



THE ROLE OF HOUSEHOLD GARDENS IN THE FOOD Security of tacana indigenous communities

Traditional agricultural management and the prominent place that Tacana household gardens occupy

The Tacana traditional agricultural system is based on three management units: 1) the field (el chaco); 2) fallow land (el barbecho); and 3) the market garden (el patio). Each is distinct in size and purpose. Fields are larger pieces of land used for annual crops. Fallow lands are left to rest or planted with crops that demand less nutrients. Household gardens are small extensions, usually 700m², where a diversity of plants are cultivated close to the home. Household gardens with an area larger than 1000 m² allow for a greater number of plants, thereby increasing production and permitting the commercialization of any surplus to generate income for households. These results are based on the study of the Tacanas household gardens and the contribution of women to biodiversity conservation and household food security, which was carried out in 122 gardens in 14 of the 20 communities found in the Tacana indigenous territory.

Household gardens have many uses. First and foremost, they are a key source of food that contributes to the basic nutritional needs of Tacana families. They are also reserves for the biological and productive diversity of small-scale crops. In addition, household gardens have valuable social and cultural functions, providing areas for recreation, relaxation, and social exchange.

Importantly, household gardens are privileged places of production for women. It is the women of the communities who actively work and care for household gardens and decide on crop use and whether production is destined for family consumption or commercialization. Historically, women have worked in household gardens with a diversity of seeds and preserved a wide variety of plants. Such plants include the Walusa, an ancient Amazonian plant resistant to floods. While a small percentage of seeds are obtained from the local rainforest and other communities, most seeds are taken from the same cultivated patio plants.

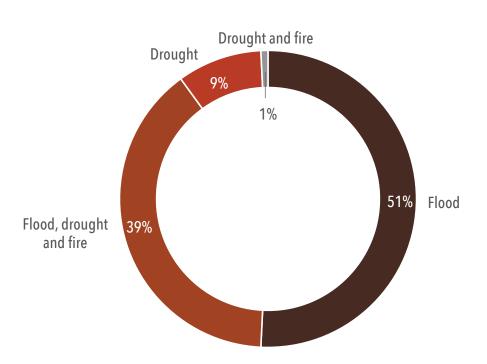


elma Solares/WC.

The exchange of seeds between families is a practice that strengthens the social fabric of the communities.

Tacana household gardens are also important because of their adaptive capacity to climatic phenomena, which reduce their vulnerability to climate change (increased risk of floods and droughts). The study found that 39% of the plants are resistant to floods, drought and fire, 51% to floods, 9% resistant to drought, and 1% resistant to drought and fire.

The agricultural management of Tacana household gardens has essential characteristics associated with indigenous territorial management, such as their role in community efforts to ensure food security. Household gardens also support the enhancement of the value of cultural practices and knowledge that highlight the role of women in productive activities, strengthen cultural identity, and promote family and community cohesion.



Environmental resistance of plants in tacana patios

NDIGENOUS TERRITORIAL MANAGEMENT



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The contribution of managed household gardens to food security and crop diversity

Eighty-three percent of Tacana households state that at least part of their daily dietary needs come from their patio. This confirms the patio's contribution to food security, ensuring a varied and nutritional diet for their families. Household gardens bring together a diverse range of plants - domesticated, wild, and semi-wild - for food, medicinal, ornamental, and craft purposes. One hundred and six species in total have been identified, of which 28 are those most cultivated. Fruit trees dominate – especially orange, grapefruit, mandarin, and lemon, but also coconut, cocoa, pacay, achachayrú, avocado, and banana trees. A variety of roots and tubers, chili peppers, and palms are likewise commonly cultivated.

In addition to plant cultivation, household gardens are places for rearing small animals such as hens, pigs, and ducks. These animals are an important source of protein, contributing to family subsistence and reducing the need to hunt wildlife. On average, each household keeps 20 chickens.

In addition to serving as places for the cultivation of plants and animal rearing, household gardens provide a good environment for smallscale food processing. The Tacana have developed local technologies to transform their produce to foodstuff. These include adobe ovens, sugar cane presses, and casava (yucca) graters. Additional special places are allocated for the deposit of by-product wastes that provide organic composting for plants.

The Tacana experience has demonstrated that problems affecting crops and plants – such as seed scarcity, plagues, and illnesses – have an influence on the quantity and quality of food consumed by families. An example of this is the reported reduction of average number of plant species in household gardens from 47 to 13 over the last 30 years. Faced with this loss of diversity, the study recommends the promotion of small-scale community seed banks, the exchange of knowledge between women, and organizational strengthening to develop household gardens as integral management units.

On the other hand, raising animals in the gardens presents problems of animal health, which can cause a high mortality. To address this problem, WCS veterinarians conducted training activities with most of the participating women. The implementation of health and hygiene best practices; the use of medicinal plants, vaccinations, and parasite control; and the improvement of infrastructure and animal feed have contributed to a significant reduction in the mortality rate of domestic livestock.

Telma Solares/WCS



HOUSEHOLD GARDENS

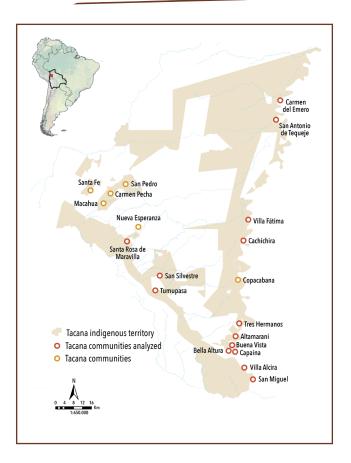
The household gardens of the Tacana people are veritable market gardens, where a great variety of fruits, vegetables, herbs, and medicinal plants are grown and domestic animals reared. These productive spaces are founded on the rich ancestral knowledge that the women of the communities transmit from generation to generation and are essential for the diet and nutrition of Tacana households.

The importance of managed household gardens for the diet and nutrition of Tacana households

- Cultivate and preserve of more than 100 varieties of patio crops used for food, medicinal, ornamental, and artisanal purposes.
- Provide an accessible source of protein through the rearing of domestic animals.
- O Contribute to the nutrition and health of households.
- Preserve traditional customs and practices passed down through generations.
- Offer a practical solution that strengthens communities' adaptive capacity in the face climate change effects.
- Provide benefits related to production, recreation, and social exchange.
- Strengthen the role of women in communities and promote social cohesion.

THE HOUSEHOLD GARDENS PRESERVE TRADITIONAL VARIETIES OF FOOD AND MEDICINAL CROPS THAT ARE FUNDAMENTAL TO THE FOOD SECURITY OF LOCAL HOUSEHOLDS

Communities of the Tacana indigenous territory



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