

Abstract(Submitted after PhD Viva)

Topic: A Empirical Analysis of Environmental Kuznets Curve: A Case Study of India

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Kuznets (1955), in his path breaking paper, symbolized the association between income inequality and economic growth by depicting an inverted U-shape. In his hypothesis, he stated that in the initial stages, when the economic growth is at a low level, GDP per capita leads to increased inequality, but when it reaches a specific turning point, additional economic growth leads to a decreased income inequality.

The environmental Kuznets curve (EKC) model has been the focuss of the study in the literature in the recent years, to understand the inverted U-shape association between GDP per capita and the level of environmental deterioration . In the initial stages of the EKC hypothesis, the environmental quality worsens, but in the later stages, it finally improves when there is advanced economic development.

Objective of the Study

- .To address the issue of missing feedback in the aforementioned hypothesis
- To examine whether turning point is being restricted or not ?

- To examine the extended EKC hypothesis model subelements of carbon dioxide emissions during the period 1971-2011
- To investigate the shape of EKC for water pollutants in different states of India during the time period 1990 -2014.
- To examine the role of institutions in lowering the turnaround point of EKC

Policy Implications/ Conclusions

The results imply that emission mitigation policies and the expense of more investment in pollution abatement will not hurt GDP percapita and could be a sustainable policy for India to achieve its sustainable growth in long run. In other words there will not be any crowding out because here this development investment does not harm economic growth. The government can follow conservationist policy as it will not hurt economic growth. In a Multivariate framework, Causality association is bi- directional in nature. Along the EKC, CO2 emission growth is enhanced by increasing growth in GDP. However, this enhancement in turn brings harm to the environment. The study shows presence of an inverted U shaped extended EKC Model for carbon dioxide emissions but the inverted U shaped EKC for different subelements of carbon dioxide emissions does not exist. In the case of EKC for water pollutants there is presence of an inverted N shaped EKC for all three water pollutants. Results show significance of Institutional variable in the EKC Model