

## Intisari

Perwujudan ketahanan pangan regional menjadi isu penting umat manusia di masa yang akan datang. Program pembangunan infrastruktur utamanya jalan dan irigasi di Sumatera Barat menjadi salah satu cara untuk meningkatkan ketahanan pangan masyarakat. Pembangunan infrastruktur jalan dan irigasi membutuhkan modal yang besar, sehingga diharapkan memberikan dampak luas bagi perekonomian. Evaluasi sejauh mana pengaruh infrastruktur jalan dan irigasi terhadap ketahanan pangan perlu dilakukan guna mengetahui sejauh mana keberhasilan program pembangunan infrastruktur bagi ketahanan pangan masyarakat.

Penelitian ini bertujuan untuk mengetahui pengaruh infrastruktur terhadap ketahanan pangan masyarakat di Sumatera Barat, meliputi infrastruktur transportasi jalan dan infrastruktur irigasi. Penelitian ini menggunakan data sekunder yang bersumber dari publikasi Badan Pusat Statistik Sumatera Barat dengan menggunakan metode analisis regresi data panel *fix effect model* metode *robust*.

Hasil menunjukkan bahwa secara simultan infrastruktur transportasi jalan dan irigasi berpengaruh positif signifikan terhadap ketahanan pangan di Sumatera Barat. Secara parsial infrastruktur transportasi jalan dan irigasi berpengaruh kepada peningkatan pangan masyarakat masing-masing sebesar 20,59 persen setiap penambahan satu kilometer jalan berkualitas per kapita dan 1,127 persen setiap peningkatan satu meter jaringan irigasi. Kebijakan pembangunan infrastruktur merupakan kebijakan yang pro rakyat di Sumatera Barat.

Kata Kunci: Ketahanan Pangan, Infrastruktur, Jalan, Irigasi, Regresi Data Panel, *Fix Effect Model* metode *Robust*.

### **Abstract**

The realization of regional food security will become an important issue for humankind in the future. The infrastructure development program, especially roads and irrigation in West Sumatra, is one of the ways to increase local communities food security. The development of road and irrigation infrastructure requires a large amount of capital, so that it is expected to have a broad impact on the economy. Evaluation of the influence of road and irrigation infrastructure on food security needs to be carried out in order to determine the success of infrastructure development programs for local communities food security.

This study aims to determine the effect of infrastructure on food security of local communities in West Sumatra, including road infrastructure and irrigation infrastructure. This study uses secondary data sourced from the publication of the West Sumatra Central Bureau of Statistics by using a regression analysis method of panel data fix effect model robust method.

The results show that road and irrigation infrastructure have a significant positive effect on food security simultaneously in West Sumatra. Partially, road transportation and irrigation infrastructure have an effect on increasing food security of local communities by 20.59 percent for each additional one kilometer of road per capita and 1.127 percent every one meter increase in irrigation networks. The infrastructure development policy is a pro-local communities policy in West Sumatra.

**Keywords:** Food Security, Infrastructure, Roads, Irrigation, Panel Data Regression, Fix Effect Model Robust method.