An Empirical Exploration of the Performance of Fertilizers Industry in India: An Econometric Analysis

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The controversy relating to the provision of fertilizers subsidy and the recent debate over its withdrawal has necessitated the present study to examine the performance of the fertilizers industry (Inorganic Industry) in India. Analysis of Cost Functions and Cobb-Douglas Production Function have been made to study the performance of the industry, the results of which reveal that the industry is subject to the law of increasing costs. The findings get further support from the examination of the production function, which reveals that the average productivity of labour exceeds its marginal productivity. Analysis of shifting cost functions further highlight that the firms belonging to this industry expand capacities, even before fully exploiting the existing capacity conforming to the oligopolistic behavioural tendency of the firms belonging to the fertilizers industry.

I Introduction

An entirely new empirical reality has emerged in the Post-Second World War period. Inflationary pressures have been persistently in operation through out the world economy. Besides, the inflationary pressures has remained in existence even when recessionary phase emerges in the selected sectors of the economy. A very high degree of unutilized or under-utilized capacities and a high rate of unemployment have been the characteristics of such features. The persistence of inflation in the midst of recession cannot be explained by the classical propositions. Put face to face these empirical realities, even the neo-classical formulations have prove to be inadequate. Keynesian and neo-Keynesian postulates have also failed to go to the roots of the problem. Macroeconometrics also dealing with prices or even pure price models prove to be inadequate to grasp such empirical realities. This has, therefore, given impetus to empirical research and the search for theoretical underpinnings and postulates.

Outline of the Paradoxical Situation of the Indian Economy

Among the many controversies relating to the policy measures of the Indian economy, the one that has attracted the most attention of the policy makers and planners is the provision of fertilizers subsidy, and the impact of such huge subsidy in maintenance of economic stability and hence, the general price level of the economy. The post-liberalization period in the Indian economy has witnessed heated debate over this issue. Since fertilizers constitute a vital input of the agricultural sector, which is used by farmers of all categories, any reduction of subsidy would, therefore, have tremendous repercussions on the Indian economy. Empirical studies relating to the Indian economy reveals that agricultural prices determine the general price level in the economy and therefore, any kind of withdrawal or reduction of subsidy would result in a rise in the cost of production. Such a tendency would throw the entire economic system out of gears, jeopardizing all our developmental policies and programmes. Therefore, though

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