Abstract
This research aims to identify the challenges of the food security indicators in the GCC countries for the period 2000-2020. The study applies three alternatives to panel data analysis. The results find that population is a significant driver of food security challenges in the GCC countries. Moreover, food price inflation has a significant affect the food availability and stability but show no significance on food access and utilization. Fertilizer consumption has significant challenges the food utilization. The results show that there is evidence of significant differences in food security across the GCC countries. The random-effects estimators of regression coefficients of food availability and stability challenges are more statistically efficient than those for pooled ordinary least square and fixed effects. While the fixed effects estimators are most preferred for the coefficients of food access and utilization challenges. The study recommends that decision-makers embark on interferences that stimulate food security to meet the continual increase in population also future research should be applied on the other factors that challenged food security.