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PERFORMANCE ANALYSIS OF GLOBAL VALUE CHAINS: A PROPOSAL OF INDICATORS FOR AQUACULTURE IN BRAZIL

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Tilapia is the most farmed fish in Brazil, with several poles of production dispersed in all regions of the country, each presenting significant differences in terms of production volume, processing and input structure, governance and division of value added between the agents. Therefore, the research purpose is to understand what factors influence for such differentiation of economic results between different poles of production and their respective value chains.

Based on the Global Value Chain (GVC) approach, this research aims to define a set of indicators and then to construct an index capable of comparing the performance of different tilapia production zones, with reference to the six dimensions of the CGV. In spite of making possible a holistic analysis, the six dimensions of the GVC (i.e. Input-output structure; Governance; Upgrading; Local institutional context; Industry stakeholders) are essentially based on qualitative and subjective data, which makes difficult comparisons between different value chains. Thus, the first challenge of this research is to develop indicators that correspond to these dimensions of the GVC analysis. From these indicators, mostly qualitative, will be elaborated a quantitative index capable of measuring the performance and/or potential performance of the production zones of tilapia and their respective agents.

The research methodology predicts the use of fuzzy logic in order to mathematically translate the qualitative /subjective information that will be collected in the field with the value chain agents and consequently to consolidate a quantitative index that is able to compare producers and value chains. As a result, it will be possible to identify the factors that influence the economic performance of producers and their value chains. In addition, this model of performance analysis of global value chains could be used in other aquaculture chains or even in other economic sectors, supporting strategic orientation at the level of public policies or of companies and producers.