the exchange rate of India causing the exchange rate of Singapore. However, there's no evidence of certain causal relationships, such as between India's GDP and Singapore's GDP. This study is useful to determine whether the adoption of WTO regulations has any influence on the agricultural trade of India. The revealed comparative advantage in agricultural products will help to promote specific product exports which have more comparative advantage and will certainly benefit the agricultural sector and international trade. The change in the trade pattern can create more engagement of people in the agriculture sector. Thus, it can be useful for policymakers as well as students and researchers to better understand India's agricultural trade.

#### **REFERENCES:**

1. Renjini, V. R., Kar, A., Jha, G. K., Kumar, P., Burman, R. R., & Praveen, K. V. (2017). Agricultural trade potential between India and ASEAN: An application of gravity model. Agricultural Economics Research Review, 30(1), 105-112.

2. Malhotra, D. G., & Vadra, D. R. (2013). India Singapore Trade-A Paradigm Shift. Paradigm, 17(1-2), 54-66.

3. Ansari, S. A., & Khan, W. (2015). India's agricultural trade potential in post-WTO period. Agricultural Economics Research Review, 28, 93-100.

4. Ashish, A., & Kannan, E. (2015). Analysis of India's revealed comparative advantage in agro-processed products. Indian Journal of Economics and Business, 14(1).

Navjot Kaur Science tutor *Dr. Sakshi* Lovely professional university (Jalandhar)

### ANALYZING THE RELATIONSHIP BETWEEN ENERGY CONSUMPTION AND CO2 EMISSIONS IN INDIA: A STUDY USING ENVIRONMENTAL KUZNETS CURVE HYPOTHESIS

Energy is an essential element for human needs. It has also a determining role in the development of the economy. Due to rapid industrialization, urbanization, and high economic growth targets, energy demand has been significantly increasing during the last few decades. Climate change and global warming have become a concerned issue globally. The empirical relationship between energy consumption, CO2 emissions, and economic development has been a major area of interest in energy economics literature over the past years. This research comes under the frame of the Environmental Kuznets curve. India is an emerging economy with a 1.41 billion population. The GDP of India is rapidly growing which simultaneously deteriorates the quality of the environment because of human activities, energy consumption, and industrial activities which results in emissions of harmful gases. India is the 3<sup>rd</sup> largest carbon emitter contributing 3% cumulatively of global GHGs. In India's power sector (37%), agriculture (21%), manufacturing (17%), and transportation (9%) contribute to green-house gases

(UNEP,2022). India signed the Paris Agreement in 2016 and submitted INDCs to address climate change. India pledged to reduce the emissions per GDP unit by 33% to 35% below 2005 levels by 2030. In India, as the per capita income is rising demand for electricity is increasing for both domestic and industrial consumption. Now India delayed and pledged to achieve net zero emissions by 2070 but still India is not working in line with the submitted targets because it relied on fossil fuels-based energy consumption to meet the demand (Chateau et. al,2023). In the present study, we will study the relationship between energy consumption and CO2 emissions using the Environmental Kuznets Curve over the period from 1990-2022. This study is based on the secondary data collected from the World Bank indicators and Ener Data.

The Environmental Kuznets Curve (EKC), depicting an inverted-U-shaped correlation between economic growth and environmental quality, was initially explored in three seminal papers. These included a study on the environmental impacts of NAFTA published by Grossman and Krueger (1991) as an NBER working paper, findings featured in the World Bank's 1992 World Development Report by Shafik and Bandyopadhyay (1992), and research conducted for the International Labour Organisation by Panayotou (1993). EKC is an inverted U-shaped curve that shows that as the economy grows pollution also increases but after a certain threshold the quality of the environment starts improving.

Numerous studies used the EKC approach to examine the relationship between energy consumption, economic development, and carbon emissions. EKC tells us the status of a country that if the income of a country is rising it deteriorates the environment quality and later on efficient ways are adopted to improve the environment. Usman et.al (2019), Ozcan & Ulucak (2021), and Uche et. Al (2023) used EKC in the case of India and found that EKC exists. It can be concluded that India is growing rapidly although fossil fuel consumption is higher its government is taking steps to improve the quality of the environment simultaneously. Obadi & Korček (2015), Shahbaz et al. (2016) Keho, Y. (2016). Morelli & Mele (2020), Li, et.al (2021). Bildirici, M., & Çoban Kayıkçı, F. (2024) examined the main drivers of energy consumption and found that GDP growth, Urbanization, population growth, and energy intensity are the major driving forces of energy consumption.

India is a developing economy in South Asia and it is the most populous (1.41 billion) country across the globe. In past years Indian GDP has grown rapidly and economic development consumes resources and deteriorates environmental quality. Demand for energy consumption is rising as the per capita income and industrialization are rising and India still consuming more fossil fuels (coal and oil) to satisfy the growing demand of the domestic and industrial sectors. India is the third largest carbon emitter in the world (UNEP, 2022). In this study, the Distributed lagged model is used to determine the main drivers of energy consumption and it is found that GDP growth, Energy intensity, and Past energy consumption are the main driving forces of energy consumption. Urbanization and Population growth are not driving energy consumption in India. The results showed that energy consumption and energy intensity have a positive and significant relation with carbon emissions in India. The findings of the study do not support the existence of EKC in India.

### **REFERENCES:**

1. Grossman, G. M., & Krueger, A. B. (1991). Environmental impacts of a North American free trade agreement.

2. Shafik, N., & Bandyopadhyay, S. (1992). Economic growth and environmental quality: time-series and cross-country evidence (Vol. 904). World Bank Publications.

3. Panayotou, T. (1993). Empirical tests and policy analysis of environmental degradation at different stages of economic development.

4. Chateau, J., Dang, G., MacDonald, M., Spray, J., & Thube, S. (2023). A Framework for Climate Change Mitigation in India.

5. Usman, O., Iorember, P. T., & Olanipekun, I. O. (2019). Revisiting the environmental Kuznets curve (EKC) hypothesis in India: the effects of energy consumption and democracy. Environmental Science and Pollution Research, 26, 13390-13400.

6. Ozcan, B., & Ulucak, R. (2021). An empirical investigation of nuclear energy consumption and carbon dioxide (CO2) emission in India: Bridging IPAT and EKC hypotheses. Nuclear Engineering and Technology, 53(6), 2056-2065.

7. Uche, E., Das, N., & Bera, P. (2023). Re-examining the environmental Kuznets curve (EKC) for India via the multiple threshold NARDL procedure. Environmental Science and Pollution Research, 30(5), 11913-11925.

8. Obadi, S. M., & Korček, M. (2015). Investigation of driving forces of energy consumption in European Union 28 countries. International Journal of Energy Economics and Policy, 5(2), 422-432.

9. Keho, Y. (2016). What drives energy consumption in developing countries? The experience of selected African countries. Energy Policy, 91, 233-246.

 Morelli, G., & Mele, M. (2020). Energy consumption, CO2 and economic growth nexus in Vietnam. International Journal of Energy Economics and Policy, 10(2), 443-449.
Bildirici, M., & Çoban Kayıkçı, F. (2024). Energy consumption, energy intensity,

economic growth, FDI, urbanization, PM2. 5 concentrations nexus. Environment, Development and Sustainability, 26(2), 5047-5065.

12. Li, S., Meng, J., Zheng, H., Zhang, N., Huo, J., Li, Y., & Guan, D. (2021). The driving forces behind the change in energy consumption in developing countries. Environmental Research Letters, 16(5), 054002.

# Amalendhu Viju Krishna

Science tutor *P. Kansra* Lovely Professional University (Punjab) India

## SOCIAL MEDIA'S INFLUENCE ON STUDENT WELLBEING AND ACADEMIC SUCCESS

Studies have convincingly documented that social media addiction is common among university and college students and this addiction is harmful to their mental health.