

CHAPTER SIX

FERTILISERS

Background

In the 1983/84 season New Zealand farmers purchased fertiliser to a total value of \$220 million. Of this approximately \$145 million (66 percent) was the imported component and the remaining \$75 million the value added by New Zealand. The New Zealand fertiliser industry is dominated by the five superphosphate manufacturers who operate ten manufacturing plants. Two of the manufacturers—the New Zealand Farmers Fertiliser Co (NZFFCo) (a listed public company) and the Ravensdown Fertiliser Co-operative (40 percent owned by NZFFCo)—control more than half the domestic fertiliser market. The three other manufacturers, Bay of Plenty, East Coast and Southland, are all farmer co-operatives.

A number of developments have occurred recently in the fertiliser industry:

- *Fall in Superphosphate Demand:* Largely as a result of the decline in the economic performance of pastoral farming, demand for superphosphate has fallen in recent years.
- *More Competitive Products:* In line with international trends, fertilisers with higher nutrient to weight ratios than superphosphate have become more price competitive. Farmers are making greater use of these more concentrated “high analysis” fertilisers. The MAF estimates that in 1983/84 15 percent of phosphate was applied in the form of “high analysis” fertilisers whereas less than 5 percent of phosphate was applied in this way in 1981/82.
- *Change in Phosphate Rock Supply:* Traditional arrangements for access to phosphate rock ceased several years ago; Ocean Island reserves are severely depleted, those on Nauru are considered to have at most a ten-year life, and the economic life of the remaining deposits on Christmas Island is uncertain. Future supplies may need to be obtained from other sources (e.g. Florida, Morocco, Peru).
- *Manufacture of Urea:* Petrochem has commenced domestic manufacture of urea, a nitrogen fertiliser.
- *Park Report:* Mr Park, a consultant from the British Sulphur Corporation Limited, was employed by the Phosphate Commission of New Zealand to assess the future supply of fertiliser nutrients to New Zealand farmers. He noted the developments detailed above, the lack of competition within the industry, and the reluctance of the industry to supply farmers with alternative “high analysis” fertilisers.

Treasury considers that the commercial environment within which the industry operates should be such as to allow the industry to respond to these changes in the market. With this concern in mind, Treasury, in association with officials from MAF and DTI, has been investigating whether the Government's interventions in the industry in any way impede the industry's response to market changes. Our conclusions are that action should be taken in the three main areas where the Government is involved, namely:

- fertiliser subsidies;
- price control; and
- the Phosphate Commission of New Zealand

The Fertiliser Subsidy Regime

Subsidies have been applied to fertiliser since 1965. As a proportion of total assistance to agriculture their relative importance has declined since the mid-1970s. In 1983/84 approximately \$47 million of assistance was delivered via fertiliser subsidies. The components of the existing subsidy regime are:

| | 1983/84 (\$m) |
|--|------------------|
| a price subsidy of \$12/tonne | 23.2 |
| a fertiliser transport subsidy of 6-8c/tonne km .. | 15.2 |
| a lime transport subsidy of 6-8c/tonne km .. | 6.5 |
| an acid transport subsidy (full cost) | 0.6 |
| an aerial spreading bounty of \$2/tonne .. | 1.5 |
| | 47.0 |

Fertiliser subsidies, like all input subsidies, give assistance in relation to usage. Land uses for which fertiliser makes up a sizeable proportion of expenditure (e.g. hill country pastoral) receive much more of this form of assistance than land uses which require comparatively little fertiliser (e.g. forestry in hill country). Likewise the subsidy of an input discriminates against more efficient users of that input. On top of these problems the existing fertiliser subsidy regime further discriminates against some farmers as it gives disparate levels of assistance to:

- farmers who use different fertiliser types; and
- farmers at different geographic locations.

This disparity in assistance levels moves farmers away from using the 'least real resource cost' input combination and thus involves a loss in national welfare.

Both the price and transport subsidies are paid on a per tonne basis and hence favour the bulkiest products. This biases the decisions of farmers against "high analysis" fertilisers which have a high nutrient to weight ratio.

One possible approach for removing the discrimination between fertiliser types would be to pay subsidies on the basis of the nutrient content of fertilisers. A system for doing this has been devised by MAF and could, through regulations promoted under the 1983 Fertiliser Act, replace the existing price subsidy. A simpler, and perhaps better, alternative would be a uniform ad valorem rate of subsidy. The prior question is whether or not fertiliser subsidies should be continued. In Treasury's view they are a poor form of intervention and should be terminated.

The existing transport subsidies are difficult to administer and contain a number of anomalies. Transport deregulation is expected to substantially increase administrative problems. From the national viewpoint it is desirable that farmers who are located far from the point of supply of either fertiliser or lime base their production decisions on the real cost of transport. This could only be achieved by phasing out the existing transport subsidies.

Price Control

Fertiliser has been subject to price control since 1936. Controls have commonly been justified on two grounds:

- to secure supply of a strategically important raw material; and
- to offset the effects of the limited competition within the industry due to the location of only one manufacturing plant in each region, high transport costs, and the high cost of entry into the industry.

In recent times it appears that price control has not, in any way, been a factor in preventing or overcoming supply problems. Moreover, price control may have had a number of unintended effects on the fertiliser industry:

- *Reduction in Price Competition:* The superphosphate manufacturers generally make price applications at the same time and charge "approved prices". This process has led to an averaging of prices between different suppliers and consequently reduced the scope for competition at the geographical margin. By limiting price competition, price control may have permitted a higher level of profits to the industry than would have occurred in the absence of such controls and may have caused a reduction in efficiency.
- *Rises in Fertiliser Prices in the Face of Reduced Demand:* In times of falling demand the price control formula has allowed companies to recover full profit on a smaller volume. Thus, when farm incomes are down, and consequently fertiliser demand is also down, fertiliser prices have tended to rise. In a more competitive situation it might be expected that companies would lower prices when demand falls in order to maintain their volume of sales; and
- *Discouragement to New Entrants:* There is some indication that controls on profits are a factor in discouraging new entrants into the business of importing "high analysis" fertilisers.

Although price control may have contributed to the perceived problem of a lack of competition in the industry, it is not certain that the removal of price control would lead to increased competition in the short term. In the longer term, however, the removal of price control on manufacturing and merchandising may encourage a new entrant into importing, and promote competition amongst existing plants in times of falling demand. These changes would be in the interests of the agricultural and horticultural industries. To this end officials consider that discussions should be initiated with interested parties on whether there is any unidentified or significant reason why price control should not be removed.

The Phosphate Commission of New Zealand

The Phosphate Commission of New Zealand was established late in 1981 to take over some of the operations of the former British Phosphate Commission. Its function was to manage stocks of phosphate in the interest of New Zealand agriculture and, in order to so operate, it was vested with powers, inter alia, to acquire, distribute and hold stocks of phosphate. In 1982 it took title to New Zealand stocks of rock phosphate previously the property of the Christmas Island Phosphate Commission. These were valued at \$42 million. The Commission was established with three members appointed by the Minister of Agriculture, one of which is required to be appointed after consultation with the Fertiliser Manufacturers Association.

In 1981 superphosphate manufacturers formed the New Zealand Phosphate Company in order to trade in phosphate rock and sulphur. The Company contracted to become the sole agent of the Phosphate Commission. The Company buys phosphate rock overseas on behalf of the Commission and delivers it to individual manufacturers. Manufacturers pay for the rock as they use it. As things stand, the principal role of the Commission is to finance phosphate rock purchases and the cost of maintaining the stockpiles.

Treasury would question the need for involving a Government organisation in phosphate trading and stockholding. In support of our view, we would argue that:

- a companies which have to balance stockholding costs against the risk of shortage, are in a better position to determine the commercial optimum size of the stockpiles required for their manufacturing operations than are officials employed by the Commission which faces no cost of capital;
- b the maintenance of phosphate rock stockpiles for strategic reasons is unnecessary as there are now many sources of supply and international trade in phosphate is not amenable to cartel control; and
- c there is no logical reason to single out the fertiliser industry for financial assistance for the purchase of imports of raw materials.

Treasury's view is that the Commission should, as soon as is practically possible, sell the existing stockpiles to individual fertiliser companies and pass the stock financing function to the companies. The Commission would then cease to have a practical function and could be wound up.

Summary

In Treasury's view any involvement by the Government in the fertiliser industry or in the provision of fertiliser subsidies to farmers should be directed towards providing a competitive environment in which fertilisers are priced on the basis of their true resource cost without distortion caused by unnecessary institutional barriers. For this to be achieved, action would be required in three areas. First, if fertiliser subsidies are to continue, the basis for the various types of fertiliser subsidies should be altered to give all farmers the same level of assistance. Second, the need for price control should be reviewed in consultation with interested parties. Third, the Phosphate Commission should sell off its large phosphate stockpiles and pass its responsibility for financing stockpiles to individual fertiliser companies.