

EXPANDED ABSTRACT

The values of the social economy as drivers of change in clusters with a strong fragmentation of knowledge: the case of sugar cane in Veracruz (Mexico)

Frequently, clusters in developing countries are characterized by a strong fragmentation of knowledge rooted in an intense concentration of economic and political power. This concentration of power forms the basis for the generation of innovation networks, that leave out local knowledge as well as a large number of actors in the cluster, contributing to the existing high social and economic inequality. This is the case in the sugarcane cluster of Veracruz. In this context, the main objective of the article is to show that in this type of reality, the modernization of the cluster and the generation of new networks of innovation that integrate local resources and knowledge as well as potential endogenous requires, as a precondition, the generation of social innovation. In order to meet this objective, an evolutionary theoretical framework is developed, explaining both the inertia as well as the forces of change, combined with other approaches that address the phenomena of power and social innovation. This theoretical framework will try to show how the values of the social economy can be the vehicle of social innovation and the engine of change in the cluster, through the generation of novelties in itself. These novelties come from the emergence of new actors, new skills, new relationships and new rules. Based on this theoretical framework and in line with the interest of this article for the knowledge of the processes and the forces that move them, qualitative research has been developed in the sugarcane cluster of Veracruz (Mexico). This research relies primarily on the realization of almost a hundred in-depth personal interviews conducted in 2017 and 2018, with companies in the value chain, various associations, training and research centers as well as experts in the sector. The sample of companies has sought to privilege the presence of the sugar mills and a group of new dynamic firms, and for different reasons: in the first place, for its central role in the organization of the cluster which we aim to understand and, in the second place, due to its transformational potential.

It has been shown that in the sugarcane cluster of Veracruz, the value chain organization exhibits an important vertical integration in the hands of sugar mills, and whose correlation is the concentration of most of the public research efforts around the innovation network of these sugar mills. On the other hand, some local actors and knowledge are marginalized and with little communication between them, with the problem of fragmentation of knowledge and lack of penetration of new sources of information and innovation that this implies. Also, it has been shown that the essential question is, that behind this productive concentration there are a series of political and business networks, which in addition to ensuring the interests of the participating groups are extending a set of values that feed violence and discrimination. In this context, the mobilization of dispersed and already existing resources

on which development depends (Hirschman, 1961), as a basis for deploying own trajectories that allow escape from external economic and technological dependence (Prebisch, 1981), it involves an exercise for the development of people's capacities, putting the emphasis on human development (Sen, 2000).

In this sense, the article shows how social economy can contribute to the transformation of Latin American clusters through their moral rearmament that places people at the centre of political concerns and scientific analysis. Within the framework of the dominant political-economic network, it was shown how the creation of formal cooperatives cannot play, either alone or through the second-degree management and cooperative teams, the transforming role of the clusters which was attributed to it by the literature in other clusters of developed regions (Gallego-Bono & Chaves-Ávila, 2015 and 2016). The reason is that in this framework, the cooperatives are captured and used spuriously by this network. However, the article shows that the values of the social economy can constitute a vehicle to mobilize the endogenous resources communicating with their values and behavioural patterns, an actual alternative project of society. This project is making its way through the development of a series of socially emancipatory business and associative initiatives that are inspired and promote responsibility, social capital and a new, more inclusive vision of business activity while mobilizing local resources. These are individual and collective initiatives that encourage new forms of organization and greater productive diversification, which introduce more substantial complexity in the value chain, to extend and take advantage of endogenous knowledge, but based on the mobilization of critical external connections.

New actors are detected that no longer pursue the use of resources supported by imports, external demand for technology and agricultural sciences. These are young entrepreneurs endowed with high skills and new values, leading them to turn their attention to human resources, intellectual capital and endogenous capacities of the territory. In other words, towards the use of resources that were mostly there, but that due to differences in values and power between the actors involved, they were not noticed until very recently. This implies the valorization of a part of the local knowledge collection, part of a tacit nature, in terms of agricultural production, industrial transformation, etc. A use of local knowledge that serves as a basis for the intensification of the division of labour and specialization in the value chain, as well as the improvement of external sector-based and spatial connections in addition to the opening of new markets.

One of the main limitations of this research is that it focuses on a single case study. Still, the problem it describes is considered, in particular, the framework of economic-political power and its main external links through the North American Free Trade Agreement (NAFTA) to be extensible to other Mexican agri-food clusters. It is suggesting, on the other hand, an essential line of future research.

The fundamental contribution of this work consists in developing, conceptually and empirically, a feasible way to integrate endogenous resources into innovation processes within the framework of clusters of developing countries, especially in Latin America, and to change the habit or tendency to disap-

prove and exclude them which predominates among themselves. So all this through the practice of the human values of inclusion, participation and equity that promotes social innovation and the social economy as a privileged vehicle for itself, not with a moralizing purpose, but with a practical mission of good governance and transparency as "vectors" of innovation. The article contributes some crucial details to the existing literature on clusters as well as social and technological innovation. In the first place, in the face of writing that highlights the lack of cooperation in Latin American clusters (Rocha, 2015), it is evident that the fundamental problem is not in here, but in a socially exclusive partnership. Secondly, it is evident that in this type of clusters social innovation is a condition of technological innovation. A social innovation that has a marked radical character (Marques et al, 2018) more for the depth and vision of the world and the values that inform it, than for the real challenge in the established powers. Thirdly, it has been shown that the stimulus to change cannot come from cooperative initiatives but from the broader values of democracy, participation and commitment with the community that distil the set of social economy initiatives (Chaves and Monzón, 2018). The picture emerges, both theoretically and empirically, of the possibility of new individual and collective business initiatives bearing new values and new internal and external relationships capable of introducing variety into the territorial system. These actors are driving a new logic of integration of knowledge in the cluster, along with an advancement in the division of labour and the generation of organizational, product and market innovations within the cluster and the value chain.

In terms of economic policy, it is inferred from the article that in order to carry out actions capable of overcoming the fragmentation of knowledge in these types of clusters, policies should generate spaces of confluence of interests of the innovation networks, while promoting participatory and inclusive governance based on the transparency of the institutions. In the type of cluster considered, supporting their values is more important than prioritizing the legal formulas of the social economy.

KEYWORDS: Fragmentation of knowledge, Discrimination, Social economy, Social innovation, Cooperative values, Sugarcane, México.