#### DISSERTATION



# THE IMPACT OF AGRICULTURAL SUBSIDIES ON

## PRODUCTIVITY IMPROVEMENT

## A STUDY BASED ON PADDY CULTIVATION OF

#### SRI LANKA

Submitted By

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### **Abstract**

The Sri Lankan paddy sector is endowed with the special attention of the government and provided with input subsidies, in consideration of dual facets of its strategic importance. One of these two aspects is that the subsidy is vital in achieving the self sufficiency of rice as the staple food production. On the other hand, the subsidy helps in ensuring income of paddy farmers since paddy cultivation is less profitable and less attractive occupation in Sri Lanka, without government support. Sri Lanka has been subsidizing fertilizer more than half a century and the subsidy programme introduced 2005 onwards was broadened absorbing more than ninety percent of the import price of fertilizer by the government. The ongoing controversial commentaries on continuation of the fertilizer subsidy always emphasize the huge cost incurred by the government for granting this subsidy as well as the adverse effect of fertilizer overuse on environment and public health.

The key objective of this thesis is to determine whether there is a positive impact of fertilizer subsidy on paddy cultivation of Sri Lanka. The analysis is based on the secondary data issued by leading government institutions such as the Central Bank of Sri Lanka, the Department of Census and Statistics and the Department of Agriculture, pertaining to fertilizer consumption of Urea, TSP and MOP, Annual average paddy yield and the extent of harvested area in relation to past 54 years. Initially, the relationship between the pairs of the variables of fertilizer consumption, paddy yield, extent of paddy harvested area and extent of paddy sown area were tested using correlation analysis. ANOVA model was fitted with the view to accomplishing the objective for determining the impact of fertilizer subsidy on usage of fertilizer, paddy yield and the extent of paddy harvested area. Under post hoc comparison, Tukey HSD test was conducted in order to ascertain the conditions where significant differences are shown.

The study revealed that there is a considerable positive impact of fertilizer subsidy towards the productivity improvement of rice cultivation in Sri Lanka. The results indicate that there is a positive impact of subsidy on usage of fertilizer, average paddy yield and paddy harvested extent of area in the country. Further it was found that there is a positive correlation between the each variables of fertilizer usage, average paddy yield, paddy harvested and paddy sown extent of area.

The findings suggest that removal of subsidy would reduce the yield growth of paddy cultivation and adversely affect the self sufficiency of the staple food commodity leaving the rural farmer unstable. Therefore, in solving the puzzle of lessening budgetary burden and eliminating the social cost stemmed from overuse of fertilizer, the policy makers have to brainstorm in order to find the best strategic solution to manage this attentively, without affecting the growth of paddy yield.

Key words- Fertilizer, Paddy Cultivation, Productivity, Subsidy, Sri Lanka