

Towards sustainable industrial development - A systems thinking-based approach



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ABSTRACT

Various critical global issues, including global warming and poverty, have been recognized and identified by the United Nations (UN) as drivers for unsustainability. Consequently, the UN established the Sustainable Development Goals (SDGs) with the aim of seeking universal peace and larger freedom by balancing the three dimensions of sustainable development, i.e. economic, social and environmental. A particular attention SDGs pay is in eradicating poverty as this is considered one of the greatest global challenges. Poverty is not only an economic matter as it also has an impact on the social and environmental dimensions. A strategy to

tackle poverty is to foster industry development. However, a holistic point of view is necessary by also considering stakeholders otherwise, it becomes a neoliberal solution. Despite the fact that some research has been conducted, e.g. case studies and surveys of sustainable practices, there is a lack of industrial sustainable development as a framework to tackle sustainability issues. Thus, this paper proposes a framework for industrial sustainable development under a socially inclusive approach within the context of the Mexican manufacturing industry. The framework proposal is based on state-of-the-art literature review conducted in the Web of Science and Scopus databases.

Keywords: Sustainable and social inclusive Development, Systems Thinking, Industrial Strategy, Manufacturing Cluster, SMEs.

1 INTRODUCTION

The *industrial sustainable development is the establishment of a suitable strategic development for industrialization by decision makers, with stakeholder's engagement and approval, and performing it in different levels of the system in the industrial region and balancing the triple line bottom with sustainable guidelines and tools.* Here some tools for decision-maker were mentioned such as sustainable BSC or Porter values chain which were combined with sustainable guidelines. Most of them with the firm's scope focus level. This proposal is a regional tool for improving the environment of the region aimed at industrial policymakers as team innovators who represent stakeholders' interests, and welfare of society to foster economic growth in the economy. In addition, some variants for each recursive level must be analyzed i. e. firms, industrial parks, and industrial clusters organization. It depends on how stakeholders have defined their scope and the maturity of the local sustainable region that the industrial management will manage. For instance, Figure 11 shows that according to how the organizational industry is domestically clustered, the market that the industrial organization would competitively aspire to. At the end, sustainable industrial development should take into consideration the existing interconnection between domestic clusters with the affordable national and international market outlook.



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