/ 20.10.08	20		
9.	RCF	Urea	1208000332/7.4.08	20	M/s Parsewar& Company, Sangli	**Entry had not been found in the stock book of the dealer.**
			1028000025/7.4.08	20		
			1028000333/7.4.08	20		
			1028000369/10.4.08	20		

Sr. No,	Name of suppliers/ Wholesalers	Grade/ manufacturer of fertilizers	Invoice No./ Date	Short supply (in MT)	Name of dealers to whom supply was made	Remarks
			1028000368/10.4.08	20		
			1028000430 /23.4.08	10		
			1028000858/29.5.08	20		
			1208004274/24.9.08	300		
			1208004369/25.9.08	300		
			1208004487/30.9.08	200		
		15:15:15	1208007342/2.2.09	10		
10.	DMO, Sangali	MOP/ ZIL	26267/ 27.5.08	175	M/s Parsewar& Company, Sangli	**Entry had not been found in the stock book of the dealer.**
11.	GSFC	DAP	27164/ 9.4.08	4	M/s Raj Fertilizer & Chemicals, Sangali	**Out of 140 MT, entry of only 136 MT had been taken in the stock book.**
				1307		

Annexe 9.5

(Para 9.13.2.6)

(Quantity in no.of bags)

Sr. No.	Name of the Dealers	Grade of fertilizers	Closing balance as on 31.3.09	Opening balance as on 1.4.09	Short / excess
1.	Dattaraj Fetilizer & Company, Salora, Taluka- Bhor	Urea(Jk)	44	Nil	**(-) 44**
		18:18:10	40	Nil	**(-) 40**
2.	M/s Yoshodhan Krishi Seva Kendra, Ramanandnagar, Taluka- Palus	Urea	9	238	**229**
		DAP	11	8	**(-) 3**
		SSP(P)	21	19	**(-) 2**
		SSP(G)	0	10	**(-) 10**
3.	Shri Agro Agency, Tuljapur, Dist.- Osm'bad	Urea (NFL)	17	1	**(-)16**
		Urea (RCF)	73	257	**184**
		DAP (Coromandal)	9	Nil	**(-) 9**
		DAP (ZIL)	89	77	**(-) 12**
		Urea (ZIL)	85	1	**(-) 84**
		10x26x26 (ZIL)	9	Nil	**(-)9**
		10x26x26 (Coromandal)	11	Nil	**(-)11**
		12x32x16 (Iffco)	12	Nil	**(-)12**
		12x32x16 (Zil)	6	Nil	**(-)6**
		DAP (IPL)	89	85	**(-)4**
		MOP (IPL)	193	185	**(-)8**
		SSP(Powder) Basant	49	16	**(-)33**
		Urea (Iffco)	5	Nil	**(-)5**
		10x26x26 (Iffco)	7	Nil	**(-) 7**
		DAP (Iffco)	57	37	**(-) 20**
		15x15x15 (RCF)	8	6	**(-) 2**
		MAP(IPL)	78	65	**(-) 13**
		DAP(RCF)	7	Nil	**(-) 7**
		Urea (Krubhco)	463	459	**(-) 4**
4	Jagdamba Agro Agencies	MAP(IPL)	7	Nil	**(-) 7**
		10x26x26	2	Nil	**(-) 2**

Sr. No.	Name of the Dealers	Grade of fertilizers	Closing balance as on 31.3.09	Opening balance as on 1.4.09	Short / excess
		SSP(Power) Krishi Sanjivani	3	Nil	**(-) 3**
5.	Vasant Krushi Seva Kendra, Sastur, Tal- Lohara, Dist.- Osm'bad	DAP/IPL	115	NIL	**(-)115**
6.	M/s Ganesh Krushi Seva Kendra, Chapoli, Tal- Chakur, Dist.- Latur	UREA/RCF	5	NIL	**(-) 5**
		DAP/ IFFCO	14	NIL	**(-) 14**
		DAP/ ZIL	2	Nil	**(-) 2**
7.	M/s Shivkrupa Trading co., Nilanga, Dist.- Latur	SSP(P)/ RKR	95	54	**(-) 41**
		SSP(G)/ RKR	198	170	**(-) 28**
		MOP/IPL	**68**	**64**	**(-) 4**

Annexe 9.6

(Para 9.17.2.7)

Statement showing shortage of fertilizer at Balikuda sales point of MARKFED

(Quantity in MT)

Product	Mfgr.	OB	Receipt	Total	Sale	CB to be	CB shown	Shortage
Urea	IPL	00	41.00	41.00	35.5	5.5	1.25	4.25
Urea	IFFCO	11.75	310.00	321.75	228.2	93.55	52.90	40.65
MOP	IPL	00	136	136	80.30	55.70	52.15	3.55
DAP	IFFCO	2.70	129.0	131.70	118.55	13.15	1.45	11.70
20:20:0	IFFCO	00	52.0	52.0	38.65	13.35	7.95	5.40
Total								**65.550**

District	Buffer/Depot	Year of annual physical verification	Name of the product	Manufacturer	Qnty. In Mt.	Remarks
Balasore	Dahunda	2006-07	MOP	IFFCO	6.600	Shortage
			DAP	IFFCO	1.550	Shortage
			GAP28:28	CFL	6.850	Shortage
			20:20:0	IFFCO	1.400	Shortage
			DAP	PPL	60.000	Not accounted for in stock
Balasore	Chandabali	2006-07	Urea	IFFCO	64.200	Shortage
			MOP	IFFCO	12.100	Shortage
			DAP	PPL	19.750	Shortage
			20:20:0	PPL	7.200	Shortage
			20:20:0	IFFCO	16.650	Shortage
Jagatsinghpur	Raghunathpur	2006-07	28:28:0	CFL	0.05	Damaged
			DAP		4.600	Damaged
			10:26:26	IFFCO	0.550	Damaged
Ganjam	Buguda	2006-07	MOP	IPL	10.550	Shortage
			28:28:0	CFL	3.000	Shortage
			10:26:26	IFFCO	7.900	Shortage
			DAP	IPL	0.900	Shortage
			DAP	PPL	0.700	Shortage
			20:20:0	PPL	5.000	Shortage
			Urea	NFCL	3.000	Shortage
			Urea	IFFCO	161.00	Shortage

Annexe 9.7

(Para 9.19.2.2)

Statement showing the variation between requirements and actual supply of major four fertilizers

S. No.	Name of fertilizer	Particular	Kharif			Rabi		
			2006-07	2007-08	2008-09	2006-07	2007-08	2008-09
1.	2.	3.	4.	5.	6.	7.	8.	9.
1.	Urea	(i) Requirement	500000	550000	560000	792000	1000000	1000000
		(ii) Actual supply		537011	545053	834072	829517	713363
		(iii) Variation (ii) minus (i) (Per centage of variation)		(-) 12989 (2%)	(-) 14947 (3%)	42072 (5%)	(-) 170483 (17%)	(-) 286637 (29%)
2.	DAP	(i) Requirement	260000	280000	260000	292000	350000	228000
		(ii) Actual supply		192402	313236	225984	253668	250768
		(iii) Variation (ii) minus (i) (Per centage of variation)		(-) 87598 (31%)	53236 (20%)	(-) 66016 (23%)	(-) 96332 (28%)	22768 (10%)
3.	SSP	(i) Requirement	125000	135000	135000	80000	110000	110000
		(ii) Actual supply		113088	131327	93850	61593	107268
		(iii) Variation (ii) minus (i) (Per centage of variation)		(-) 21912 (16%)	(-) 3673 (3%)	13850 (17%)	(-) 48407 (44%)	(-) 2732 (2%)
4.	MOP	(i) Requirement	7000	8000	15000	15000	15000	18000
		(ii) Actual supply		13811	16266	2338	9438	12966
		(iii) Variation (ii) minus (i) (Per centage of variation)		5811 (73%)	1266 (8%)	(-) 12662 (84%)	(-) 5562 (37%)	(-) 5034 (28%)

Annexe 9.8

(Para 9.19.2.3)

Statement showing details of short supply of fertilizers during the period from October 2007 to March 2009

(Quantity in MT)

Season	Month	Urea			DAP			SSP			MOP		
		Supply Plan	Actual supply	Short supply and its per centage	Supply Plan	Actual supply	Short supply and its per centage	Supply Plan	Actual supply	Short supply and its per centage	Supply Plan	Actual supply	Short supply and its per centage
1.	**2.**	**3.**	**4.**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**
Rabi 07-08	October 07	123300	143220	-	85129	126289	-	40000	32793	7207(18%)	3624	219	3405(94%)
	November 07	131370	135845	-	75755	70997	4758(6%)	25000	20533	4467(18%)	2068	551	1517(73%)
	December 07	156350	287262	-	25191	24732	459(2%)	3000	5177	-	3600	6098	-
	January 08	165152	157874	7278(4%)	10800	19171	-	11000	1694	9306(85%)	1300	893	407(31%)
	February 08	62337	60458	1879(3%)	12400	8573	3827(31%)	11000	1098	9902(90%)	1000	1587	-
	March 08	53082	44858	8224(15%)	7690	3906	3784(49%)	20000	298	19702(99%)	500	90	410(82%)
	Total	**691591**	**829517**		**216965**	**253668**		**110000**	**61593**		**12092**	**9438**	
Kharif 08	April 08	81050	81502	-	6100	9737	-	0	413	-	1500	96	1404(94%)
	May 08	90850	89471	1379(2%)	29500	11525	17975(61%)	24670	32221	-	1000	93	907(91%)
	June 08	80510	55751	24759(31%)	51900	45823	6077(12%)	71945	33241	38704(54%)	1500	1004	496(33%)
	July 08	97840	99610	-	72525	97916	-	51685	19502	32183(62%)	2600	8701	-

	August 08	123960	92600	31360(25%)	89400	68400	21000(23%)	77200	17697	59503(77%)	7500	1143	6357(85%)
	September 08	128373	126119	2254(2%)	77265	79835	-	81200	28253	52947(65%)	8500	5229	3271(38%)
	Total	**602583**	**545053**		**326690**	**313236**		**306700**	**131327**		**22600**	**16266**	
Rabi 08-09	October 08	129000	134753	-	114300	110341	3959(3%)	67700	32362	35338(52%)	7500	1863	5637(75%)
	November 08	98400	155244	-	90100	93604	-	54970	10668	44302(81%)	3400	731	2669(79%)
	December 08	185368	254234	-	27100	11747	15353(57%)	16910	12458	4452(26%)	6000	0	6000(100%)
	January 09	84900	104788	-	11400	24214	-	39460	19894	19566(50%)	2000	1987	13(1%)
	February 09	44580	31651	12929(29%)	12700	10862	1838(14%)	36270	13028	23242(64%)	1000	8285	-
	March 09	41970	32693	9277(22%)	17900	0	17900(100%)	34105	18858	15247(45%)	5000	100	4900(98%)
	Total	**584218**	**713363**		**273500**			**249415**	**107268**		**24900**	**12966**	

Annexe 9.9

(Para 9.22.2.2)

Supply plan uploaded and actual supply in the test checked districts for nine months of year 2008-09

(Quantity in MT)

DAP		Aligarh	Barabanki	Bulandshahr	Gorakhpur	Lakhimpur Kheri	Moradabad	Varanasi
April 08 to December 08	Plan	41897	17006	43579	27470	12560	16018	**26528**
Excess (-) and Shortage (+)	Actual	55487	15824	46104	44291	2711	26736	**63467**
	P-A (Percentage)	(-)13590 **(32)**	(+)1182 **(7)**	(-)2525 **(6)**	(-)16821 **(61)**	(+)9849 **(78)**	(-)10718 **(67)**	**(-)36939 (139)**
Urea								
April 08 to December 08	Plan	**82491**	**87049**	**93257**	**182196**	**155063**	**130147**	**46232**
	Actual	**101917**	**79692**	**81581**	**164349**	**45049**	**138393**	**80957**
	P-A (Percentage)	**(-) 19426 (24)**	(+)**7357 (8)**	(+)**11676 (13)**	(+)**17847 (10)**	(+)**110014 (71)**	**(-) 8246 (6)**	**(-) 34725 (75)**
MOP								
April 08 to December 08	Plan	**4874**	**5406**	**943**	**5113**	**2175**	**6552**	**4482**
	Actual	**20730**	**2708**	**7752**	**14790**	**0**	**3853**	**11591**
	P-A (Percentage)	**(-) 15856 (325)**	(+)**2698 (50)**	**(-) 6809 (722)**	**(-) 9677 (189)**	(+)**2175 (100)**	(+)**2699 (41)**	**(-) 7109 (159)**
NPK								
April 08 to December 08	Plan	**2330**	**28399**	**7706**	**15465**	**24686**	**46672**	**13087**
	Actual	**1261**	**23227**	**5902**	**34915**	**0**	**35521**	**32427**
	P-A (Percentage)	**(+)1069 (46)**	**(+)5172 (18)**	**(+)1804 (23)**	**(-) 19450 (126)**	**(+)24686 (100)**	**(+)11151 (24)**	**(-) 19340 (148)**

Annexe 9.10

(Para 9.22.2.2)

Consumption data of fertilizer nutrients in last three years for test checked districts

Name of the District	Consumption Data (In MT)			Gross cropped Area	Per hectare consumption of fertilizer to Gross cropped area
2006-07	**N**	**P**	**K**	**In Thousand hectare**	**In Kg**
Aligarh	40898	22610	1484	583	**70:39:03**
Barabanki	57172	20090	5520	463	**123:43:12**
Bulandshahar	73147	17766	2910	409	**179:43:07**
Gorakhpur	47585	15862	4013	380	**125:42:11**
Lakhimpur Kheri	85902	21453	5388	728	**118:29:07**
Moradabad	85562	15464	7497	480	**178:32:16**
Varanasi	39949	16083	3986	136	**293:118:29**
2007-08					
Aligarh	52161	20592	3487	583	**90:35:06**
Barabanki	68507	15892	2425	463	**148:34:05**
Bulandshahar	66169	21351	2538	409	**162:52:06**
Gorakhpur	64080	15621	6073	380	**169:41:16**
Lakhimpur Kheri	86900	12718	4244	728	**119:17:06**
Moradabad	87708	13861	4324	480	**183:29:09**
Varanasi	40067	17851	4674	136	**294:131:34**
2008-09					
Aligarh	53233	21691	4968	583	**91:37:09**
Barabanki	70546	17001	3191	463	**152:37:07**
Bulandshahar	67802	22909	3472	409	**166:56:08**
Gorakhpur	65809	18020	8481	380	**173:47:22**
Lakhimpur Kheri	89891	15254	6067	728	**123:21:08**
Moradabad	90236	14549	5872	480	**188:30:12**
Varanasi	**40916**	**19847**	**6589**	**136**	**300:146:48**

Annexe 9.11

(Para 9.22.2.2)

Consumption data of fertilizer nutrients in last three years for Bundelkhand districts

Name of the District	Consumption Data (In MT)			Gross cropped Area	Per hectare consumption of fertilizer to Gross cropped area
2006-07	**N**	**P**	**K**	**In Thousand hectare**	**In Kg**
Jhansi	15915	10937	104	457	**35:34:00**
Lalitpur	7629	6237	90	364	**21:17:00**
Jalaun	20035	9634	154	406	**49:24:00**
Hamirpur	7928	4921	5	357	**22:14:00**
Mahoba	4706	4549	64	298	**16:15:00**
Banda	7093	3785	64	446	**16:08:00**
Chitrakoot	5644	2809	0	214	**26:13:00**
2007-08					
Jhansi	17406	8136	1591	457	**38:18:03**
Lalitpur	7961	5533	5392	364	**15:15:03**
Jalaun	18408	6960	1139	406	**45:17:03**
Hamirpur	5964	1924	921	357	**17:05:03**
Mahoba	3283	2163	1322	298	**11:07:04**
Banda	7988	3867	918	446	**18:09:02**
Chitrakoot	4029	3000	943	214	**19:14:04**
2008-09					
Jhansi	17511	8383	2091	457	**38:18:05**
Lalitpur	5629	5962	1308	364	**15:16:04**
Jalaun	18452	7171	1494	406	**45:18:04**
Hamirpur	5977	1958	1212	357	**17:05:03**
Mahoba	2386	2205	1728	298	**11:07:06**
Banda	8054	3882	1207	446	**18:09:03**
Chitrakoot	**4066**	**3050**	**1241**	**214**	**19:14:06**

Annexe 9.12

(Para 9.24.2.2)

Sl. No	Name of Manufacturer	Product	Qty despatched (MT)	Qty received (MT)	Qty not received (MT)	Amount (Rs. in Crore)
1.	Tata Chemicals Ltd,(TCL)	MOP	21441.00	18492.60	2948.40	5.01
2.	Rashtriya Chemical Fertilizer Ltd., (RCF)	MOP	2609.70	2453.90	155.80	1.01
5.	IFFCO	NPK	32962.05	19724.25	13237.80	39.44
6.	Paradeep Phosphate Ltd., (PPL) Paradeep	DAP MOP NPK	2166.90 2615.80 2519.80	1851.60 2040.05 2435.50	315.30 575.75 84.30	1.40 0.85 0.10
7.	M/s India Potash Ltd (IPL)	DAP MOP	8914.00 17492.30	6707.10 12841.70	2206.90 4650.60	4.42 12.70
	Total		**90721.55**	**66546.70**	**24174.85**	**64.93**

Annexe 9.13

(Para 9.24.2.5)

Statement showing sale of fertilizers to dealers in other districts

Name of Dealers	Dealer to whom sold	District to which diverted	Month of Sale	Product sold	Quantity (MT)
Sridharpur Co-operative Bank Limited, Memari, Bardhaman	D.K Bhagat, Bolepur	Birbhum	Aug-08	Urea	**100**
	D.K Bhagat, Bolepur	Birbhum	Aug-Sep-08	NPK*	**115**
	H.C. Paul, Pandua	Hooghly	Sep-08	NPK 10.26.26	**10**
	H.C. Paul, Pandua	Hooghly	Aug-08	DAP	**5**
	R.N Pati, Mogra	Hooghly	Sep-08	NPK*	**20**
	B Sirkar Pandua	Hooghly	Sep-08	NPK*	**15**
K.S RAY, Bhatar, Bardhaman	SK Amjad Ali, Khujuliapara	Birbhum	July-Aug-08	MOP	**100**
	SK Amjad Ali, Khujuliapara	Birbhum	July-Aug-08	Urea	**200**
	Bolepur KBSS Ltd, Bolepur	Birbhum	July-08	Urea	**120**
	SK Amjad Ali, Khujuliapara	Birbhum	July-2008	NPK 10.26.26	**100**
Bardhaman Central Co-operative Agricultural Products Marketing Society Limited, Memari, Bardhaman	Sati Nath Sarkar, Pandua	Hooghly	Dec-2008	NPK 10.26.26	**10**
	Sati Nath Sarkar, Pandua	Hooghly	June-2008	NPK 15.15.15	**15**
	Sati Nath Sarkar, Pandua	Hooghly	Oct-Sep-08	Urea	**30**
	Sati Nath Sarkar, Pandua	Hooghly	April-June-08	MOP	**50**
	Sati Nath Sarkar, Pandua	Hooghly	April-08	NPK 20.20.13	**10**
	Sati Nath Sarkar, Pandua	Hooghly	Aug-08	TSP	**10**
	Sati Nath Sarkar, Pandua	Hooghly	Aug-08	DAP	**5**
	Biswajit Paul, Sikta	Hooghly	Aug- Dec-2008	NPK 10.26.26	**24**
	Biswajit Paul, Sikta	Hooghly	Sep-08	NPK 15.15.15	**10**
	Biswajit Paul, Sikta	Hooghly	Aug-08	MOP	**1**
Total Quantity					950

(Source: Sale Registers of dealers)

* Composition of nitrogen (N), phosphate (P) and potash (K) was not mentioned in the sales statement

List of Abbreviations

ADA	Assistant Director of Agriculture
AS	Ammonium Sulphate
AIDCL	Agro Industries Development Corporation Limited
BAU	Birsa Agricultural University
BIFR	Board of Industrial and Financial Reconstruction
BVFCL	Brahmaputra Valley Fertilizer Corporation Limited
C&F	Cost and Freight Price
CAG	Comptroller and Auditor General of India
CAOs	Chief Agriculture Officers
CCEA	Cabinet Committee on Economic Affairs
CFCL	Chambal Fertilizers and Chemicals Limited
CFL	Coromandel Fertilizer Limited
CIFC	M/s Compagnie Indo-Francaise De Commerce Private Limited
CMS	Cooperative Marketing Societies
COA	Commissionerate of Agriculture
CRC	Capital Related Charges
CSIS	Concession Scheme Information System
DAP	Di-Ammonium Phosphate
DDsA	Deputy Directors of Agriculture
DMO	District Marketing Officers
DOA	Directorate of Agriculture (of the State Government)
DOAC	Department of Agriculture and Cooperation, Ministry of Agriculture, Government of India
DOF	Department of Fertilizer, Ministry of Chemicals and Fertilizers, Government of India
ECA	Essential Commodities Act
ERC	Expenditure Reforms Commission
FACT	Fertilizers and Chemicals Travancore Limited
FCO	Fertilizer Control Order
FICC	Fertilizer Industry Coordination Committee
FMCO	Fertilizer Movement Control Order
FMS	Fertilizer Monitoring System
FO/ LSHS	Fuel Oil/ Low Sulphur Heavy Stock

FS	Fertilizer Statistics
GNFC	Gujarat Narmada Valley Fertilizers Co. Ltd.
GOI	Government of India
GSFC	Gujarat State Fertilizer Corporation
HIMFED	Himachal Pradesh State Cooperative Marketing & Consumer Federation
IFFCO	Indian Farmers Fertilizer Cooperatives
IPL	Indian Potash Limited
JAKFED	Jammu and Kashmir Cooperative and Marketing Federation
JDA	Joint Directors of Agriculture (of the State Government)
JPC	Joint Parliamentary Committee
KSFL	KRIBHCO Shyam Fertilizers Ltd.
LC	Letter of Credit
LNG	Liquefied Natural Gas
MAP	Mono-Ammonium Phosphate
MCFL	Mangalore Chemicals and Fertilizer Limited
MECOFED	Meghalaya Cooperative Federation
MFL	Madras Fertilizer Limited
MMTC	Minerals and Metals Trading Corporation Limited
MOP	Muriate of Potash
MRP	Maximum Retail Price
MT	Metric Tonnes
NA	Not Applicable
NBS	Nutrient Based Scheme
NFCL	Nagarjuna Fertilizers and Chemicals limited
NFL	National Fertilizer Limited
NG	Natural Gas
NPK	Nitrogen Phosphorus and Potassium
NPS	New Pricing Scheme
OMIFCO	Oman India Fertilizer Company
PACBs	Primary Agricultural Co-operative Banks
PPL	Paradeep Phosphate Limited
RCF	Rashtriya Chemicals and Fertilizers
RPS	Retention Price Scheme
SKUAST	Sher-e-Kashmir University of Agricultural Sciences and Technology,

	Kashmir
SRSWOR	Simple Random Sampling Without Replacement
SSP	Single Super Phosphate
STC	State Trading Corporation
STL	Soil Testing Laboratories
STEs	State Trading Enterprises
TCL	Tata Chemicals Limited
TANFED	Tamil Nadu Marketing Federation
TSP	Triple Super Phosphate
UOTA	Urea Off-Take Agreement
ZIL	Zuari Industries Limited