

Dimension design to measure profitability and knowledge management in the Colombian Swine Industry

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Abstract. The Colombian Swine Industry (CSI) market is managed by importers, technified pig farmers, and small pig producers. CSI is important for agriculture due to sustainable objectives. CSI wants to encourage profitability in order to enter new markets and satisfy local demand. One of the strategies proposed in this research is capitalization of Knowledge Management (KM) since pig's production cycle is relatively short and it encourages the return of investment for Colombian farmers. However, small pig farmers have many limitations due to the lack of technology, high production cost, lack of resources, and production and training incentives, those are main issues to encourage pork commercialization along with quality, biosecurity, and traceability. This article aims to identify the dimensions, subdimensions, and variables for competitiveness and KM that exist in the literature and have been applied to the Swine Industry (SI) to identify and incentivize CSI profitability. Firstly, to design those theoretical dimensions, subdimensions, and variables proposed for competitiveness and KM in CSI, 90 articles were reviewed; they were classified, analyzed and consolidated. Among the most outstanding results, to measure the global pig industry (GPI) competitiveness, authors have focused on costs, revenues, and traceability which have been determined on the literature as environmental, profitability and Supply Chain (SC) design and management in SI. Secondly, this research complements the literature in designing KM dimensions, sub-dimensions, and variables to measure SI profitability. Six competitiveness dimensions proposed in this research were constructed from the literature: environment, SC design and management, cost-effectiveness, quality management, human resource management, and innovation management; and KM dimensions for agglomerations are four: profitability, SC design and management, KM capacity and innovation, and agglomeration performance. The research perspective is the validation of the dimensions in other industries.