

**Node: Suite Summary<sup>1,2</sup>****Bolivia: Community-led improved NRM****Context**

Bolivia is amongst the poorest Latin American countries. It is estimated that in 630,000 rural households, basic needs are not being met, and 85% of Bolivians consume less than the recommended 2,000 calories daily. Approximately 29% of the population live on less than \$1 per day. The majority indigenous population suffers most from poverty. Whilst the last 15 years has led to some economic stability, this has been to a great extent at the expense of the poor and has led to the sixth highest level of income inequality in the world.

In 2001 Bolivia approved its Poverty Reduction Strategy which identified four long-term objectives: enhanced economic opportunities for poor people; increased capacities; increased security and social protection; and enhanced social integration and participation. As one of its tools for achieving these objectives, Bolivia created SIBTA (Sistema de Investigacion Boliviano de Tecnologia Agropecuaria) and its four research Fundaciones de Desarrollo de Tecnologia Agropecuaria (FDTAs) based around the macro-regions of altiplano, highlands; valles, valleys; tropico humedo, humid tropics; and chaco, arid lowlands. The priority of SIBTA and its FDTAs is the improved production of commodities for export to benefit the rural and national economies, a priority that lacks an explicit poverty focus. DFID (Department for International Development) -Bolivia through its Facilitating Innovative Technology (FIT) programme, has supported a pro-poor focus within SIBTA and the Fundaciones.

This Suite focused on the south-western part of Tarija, close to the Argentinean border. This area consists of temperate valleys at 2000-2600 metres above sea level, bordered in the west by a high plateau (altiplano) at 3700 metres. The communities in this region adopt a combination of livelihood strategies that include migration, usually to Argentina, for waged labour, farming and livestock rearing / production. These last two provide food for domestic consumption and also for sale in markets or for exchange for products from other agro-ecological zones.

Projects within this Suite have researched processes by which local professionals can sensitively work with these communities, including with those community members who, through reasons of marginalisation or extreme poverty, often find it difficult to voice their needs for natural resource (NR) management improvement. This research developed a novel approach in an attempt to go beyond the participatory approaches that are common to development projects and that, due to time, resource and donor pressures and project staff personalities and skills, often tap only the opinions of the more wealthy or male or articulate or motivated people. Awareness of this new approach and its attraction to rural people spread and led to other communities, some in other ecological zones, seeking similar forms of collaboration with local professionals (LPs). The process by which these interactions approached their goal was central to the research.

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<sup>1</sup> This document summarises NRSP's work in one of its Uptake Promotion Node: suites. For further details and links to project and project documents see <http://www.nrsp.org.uk/6.aspx>

<sup>2</sup> This document presents research funded by the UK Department for International Development (DFID) for the benefit of developing countries. The views expressed are not necessarily those of DFID.

## Research Topics

- How can local professionals work with poor communities to assist them to identify and articulate their priority NR management needs?
- Can this participatory process lead to a sustainable improvement in the livelihoods of poor communities through the improved management of natural resources?
- To what extent can this research influence local government and NGOs to incorporate community-led NR management in their work?
- What groups of the poor continue to benefit from improved management of natural resources beyond the end of the project?
- Which groups of the poor fail to derive such benefits and how can they be more effectively reached?
- Can research influence NR management policy beyond the local focus of projects?

## Projects

This Suite consists of two projects (see project linkages below), R7584 (Community-led tools for enhancing production and resource conservation, 2000 – 2003) and R8362 (Validation and communication of a community-led mechanism for livelihood improvement of remote marginalised communities in Bolivia, 2004 – 2005). R7584 built on previous research experience in the area and sought to respond to local demand for more action on NR management problems. The project involved a small team of local professionals, a fruit and vegetable expert and a veterinarian, developing close partnerships with three communities in the Tarija area over a three year period. During the follow-up R8362, this was extended to similar work with a further six communities. The livelihood strategies of households in these communities include migration for waged labour, crop cultivation (fruit trees, maize, potatoes and beans) - sometimes with irrigation and livestock production (cattle, sheep and goats). The poorest households usually lack irrigable land and cattle.

Community meetings and more informal contacts by the LPs with the less articulate, excluded and often poorest members of the communities led to the sensitive establishment of close relationships between these individuals. These links facilitated identification of the livelihood priorities of the poorest stratum and exploration of how these could be addressed through improved management of NRs. At the start of R8362 the community-led mechanism (CLM) developed during R7584 was formalised into a four stage process:

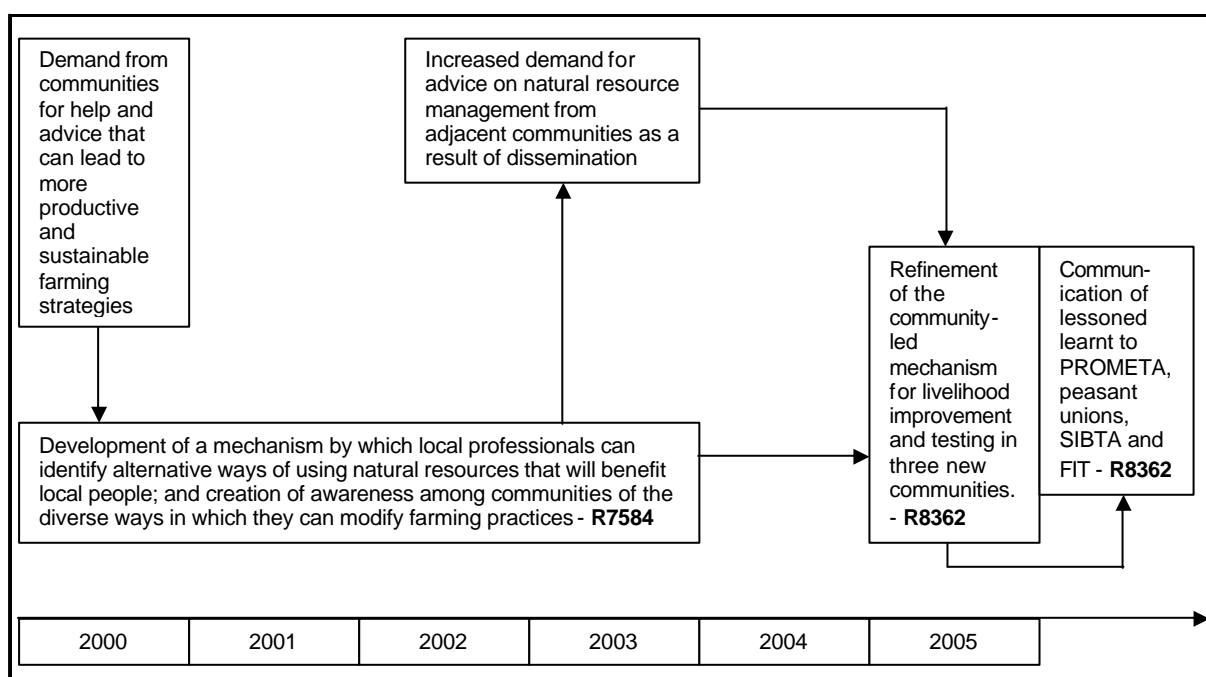
1. Diagnosis – raising self-awareness of problems so the bases for future changes could be established.
2. Vision – reflecting on values, aspirations and community objectives.
3. Plan – strengthening participatory planning processes for future development.
4. Management – strengthening processes of communal management in the articulation and formation of alliances between different stakeholders at a range of local to national levels.

In R7584, priorities identified by farmers through use of this mechanism led to workshops on management of fruit tree pests and animal internal and external parasites. These in turn led to further meetings when the knowledge gained on collective action to control pests was discussed, reflected on and related to farmers' personal experiences, so that the farmers acquired ownership of their new knowledge.

The project worked with the Radio Tarija of the Jesuit NGO, Acción Cultural Loyola (ACLO), and made monthly broadcasts consisting of informal talks about the priorities identified by the communities and the NR management work done with them. These broadcasts brought the work to the attention of a broader public and created interest in widening the interactions between LPs and farmers; as a result collaborations were extended to six more communities in addition to the original three. The main NGO partner was Protección de Medio Ambiente en Tarija (PROMETA), which managed the protected areas (national parks) in which an altiplano community targeted by the project was located. The relationship between PROMETA and the project was strengthened during the course of the project and joint workshops on participatory methods and on best practice in facilitating community collaboration may have tempered PROMETA's traditional top-down approach.

The second project, R8362, aimed to document the community-led mechanism (CLM) used in R7584, to produce a synthesis of the lessons learnt and to use the CLM in three new adjacent communities. The synthesis assessed the extent of pro-poor service achievement in the three original communities and the CLM and its potential was promoted at regional, departmental and national levels via workshops, booklets and other media.

### Project links within Bolivia Suite 1: 2000 - 2005



### Outputs

#### Findings

A project assessment (part of R8362), conducted in the original communities with which the R7584 team had worked for three years, indicated that sustained adoption of new practices varied between different strata of the communities. Two-thirds of households in upper and middle stratum who had initially participated in the project continued with at least one of the promoted practices: one-third of those in the lowest stratum who had

adopted the new practices were still using them at the time of the assessment. The highest adoption rate was seen in practices relating to fruit tree disease control and management (mostly by middle and upper stratum households). Although the impacts of the new practices on yields were rarely quantified due to a lack of reliable baseline data, it can be assumed that those who continue to use the practices perceive a benefit from doing so.

The process of achieving these benefits via close interactions between the LPs and members of different socio-economic stratum of the project communities generated a feeling of friendship. This went beyond the usual professional contact and formed a good basis for facilitating consultation on a broad range of issues.

Limited adoption and livelihood impact within the lowest socio-economic stratum was at least partly a result of these households' lack of resources. Wealthier households had more resources enabling them to invest in a broader range of production activities, and to take greater risks. Therefore, R8362 concluded that it was necessary to address the extent to which the CLM enables the poorest stratum of households to derive benefits from work targeting community priorities. In addition, it asked whether actions specifically directed at the poorest stratum, and often requiring lower capital inputs (e.g. training in marketable skills), would have had more lasting success. The project highlights the point that while a CLM may make possible the identification of the specific needs of the poorest stratum of a community; it is the development of appropriate collaborative actions that determines livelihood impact.

Yet the poorest households did derive some important benefits from the projects. Research with the three new communities in R8362 indicated that the poor were particularly enthusiastic about the learning process because the associated increase in social and human capital could add value to their work as labourers for others with more capital resources. For example, several individuals from the poorest stratum of households in each of the communities mentioned being able to or having carried out technical veterinary actions for others for payment or non-pecuniary benefit.

Monthly radio broadcasts by Radio Tarija proved to be particularly useful in stimulating the interest of people beyond the target communities in similar interaction with the LPs. The expansion of project activities to the six new communities was a result of this interest although more communities expressed interest than could be accommodated. Farmer-to-farmer extension has often been found to be an effective means for promoting NRM innovation. The popular appeal of the radio broadcasts may have been partly due to the inclusion of informal talks by people from the target communities about their experiments with new NR management strategies. Farmer-to-farmer extension has often been found to be an effective means for promoting NR management innovation.

The mayors of the two municipalities in which project work was focused came to appreciate the value of the improved NR practices adopted in the communities. However, this did not result in their overt acceptance that municipalities could use similar mechanisms to stimulate production in rural communities. This appeared to be because the mayors believed that re-election depended on undertaking high profile infrastructural projects (e.g. roads and schools) as opposed to pursuing less visible increases in production and livelihood gains. The impact on meso-level policy and practice was therefore very limited.

### *Research Messages*

Key research messages for NR management derived from this Suite are summarised below:

- The development of close relations between rural communities and LPs can facilitate and encourage changes in the use of NRs. Crucial to this process are:
  - Acceptance by LPs of the importance of respecting local experience and farmer perceptions of issues relating to their use of NRs. This attitude is a critical factor in encouraging local people to explore alternative ways of managing resources.
  - Identifying different socio-economic stratum within a community at the beginning. Households from different stratum can have different NR management needs and priorities and differing capabilities to adopt the practices suggested to them by LPs.
  - Accepting that while NGOs, municipalities and other organisations can sometimes be used in this bottom-up approach, they often work to different agenda and priorities. Therefore, achieving a change of approach can be difficult.
- While the poorest stratum of households may appreciate the importance of improved practices it is the middle to higher social stratum that benefit most through their long-term adoption. However, the poorest can benefit from their enhanced social and human capital by using it to gain employment from wealthier households.
- Children can be capable representatives of their households and valuable sources of NR knowledge, especially about livestock. Attending to the knowledge of children can therefore be important for LPs engaged in a CLM.

#### *Key research products*

- Preston, D., Montaña, R., Condori, R. 2005. Stimulating locally initiated and sustainable livelihood change – new relationships between local professionals and rural communities in the Central Andes. In: Stocking, M., Helleman, H., White, R. (Eds) Renewable natural resources management for mountain communities. Hill Side Press: Kathmandu. pp. 159-178.
- de la Fuente, T. 2004. El mecanismo de vinculacion entre oferta y demanda de informacion agropecuaria: documento analitico. Tarija, Bolivia: VINCOSER, Working Paper 04/01. 9pp.
- de la Fuente, T., Gündel, S., Preston, D. 2005. Livelihood impact assessment of first generation communities. Tarija, Bolivia VINCOSER, Working Paper 05/01. 18pp.
- Preston, D., de la Fuente, T., Gündel, S. 2005. Trends in livelihood changes in association with recent technical actions. Tarija, VINCOSER, Working Paper 05/02. 27pp.
- VINCOSER (2005) El Mecanismo Vincoser. Una propuesta de vincilación oferentes – demandantes guiada por la demanda. Informe – Guia. Tarija, Bolivia: VINCOSER. 40pp.
  - Nuestra Propuesta, Cuaderno No. 1. 20pp.

- Nuestro Diagnostico, Cuaderno No. 2. 20pp.
- Nuestra Visión, Cuaderno No. 3. 16pp.
- Nuestro Plan, Cuaderno No. 4. 20pp.
- Nuestro Gestión, Cuaderno No. 5. 16pp.
- Nuestros Proyectos, Cuaderno No. 6. 20pp.
- Nuestra Producción, Cuaderno No. 7. 16pp.
- Nuestros Entidades y Servicios Agropecuarios, Cuaderno No. 8. 16pp.
- Nuestra Comunicación, Cuaderno No. 9. 16pp.

### **Impacts**

- Local farmers reported that new veterinary practices introduced at the project sites had visibly improved animal health and that new horticultural management practices (e.g. pruning and disease control) had led to large increases in production of peaches and grapes.
- Middle to higher income households in the poor rural communities targeted by R7584 continued to use the improved NR methods beyond the end of the project, but the poorest households often did not.
- The poorest stratum of households benefited by improved social and human capital that enhanced their employment prospects.
- Both target and non-target communities articulated the benefits of community-led mechanisms (CLM) for livelihood improvement via sub-centrales (peasant union centres).
- R8362 was able to influence SIBTA (a national-level stakeholder) through DFID's FIT programme to incorporate CLM in its Operating Procedures for its work with the FDTAs (Fundaciones). This should allow the CLM approach to influence regional and national development.

### **Further work**

Monitoring and promoting uptake of the CLM is required at the local, regional and national levels, especially as Bolivia remains a priority for DFID.