

**AGRICUTULTURAL INPUTS, SERVICES AND INPUTS CREDIT  
SCHEMES: THE CASE FOR THE PROMOTION OF CROP INPUT  
FINANCING IN ZIMBABWE.**

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**Abstract Introduction.**

The following is a research paper seeking publication and draws its scope from agricultural development and economics disciplines. It is an expression of theoretical and practical approaches that have been observed and noted by the author during his research as potential best responses to the provision and supply of agricultural inputs. The researcher's experience with the following areas ; agricultural extension services and credit schemes, conceptual framework on fertilizer supply and distribution strategies, comprehensive agricultural policy, vis-a- vis sustainable fertilizer development and effective farmer subsidies have demonstrated that sustainable fertilizer supply is hinged on these concepts.

The author draws some key concepts, approaches and best practices that can be replicated to improve fertilizer development and supply.

**Abstract**

This paper attempts to highlight the challenges facing fertilizer demand and supply and puts forward mechanisms to strengthen crop input financing options that allow a farmer to purchase crop inputs from a local dealer. The financing mechanisms, for example will support key activities such as developing Zimbabwe's fertilizer manufacturing capacity, provision of credit guarantees for fertilizer importers and distributors, establishing regional fertilizer procurement and distribution facilities, developing policy instruments and institutional research and capacity-building activities. Radical approaches to the Zimbabwe's land policy, introduction of structural adjustment

programmes coupled by the economic and political crises over time have contributed to the slow development of the fertilizer industry in the country.

The paper also offers a case study from Australia for replication, highlighting how the fertilizer industry has contributed to the country's economic performance in that country. The study notes that the activities of fertilizer manufacture, blending and distribution of both domestic and imported fertilizers and associated contractual services also contribute to economic activity, employment and living standards. The paper also looks at the economics of fertilizer use, particularly how fertilizer consumption is affected by a number of factors such as area under cultivation, cropping patterns, weather conditions, irrigation facilities, availability of credits, prices of fertilizers, procurement prices, output producer prices and cultivation practices adopted by farmers. These factors have varying degrees of impact on the fertilizer consumption. The influence of these factors are felt differently by the farmers of various sizes of land holdings. (239 words)

### Key Words

Demand and supply      Input financing      local dealer      financing  
mechanisms      Credit guarantees      distribution facilities      land policy      structural  
adjustment programmes      Case study

### Introduction

In contrast with high agricultural capitalisation of land and labour, the Zimbabwean farmer's investment in modern production technology is very limited since the advent of land redistribution. The same goes for interventions by agricultural services in the local economy. As a result, the main tasks by agricultural authorities consist of the promotion of fertilisers, pesticides, high-yielding varieties, methods of row planting and the provision of credits in chemical inputs (Global 2000) or loans for farming ventures (Rural Banks) (Amanor 1994). Investments in agricultural technology and the extent of the support facilities provided by agricultural development agencies for farmers can be charted by examining the extent of the use of these technologies and services (Ibid).

Just like the agricultural sector, the fertilizer industry in Zimbabwe has evolved over the years in response to different government policy changes premised on priorities obtaining during the time the industry grew from the 1930s.

This move to redistribute the land was aimed at correcting historical imbalances by targeting primarily large scale commercial farmers. The advent of the Economic Structural Adjustment Programmes between 1990 and 2000, saw the removal of subsidies and controls on the marketing system through to now where all systems and policies have evolved.

Since 2000, following the land redistribution program, Zimbabwe has faced food insecurity challenges that have been worsened by the political and economic crises over time. This prompted the government to adopt adhoc policies that have eroded private sector interests and participation in fertilizer supply (Minde. et al 2010).

As a result, fertilizer on the market disappeared. In such scenarios where explicit fertilizer markets have been absent, relief programs have been leading in facilitating deliveries of fertilizers to less privileged smallholder farmers located even in far and marginal areas.

Consequently, the supply of fertilizers in Zimbabwe got driven by government policy buttressed by finance and infrastructure, while the demand has primarily been a function of farmer's capacity to acquire fertilizers, his knowledge of fertilizer use, price of product output and availability of water. In order to promote a competitive fertilizer marketing to support a wider spectrum of farmers in Zimbabwe which leads to agricultural productivity and growth (Ibid), there is need by all developmental agencies to refocus.

With the decontrol of the fertilizer markets, a hoist of traders is bringing in proliferation of South African fertilizer formulations. Almost all fertilizer manufacturers in South Africa are exporting fertilizers into Zimbabwe to the benefit of the farmers and to the demise of Zimbabwean fertilizer manufacturers. The supply side of fertilizer is slowly correcting itself and what would remain a challenge is its use.

The extension service in Zimbabwe has been weak logistically. The Agritex extension staff is office bound most of the time due to mobility challenges. Also the ratio of agricultural extension worker to farmer has been widening to as high as 1 to 1000, a factor that has severely crippled the service. Training on fertilizer use and benefits has been nonexistent as a result to a point that use of fertilizer by a farmer is motivated by the power to purchase it and the knowledge to use it. Most of the farmers do not know their soil texture and have no records of soil analysis for the field they have been allocated by government. The knowledge of soil type is critical in terms of fertilizer recommendations. Soil type determines the amount of fertilizer required by the plant in certain soil type.

Infrastructure is another critical investment which reduces marketing costs for the agricultural products thus availing more disposal income to the farmer. Therefore to boost fertilizer demand; policies that strengthen farmer's capacity to acquire fertilizers and increase their knowledge on fertilizer use complemented by technologies that promote water use efficiencies are needed.

### **Aims and Objectives of the Study**

The overall aim of this study is to understand and strengthen mechanisms that promote crop input financing options that allow a farmer to purchase crop inputs from a local dealer.

*The Objectives are:*

- i):** Developing the country's fertiliser manufacturing capacity to meet the high demands of fertiliser in the country.
- ii):** Providing credit guarantees for fertilizer importers and distributors to minimize risks involved in the purchasing and distribution of fertilisers.
- iii):** Establishing regional fertilizer procurement and distribution facilities across the country to

reduce fertiliser prices.

- iv): Improving the efficiency of fertilizer distribution through facilitating cross-border trade in the SADC region.
- v): Promote institutional, research and capacity-building activities for small-holder farmers around the country.

### **The Financing Mechanisms**

The Financing Mechanism will support quite a number of key activities, as outlined in the following sections:

**1. Developing Zimbabwe's fertilizer manufacturing capacity:** The mechanism will support: (i) pre-investment and feasibility studies; (ii) provision of advisory services by the government and development agencies, including tax incentives that promote sustainable fertilizer production; and, (iii) facilitate the formation of investor consortia. The Government will also support fertilizer production through public-private partnerships by undertaking: (a) economic and social sector work to identify opportunities and gaps for competitive production and trade; (b) technical feasibility studies to identify bankable projects; and (c) re-habilitation of fertilizer production units to improve efficiency.

**(2) Providing credit guarantees for fertilizer importers and distributors:** In more complex African markets, mechanisms already exist to offset dangers involved in purchasing and distributing fertilizers. Drawing lessons from past efforts to provide credit guarantees, the international and regional bodies will assist countries in reviewing, selecting, and transferring efficient market mechanisms, and in selecting suitable guarantee and support environments within which those markets can best function.

Such kind of supporting initiatives would be made up of the following: (i) hedging (using futures contracts to avert currency fluctuation risk); (ii) credit guarantees for agro-dealers, large-scale fertilizer importers and distributors (i.e., through existing national and regional development banks); (iii) assisting private traders in obtaining lines-of-credit from local banks; and (iv) extending credit to wholesalers who have established customers.

The focus would be to promote economies of-scale, i.e. for cost-effective and efficient provision of services. Provision-of-credit guarantee schemes for the fertilizer sub-sector can complement efforts to develop distribution systems and to support agro-dealers, that is, by working with institutions such as the Afrexim Bank, Agribank, and various foundations and NGOs.

**(3) Establishing regional fertilizer procurement and distribution facilities:** Making improvements in selected transport systems can significantly reduce fertilizer prices, if such efforts are supplemented by large-scale purchasing that guarantees economies-of-scale, and by the

provision of adequate warehousing space. Formation of regional trading blocs that can effectively utilize common markets could also boost fertilizer availability and affordability.

There have been cases where fertiliser and other grains have been distributed privately, ignoring nodal points where public storage facilities could impart major efficiency in distribution. Flexible public/private partnership schemes could also be very useful here – public institutions would provide fertilizer procurement and facilities for initial storage, leaving private wholesalers and retailers to then distribute it from central nodes. Such a platform for regional fertilizer procurement and distribution could foster greater economies-of-scale, assuming fertilizer inventories are matched to reliable supply and demand estimates.

**(4) Developing policy instruments:** Improving the efficiency of fertilizer distribution will require facilitating cross-border trade. This, in turn, will require that national macroeconomic policies be better aligned. Government efforts should be coordinated and harmonized thus improving policies and regulatory capacities. Subsidies remain the prerogative of sovereign countries as the government will not directly finance fertilizer procurement, and hence will not directly fund subsidies. Payouts could be used to finance studies and supports to policy reforms in the sector.

**(5) Institutional research and capacity-building activities:** Institutions that undertake research, develop and promote fertilizer utilization will receive priority support, as would national and regional institutions.

### **Case Study**

#### **How the fertilizer industry contributes to Australia's economic performance**

Fertilizers are major inputs to agricultural production and productivity. But for these gains to be realised fertilizers need to be produced and distributed to final users in the required form and used appropriately. The activities of fertilizer manufacture, blending and distribution (of domestic and imported fertilizers) and associated contractual services also contribute to economic activity, employment and living standards.

In analysing this contribution it is important to distinguish between the contribution of:

- domestic fertilizer manufacture;
- blending and distribution of imported and domestic fertilizers; and
- the fertilizer induced improvement in production, productivity and international competitiveness of agricultural industries.

The process of domestic manufacture involves the purchase of inputs from other industries and overseas to produce fertilizers. Value added is generated in manufacturing through payments to labour

and profits earned by manufacturers. This value added contributes directly to national income. There are also flow-on effects. The demands by manufacturing plants for raw materials and other goods and services in turn provides a boost to output, employment, profits and value added in input supplying industries, which further increases GDP. If domestic fertilizer production were to cease, the economy would initially lose all this value added, though over time the resources released from fertilizer manufacture would contribute to the generation of value added elsewhere in the economy.

That part of the industry engaged in the blending and distribution of fertilizers, whether domestically

produced or imported, also contributes directly to GDP through the value added it generates directly and through the stimulus it provides to feed supplying industries. This contribution would occur no matter whether fertilizers were produced locally or imported.

### **Economics of Fertiliser Use**

Fertilizer consumption is affected by a number of factors such as area under cultivation, cropping patterns, weather conditions, irrigation facilities, availability of credits, prices of fertilizers, procurement prices, output produce price and cultivation practices adopted by farmers. These factors have varying degrees of impact on the fertilizer consumption. The influence of these factors are felt differently by the farmers of various sizes of land holdings. In such scenarios, the prices of inputs and crop produce by a major player play a key role in choosing the cropping mix and the use of various agro- inputs -seeds, fertilizers, pesticides and other agro- chemicals.

The small and marginal farmers whose land holdings are less than two hectares are guided more by personal consumption patterns rather than by commercial viability as they may not have marketable surplus. In the fertilizer marketing system not only the cost of marketing the fertilizers but **also** the economics to the farmers for use of the fertilizer to be considered. Fertilizer marketing involves a variety of functions, each of these elements has an associated cost element.

Adopting this entails the fertilizer industry to maintain data relating to the costs for claiming the subsidy from the **government**. The major cost elements are: transportation and handling, storage, promotion, advertising and sales promotion, credit and other marketing overheads.

### **Fertilizer Marketing in India.**

**Source:** A Study of Marketing of fertilizers in India (1985) By Dr.V.S.Ramaswamy Madras.

Agro-dealer survey on the cost elements of the fertilizer they sell to farmers conducted for the purpose of the research. The agro-dealers were asked to enumerate the cost elements of the fertilizer. The following were the elements cited:

**Cost Elements**

Transport &amp; handling

Distribution Margin

Inventory carrying

Promotion

Others

From the survey conducted, transportation alone accounts for 37.5% of the total marketing cost. This includes primary movement from plant locations to the rail heads in case of transportation by rail and the secondary movement from rail head at the destination end to the stock points or warehouses. In case of road movement there are no secondary transportation as the products are directly delivered to the stock points. The cost of handling is also included. Any efficiency to reduce the cost of this element by choosing a proper mode mix, choosing the territory of marketing operations will help bring down the cost of marketing.

Dealers margin is another important area of fertilizer marketing cost but there is hardly any scope to reduce this element as this would de-motivate the dealers.

Promotion expenses account for only 1.5% of the marketing cost, in order to create the required awareness, promotion and extension support are essential aspects of marketing in fertilizer industry. Lack of awareness to the economics of fertilizer use and scientific cultivation are the important factors for the non-use of fertilizers according to experts and specialists. Periodical evaluation of the impact of each of these elements is necessary.

**Fertilizer Promotion Costs.**

Advertisement and sales promotion are important aspects of marketing management. Awareness to fertilizer use and its economics must be convincingly conveyed to farmers. Indian literacy level stands at 63.09% (male) according to 1991 census .It varies from 51% (Arunachal pradesh) to 94% (Kerala). The literacy level among the rural population is much less among the farming community with small and marginal holdings. Advertisement in newspapers has very little reach. Hoardings & Wall paintings are extensively used by the fertilizer and other agro - inputs marketing industries.(source)

Promotion not only helps in conversion of a potential demand into actual demand but serves as a very important tool for transfer of agricultural technology through conducting various programs which reach farmers and get the desired impact. Marketing cost in this element must be judiciously used. Depending on the reach, impact, availability of the media and the cost involved in the operation is carried out. The expenses incurred on promotion by fertilizer units is not adequate. As this cost element is not fully covered by the fertilizer subsidy, manufacturing / marketing units exercise restraints in this area .

There has not been adequate research to evaluate the reach and impact of advertisement and sales promotion in India. There exists significant overlapping and mixed-up communications from manufacturers. Attempts are made to eradicate the impact on one company by the other through press advertisements, farmer dealer meetings and village adoption programs.

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