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Rice and Fertilizer Policies in Indonesia

A thesis presented in partial fulfillment of the requirements for the degree of Masters of Agricultural Economics

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GLOSSARY

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| Expression | Description |
|------------|--|
| BULOG | (Badan Urusan Logistic) is the National Agency for regulating supply, demand, and price of principal food crops in Indonesia. |
| C.i.f. | Cost, Insurance and Freight. |
| F.o.b. | Free on board. |
| Gabah | Unhusked Rice |
| GATT | General Agreement on Trade and Tariffs. |
| На | Hectare. |
| HYV | High Yielding Varieties of Rice. |
| KCl | Potassium chloride. |
| Kg | Kilogram. |
| KUD | Koperasi Unit Desa (The Cooperative which organize farmers on Supply and Demand for Agricultural inputs and output Production and usually offer soft-loan credit to its members). |
| LADANG | Slopeland of varying steepness and altitude, which is usually located quite far from settlements but close to forest. Food crops, vegetables and tuber crops are intercropped with tree crops. |
| MMT | Million Metric Ton. |
| MT | Metric Ton. |

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| | Rp | Rupiah (Indonesian Currency). |
|--|---------|--|
| | SAWAH | Flat lowland on downhill sites or on floodplains and terraced land on upper slopes. The major crops is wetland rice while upland crops are planted in the off-season. Lowland crops are usually irrigated, while those on upper slopes are rainfed. |
| | TEGALAN | Gently sloping land which has no access to any irrigation system, and which is usually located quite close to settlements (Home gardens). Such land is planted in a patchwork of tuber crops, maize, grain legumes, and tree crops. |
| | TSP | Triple super phosphate. |
| | ZA | Ammonium sulphate. |

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ABSTRACT

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To promote rice production, the government of Indonesia implemented various agricultural policies. Some agricultural inputs had been subsidised heavily, particularly fertilizers. The combination of lower inputs prices, improved technology and better infrastructure such as irrigation schemes increase rice production significantly.

However, higher rice production and lower fertilizer prices encouraged farmers to use more fertilizers. In some areas the use of fertilizers has exceeded that recommended and in some areas production has even declined. It is likely that higher farm incomes that resulted from higher production and increased product prices affected the demand for fertilizers and other inputs to production. As demand for fertilizer increased the cost of the fertilizer subsidy became an important part of government expenditure.

In recent years, the government of Indonesia has introduced policies to reduce the fertilizer subsidy. These policies have had substantial impacts on farmers' costs and incomes. On the one hand, the reduction of the fertilizer subsidy reduced demand for fertilizers. However, this policy was estimated to have little effect on rice production since the use of fertilizer was in general more than was recommended. On the other hand, while the rice price had been hold constant, increased farm costs reduced farmers' incomes. In order to offset the increased farmers' costs the government could allow the rice price increases.

This study is concerned with the effects of the reduction in urea subsidy and the increase in rice support price to maintain self-sufficiency, or to offset the producers loss, due to the increase in urea price. A model developed by Baker and Hayami is adopted for this analysis, to examine their effects on demand for urea, rice

production, producers surplus, government expenditure, and foreign exchange earnings.

The results indicate that the joint policies can meet either the income compensation or self-sufficiency goals, but not without increasing government expenditure. In addition, these policy actions would distort the rice and urea markets.