Understanding Agriculture-Industry Inter-Linkages for Agrarian Development: Empirical Evidence from India

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The paper examines the changing linkages of the Indian agriculture sector with the industrial sector over the course of economic development as achieved in the last three decades. The Indian agriculture sector has been distraught with socio-economic distress, which has exacerbated in the last two decades. Against this background, the study aims to analyse at a disaggregated level the interdependency of the agriculture sector with the industrial sector and how it has changed over time. This is done by the means of calculating relative linkages, backward and forward linkages. For the same, Input-Output Transactions Tables have been used for the years 1973-74, 1979-80, 1983-84, 1989-90, 1993-94, 1999-00, 2003-04 and 2007-08, as prepared by Central Statistical Organisation. The tables are converted to constant prices to make them comparable over time. The paper adds to the structural transformation literature by providing a disaggregated analysis with detailed focus on intra vs. inter sectoral linkages, which further make the conclusions to be unique. The study concludes that over the years the linkages have weakened with the industrial sector. It was only after 2003-04 that linkages started improving. However, a disaggregated analysis highlights that inter-linkages have improved with the sub-sectors of the industry like chemicals industry, metal products, food-processing industry, electrical machinery, and transport equipment, some of which have significant presence in the unorganised sector. Moreover, after 2003-04, intra-linkages of the agriculture sector have also increased drastically. This points out that at a disaggregated level, the agricultural sub-sectors depend upon their parent sector both for their input requirements and to sell their output. The results question the hope of modernisation of agriculture sector and falling structural push and pull side incentives arising from the growth of industrial sector.