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 Since then, the RPS for urea has been replaced by the New Pricing Scheme (NPS).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 naphthabased 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.

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- 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.