

# The Effect of International Trade on Food Security at Southeast Asian Countries

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*Abstract:* - For decades, although the world has made significant progress in the fight against hunger, food insecurity has been considered as the top concern of countries, especially developing countries. In this study, we use panel data of 10 Southeast Asian countries for the period from 2000-2015 to evaluate the effect of international trade on food security. Applying panel data regression methods such as fixed effects model (FE), random effects model (RE), and feasible generalized least squares model (FGLS), the results show the positive impact of international trade on food security on all three aspects of food availability, stability, and access at each country. Besides, other factors such as agricultural productivity, the share of agricultural land over the total land area, percentage of farmers in total population, and inflation also affect to food security of Southeast Asian countries on several aspects. Based on the results, we propose some policy implications for Southeast Asian countries to deal with food insecurity problems.

*Key-words:* - International trade; Food security; Fixed effects model (FE); Random effects model (RE); Feasible generalized least squares model (FGLS)

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## 1 Introduction

Over the past decades, although the world agriculture sector has made considerable progress, food insecurity continues in many countries. According to FAO (2012), the world still has over 800 million people suffering from malnutrition and pressure on the population issues, and poverty reduction continues to be a significant challenge globally.

Food insecurity and malnutrition have a direct impact on the health and development of people generally in the field of learning, individual productivity, and economic development (World Bank, 2006; Upton et al., 2016). Therefore, FAO (2014) emphasized the necessity of putting food security issues at the highest level in national policy formulation and international research programs.

Countries should effort to create an enabling environment for improving food security by enhancing domestic production capacity and promoting international trade.

Many developed and developing countries have made significant policy reforms over the past three decades, including trade policy reform aiming to reduce taxes and non-tax barriers. Trade policy reforms have contributed to the growth of international trade in the world (Anderson, 2010). Trade reforms are expected to help boost economic growth, reduce poverty, and improve the food availability for consumption in countries (FAO, 2003; Dorosh et al., 2016; Alesandro et al., 2017; Taraba, 2019; Okunlola et al., 2020).

Much empirical research has focused on the effects of globalization and trade liberalization on