



Development of projects for sustainable residential food production

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1 INTRODUCTION

There are several needs of society, bringing some questions regarding the possibilities of projects that bring improvement of the community. Projects when implemented and that can bring individual and collective training and develop activities that meet the needs of interprofessional training of the social, economic and environmental sphere.

The introduction of enabling projects permeate actions and impacts on both social, economic and environmental systems, bringing new opportunities and sustainable alternatives for local and/or regional development. How to idealize a project for food production in a sustainable way for low-income people? The complex reality nowadays, makes projects even in their complexities, seek to respond to the demands of specific regions.

The study of the feasibility and possibilities of sustainable residential food production occurs due to the need to serve a community located in the city of Cachoeira - BA, a city that brings a wide cultural, economic and historical wealth of the entire Bahian Recôncavo. But it does not reduce areas of poverty, economic and social inequalities, with a significant portion of the population being precarious living conditions. The creation of projects in the community aims to mitigate these differences with the purpose of promoting individual and collective development. Inserting itself in the regional reality as a vector of social transformation.



Projects to serve the needy society and ways of producing food begins based on the vision and mission conceived and presented to students of the Administration course of the Adventist College of Bahia - FADBA, which proposes to continue the regional insertion, evidencing the values of citizenship in the critical understanding of its strategic role in the regional and socioeconomic context, contributing to a collective and individual transformation.

Many economic and social difficulties experienced by the local community would not provide some families to take advantage of the development opportunities of the region. This project aims to strengthen the strengthening of the construction of new social actors, capable of multiplying the knowledge that promotes equality, professional development, and the possibility of sustainability.

Project began with research to analyze possibilities of residential food production in a sustainable way and that could bring advantages to low-income families. Starting tests to verify feasibilities, disadvantages and application possibilities.

The project started in July 2022 and is still in the study phase to be able to be implemented with the community. The project aims at the production of vegetables for residential consumption. The idealization of the project started then with The Residential Aquaponics - Integrated Production of Fish and Vegetables

Residential aquaponics project is based on food production. The word "aquaponics" is derived from the combination of "aquaculture" (production of aquatic organisms) and "hydroponics" (production of plants without soil).

Initial idea of the project is the training of families for the production of their own food (fish and vegetables), in addition to socio-environmental awareness, respecting the environment with up to 90% of the reduction in water consumption, compared to conventional horticultural systems.

The tests performed present some difficulties and challenges, but it brings several sustainable advantages and with a socio-environmental vision bring advantageous points for the implementation in a poor community.

The advantages of aquaponics design are:

- Total reuse of water, avoiding its waste and drastically reducing, or even eliminating, the release of effluent into the environment;
- Food production technique with low water consumption and that do not generate effluents that contaminate our rivers;
- Food without the use of pesticides, providing a healthy diet for families;
- Possibility of extra income for families, with the sale of vegetables and fish;
- Pedagogical didactic tool for the teaching of children;
- Take adolescents or families out of idleness;
- Training and individual and collective learning.



Aquaponics has the purpose of providing the production of food to support a family with vegetables of the most varied, and fish. The joint production brings benefits and advantages, because in the end, the result is the diversity of vegetables and the consumption of fish, and can be expanded for the intense cultivation and sale of production, bringing an extra income to the benefited family. Initially the project is based on serving 10 families consolidating the practice and involvement of the community, the project aims to reach as many people as possible, through the availability of resources.

The tests carried out in the pre-project already demonstrate the feasibility of implementation, as well as positive results for sustainable residential food production. At the end of the pre-tests, the project can be expanded and applied. Because the teaching and training for the execution of residential aquaponics will benefit those involved, because so far, it has been possible to have results with the production of several vegetables such as lettuce, cabbage, pumpkin, ora-pro-nóbis, watercress, mint, mint, chives, taioba and tomatoes. Associated with the production of fish, which in three months have already left the fingerling faze and already has on average 20 cm already being in the initial phase for consumption. Being your best stage with ideal size and weight, from the sixth month.

Aquaponics as a project for sustainable residential food production brings fundamental points that could be visualized in the initial pre-test. The study for the implementation and future execution of training, guidance and execution of needy families. Even in its study phase it already presents the feasibility, with several benefits to those involved. Both students of the administration course of the Adventist College of Bahia, as well as the residents of the community where residential aquaponics are intended to be implemented.

Several other benefits and projects already arise with the test and studies phase, being something that will have higher proportions than seen until the present test. Thus being able to soften the differences, promote individual and collective development as a vector of social transformation. The idealization of residential aquaponics as a project for sustainable residential food production opens up several possibilities for studies and applications in various realities and specific regions.



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