

EXPANDED ABSTRACT

Associative Capabilities Index: theoretical construction and methodological proposal for Solidarity Economy organizations

Objectives

The main objectives of this investigation were to elaborate the concept of associative skills, and to design and apply a methodology to calculate their level of capacity.

Design

The construction of a concept of associative capacities and the design of a methodology to calculate the levels of these capacities have been the main reason for this study, which took the Tsáchila ethnic group as the unit of analysis. This indigenous group is based in the canton of Santo Domingo in Ecuador, and has economic, organizational, educational and cultural limitations that put at risk their survival as an ethnic group.

When applying the research on associative capacities to this ethnic group, the attempt was made to identify the strengths and weaknesses of the solidarity in their economic relations, so that members of the group can change their deficit situation towards a scenario of growth and organizational maturity — one which foments their environmental, agricultural, tourist and cultural potential, through associative ventures, so that they can improve their living conditions, elevate their self-esteem and cultural identity, and strengthen their stability within their economy of solidarity.

The research design was planned by taking into account the three phases that make up the present study. The first phase begins by exploring, describing and comparing the proposals of Martha Nussbaum and Amartya Sen in their theories about capabilities. The first author describes a person's set of possible functions which he/she can choose for him/herself. An understanding Amartya Sen's Capabilities Approach gives one an underlying theoretical framework to work with that recognizes the importance of the chosen functions, and point to the fact that these come to be regarded as of more worth than others, according to the different contexts in which individuals develop. This phase concludes with the definition of the term associative capacities, which allows an adequate understanding and use of this expression throughout the present study.

The second phase is also associated with a descriptive and transversal design. In order to construct the methodology for the calculation of Associative Capability Indexes, existing

methodologies were taken for reference purposes, validated and used — methodological procedures such as those used by the United Nations for the calculation of the Human Development Index, as well as the Venezuelan methodology established in the Methodological file: Human Development Index. The dimensions and indicators that are established to calculate the index of associative capacities should respond to the reality and needs of the group to be studied.

The third phase is that of application. It maintains a descriptive trans-sectional character, because it is through the calculation of indexes of associative capacities that strengths and weaknesses are identified, and comparisons of groups, subgroups and individuals are developed, which allows the capacities to be described and measured.

Methodology

The construction of a concept of associative capacities and the design of a methodology to calculate the levels of these capacities have been the main reason for this study, which took the Tsáchila ethnic group as the unit of analysis. This indigenous group is based in the canton of Santo Domingo in Ecuador, and has economic, organizational, educational and cultural limitations that put at risk their survival as an ethnic group.

The first phase of the study consisted of structuring the concept of Associative Capabilities. The most relevant aspects of a bibliographic review were analyzed from multiple perspectives, in order to support a concept which, although it is understood and used, does not yet have an official and distinctive definition.

For the second phase, the design of the methodology for the calculation of the Indexes of Associative Capacities (IAC) followed a process of induction, deduction and analysis — the calculation method of the Human Development Index (HDI) that has been used since 1990 by the United Nations Development Program. This calculation method, which serves for reference purposes, is based on the theory of human capabilities of the economist Amartya Sen. Once the IAC methodology had been designed, its functionality was tested with pilot data to correct imperfections. Finally, a standard procedure was obtained to calculate the indexes of each of the dimensions and their corresponding indicators, whether by groups, subgroups or individually. Each variable gets a certain score — a higher score for a more favorable response.

For the third phase, the methodology's main input for calculating associative skills lies in the information obtained from each researched participant. This study was based on a survey whose questionnaire in the end was comprised of twenty-five specific questions that inquire about a favorable or unfavorable position. The selected sample reflects a convenience-based sampling, a non-probabilistic survey technique, useful for the advantageous accessibility and proximity of the subjects to the researcher. The convenience-based sampling was combined with discretionary

sampling. The latter is useful in that it makes it possible for the researcher, on the basis of his knowledge and professional judgment, to select the units that will be part of the sample.

Approach

In order to evaluate the associative capacities, it is first necessary to determine with precision the variables that affect the process. In addition, it is necessary to identify which categories favor the conditions of associativity, such as knowledge, communications, relationship, leadership and management, among others.

After having applied this methodology in the Tsáchilas communes, it is held that the calculation of the indexes of associative capacities makes it possible to determine the consistency of any associative group's social interaction, that the indices obtained make it possible to establish individual and collective strengths or weaknesses, and that based on this it is possible to design plans for improvement that not only guarantee the associative group's permanence, but also boost its development.

Results

The definition of the term associative capacities — the capacities or set of skills that every organization requires for its proper functioning — allows an adequate understanding and use of the term throughout the present study.

Regarding the methodology developed, the calculation formula is as follows:

$$\text{Associative Capabilities Index} = \frac{\text{Real value} - \text{Minimum value}}{\text{Maximum value} - \text{Minimum value}}$$

The number of cases of each item is multiplied by its score, generating a result. The sum of the four results of the items represents the Real Value. The maximum value and the minimum value are theoretical values that represent the hypothetical possibility that all the answers are located both in the item with the highest score (4) as well as in the item with the lowest scored (1).

In the example below (see Table 1) there were 70 surveys, distributed equally among seven communes. The maximum value would be 280, the minimum value would be 70, and the real value is 236.

Table 1. Model of contingency tables for the calculation of IAC

Ítems Score	There are hardly any conflicts [4]	There are occasional conflicts [3]	Fairly frequent conflicts [2]	Thre are frequent conflicts [1]	Total
Commune: Peripa	4	3	2	1	10
Los Naranjos	5	4	1		10
El Poste	7	2		1	10
Cóngoma	7	3			10
Chigüilpe	5	2	2	1	10
Otongo Mapalí	6	3	1		10
El Búa	7	1	1	1	10
B. Total cases	41	18	7	4	70
C. Weighing (A*B)	164	54	14	4	236

ELABORATION: the Authors.

After applying the formula, the result will be a maximum score of one (1) and a minimum of zero (0). The equivalence of the scores obtained is interpreted on the basis of a Likert scale.

The application of this methodology using the field results of the Tsáchila population produced a score of 0,64 (average) as the index of associative capacities of the Tsáchila nationality, a result that is consistent with its social, economic and cultural reality. Nevertheless, intervention is necessary so that at the level of communes they can develop enterprises of an economy of solidarity, in which solidarity practices are fomented and their associative capacities are fully developed.

Limitations of research

The main limitation of the work carried out with the Tsáchila population was that of the four dimensions, only three had four indicators, unlike four others of the seven communes.

Implications

The versatility of the method for calculating indexes of associative capacities allows its application in the study of various groups or organizations simultaneously, allowing the disaggregation of results for each of the groups analyzed.

The standardization in the IAC's calculation procedure facilitates the production of individual indexes (by indicator), as well as group indexes (by dimension) to carry out precise analyses that are adapted to the particular needs of any organization. In addition, its design can be used for various forms of organization, whether or not they belong to an economy of solidarity.

Practical conclusions and original value

The present work made it possible to delimit with precision the theoretical framework related to associative capacities, to establish a methodology of calculation, and to apply it in a given population (the Tsáchilas).

The dimensions and indicators that were established to calculate the index of associative capacities, responds to the Tsáchila ethnic group's own reality and needs, and were built on the foundation of a diagnosis of its current situation and its historical antecedents. Due to this, dimensions and indicators must be established for each new group, according to their reality.

KEYWORDS: Associative capabilities, Solidarity Entrepreneurship, Solidarity Economy, Local Development.