

Snow in the Tropics: Subnational Modeling of the Cocaine Supply Chain in Colombia

Topic: Input-Output economics in Latin America: Advances and challenges (I)

Author: Enrique Gilles

Co-Authors: Jaime Vallecilla

While the cocaine industry represents a significant portion of Colombia's rural and regional economic activity, its exclusion from official national accounts obscures its real impact on local development and inter-sectoral dynamics. This paper develops an augmented subnational Input-Output (IO) table for Colombia (2015), covering 32 departments and Bogotá, by explicitly integrating the cocaine agro-industrial complex. The methodology involves disaggregating the production process into two distinct stages: the agricultural phase (coca leaf cultivation) and the industrial transformation phase (coca paste and cocaine hydrochloride production). By adding these specific rows and columns to Colombia's interregional input-output table, we provide a formal tool to quantify the "shadow" economic weight of these activities. This augmented model allows for the calculation of forward and backward linkages, as well as the estimation of regional economic impacts resulting from demand shocks or policy interventions. The contribution of this work is twofold: it provides a methodological roadmap for internalizing illicit activities in regional accounting and offers a robust analytical framework to understand the structural role of the cocaine economy in the Colombian regional economies.