

ABSTRACT OF A DISSERTATION

**CONTAMINATED FUTURES:
ECONOMIC DEVELOPMENT THROUGH INDUSTRIALIZATION**

DEB RANJAN SINHA

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**Dianne Rocheleau, Ph.D.
Chief Instructor**

Industrialization has been traditionally considered one of the most important mechanisms of economic development. A general decline in manufacturing in the North has accompanied this burst in industrialization in the South. Concurrently, polluted former industrial land – commonly referred to as brownfields – have become important elements of development agendas in centers of declining industrial production in the North. The case of the city of Worcester, located in central Massachusetts (USA), has been used to challenge the broad hypothesis that current and future environmental impacts of industrialization are benign, and are easily resolved through technology and the free-market economy. This study uses the Political Ecology framework to analyze dominant environmental theories associated with the industrial mode of development. It is argued that the theoretical assumptions inherent in the Environmental Kuznets Curve hypothesis, Ecological Modernization theory and the concept of Spatial Fix are inadequate to account for environmental externalities that are an integral component of economic development through intensive industrialization.

This study, using the city of Worcester as a case study, attempts to answer the following questions: What are the shortcomings of current dominant economic development theories that seek to encourage industrialization in the South?; What are the challenges facing communities in former industrial centers of the North?; How have the State and communities in the North responded to the problems of legacy pollution?; How effective have the interventions been in resolving the consequences of industrialization?

To that end, this dissertation provides a geo-historical analysis that traces the evolution of industrialization across the globe, critiques industrial economic development literature, examines the history of environmental abuse resulting from industrialization, and documents policy attempts at redevelopment of former industrial centers.

The geo-historical analysis of industrialization and its environmental implications in Worcester, Massachusetts establishes the impediments and shortcomings of the current neoliberal economic development policies. Industrialization in Worcester, while creating momentary prosperity and employment for a large workforce, burdened the city's environment in perpetuity. Alleviating the socioeconomic consequences of almost fifty years of deindustrialization has proven to be a bigger challenge due to the presence of legacy pollution in the defunct and obsolete factory buildings, and soil and groundwater in and around the industrial sites. The absence of designated responsibility for contamination cleanup, the waiver of legal liabilities arising out of environmental contamination, the high cost and complexity of environmental remediation, dependence on the capitalist land market, and a lack of necessary political will has ensured a slow and mostly partial response to the environmental threats of industrialization.

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