PGMacro for sustainability: a practice of planning and management and its visual artifact

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Organizations need to search performance models more systemics and this organizational change demands the development of specific strategies to encourage interaction among organizational subjects in environments favorable for the creation of new knowledges (STRAUS, 2002; HOLMAN, DEVANE, CADY, 2007; PAQUET; WILSON, 2011). Concepts of governance (interactions among political society, civil society and market) and of co-governance (use of organized ways of interactions for management purposes) involves search for agreement between the parts from collaborative practices that has sub-estimated the core importance of the heuristic learning (PAQUET; WILSON, 2011) facilitated by visual artifacts characterized by a prevalence of holistic and immediate information (MEYER et al., 2013). "PGMacro", also known as 'Macroeducação', is a participatory planning and cooperative management method that helps the establishment of a co-governance build by the collective, focusing people and outcomes, developed in Embrapa (Brazilian Agricultural Research Corporation) (HAMMES, 2012; HAMMES; ARZABE, 2015). The foundations of "PGMacro" were built in the environmental management area to work the concept of sustainability. The method is based on the perception that complexity is easier noted from different points of view (panoramic and collective vision) and uses several visual artifacts (constructed images, such as drawings, maps, models) as a way of composing circuit relationships between people and their ideas in a creative and interpretive process, creating 'materiality' for joint analysis.

To present the structure of "PGMacro" method, three figures were made that aims a) synthesize its stages and components; b) demonstrate how governance is established in different stages; and c) what are its effectivity, efficacy and efficiency indicators.

The stages and components of this method are presented in Figure 1. The stage "Awareness" involves partnerships articulation and the definition of a collective actions chronogram, outlining the roll of each representative. It involves design a process map - a visual representation of a process that defines the order of activities and gives participants a sense of how these activities fit into the larger context. The advertisement of the proposal aims to promote engagement and transparency. At stage "Rebuilding", the involved ones "reread" the individual knowledge following criteria of collective interpretation, building a collective concept of sustainability. The collective construction occurs from the interaction of individual concepts by creating an abstract representation (drawing) and consensus among peers. So the sense is made collectively and interactively, allowing the leveling of knowledge and a common language between the partners. According Straus (2012) having a common language is crucial. All the stakeholders must agree on a language of process in order to be able to design a common way of working together. This stage promotes an agreement within the group and allows the rising of more innovative strategies to be used at stage "Suitability", where the transformations are made in an experiential process of internalizing knowledges from action (learning by doing). Finally, "Habituation" is characterized by providing monitoring and safeguard of achievements, consolidating them following collective evaluation multilevel (management group, multipliers and local community). Governance it's established in each stage, as per Figure 2, and the effectivity, efficacy and efficiency indicators (Figure 3) measure its performance. This practice it's based on combining several ideas that will create a complexity, which will be simplified once again, without returning to the beginning, but creating something new and feasible to be done - innovative strategies as 'emerging properties' in a spiral movement.

GMacro is a complex method that may be synthesized using visual artifacts (diagrams), which will make comprehension easier as it allow the reader to "walk around" this method in a small visual

place that comprises all of its parts (stages and components). Thus, the reader can train its perspective (particular), referring to a method's stage, for example, and a perspective more systemic (considering the stages in a group) without getting out of the figure, because it ranges both the particular and the general. It's within this perspective that the method works, from the individual/particular/simple to the collective/complex and from the complex to the simple with the help of visual artifacts that allow a creative and interpretive process, creating 'materiality' for joint analysis.

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