

# IDRC in Bolivia

**F**or more than 30 years IDRC has supported research in Bolivia as well as activities to strengthen the capacity of researchers to influence policy design and implementation.

Research topics have ranged from health care and education to participatory natural resource management and new converging technologies. Recent IDRC-supported research has had a lasting effect on the country as it helped to form a broad consensus for new legislation that respects traditional communal water rights.

In 2005, after decades of coalition governments, Evo Morales became the first president of Bolivia to win a majority. Backed by Indigenous people's organizations and social movements, his government faces the challenge of including Indigenous people's rights and practices in national development strategies while at the same time achieving economic growth.

Related to these issues is natural resource management, which has long been at the forefront of Bolivia's political agenda and the focus of IDRC-supported activities. Access and rights to resources have frequently led to conflict among users as well as between the government and civil society. Social protests against water concessions to foreign-owned companies paralyzed the country in 2000 and in 2005. Social exclu-

sion and widespread poverty — two-thirds of Bolivia's population lives in poverty — exacerbates the tensions associated with resource use and makes the development of laws and institutions based on consensus all the more crucial.

In the countryside, residents compete for irrigation and household water with private companies and large mining and hydroelectric plants. Agua Sustentable (sustainable water), the research arm of the Comisión para la Gestión Integral del Agua en Bolivia, has been coordinating IDRC-supported research on water rights in rural areas since 2002. The research team used a mathematical simulation model to produce a water distribution proposal that all users could accept. Their findings legitimized traditional water rights and led to their inclusion in a new irrigation law passed in 2004. This law is a remarkable achievement, given that 32 previous attempts to reach agreement on water legislation had failed. IDRC is supporting a second research phase to fine-tune and test the methodologies under more complex conditions.

In early 2006, Bolivia's new government created a water ministry to coordinate and oversee water issues. Agua Sustentable actively participated in the debates that led to its creation and provided input into its design. The first vice-minister of basic services, René Orellana, came from Agua Sustentable's team.

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The new ministry will also have access to the results of research on the effects on women of community and individual rights to water, when Bolivian partner, Pro Agro, completes its analysis of this issue. Pro Agro won a grant to conduct this research as part of an IDRC Decentralization and Women's Rights Competition.

Other Centre-supported activities include research to strengthen the ability of municipalities to plan their own sustainable economic development. Other partners are collaborating to identify ways of involving citizens in decision-making in health care. Two regional initiatives coordinated by organizations in Bolivia focus on technology: the readiness in Andean nations to meet the opportunities and challenges that nanotechnology, biotechnology, and information and communication technologies (ICTs) represent; and the need to safely dispose of obsolete computers and ICT components.

IDRC is also funding a regional program carried out by the Fundación para la Investigación Estratégica en Bolivia (foundation for strategic research) to manage a scholarship program and educate natural resource management professionals on gender issues in Bolivia, Ecuador, and Peru.

From 2000 to 2006, a consortium of five Bolivian organizations, led by Fundación TIERRA in La Paz, analyzed the impact of land tenure changes implemented since the 1952 agrarian reform on rural men's and women's access to natural resources. The IDRC-supported researchers found that, contrary to current land registration law, people want and need private and group titles to common pooled resources as well as private titles to individual parcels of land. Through a series of workshops, researchers disseminated these results to the county authorities implementing land reform. The foundation is, with IDRC support, monitoring the government's land and agrarian reform so as to identify and remedy knowledge gaps among the different stakeholders.

Bolivian cities are also facing increasing social and environmental challenges as their peri-urban areas grow. In mid-2007, a research team in Cochabamba will tackle waste management at a dumpsite. Research on how to dignify the work of scavengers who live off the dump and improve the surrounding neighbourhoods will be of interest to Latin American cities with similar challenges.

IDRC support has had the overall effect of linking Bolivian researchers with their Andean colleagues and bringing them out of universities and into communities. It has bolstered traditional knowledge in farming and contributed to biodiversity preservation and a better understanding of socio-economic and market forces at play in agriculture, especially on the Altiplano.

Much of the early IDRC-supported research in agriculture culminated in an effort, in the late 1990s, to expand the production of a few Altiplano agricultural products from a subsistence orientation to a market one. Researchers knew from previous work that quinoa had the greatest potential for expansion. Market development and a new agro-industrial plant created employment for agricultural producers, processors, and those involved in marketing in the Lake Titicaca region.

Since 1975, IDRC has funded 98 research activities in Bolivia. These projects, some of which involved several countries, represent an allocation of just under CA\$25 million. Ten projects, worth CA\$3.7 million, are active.

### RESEARCH HIGHLIGHTS

#### Common Ground in Water Management

In response to conflicts over water that culminated in a political crisis in 2000, the Government of Bolivia sought the input of civil society organizations and the private sector to develop a proposal for a new water law.

A previous phase of this project enabled the Comisión para la Gestión Integral del Agua en Bolivia (CGIAB — commission for integral water management in Bolivia) to seize this opportunity to influence policy. CGIAB mapped water rights in two rural areas and simulated water access scenarios using computerized mathematical models. The research revealed that the customary collective ownership of water for multiple uses would allow a more efficient use of water than an approach favoured by the government. The findings were widely discussed with community members and social movement leaders and contributed to the development of the Irrigation Law, passed in October 2004, which recognizes the traditional water rights of Indigenous and farming communities.

In this second phase, Agua Sustentable, CGIAB's research arm, is working to expand and strengthen the capacity of government agencies to implement the water policy. Researchers are adapting methodologies and tools for assigning water rights under the new law. They are also testing and evaluating the tools in more complex contexts, such as an international watershed and a large river with multiple uses.

(Project # 102884, Regulation of Rights in the Water Law (Bolivia) Phase II; Duration: 2005–2008; IDRC allocation: CA\$446 130; IDRC contact: Merle Faminow; Research partner: Juan Carlos Alurralde, Agua Sustentable, CGIAB, Andrés Muñoz 2495, PO Box 13078, La Paz, Bolivia; Tel.: 591-2-215-1744; Email: oso@aguabolivia.org or cgiab@aguabolivia.org)

## Municipal Governments and Local Economic Development

Decentralization in Bolivia during the past decade has given municipalities greater responsibility for economic development. This research aims to determine how Bolivian municipalities can play an active role in national efforts to reduce poverty by becoming engines of their own sustainable development.

The pilot phase of this project involved the Atlantic Community Economic Development Institute, of Halifax, Canada, and two Bolivian institutions, the Centro de Servicios Agropecuarios Técnicos de Chuquisaca (Chuquisaca centre for technical agronomy services) and a union of municipalities from the department of Pando. In collaboration with municipal officials and other local actors in 14 municipalities, the researchers developed and tested a participatory data-collection tool to identify local resources that could be harnessed for sustainable development.

The pilot attracted the interest of the Ministry of Municipal Development and the Federación de Asociaciones Municipales de Bolivia (Bolivian federation of municipal associations). They are now working with 30 municipal governments to complete resource mapping and design and implement economic development plans that reduce unsustainable practices and promote gender equity and the participation of civil society. The research partners are disseminating the tools, databases, and results to all 314 municipalities in the country.

(Project # 102217, Toward a Strategy of Productive Municipalities; Duration: 2003–2006; IDRC allocation: CA\$616 356; IDRC contact: Gisèle Morin-Labatut; Research partners: René Zambrana, Federación de Asociaciones Municipales de Bolivia, Av. Ecuador #2694, Sopocachi, La Paz, Bolivia; Tel.: 591-2-212-5362; Juan Tellez, Atlantic Community Economic Development Institute, 22 Northcliff Lane, Halifax, Nova Scotia, Canada B3M 2Z6; Tel.: 902-445-0855; Email: juan@cedinstitute.ca )

## Social Participation in Health Care

Most Latin American countries are decentralizing health care amidst renewed interest in primary health care. Although governments nominally support citizen participation in health-care planning, decision-makers have little information or analysis on how to involve people. IDRC supported two workshops, in 2004 and 2005 in which members of Latin America's common

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trading bloc, MERCOSUR, identified the need for research on the role citizen participation plays in planning national and regional health care.

The Instituto de la Salud, Medio Ambiente, Economía y Sociedad (ISALUD — institute for health, environment, economy and society), based in Argentina, facilitated the workshops. It is now coordinating country teams of researchers, decision-makers, and civil society representatives from Argentina, Paraguay, and Uruguay, (MERCOSUR members) and Bolivia (in the process of joining). They are analyzing patterns of social participation in the health sector and how that participation can improve health care. This effort is also contributing to the proposed establishment of an Observatory of Citizen Participation in Health in MERCOSUR, which would constitute a regional forum for analysis and evidence sharing on health care issues.

(Project #103569, Social Participation in Health in the MERCOSUR; Duration: 2006–2008; IDRC allocation: CA\$408 000; IDRC contact: Roberto Bazzani; Research partner: Ismael La Palma, ISALUD, 925/31 Venezuela, Buenos Aires, Argentina; Tel.: 54-11-4775 3601; Email: ilapalma@fibertel.com.ar)

### Electronic Waste Toolkit

The Latin American and Caribbean region lags behind developed countries in its use of information and communication technologies. But the digital gap is narrowing. Like the developed world, the region is facing the challenge of safely disposing of large numbers of computers and

ICT components that are no longer useful. This equipment contains substances, such as poly-vinyl chloride (PVC) and heavy metals, which can be dangerous if disposed of improperly.

The Quipus Cultural Foundation in Bolivia is acting to address this environmental threat and to prevent the region from becoming a dumping ground for imported e-waste. It has undertaken a one-year initiative to research, produce, and disseminate a practical toolkit to educate computer users about responsible options for e-waste disposal. The toolkit will include information on operating a recycling centre. Quipus plans to hold an international workshop on this subject with key stakeholders, partners, and policymakers from the region, to identify good disposal practices and future action required on this issue.

(Project #103829, Electronic Waste Toolkit for Latin America and the Caribbean: 2006–2008; IDRC allocation: CA\$230 700; IDRC contact: Angélica Ospina; Research partner: Peter McFarren, Quipus Cultural Foundation, 448 Pasaje Jauregui, Casilla 1696, E, La Paz, Murillo, Bolivia; Tel.: 591-231-4530; Email: mcfarren@entelnet.bo)

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