

BOLIVIA

ADAPTIVE TERRITORIAL MANAGEMENT



OXFAM



JANE BEESLEY/OXFAM GB

CONTENT

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ADAPTIVE TERRITORIAL MANAGEMENT

INTRODUCTION

The greatest achievement since February 2009, when **Oxfam and FUNDEPCO**¹ launched the “Gestión Territorial Adaptativa²” [GTA-Adaptive Territorial Management] Project has been its contribution to significantly reducing the number of families affected by floods; besides being prioritized six strategic plans within the Municipal Development Plan, under the premises of the GTA, including the Sustainable Water Resource Management, Environmental Control and Risk Management, which is a greater allocation of funds to these issues.

Data reveal that the average number of families affected a year before the project began - 6,500 - has fallen to an average of 400 families.

Another achievement was, without a doubt, the decision to prioritize a risk prevention initiative which focuses on prevention to deal with both natural and man-made environmental threats; these actions also take into account that Bolivia is currently going through profound political and cultural change with the main aim of including indigenous peoples who suffer the highest rates of poverty and malnutrition (over 65% in both cases), which increases the vulnerability of children, the elderly and women.

BACKGROUND

Bolivia, like other South American countries, is directly under threat from different natural phenomena, the

clearest example being the ENSO [El Niño], which periodically devastates sectors of the population. Flooding in 2006 cost the country over USD150 million and affected around 38,000 families.

The Project focused its work in the Municipality of Trinidad, in the Beni region, since it is located in the lowlands and is prone to flooding as it is crisscrossed by streams, lakes, wetlands, and is close to the River Mamoré (the longest in Bolivia); as well as human intervention such as: lack of or scarce basic infrastructure, incipient pluvial drainage system, inadequate street and bridge planning, little forethought for urban development and planning (settlements on the shores of rivers and streams), all of which conspire to make the region

¹ *Fundación para el Desarrollo Participativo Comunitario (FUNDEPCO) [Foundation for Participative Community Development] is a not for profit NGO which works to strengthen the population's capacities to achieve effective, sustainable, and equitable development, with equal opportunities. FUNDEPCO has ample experience in implementing humanitarian aid programs and developing disaster prevention and preparedness projects. Participative planning and territorial management are the fundamental pillars used to accomplish objectives, with efficient, effective and sustainable processes in time.*

² *The definition of Adaptive Territorial Management [Gestión Territorial Adaptativa (GTA)] refers to the set of resources, organisations and potential that the Municipality of Trinidad already has or has developed as a natural response to events and physical changes that have arisen over the last few years; however, these capacities, in order to be effective and sustainable in the mid and long term, need to be backed up by guidelines, policies, programmes and projects articulated through planning instruments, such as the Municipal Development Plan and the Territorial Regulation Plan.*

highly vulnerable to climatic phenomena. The Municipality of Trinidad is an urban and rural zone with a large indigenous presence and high poverty rates.

One of the main problems identified was the lack of capacities within local public institutions to comprehensively

face environmental issues affecting Trinidad, coupled with the lack of regulations, adequate instruments and methodologies to do it. It was also observed that social and cultural issues, such as high levels of social, cultural and economic vulnerability of those most exposed to environmental risks, lead to

an increase in those same environmental risks.

WOMEN USUALLY ARE MORE AT RISK THAN MEN, SINCE THEIR ACTIVITIES ARE OFTEN ASSOCIATED WITH JOBS IN LESS SECURE CONDITIONS.

GTA DESCRIPTION

The “Adaptive Territorial Management” (GTA) project began in 2009 having a duration until 2013.

Its main objective was to promote implementing the GTA approach in the Municipality of Trinidad in the Beni department, as a territorial planning and

regulation mechanism to recover traditional methods of adaptation and land management in areas susceptible to flooding.

The Project focused its work in the area of Beni, which is the country’s second poorest department but which also has the most biodiversity. This

meant that even though no great urban settlements have sprung up and there has been little diversification of the region’s productive activity, it is a unique region to work in and implement the GTA, which will change the inhabitants’ relationship with the land and reduce poverty and vulnerability.

Surface area and population, Municipality of Trinidad

	Surface in hectares	% Surface	Population 2001	Population 2010	% Population
Urban	4.358	2.44%	75.540	92.225	94.47%
Rural	175.453	97.56%	4.423	5.400	5.53%
Total	179.838	100%	79.963	97.625	100%

Oxfam-FUNDEPCO were in charge of the Project due to their interest in developing an Adaptive Territorial Management system.

Work was also done with the **National Centre of Competence in Research (NCCR)**, a scientific cooperation consortium of universities and institutions from Switzerland and some African, Asian, and Latin American countries, which promotes scientific research. Their support was focused on providing technical capacities to support the accomplishment of the intervention’s objectives.

The social and political actors involved in developing this project were selected depending on their advocacy capacity and the role they play in municipal administration. The selection criteria were as follows:

- **Institutional capacity:** Actors who have more or less advocacy capacity where their relationship could be direct, complementary or subsidiary. Some are related to public or private service providers, or with socio-cultural organizations.
- **Political influence:** Even though the method used by the project was to give priority to the relationship between social participation and technical criteria, this focus could be developed by using the political will of

decision makers and actors with political influence in local government and institutions. These actors were fundamental when defining preferred actions for investment in infrastructure, services, etc.

- **Relationship with the local economy:** The type of actors related to production is important to how local economy works, particularly those who generate economic surplus and invest in certain activities, such as livestock and agriculture.
- **Technical capacities:** Of local government and technical institutions (Universities and NGOs)
- **Key information providers:** Students, women, independent workers, senior citizens, who fully understand the territorial dynamics.

The key actors were:

- Municipality, mayor and heads of departments.
- Vigilance committee, an umbrella organisation of 97 neighbourhood boards, representatives from neighbouring districts.
- A state and a private university; particularly the departments of architecture, agronomy and economics. The universities contributed

by having students doing their thesis work on subjects such as territorial regulation that contribute to the project.

The direct beneficiaries were inhabitants from the Municipality of Trinidad, which is made up of 12 municipal districts, 8 urban, 4 rural and one from the Sirionó ethnic group.

OBJECTIVES AND STRATEGY

The plan below was implemented in Trinidad to tackle the problems described:

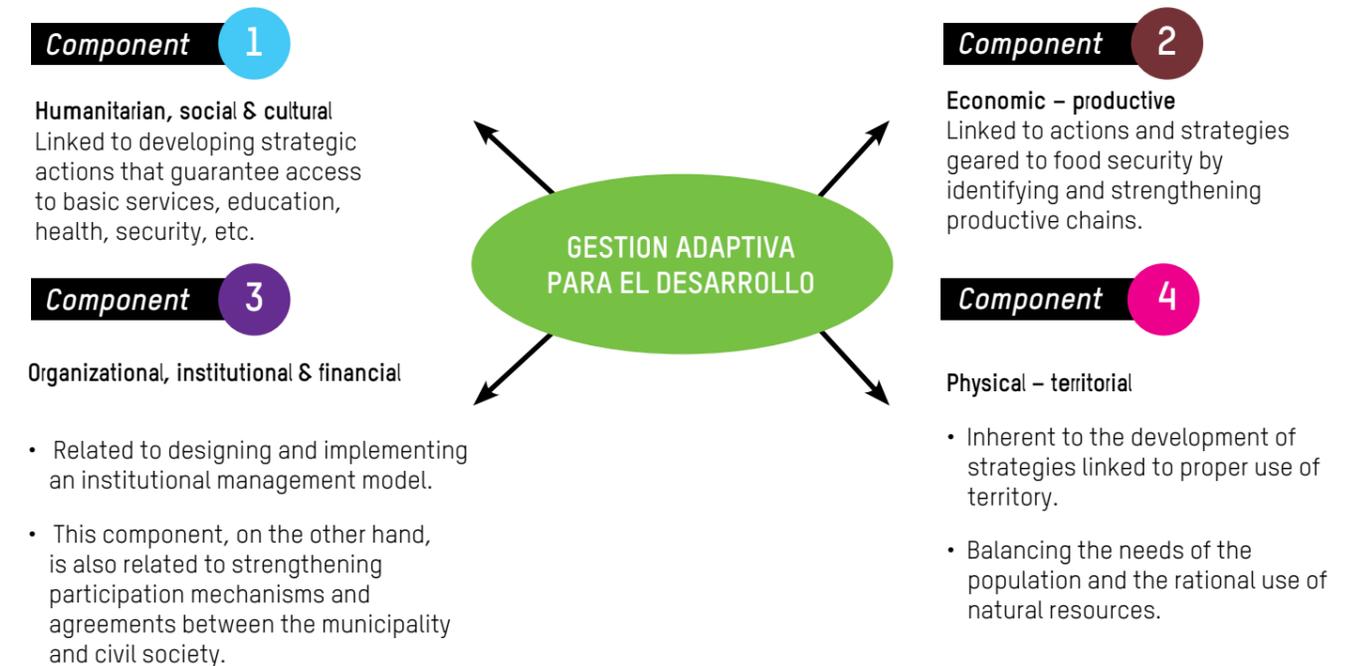
Project's Intervention Logic

Impact	Incorporate Adaptive Territorial Management as a planning and work tool into Bolivia's vision of territory.
Effect	Adaptive Territorial Management in the Municipality of Trinidad County is adopted as a territorial planning and regulating mechanism that modifies the traditional patterns of the area.
Products	<p>Developed a Municipal Development Plan in the Municipality of Trinidad with adaptive capacities involving citizens actively and effectively.</p> <p>Strengthened Municipal Government in Trinidad in its capacity to generate and design a Territory Regulation Plan where risk management and adaptive capacities are incorporated in its analysis.</p> <p>Built authorities' and local actors' capacities to adapt to climate change and risk management in such a way as to lobby for public policy.</p>



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The following diagram shows the components considered in **Adaptive Territorial Management**



Gender equality approach and strategy

A situation analysis of the Municipality of Trinidad was carried out within the framework of the project, which included information by sex. The analysis took into consideration how environmental risks affect men and women. We looked to involve men and women in developing the project's planning instruments.

The purpose of the Project was to mainstream gender at all levels, with the active involvement of the population (men and women) as the key component. At the same time, women's participation was crucial for preventing risk situations, due to the following:

- Generally, women are more exposed to risk than men, given that their activities are frequently associated with jobs in less secure conditions.
- Women are the essence of the required social capital to initiate community activities in development, risk reduction and reconstruction activities. The construction of housing has been through the support of "Connexión", incorporating a gender perspective in the GTA. Moreover also have trained women's groups in nontraditional as plumbing, masonry, electrical and painting buildings (currently working with the municipal government).

Therefore, any obstacle preventing women from participating in decision-making seriously limits their potential contribution of capacities and knowledge to accomplish sustainable development and risk reduction.

From this perspective, equitable access to education is a core component for reducing disaster risks.³

Actions taken in this field were:

- **Identifying social actors** who work locally on gender issues.
- An **alliance with organizations working** on the strengthening

³ Objetivos de Desarrollo del Milenio [Millennium Development Objectives]; Beni situación antes del fenómeno del Niño. 2007 [Beni's situation before the ENSO phenomena. 2007]. UN-UNDP

and inclusion of women was established.

- **Deliberate involvement** of women in all project's activities.
- All workshops took into consideration **women's situation in health, education and employment.**
- From the work done a **diagnosis of women's situation in the community** is available, which makes it feasible to develop a strategy to tackle these issues.

RESULTS AND IMPACT

As mentioned above, the Project promoted the incorporation of the GTA approach using territorial planning and regulation instruments available

to local institutions and civil society, by encouraging a mid and long-term outlook to tackle municipal development issues in a comprehensive manner. The project outputs were:

A **"Municipal Development Plan"** that includes **adaptive capacities and active involvement of the population.** This plan was approved through a Municipal bylaw, which includes specific GTA activities. Additionally, the inclusion of a budget in several sectors has been mainstreamed to tackle risk prevention as a part of the integral development of Trinidad.

Municipal capacities to generate and design a "Plan for Territory Regulation" have been strengthened.

The plan covers risk management and adaptation capacities in the analysis. Within this framework, i) the plan was approved through a municipal bylaw, ii) the risk of flooding due to the River Mamoré bursting its banks and intense rain, was reduced iii) emergency intervention units were strengthened, iv) the capacities of involved actors to identify mitigation actions were strengthened. (v) the moving of houses to safer areas and building subsidised housing were promoted, and vi) the capacities of involved actors to identify mitigation actions were strengthened.

Within PMOT results were generated three important documents such as land-use plan, urban plan and land

use plan, and a diagnosis, a local atlas identifying threats and vulnerabilities, records of 69 urban neighborhood committees urban districts that serve to plan and demand action on the boards.

The **climate change adaptation and risk management capacities** of authorities and local actors who influence public policy have been developed.

The following **results and impacts** are related to changes and/or processes triggered as a result of this intervention:

Reduction in the number of families affected by flooding, from an average of 6,500 families affected per year to 400 families. This is a result of sustained public investment in infrastructure as a result of lobbying by the project. In 2009, 700 people in Trinidad suffered some type of damage generated by environmental risks affecting the municipality. In previous years the number was much higher, with almost 30,000 people affected in the worst moments.

Improved conditions to adapt to climate change; this was shown by the creation of programmes to protect the traditional ports in the municipality — Puerto Varador, Puerto Almacén, Puerto Ballivián and Loma Suárez— by recuperating original technologies developed by indigenous peoples from the region, such as building houses

on pillars and the constructing lagoons for water regulation.

Incorporated technical criteria on risk management into development programmes and projects working on risk reduction, such as the "Rainwater Drainage System Design" which included topographic, geotechnical and hydrologic studies. This change is hard evidence of public institutions internalising the new practices and approaches promoted by the project.

Community and local lobbying at the municipal and national level for the need to include adaptive territorial management as a public policy and as a mechanism to plan, regulate and develop new cities and improvement existing cities with the active involvement of the local population.

Municipal policies favouring women and the most vulnerable population Implemented a housing building program focused on the most excluded sectors: women and youth. Additionally, strengthened developing a **municipal policy to promote women's right to own housing** for those who live in highly vulnerable areas (relocation or improvement programme: safe housing and own housing). The programme began with 60 houses. (40 in the suburban area, with brick and cement material) and 20 overdrawn houses in Mangalito community.

FACILITATING FACTORS

- **Local government officials willing** to study and implement the project: this can be seen when they attend meetings, sign agreements between institutions and changes being introduced in their practices.
- **Establishing coordination mechanisms with different project implementers,** which had a positive effect on developing programmed activities and achieving the project objectives.
- **Selecting professionals for the technical team with ample knowledge and experience** in dealing with municipal administration and formulating plans.
- **Institutions and social organisations willing to participate** as active subjects in the process of defining municipal policies.
- **Involving indigenous peoples** facilitated decision making, and their demands have been included in the plan, which is reflected by their signing the agreement to be able to participate in the process.
- Technical capacity of the **National Centre of Competence in Research (NCCR),** a consortium of universities and institutions for



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scientific cooperation, which contributed to the project with its knowledge and expertise.

- Funding from the United Kingdom through the **Programme Partnership Agreement (PPA)** in Latin America and the Caribbean, which contributed 50% of the funds in the first year and 80% in the second year.

These were the first and only funds to finance this type of experiences, since emergency response is traditionally favoured.

LESSONS AND CHALLENGES

The investment made to channel and deal with environmental risks (natural and man-made)

focussing on prevention, tackling the issues using the development model and its effect on the way of inhabiting and relating to the land where urban settlements spring up; it has proposed work methodologies and policy instruments available for both local institutions and civil society in general: Municipal Development Plan and the Territory Regulation Plan.

The experience of using territorial planning and regulation instruments has promoted a mid and long-term approach to dealing with development issues comprehensively for the municipality, on the understanding that development issues and risk prevention are intertwined: when risk is reduced, social inequality issues are also reduced. This

is the case of the population who inhabit unsuitable areas; they deforest and modify the natural environment, which often causes risk situations to arise as the natural barriers that protected them against rain and overflowing rivers are no longer present or are deteriorated.

The ample participation and the role played by social actors in the construction of public policy instruments, with adequate technical support, would have laid the foundations for them to have a vested interest in insisting that local authorities use them, and be accountable for the commitments that they subscribed to in the Plan.

At all times the proposal spearheaded by Oxfam-FUNDEPCO **used the existing coordination structures** in the

municipality and civil society, and did not **duplicate efforts by setting up new coordination mechanisms** for public and/or private/social actors.

The level of knowledge of the reality of the territory and its actors allowed prevention strategies previously used by the inhabitants to be recovered.

This was the case of the reintroduction of the “waru-waru” or camellones fields: farmable areas on higher lands that will always be above water level, which is a technique that has been used for centuries by the indigenous population to grow crops and prevent possible damage by eventual flooding.

This type of prevention strategy was recovered and valued in the framework of the experience

developed, and there is support from municipal programmes to develop these strategies.

Promoting **developing a municipal policy instrument to tackle some inequities affecting women** is also considered to be innovative.

It took into account the existence of a significant number of homes with female heads of household, who also live in poverty and tend to live in high risk areas, particularly women’s **access to housing and legal ownership of their house.**

Although there are many reasons to ensure that the project’s results are sustainable, it is also true that the following challenges exist:

- Territorial regulation has a scope of at least 15 years, and

the municipal development plan is for 5 years; therefore, the challenge is to **maintain the same level of commitment by local authorities, in spite of government changes, to implement the policy instruments** generated by this project. At the same time, this will be ensured if social actors demand continuity of the processes and commitments acquired from the authorities.

- This Project was conceived of and designed to be replicated and so a challenge lies in ensuring that **the process and its outputs are properly documented,** so that good practices and lessons can be extracted by other municipalities.





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