Chapter 5
Environmental Regulation and Incentives in Socio-Ecological and Green Technological Innovation

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ABSTRACT

This study intends to analyze the impact of environmental regulation and incentives in socio-ecological and green technological innovation. It departs from the assumption that environmental regulation affects the performance of socio-ecological and green technological innovation in organizations. The method employed is critical analysis and reflective based on the theoretical, conceptual, and methodological literature. It is concluded that the analysis confirms that there is a direct relationship between the incentives of environmental regulation and the socio-ecological and green technological innovation in organizations.

INTRODUCTION

The rapid spread at global scope of innovative technologies has modernized the economic sectors that are contributors of environmental pollution and other health risk hazards with limiting findings in technological innovations and ecological solutions. The development of organizational socio-ecology is based on theoretical methodological and empirical research. The abundance of research in population socio-ecology is accompanied by criticisms of ecological research and organizational socio-ecology regarding the abandonment of organizations (Amburgey & Rao, 1996).

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Research can be advanced at the intersection between sustainability and population socio-ecology (Salimath, & Jones, 2011). The theoretical proposal builds on the theory of organizational choice and the theory of resource dependency (Pfeffer and Salancik, 1978) and the ecological theory of organizations that allow concentrating on the specificities of the sector as exercises of elections.

The theoretical framework of organizational socio-ecology and sociological theory applies ecological principles to organizational analysis. The theoretical framework of organizational socio-ecology and sociological theory is a tool to formulate and implement socioecological principles to organizational strategies for turning around low-performance organizations, inducing the emergence of an economic and social environment and with an impact on non-linear development.

The organisational socio-ecology theory assumes that there is convergence between the paradigm of organizational socio-ecology and sociological perspectives leading to organizational research. The fundamental assumption of organizational socio-ecology is the differentiation of organizational populations. organizational socio-ecology emphasizes issues that are still under discussion, and they conclude with areas of progress and fertilization with other disciplines of organizational thought. Organizational socio-ecology is linked to other areas with the incorporation of methodological innovations such as strategic simulation models.

The forces of the organizational socio-ecology context give rise to criticism of the assumption that organizational destiny is a controllable variable. Organizational socio-ecology is dynamic and is based on the methodology of event history analysis in the analysis of temporal processes.

The theory of population socio-ecology is a tool for the theoretical and empirical analysis of organizational phenomena. The population of socio-ecology has several theoretical currents. Population socio-ecology is a perspective of convergent intersection with sustainability that integrates dimensions, levels of analysis and results. Routine socio-ecology deals at the organizational and inter-organizational analysis levels. The socio-ecology of routines at the organizational level, and the notion organizational character (Birnholtz, Cohen & Hoch, 2007) is defined as the ability to regenerate a coherent socio-ecology of patterns of action.

Research in organizational socio-ecology looks at the interactions of organizational populations. Organizational socio-ecology research intersects sustainability. The application of principles and assumptions of organizational socio-ecology to analyze the sustainability of organizations. The theory of organizational socio-ecology is based on a social Darwinism of organizational populations The organizational socio-ecology theory analyzes the alterations, difficulties, and restrictions of the organizational populations in application conditions (Dimaggio y Powell, 1983).

Research in the ecological theory of population is consolidated in the theory of population socio-ecology. The research focuses on the socio-ecology of populations in coordination and convergence with organizational sustainability considering that there are several areas related to the sustainability of populations that potentially contribute to population sustainability (Salimath, & Jones, 2011). The variables gas emissions, energy consumption, green technology innovation, institutional quality, and economic growth and urbanization are all interdependent and cointegrated.

There is a relationship between environmental regulation and green innovation. Values are assigned to environmental regulations leading to green innovation performance. When the environmental regulation system is weak, firms tend to emphasize maximization of profits, environmental taxes and engage in treatments to expand production scale and balance the regulation cost.

Green innovation research focuses on green product innovation and environmental management systems, the development of technological systems adopted by organizations, and the adoption of innovative