

NAME OF PROJECT

Aquaponics for my community

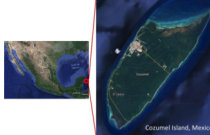
LOCATION

Cozumel Island, Quintana Roo, Mexico

KEY ISSUE

Having insufficient economic resources, the diet of families in rural areas of Cozumel does not cover their nutritional requirements. Lacking urban services, the use of water is limited and indiscriminate, contributing to the pollution of the island's freshwater reservoir.

RELEVANT SUSTAINABLE DEVELOPMENT GOAL/S



PROBLEMS

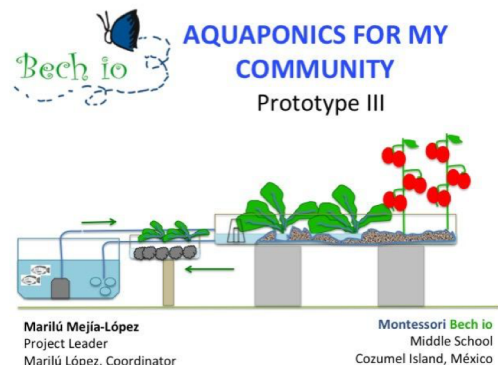
Approximately 100 thousand people live in Cozumel, of which at least 30% live in rural areas with no access to potable water. Many of these families have limited access to healthy foods and their economic situation is unfavorable. Being an island, Cozumel's fresh water is also a limited resource that we must take care of and is currently at risk from pollution and excessive extraction.

SOLUTION

Install non-electricity aquaponic systems in areas where there are no urban services such as electricity and potable water, improve the living conditions of families by providing food security and teaching them sustainable water management.

OBJECTIVES

Provide non-electricity aquaponic systems to vulnerable families of Cozumel Island, with which they cultivate quality food (vegetables and protein) that guarantee a healthy diet and improve their economic situation, making a sustainable use of water.



STAKEHOLDERS

Primary: Families in vulnerable urban areas and rural zones of Cozumel; families in the urban area of the island; farming community of Cozumel, as part of its transfer towards sustainable agricultural practices. **Secondary:** Restaurants and the wider community, that will be able to buy the products derived from the aquaponic culture; Municipality of Cozumel.

Sustainable Water Management and Food Production

Sustainable production of vegetables and protein Research and Prototype II



First Place Science Award 2017 Prototype I



Project presentation at the YIF Showcase, March 2019



RESULTS

DIRECT RESULTS

- Sustainable production of food for self-consumption.
- Sustainable water management by using cyclic aquaponic systems.
- Economic empowerment of vulnerable families when marketing their production.
- Improvement of their quality of life.

BUDGET

OVERALL

\$20,000 USD

EXISTING FUNDING

\$5,000 USD

IMPACT ON COMMUNITY

- Food security of vulnerable families of Cozumel Island.
- Protection of the aquifer system of Cozumel Island.
- Conservation of the island's biodiversity by promoting the responsible use and consumption of natural resources, through sustainable systems.
- Strengthening the community.

REQUIRED FUNDS

\$15,000 USD

TIMELINE

2019		2020	
APRIL. Introductory workshop and selection of pilot families.*	MAY-JUN-DEC. Installation, training, and monitoring.	JAN-FEB. Evaluation of operability and expansion.	FEB-MAR. Result presentation to sponsors. Funding for Phase III.

STATUS

*Residents of rural areas; limited economic resources; farmers and non-farmers.

Phase I of the project consisted of the problem identification, scientific research around the aquaponic systems and the design of the prototypes. In 2017, our aquaponic prototype won the first place in the science fair. In 2018 we succeeded in producing organic lettuce, basil, tomato and tilapia. In 2019 the project was presented to the Governor of Quintana Roo State. The second phase involves the final definition of the project and the launching of the pilot stage.

CREDIBILITY

Aquaponic systems are a sustainable alternative that contributes to food security and sustainable water management in Cozumel. Since island systems are so fragile, this project contributes to their conservation based on the action of their own citizens.

“Do the right thing, even if they do not see you and, if they see you, teach them to do the right thing.”

Marilú Mejía-López

NEXT STEPS

1. Carry out workshops to sensitize people about the advantages of the aquaponic system as an alternative for sustainable consumption and adequate water management. *Rural and peri-urban areas were identified from state and municipal censuses.	2. Design and assemble aquaponic systems with water pumping without electricity and water filters, according to each family, based on prototype III. *Workshops have been held to know the general needs of the people.	3. Install aquaponic systems without electricity in the homes of five to ten vulnerable families in Cozumel. Phase I.	4. Carry out training workshops on the operation of the aquaponic system, vegetable cultivation and water management, sustainable agriculture, and ODS. Monitoring.	5. Evaluate the use and exploitation of the aquaponic systems of the pilot families.	6. Promote systems to the community according to the impact on the first group of families.
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CONTACT DETAILS

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