

BRAZIL



CETRA

This family-based agroecological initiative is led and inspired by feminist farmer Fátima Maria dos Santos, coordinator of the network of agroecological and solidarity markets in Ceará State. It supports egalitarian gender relations and promotes solidarity within socially integrated agricultural systems.

Map

The initiative is situated in the Jenipapo community, in the north-eastern region in the Caatinga Biome comprising Coastal Riverside Forest Vegetation on sandy soils. The Caatinga is comprised of xeric shrubland and thorn forest, with trees that shed their leaves in the dry season as well as cacti and grasses that are adapted to the aridity of the climate. Most vegetation experiences a brief burst of activity during the three-month long rainy season.

The impacts of climate change have lowered groundwater levels and farmers have realised that they must adapt their farming practices to survive and thrive in this semi-arid environment.



Context



Preservation of native species and conservation of water resources have been shown to enhance the resilience of local ecosystems.

The farmers of the rural Jenipapo community have access to relatively small areas of farm land and produce most farming inputs agroecologically within the agroecosystem, without mechanization. Land access is distributed equitably by the community association,



Description

The agroecosystem is managed by Fátima with the collaboration of her sons and daughters. When presenting a course about Multiplier Agents in Agroecology held by Study Centre for Work and Advice to Workers, (CETRA) in 2004 she realised she was already a **practicing agroecological farmer**. Since then she has more consciously applied the principles of agroecology in her farming practice, **retaining native vegetation** and developing **agroforestry** systems. The family has a large **cistern** that is filled with rainwater in the rainy season to support subsystems of:

- **Agroecological vegetable production;**
- **Swidden and cashew trees;**
- **An agroforestry system** comprising forest, native and fruit trees, and crops such as cassava and beans.

Labour is supplied by the family itself. External resources were supplied by environmental projects for fencing and seedling acquisition. A **seed bank** has been created in the **Jenipapo community**, and the initiative contributes to and benefits from this.



2 hectares



Cassava, pineapple, tapioca, papaya jam, curcuma, eggs, flour, coriander, chicken, coconut, lettuce, lemon, passion fruit, tomato.

Trajectory

Pre-2004: Fátima produces vegetables and fruits on her small-holding

2004: Fátima attends a course on Multiplier Agents in Agroecology

2004 – 2020: Fátima and her family further develop their land following agroecological principles

2020: During the pandemic sales of fruits and vegetables are taken on-line



Results and Benefits



The initiative is part of the **Network of Agroecological and Solidarity Farmers** of the Curu and Aracatiagu Valleys territory and the Network of Agroecological and Solidarity **Markets** of Ceará. Fátima Maria dos Santos is part of the Rural Workers Women's Movement of the Northeast and one of the articulators of this **social movement** in her community. The experience of Fátima and other families was essential in the creation of the **community seed bank**.

The family has significantly changed its production process with **diversified, resilient and more autonomous agroecosystems**. Fátima expresses empowerment in her speech, she is an **experimenter and multiplier** of experiences and knowledge in the territory. It raises awareness about the **importance of the environment for the human being**, which reflects on how to farm in a more sustainable and sociable way in the community.

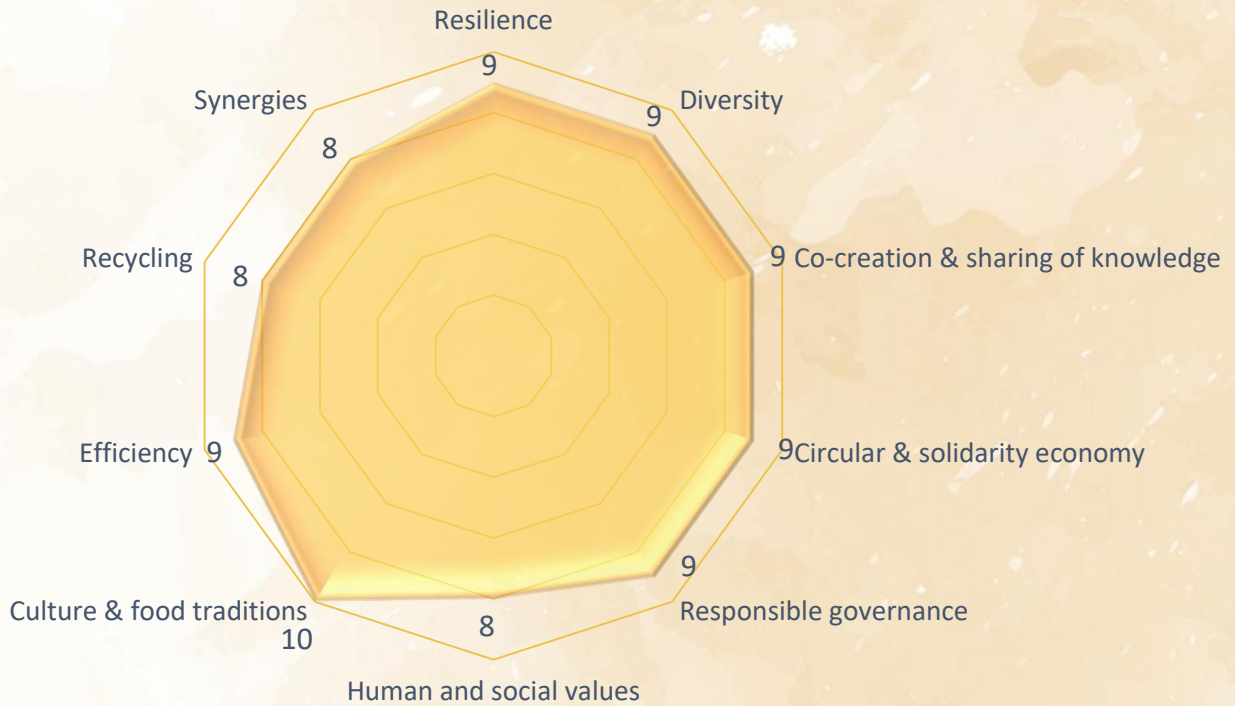


The initiative has **increased soil fertility, preserved of water resources, improved economic conditions and enhanced participation** of the community in agroecology and in other dimensions of social organisations. The initiative participates in various agroecological and solidarity markets such as Itapipoca and Fortaleza, in addition to the commercialization of agroecological products in the community.



The application of agroecological principles on the farm has **increased resilience** of the production system, **even in times of drought**, when the farm is still able to derive an income by selling its produce at markets. The initiative contributed to the development on an **agroecological booklet** 'Sharing Agroecological Knowledge'.

Lessons learned and reflected FAO principles



Resilience: 9

The subsystems are designed to maximise diversity. In addition to the production being larger by area and consortium planting generating more nutrient recycling, more biomass is returned to the soil, which enables it to recover faster from a disturbance.

Human & social values: 8

The initiative promotes egalitarian gender relations, defends women's rights and is part of the feminist movement. Women's position has been enhanced in the territory through debate on egalitarian gender relations within the farmers' network.

Diversity: 9

The initiative conserves native plant species, integrates multi-functional species in the production system, contributes to processing products of socio-biodiversity, and contributes to the rich food culture of the community.

Culture & food traditions: 10

The initiative promotes traditional food culture in the Itapipoca region, with emphasis on cassava-based foods and various vegetables, fruits and native plants used as foods and medicinal herbs. Local vegetables and animals produce healthy and high quality food.

Co-creation & sharing of knowledge: 9

The initiative is family- and community-based. It both contributes to and draws from local agroecological knowledge through farmers' networks, and has contributed a guide to agroecology for the local context.

Efficiency: 9

Agroecological practices such as pruning and nutrient recycling optimize natural resources and have reduced dependency on external inputs. Conservation of Creole seeds enhances resistance and retains diversity.

Synergies: 9

The initiative promotes the products of socio-biodiversity and is thus preserving the ecosystem. The ecosystems of farm are managed in ways that sustain them through drought cycles and generate nutritious food, creating synergies between conservation and food production.

Responsible governance: 9

The initiative's use of land and natural resources is guided by principles that govern agroecology and solidarity socio-economy within a family system based on egalitarian principles.

Recycling: 8

The integration between the subsystems of the agroecosystem promotes recycling. The initiative recycles inputs generated in other subsystems, such as soil fertilization using animal manure and animal feeding enhanced by diverse plants grown on the property.

Circular & solidarity economy: 9

The initiative sells its products in the agroecological and solidarity markets of Itapipoca and Fortaleza and is part of the Network of Agroecological and Solidarity Markets of Ceará. Produce is also sold within the local community

Contacts

Contacts:

CETRA Centra de Estudos do Trabalho e de Assessoria ao Trabalhador



Neila Santos
Luis Eduardo Sobral



+55 85 99947.8278/99185.3151
+55 85 99982.0259



Rua Capitão Gustavo
3842 / São João do Tauape
Fortaleza - Ceará

The Avaclim project aims to create the necessary conditions for the deployment of agroecology in arid areas.

For more information : www.avaclim.org

Financial partners:



FONDS FRANÇAIS POUR
L'ENVIRONNEMENT MONDIAL

Operational partners:



Contact :
agroecologie@cariassociation.org



Contact :
wouter.vanoosterhout@gmail.com

October 2020
Editing : CARI & EMG
Design : pikopiko.io
Photos credit : CAATINGA

