

Biofuel Impact on World Food Market and Food Security

Tatsuji KOIZUMI

Summary

To address energy security, reduce greenhouse gas (GHG) emissions, and strengthen agricultural/rural development, biofuels are produced and utilized globally. This study analyzes biofuel programs in the USA, Brazil, the EU, Indonesia and Malaysia. The study also reviews biofuel impact on the world food market and food security. The growth rate of global biofuel production is a decreasing trend, whereas biofuel production is an increasing trend. The main feedstock of biofuels continues to be dominated by agricultural products. Biofuel production and consumption are expected to remain constant into the future, despite their impact on global food markets. Biofuels have a *floor price effect* on global food markets and have been a main factor in changes in global food-market structure since the mid-2000s. In contrast, agricultural products are a crucial source of income for farmers. The *floor price effect* derived from biofuel production prevents sharp declines in global and local agricultural commodity prices and raises the income of farmer households. Consequently, by way of their positive contribution to improved world food security, biofuel programs are pivotal to promoting advances in societal development structures worldwide.

Key words and phrases: Biofuels, World Food Market, Food Security, Competition between biofuels and food, Floor price effect of food prices