National Institute of Technology Rourkela

Registration Seminar

Seminar Title : Food Security, Energy Consumption and Climate Change: Towards achieving the Sustainable Development Goal in South

Asia and Sub-Saharan Africa

Speaker : Biswanath Behera (Rollno: 521hs2007)

Supervisor : Dr. Narayan Sethi
Venue : HS Seminar Room
Date and Time : 08 Dec 2023 (10.30 A.M.)

Abstract

: Achieving food security amidst a growing population and increasing vulnerabilities to climate change has become a serious concern globally. In this regard, the United Nations has introduced the &IdquoSustainable Development Goals (SDGs)&rdquo agenda for 2030, consisting of seventeen SDGs to address the global problem. Specifically, &ldquoSDGs 2.1 and 2.4&rdquo aim to ensure food security through the implementation of resilient agricultural practices to adapt to climate change vulnerabilities. However, with the current trends of global climate change and policies to eradicate hunger, achieving food security to meet Sustainable Development Goal 2 is highly unlikely. In the context of South Asia and Sub-Saharan nations, the agricultural sector plays an indispensable role in ensuring food security therefore, adaptive measures to improve agricultural sustainability by abating the detrimental effects of climate change are required to ensure food security in these regions. The present study, therefore, proposes to analyze the nexus between climate change, clean energy access, and food security for 20 selected countries from South Asia and Sub-Saharan Africa spanning from 2000 to 2022. The countries from both the regions will be selected based on the prevalence and number of people experiencing food insecurity in South Asia and Sub-Saharan Africa. Alongside investigating the nexus between climate change and food security, the study also intends to assess the role of other determinants of food security, technological advancement, geopolitical factors, and developmental aid to agriculture. For the empirical analysis, this study proposes to use the Driscoll-Kraay estimator, the Pooled Mean Group estimator, and the Method of Moments Quantile Regression estimator. This choice is made considering the potential problems of heteroskedasticity, cross-sectional dependency, autocorrelation, and endogeneity in the model. This problem has significant policy implications and warrants further investigation since the world is undergoing the long-term adverse impacts of climate change.