

Chapter 3 - Achievement of objectives of NBS Policy

Nutrient Based Subsidy (NBS) Policy implied that subsidy would be fixed for each nutrient contained in the fertilizers. With the subsidy remaining fixed, selling price of fertilizers at farm gate level was decontrolled and left to be determined by market forces. Though farm gate prices were dependent upon international prices and subsidy levels, it was expected that competition would not only regulate farm gate prices but also encourage fertilizer industry to focus more on farmers through development of new innovative fertilizer products customized to their requirement, farm extension services, brand building, product differentiation etc. Further, it was also expected that the basket of subsidized fertilizers would also be gradually broadened to cover new fertilizers containing secondary and micronutrients with a view to achieving twin objectives of balanced fertilization through better fertilizer products and growth of indigenous industry based on buoyant demand of fertilizer in the country.

NBS Policy was introduced with the following major objectives:

- to ensure balanced application of fertilizers;
- to improve growth of indigenous fertilizer industry;
- to contain the subsidy bill; and
- to leave open MRP to be fixed by fertilizer manufacturer/importer at a reasonable level.

3.1 Non-existence of road-map for achieving objectives of NBS Policy

Records of DoF produced to Audit did not reveal a clear road-map for implementation of NBS Policy for achievement of laid down objectives.

DoF stated (November 2014) during the Exit Conference that fertilizer production and regulation of subsidy are complex issues. Further, two different policies for Urea and P&K Fertilizers and the objectives of the two policies with common goals had become a great challenge for DoF to draw a road-map and timelines for achievement of goals. After introduction of NBS Scheme, DoF has brought down the subsidy budget of GoI to a large extent. DoF has also resolved the larger issue of non-availability of P&K fertilizers to farmers and has ensured availability of P&K fertilizers in time throughout the year. Corrective action has also been initiated for few aberrations noticed during implementation of the scheme. DoF also stated that guidelines for achieving the objectives were available in the approved Cabinet Note (February 2010) for introduction of NBS. DoF further replied (March 2015) that the objectives of NBS Policy were permanent in nature and dependent on other factors for achievement. Hence, a road-map or timelines for achievement cannot be laid down.

An examination of Cabinet Note referred to by DoF revealed that Annexure-IX of the Cabinet Note contained implementation plan for NBS along with the illustration for fixation of nutrient subsidy for various nutrients across the subsidized fertilizer products. It discussed

the fixation of per nutrient subsidy, freight equalization, administrative issues like release of subsidy to industry and expected impact of NBS scheme on production and distribution etc. However, it neither envisaged any monitoring mechanism nor were any timelines defined for achieving the laid down objectives of the Scheme. Further, the contention of DoF that a road-map and timelines for achievements of the Policy cannot be laid down is not tenable as a well defined road-map and timelines for achieving the Policy objectives are a pre-requisite for implementation of any major scheme/programme.

Recommendation 1: A well-defined road-map for achieving each objective of the Policy, which may, inter alia, indicate quantifiable deliverables and specific timelines for achieving the objectives, needs to be laid down.

3.2 Imbalanced use of nutrients

While finalizing NBS Policy in February 2010, it was brought out in the Cabinet Note that the aggregated application of ‘N’, ‘P’, & ‘K’ nutrients in Indian agriculture was 5.3:2.2:1 as against the preferred ratio of 4:2:1. As per the Report of Inter Ministerial Group (discussed in the meeting of Committee of Secretaries in July 2009) on rationalization of Fertilizer Subsidy, the highly subsidized price of Urea (which contains ‘N’ as compared to that of DAP, which contains ‘P’), was considered one of the contributing factors leading to imbalanced application in favour of ‘N’.

Details of consumption ratio of N, P & K during the period 2007-08 to 2013-14 are given in Table-3:-

Table 3 : Consumption ratio¹⁴ of N, P & K

Year	Consumption ratio (N:P:K)
2007-08	5.5:2.1:1
2008-09	4.6:2.0:1
2009-10	4.3:2.0:1
2010-11	4.7:2.3:1
2011-12	6.7:3.1:1
2012-13	8.2:3.2:1
2013-14	8.0:2.7:1

As against the preferred ratio of 4:2:1 (N:P:K), ‘N’, jumped to a ratio level of 8.2 in 2012-13 from 4.3 in 2009-10. Ratio in 2013-14 stood at 8:2.7:1. This was mainly due to the fact that farmers preferred Urea, containing ‘N’, because it was cheaper than P&K fertilizers though such a practice had an adverse effect on soil fertility. Thus, it is clear that NBS Policy did not succeed in controlling the imbalanced use of N, P and K nutrients in the soil which indicates that the efforts to promote balanced fertilization were not well directed and publicized.

¹⁴ Source: Department of Agriculture and Co-operation.

DoF, in its reply stated (June 2014) that imbalanced fertilization was due to rise in prices of P&K fertilizers while there was relative stability in Urea prices. DoF further replied (October 2014) that there was distortion in the existing ratio of N, P & K in the country due to regulation of subsidy of Urea and P&K fertilizers under two divergent schemes. During Exit Conference (November 2014), DoF informed that it was in the process of revising the New Pricing Scheme (NPS) for Urea to address this issue. DoF further replied (March 2015) that NBS Policy promotes balanced utilization of fertilizers. Any imbalance in fertilization is due to low cost of Urea as compared to P&K Fertilizers. Government has already taken note of this and is in process of review of the Urea Policy.

The replies of DoF have to be viewed in the light of the facts that policy of GoI to decontrol prices of P&K fertilizers on the one hand while retaining its control on prices of Urea on the other hand distorted consumption equilibrium, as the price of Urea did not see much increase vis-à-vis P&K fertilizers. This was evident from the fact that between 2010-11 to 2013-14, the per metric tonne (PMT) price of Urea had increased by only 1 per cent (from ₹5310 PMT in 2010-11 to ₹5360 PMT in 2013-14) whereas during the same period, prices of P&K fertilizers increased between 104 per cent (from ₹7421 PMT in 2010-11 to ₹15150 PMT in 2013-14 for NPK 15-15-15-0) and 251 per cent (from ₹5055 PMT in 2010-11 to ₹17750 PMT in 2013-14 for MOP 0-0-60-0).

This resulted in a wide gap between the prices of Urea and major P&K fertilizers. Therefore, it was natural for farmers to substitute Urea for P&K fertilizers which resulted in skewed consumption ratio towards 'N' as compared to 'P' & 'K'.

PAC (2012-13) in its 81st report laid in Parliament on 30 April 2013 had also desired that “the department should address the balanced fertilization need of the nation as a dynamic concept with appropriate linkages and necessary inputs so that the intended goals of NBS Policy are achieved within a targeted time frame.”

The fact remains that there was a need to expedite the review of Urea pricing policy to attain the objective of balanced use of nutrients.

Recommendation 2: DoF may put in place specific well coordinated measures including a critical review of pricing of Urea and extending to farmers the benefits of balanced usage of fertilizers through a dedicated strategy of publicity.

3.3 Shortfall in production

NBS Policy expected growth of indigenous fertilizer industry¹⁵ as well as increase in agriculture productivity. It was, however, observed that production levels of DAP and complex fertilizer did not increase during NBS regime. Details of number of fertilizer production plants and installed capacity during 2009-10 to 2013-14 are given in Table 4:-

¹⁵ The country is dependent on imports up to 90 per cent in Phosphatic sector and 100 per cent in Potassic sector in the form of either finished product or raw material. Major chunk of P&K fertilizers, as well as requirement of Nitrogen for P&K fertilizers, are made available either by production with imported raw materials/intermediaries or by import of finished fertilizers.

Table 4 : Installed capacity during 2009-10 to 2013-14

(capacity in lakh MT)

Year	No. of plants		Installed Capacity	
	DAP	Complex Fertilizers	DAP	Complex Fertilizers
2009-10	13	21	72.99	52.22
2010-11	13	21	72.99	52.22
2011-12	13	21	72.99	52.22
2012-13	13	21	72.99	52.22
2013-14	13	21	83.32	60.71

A perusal of the data in Table 4 reveals that notwithstanding the fact that promoting growth of indigenous fertilizer industry was one of the objectives of NBS Policy, there was neither any addition in the number of fertilizer plants nor was there any increase in the installed capacity of these fertilizer plants during the period when NBS Policy was implemented (2010-11 to 2013-14). In fact the number of plants, and their installed capacities, remained static since 2003-04. Though the number of plants remained the same even in 2013-14, installed capacity increased marginally by 10.33 LMT and 8.49 LMT for DAP and Complex Fertilizers, respectively, during that year.

Details of production levels of DAP and other Complex fertilizers during 2009-10 to 2013-14 are given in Table 5:-

Table 5 : Actual Production¹⁶ during 2009-10 to 2013-14

(production in lakh MT)

Product	2009-10	% of installed capacity	2010-11	% of installed capacity	2011-12	% of installed capacity	2012-13	% of installed capacity	2013-14	% of installed capacity
DAP ¹⁷	42.47	58.18	35.37	48.46	39.63	54.29	36.47	49.97	36.11	43.33
Complex Fertilizers	80.38	153.93	87.27	167.11	77.70	148.79	61.81	118.34	69.13	113.86

From the above table, it can be observed that:

- Production of DAP which was 58.18 per cent of the installed capacity in 2009-10 (in Concession Scheme) had gone down to 43.33 per cent of the installed capacity in

¹⁶ MOP has not been considered for the analysis as the country is 100 per cent dependent on import for MOP.

¹⁷ DAP category of fertilizers include MAP/TSP/DAP lite.

2013-14. As far as actual production was concerned, it fell by 14 per cent during the period 2009-10 to 2013-14.

- Further, production of complex fertilizer had also registered a decline of 14 per cent during 2009-10 to 2013-14, as it fell from 80.38 LMT in 2009-10 to 69.13 LMT during 2013-14.
- Though the capacity utilization in respect of complex fertilizer was better than that of DAP, overall capacity utilization of complex fertilizer plants declined during the period 2009-10 to 2013-14. The fertilizer industry producing complex fertilizer was utilizing 153.93 per cent of its capacity in 2009-10 which came down to 113.86 per cent in 2013-14.

DoF stated (June 2014) that under NBS Policy, no maximum/minimum production limit has been fixed for P&K fertilizers except for SSP. In respect of SSP, a unit was supposed to produce 50 per cent of its annual installed capacity or 40000 MTPA¹⁸, whichever was less, in order to be eligible for subsidy. P&K fertilizer companies, so far as capacity utilization was concerned, were free to produce the quantity of subsidized products as per their commercial consideration.

The audit observation and the replies of DoF thereto have to be seen in light of the facts that one of the objectives of NBS Policy was to promote growth of indigenous fertilizer industries. Also, one of the major drawbacks of Concession Scheme, as observed by DoF, was that no investment had taken place in fertilizer sector during 2000 to 2009. Audit observed that no significant investment was made in the fertilizer sector to increase either the number of fertilizer plants or their installed capacity even after introduction of NBS Policy.

Further, there was no incentive for the companies to import raw material/intermediaries and produce finished goods, instead of importing finished products, as NBS did not differentiate between fertilizer companies which imported raw materials to manufacture finished products and those which imported finished products. Therefore, the fertilizer companies preferred to import the finished product.

DoF contended (October 2014) that without logistics provided by GoI or available in the country, no company would venture into fertilizer business, when establishment of fertilizer companies involved large investments. Hence, there were no investments in P&K fertilizer sector even after introduction of NBS Policy. As regards incentive to indigenous industry for importing raw materials/intermediaries, DoF had already taken up the matter of reduction in customs duty for raw material with Ministry of Finance.

The fact, however, remains that despite introduction of NBS Policy with its stated objective to improve growth of indigenous fertilizer industry, production of P&K fertilizers by the indigenous fertilizer industry declined. DoF being the nodal agency of GoI would do well to proactively work out a coordinated strategy in consultation with other department/wings of GoI so as to encourage investment in and growth of indigenous fertilizer industry in P&K fertilizers.

¹⁸ metric tonne per annum

Recommendation 3: DoF should take measures to encourage and enhance investment in the fertilizer sector in close coordination with Ministry of Finance. Early adoption of a result oriented approach to promote growth of domestic production of P&K fertilizers is recommended.

3.4 Subsidy on Imported and Indigenous Fertilizers under NBS Policy

The position of payment of subsidy on imported and indigenous fertilizers during the period 2009-10 to 2013-14 is depicted in Table 6:-

Table 6 : Amount of subsidy paid for Indigenous and Imported P&K fertilizers

P&K fertilizer (All products)	Subsidy (₹ in crore) (Quantity in Lakh Metric Tonnes (LMT))									
	2009-10		2010-11		2011-12		2012-13		2013-14	
	Amount (Qty)	%age	Amount (Qty)	%age	Amount (Qty)	%age	Amount (Qty)	%age	Amount (Qty)	%age
Indigenous	16000 (153.78)	40.56 (58.56)	20650 (154.10)	49.76 (51.10)	19943 (170.28)	55.23 (53.96)	16000 (144.05)	52.33 (64.50)	15500 (147.51)	52.67 (68.44)
Imported (Finished Goods)	23452 (108.83)	59.44 (41.44)	20850 (147.46)	50.24 (48.90)	16165 (145.26)	44.77 (46.04)	14576 (79.27)	47.67 (35.50)	13927 (68.0)	47.33 (31.56)
Total	39452 (262.61)	100	41500 (301.56)	100	36108 (315.54)	100	30576 (223.32)	100	29427 (215.51)	100

Audit noted that:

- The subsidy outgo on indigenous P&K fertilizers, in 2009-10 which was 40.56 per cent of the total subsidy expenditure that year, increased to 52.67 per cent in 2013-14. During 2009-10, DoF had released a subsidy of ₹16000 crore for 153.78 LMT of indigenous fertilizers and during 2013-14, an amount of ₹15500 crore was released as subsidy for 147.51 LMT of indigenous fertilizers.
- The subsidy outgo on imported P&K fertilizers, in 2009-10 which was 59.44 per cent of the total subsidy expenditure, reduced to 47.32 per cent in 2013-14. During 2009-10, DoF had released a subsidy of ₹23452 crore for 108.83 LMT of imported fertilizers and during 2013-14, an amount of ₹13927 crore was released as subsidy for 68.00 LMT of imported fertilizers.

Apparently, the objective to contain the subsidy bill was achieved after introduction of NBS Policy. Audit, however, observed that indigenous production as well as imports of P&K fertilizers also declined during this period indicating lesser availability of these fertilizers in the country. This suggests that during this period consumption of P&K fertilizers in the country declined and demand got skewed towards highly subsidised Urea as already mentioned in para 3.2.

DoF in its reply stated (October 2014) that no target was fixed for maintaining the subsidy on imports at a particular level. Since most of P&K fertilizers were imported and GoI did not control indigenous production, there would be ups and downs in the subsidy under two different heads. Moreover, the overall subsidy burden remained at the same level.

The reply was, however, silent about decreasing consumption of P&K fertilizers in the country which was a prime contributor to non achievement of balanced use of fertilizers envisaged under NBS Policy.

3.5 Quality Control

Schedule II of the Fertilizer Control Order, 1985 (FCO) and various amendments thereto contain detailed procedure for drawal of fertilizer samples from lots/bags, big/small go-downs, high stacking, etc. by the enforcement agencies. FCO also lays down the procedure for analysis of samples collected and time limit for analysis, and communication of results.

As per the information made available to Audit, there were 78 Fertilizer Quality Control Laboratories (FQCLs) located in various States including four laboratories of GoI at Faridabad, Kalyani (Kolkata), Mumbai and Chennai for testing the samples collected.

State-wise and year-wise figures (2010-11 to 2013-14) of the analyzing capacity of FQCLs in various States furnished by DoF revealed that the analyzing capacity consistently remained under-utilized in some States whereas number of samples tested was more than the capacity in other States. For example, samples tested in Mizoram FQCL ranged from zero to five, during 2010-11 to 2013-14, against analyzing capacity of 250. As against this, number of samples tested in Gujarat FQCL was 14623 as against analyzing capacity of 7500 in 2013-14. Details of samples tested during 2010-11 to 2013-14 in all laboratories are given in **Annexure IV**.

This shows sub-optimal utilization of created facilities on the one hand and excess utilization on the other hand, both of which underlined the need for critical review of the facilities and improvement of quality control efforts.

DoF stated (November 2014) during Exit Conference that:

- DAC had intimated that it had formulated a new Fertilizer Quality Control Act on the lines suggested by various stakeholders at various fora to make it similar to laws in other countries.
- In this regard, a detailed concept note covering various aspects such as notification of grades, registration/licensing, referee analysis had been prepared and submitted to State Governments and stakeholders for comments and DAC was awaiting comments. The proposed Act already has suitable provisions related to the issue raised by Audit.
- DoF also advised DAC on 19 September 2014 to formulate the proposals for revamping of the mechanism to enforce quality of fertilizers at farm gate level before Central Fertilizer Committee for discussion with stakeholders at the earliest and prepare a blue print for its implementation within two months.

The fact, however, remains that there was considerable scope for improving the effectiveness of quality control mechanism.

Recommendation 4: There is a need for critical review of utilization of FQCLs so that there is no avoidable underutilization or overutilization of the facilities.