

Balancing Economic and Environmental Goals for Sustainable Development: An Environmentally Extended Input-Output Analysis of India

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Economic policy in India has predominantly prioritized economic development and national income growth. Discussions around sustainable growth have emerged in recent decades. However, policy measures around environmental accountability has not received due attention in India. The government has recognized the need to reduce harmful emissions and to increase environmental accountability in production and consumption. Yet, actions taken towards this motive remain insufficient given the intensity of environmental degradation and pollution India faces. As of 2011, India ranked fourth in the world in carbon emissions. With the world leaders meeting up for the Paris Climate Summit, India's stand on the issue is critical. It might be unsettling that India, although a signatory, was not obligated to reduce greenhouse gas emissions under the Kyoto protocol. It was argued that much of the emissions in developing nations like India and China is due to production fuelled by demand from the west. However, despite the cause, the effect has attracted huge attention from activists and academia alike. It is our view that an economy-wide analysis describing interconnection between demand and production is useful in visualizing the nexus of economic and environmental goals. We employ an environmentally extended Input-Output framework as developed by Leontief (1970) to estimate the changes in production and demand under various pre-specified tolerable levels of carbon emissions, and thus resulted changes in economic growth for India. Our preliminary results show that economic and environmental goals may not be conflicting with each other as long as policies are wisely designed. Our analysis provides insight for policymaking towards sustainable development of the Indian economy.