GROWTH AND CHANGE IN THE INDONESIAN ECONOMY: THE ROLE OF THE AGRICULTURAL SECTOR

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Dedication

To Heny, Didiet, Nina and Raka Daryanto,
and my parents

Abstract

The objectives of this research are threefold. The first objective is to analyse the patterns of output and employment change in Indonesian agriculture compared to other sectors. The second is to utilise a CGE model of the Indonesian economy to analyse macroeconomic agricultural linkages and evaluate sectoral effects of changes in the external shocks and changes in domestic policies on agricultural development performance in Indonesia. The third is to analyse existing agricultural development policies in response to the external shocks with a view to finding policies that generate the highest rates of economic growth and equal income distribution.

By using the input-output framework this study analyses growth and structural change in the Indonesian economy with special reference to the agricultural sector. Growth and structural changes are examined in terms of how changes in a sector's output and employment can be apportioned between changes in (1) domestic final demand, (2) export demand, (3) import substitution, and (4) technological change. Results indicate that the growth and structural change in output and employment of agricultural sectors and other sectors in the Indonesian economy during the periods of 1971-1985 and 1985-1995 are heavily dependent on domestic demand. It is found that the contribution of exports to output growth became relatively stronger in the process of economic development, especially in the manufacturing sectors. The agriculture sector always records positive net effects due to trade. It is also found that the most important sources of growth in employment in agriculture are changes in domestic final demand and labour productivity. Changes in technology have significant impact on structural change in agriculture.

A multisectoral computable general equilibrium model is used to evaluate negative external shocks to the Indonesian economy and the ability of agricultural demand-led industrialisation (ADLI) to mitigate the effect of these external shocks. Among other findings, the ADLI simulation results suggest that policies which are successful in raising agricultural production and real income, also lead to a significant improvement in non-agricultural performance. However, an ADLI policy is likely to benefit rural households less than urban households, owing to the deterioration in the agricultural terms of trade. The challenge for policy makers is to devise ways that will ensure farmers a greater share of gains from implementation of ADLI strategy. The results of counterfactual experiments also indicate that the implementation of ADLI successfully mitigates the adverse terms-of-trade shocks in the economy. The contractions due to the negative shocks in the economy are reversed by more than proportionate expansion that resulted from the boom in agricultural production and exports.

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Abbreviations

ADLI	Agricultural Demand-Led Industrialisation
BPS	Biro Pusat Statistik
BULOG	Badan Urusan Logistik (National Logistic Agency)
CGE	Computable General Equilibrium
GDP	Gross Domestic Product
GEMINA	General Equilibrium Model for Indonesian Agriculture
IO	Input-Output Analysis
LDCs	Less Developed Countries
Rp	Rupiah, the basic unit of the Indonesian money. The official exchange rate in 1985 was that one dollar US equalled 1120 rupiah.
SAM	Social Accounting Matrix

Note: Abbreviations and variables names in the CGE model are listed in Appendix 7.1 as well as in the GAMS program listing of the CGE model in Appendix 7.2.