



# **Strategy in order to protect the Chicapa River basin in Saurimo City through communication management**

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**Abstract:** Currently identifying, valuing and proposing solutions to mitigate environmental problems are a priority both globally and locally. To extent that new avenues for work in this direction are being exposed, this path is advanced in favor of a better quality of life for the population and the conservation of the planet for the lives of future generations. Although there are different alternatives directed to this objective, there are still difficulties regarding the knowledge and conduct related to this theme. In the process to solve these problems a strategy is elaborated by the authors, in order to contribute to the environmental education of the students at School "Amor do Povo" to take systematic actions to care and conservation the Chicapa river basin in Saurimo City, through the management of communication.

**Keywords**—*Chicapa river; environmental, education; deterioration;*

## **I. INTRODUCTION**

In order to the extent that man knows the environmental problem better, he becomes aware of it, until he becomes aware of the importance of his action to improve his environment, then he is already in a position to attack actions, to do, in favor of his environment, so it will also bind to the pillar learn to do.

As referred from [1] to [5], this conception integrates within itself all that concerns human, economic and social development, the environment in a holistic way as one of the ways to achieve sustainable development. Not only does it conceive environmental education for the protection of the environment from the natural point of view or as an instruction for responsible behavior for the natural environment, it is also oriented towards the creation of a consciousness that includes the relationship between men and men with society. sees the relationship between men as an essential factor in the quality of the environment that is much more than nature or natural ecosystem, is a complex system that incorporates the historical-cultural heritage, the individual and social human being, social relations, and culture as a mediator between man and nature.

In this sense, it plays an important role in the thinking and behavioral styles of people and communities, science, education and culture; but above all the integration of these and other factors of locality through the application of strategies, programs and projects with the participation of all. The accumulated experiences

directed to community work tend to: the satisfaction of subsistence needs (food, construction, health and environmental protection); needs for knowledge, affection, feeling, participation, recreation, identity; and especially the protection of the natural, social and cultural heritage of the community.

This requires the development of environmental education to provide information and knowledge about the causes and effects of these problems, offer alternative solutions to environmental problems, as it contributes to sensitize individuals with the application of solutions to problems.

To achieve these finalities, communication management occupies a special place, since in this process the presence of two common essential elements in its content is identified; the projection, development and evaluation of actions and activities in function of the social object and the relations that are established between the components.

Therefore, the projection, development and evaluation of actions and activities for environmental education must provide a dynamic succession of phases through which the processes of planning, organization, execution, control and evaluation, which are carried out to meet the socially defined objectives, pass through, where communication is essential.

The authors of this work conducts an investigation related to the basin of Chicapa River (see Fig. 1) in Saurimo City and the “Amor do Povo” School of Teaching, located in this locality, and elaborates a strategy for the protection of the Rio River Basin “Chicapa”, where communication management occupies a special place. In the development of this work the authors use a system of theoretical level methods as the synthetic analytical, and the deductive inductive for the determination of the theoretical budgets that support the communication management for the protection of the river basin, and the modeling for the proposed elaboration to contribute to the problem solution.



**Fig 1: Chicapa River. Source: [www.google.com](http://www.google.com).**

In a detailed way the synthetic analytical: for the study of the processes of management and environmental education, since it allows an interpretation and to make the conclusions of the process of theoretical systematization, the deductive inductive stops from the components of the processes and their unity as a whole, reach conclusions and criticize and take inquiring positions allow a better compression of this theme.

## **II. DEVELOPMENT OF THE ENVIRONMENTAL STRATEGIE**

There is a need to multiply efforts and actions to develop a culture that encourages the implementation of new environmental strategies and reorients existing ones; recover the abandoned positive experiences; to speak out for the materialization and execution of projects, programs and actions that promote profound and progressive changes in the scale of human values and their relationship with the environment.

It can be said that communication management allows planning, executing, directing, controlling and evaluating processes, since it allows a very general view of aspects involved in the coordination of human groups and limited resources to achieve goals.

Therefore, in the elaboration of a strategy to contribute to the protection of the Chicapa river basin in the municipality of Saurimo, communication management is needed to synchronize aspirations and goals. efficiency in meeting this objective.

The actions that generally conform the proposal include activities with objectives aimed at influencing the individual behavior of young people to the fundamental elements that shape the environment with which they relate; the establishment of interpersonal relations with their companions in the accomplishment of numerous activities of collective character and for other members of the community with whom they interact, where the communication occupies a special place.



**Fig 2: Contamination by hydrocarbons and car wash oils. Source: Authors.**

One of the authors of this work is a teacher at the School “Amor do Povo” in Saurimo City, which allowed all of the researchers to conduct an investigation that showed that the students of this school have limited knowledge about the environmental problems of the basin of Chicapa River, besides that their conduct regarding the protection of this territory is not adequate, which is evidenced in its trigger newspaper which contributes in general to higher rates of contamination and deterioration of the area.



**Fig 3: Contamination by solid waste. Source: Authors.**

Strategy as a scientific result has the following requirements:

- Firstly, the conception with a systemic approach in which they are elaborated. This strategy elaborates by its practical significance in a shorter time, optimizing resources for the transformation of the object of study, from a real state to a desired state. This type of outcome implies planning in correspondence with the fulfillment of objectives, both general and specific, corresponding to each step.

This planning is conceived taking into account a dynamic balance between the organization, execution and control of educational actions and the management of communication. This supports the systematic pursuit of possibilities and resources to address students' real needs.

- It is structured in phases or stages related to the actions of diagnosis and planning, orientation, execution and control.
- Responds to a contradiction between the current and desired state of a concrete object if located in space and time it resolves through the programmed use of certain resources and averages.
- Its dialectic character given by the search for the qualitative change that will take place in the object (real state to desired state), by the constant adaptations that can be triggered by it and by the articulation between the objectives (pursued goals) via instrumented to achieve them, among others.



**Fig 4: The reddish-colored acidic waters of Chicapa River due to solid waste. Source: Authors.**

In Fig. 4 can be seen the reddish-colored acidic waters of Chicapa River due to solid waste, that is the solid waste cause the pollution of the water with acid substances, it is an important ecological problem.

### **III. COMPLIANCE WITH THE REQUIREMENTS A SCIENTIFIC RESULT SHOULD HAVE**

This strategy meets the requirements that a scientific result should have according to:

Feasibility: for the real possibility of application in the context of the Saurimo “Amor do Povo” Teaching School for the protection of the Chicapa River watershed.

Validity: given by its structure and reasoning that allows the profit of the goal for what was conceived.

Relevance: given its importance, its social value and the real needs it responds in practice

Applicability: Due to its structure and specific orientations for the development of each of the conceived steps, it offers sufficient clarity to allow its implementation by another person, as well as its contextualization.

Originality: It is given because its actions are creative and offer a novel alternative to the profit of the proposed objective.

Generalizing character: The integration of the strategic trigger presented by its applicability and viability allows under normal conditions the extension of the result to other similar contexts.

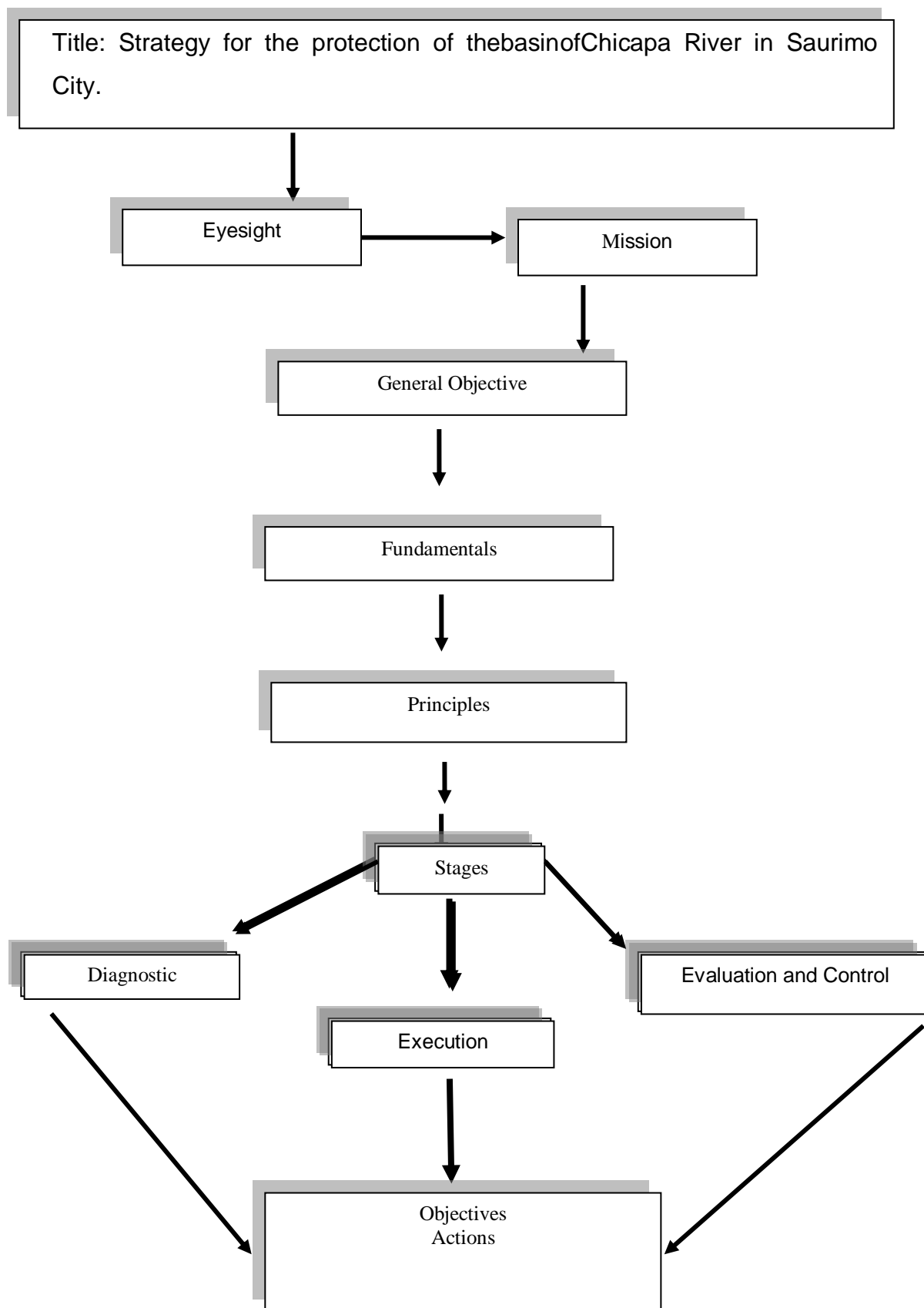
### **IV. STRATEGIC PLANNING WHERE FUTURE ASPECTS ARE TAKING INTO ACCOUNT**

Strategic planning takes into account strategic planning in which future aspects that are evident in the mission and vision are planned.

Mission is the purpose or reason for the strategy's existence.

The vision expresses the fundamental aspirations and values of the strategy.

The strategy presented presents the following structure, shown in Fig. 5.



**Fig 5: Strategy for the protection of the basin of Chicapa River in Saurimo City. Source: Authors.**

Mission: To provide ways and actions that, through communication management, contribute to the environmental education of the students at the School “Amor do Povo” in Saurimo City, to protect the Chicapa River watershed.

Vision: The students at the School “Amor do Povo” in Saurimo City, raise their environmental education so that they can contribute to the protection of the basin of Chicapa River.

General objective: contribute to the development of environmental education, by managing the communication of students at the School “Amor do Povo” in Saurimo City, for the protection of the Chicapa River basin.

## **V. GENERAL FOUNDATIONS OF THE STRATEGY.**

The strategy is based on the dialectic-materialist conception, which allows to objectively value each educational action, in each of the stages, from the environmental education, the communication management and the main outlined sketches to reach this goal of the school action in the school, profit from the integral formation of the new generations. Given its affinity with other contents and phenomena related to the surrounding world in which students are unwrapped within the framework of the locality.

The actions included in the strategy take into account the main elements of environmental education and communication management and are aimed at contributing to the development of environmental education, in such a way as to ensure a consistent attitude that is objectively manifested in the daily actions of students regarding the protection of the Chicapa River basin.

The proposed strategy was conceived for its execution in the short, medium and long term and with a fully functional character, therefore the actions that are structured have definite objectives, but besides their flexibility they can be constantly modified, starting from the results that will be obtained in your application and that can be detected through its control.

It should be noted that each of the stages that make up the strategy has specific objectives that are subordinate to the overall objective of the strategy.

The actions take into account the students' own characteristics to which each of them is oriented, according to the general objective; also presuppose the active participation of all the subjects involved. The design of these actions also takes into account the characterization of the locality. Strategic action propitiates the development of the ability to regulate behaviors before different important aspects of the relation with the environment, in order to obtain behavioral changes of the students.

Step 1: Diagnosis.

Specific objectives:

- Verify the real state of environmental education of the students of the Professors School “Amor do Povo” in Saurimo, for the protection of the Chicapa River watershed.
- Identify potentialities with respect to internal and external factors to achieve the overall objective of the strategy.
- Ensure the preconditions for implementing the strategy.

Actions:

- 1- Apply group interviews to students to collect information related to their knowledge about environmental education, care and conservation of their locality, the environmental conditions of the Chicapa River basin.
- 2- Debate of problematic situations regarding environmental education, the care and conservation of its locality, the environmental conditions of the river basins, especially the Chicapa River, which enable the position strip regarding the conduct for its care and conservation.



3- Investigation of the main factors of the community to raise awareness and to find resources with which they can support the implementation of the actions of this strategy.

4- Search the existing materials in the library to work with the themes corresponding to the strategy.

5- Creation of a showcase for the dissemination of the results of the implementation of the strategy.

6- Action planning for the rest of the steps in correspondence with the actions already taken so far.

Step 2: Execution.

Specific objective:

- Implement planned actions for the protection of the Chicapa River basin.

Actions:

1- Lectures by environmental experts, addressing the environmental situation of the territory, the locality and specific aspects of river basin protection.

2- Incorporation of the relatives of the students of School “Amor do Povo” to the chats about the environmental problems of the basin of Chicapa River: the polluting outbreaks, the wrong actions that pollute the locality, their impact on community health, measures to be taken, etc.

3- Conducting advertising campaigns for environmental sanitation of the Chicapa River basin.

6- Conducting advertising campaigns for gathering raw materials.

7- Incorporation of reforestation activities in the territory of the Chicapa River basin.

8- Characterization of the most critical environmental problems of the Chicapa River basin, where the school is embedded, in which family members and the community have an impact.

9- Preparation of reports and presentations for their presentation in different spaces where the essential aspects of the protection of the Chicapa river basin are reflected.

10- Carrying out campaigns to disseminate environmental issues for the Chicapa River basin, through loose materials, where explanations and information on the subject are offered.

11- Registration of information obtained about the results of different activities developed with students (their participation, assistance, motivation, level of commitment to tasks and willingness to perform among others).

12- Exchange with students from other schools where they also develop strategies for the development of environmental education.

Step 3: Monitoring and Evaluation.

Objectives:

- Assess the achievement of the crossed out objectives for each of the steps.

- To evaluate

of the objective results of the strategy in meeting the outlined objective.

- Redesign actions based on outlined compliance.

Actions:

1- Group interview to students

2- Application of observation to the activities corresponding to the implementation stage, to observe changes in the development of environmental education and the protection of the basin of Chicapa River.

3- Preparation of a systematization record of experiences.

4- Redo actions in each of the stages, according to the results that will be achieved.

## **VI. CONCLUSIONS**

Due to importance of human action to improve the environment, this strategy is a proposal which profit from the integral formation of the new generations. Strategic action propitiates the development of the ability to regulate behaviors before different important aspects of the relation with the environment, in order to obtain behavioral changes of the students. Given its affinity with other contents and phenomena related to the surrounding world in which students are unwrapped within the framework of the locality. The design of these actions also takes into account the characterization of the locality.

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