

TERRA Resource Development International
Strategic Plan
2007-2010

I. Executive Summary

Terra Resource Development International (TERRA) is a 501(c)(3) non-profit organization focused on improving health and increasing income in rural and impoverished Andean communities in Bolivia. To accomplish this, TERRA develops vital water resources and improves the management of natural resources by providing financial assistance, technical expertise, and education.

In rural Bolivia 78% of poor families have no access to drinking water, and most people have chronic dysentery. Worse off are the people of the Bolivian Andes whose average income is less than two dollars a day. This severe poverty prohibits communities from developing vital water and natural resources without external aid. Despite the UN Millennium Project's conclusion that improvements to water significantly reduce poverty, few organizations develop water resources effectively—most water systems fail within five years. Furthermore, most towns have no developed irrigation water, and recurring droughts continually destroy crops which are the sole source of income. Since poor communities are the most ill-equipped to mitigate the impact climate has on water resources, aid for water development is essential. This is especially critical given the fact that the Intergovernmental Panel on Climate Change forecasts a more drought-intensive future for the Bolivian Andes.

To date, TERRA has executed seven water and community development projects. Maxwell Borella and Zackry Guido, TERRA's two directors, have drawn on their ten collective years of working experience in Bolivia to improve the lives of more than 1,500 people. More importantly, TERRA has created a new approach to water development in Bolivia (outlined below) and is forging strong partnerships with other organizations in order to scale-up this model and to direct the needed resources and expertise to water development.

II. Mission Statement

TERRA increases the social and economic welfare of rural and impoverished Bolivian communities by providing financial assistance, technical expertise, and essential education to develop vital water supply and improve degraded natural resources.

III. Goals

1. Develop and strengthen the function of vital potable and irrigation water infrastructure

2. Improve health and agricultural productivity thereby raising income and enabling people to elevate themselves from poverty
3. Enhance the quality of basic sanitation
4. Support projects that generate income or that are funded by local institutions so that money is available for future costs
5. Collect and draw on social and scientific information to properly develop projects and to ensure that limited resources are applied to communities where there are high probabilities for success.
6. Promote a new model that emphasizes water development and that teams local management with roving technical experts
7. Facilitate greater involvement between donors and the communities they support
8. Be recognized as a leading water development organization and an innovator in mitigating the impact climate change has on poor communities

IV. Philosophy and Values

TERRA's philosophy comes from the belief that there should be an intolerance to suffering, that every individual should have the opportunity to reach his or her potential, and that improving water is the most effective strategy to reducing poverty. In rural communities, which all have an agricultural foundation, the root cause of poverty is the lack of access to clean and constant water. Water is the key link in the downward spiral of welfare—poverty restricts the funds available to develop water resources that reduces human health and agricultural productivity that, in turn, lowers income and causes more poverty. To break this cycle, external aid is necessary.

TERRA and other development leaders agree that successes in international development have been overstated because few projects are sustainable. TERRA believes that innovation is critical and urgent. TERRA's strategy for water development is novel in three respects. First, TERRA provides expertise in hydrology. This is essential and currently absent. Most communities never test water quality, harmfully assuming that all water is sanitary. Wells are also cheaply constructed which cause most water systems in the Altiplano to fail within five years. Second, TERRA's involvement is predicated on the community charging a monthly water-use fee. A management fund evades the common problem of not having money available for maintenance. A fee also invests each family in the water project and partially supports TERRA's third innovation, a roving

engineer service. TERRA trains Bolivians in hydrology and community development. The service visits each community monthly, repeatedly conducting educational seminars in health and agriculture and providing necessary maintenance and oversight. This service ensures long-term project function. Since past projects that have been exclusively managed by the community have failed to generate sustainable benefits, TERRA is pioneering a new model that couples community control with external fortification.

TERRA extends its expertise and access to funds to motivated, deserving communities and in doing so leads crucial progress towards improving welfare. Since TERRA is one of a small number of U.S. non-profit organizations working in water development in the Bolivian Andes, TERRA is uniquely positioned to lead efforts in water development that make significant improvements to welfare.

V. Community Selection Criteria

TERRA partners with motivated, organized communities to ensure that limited resources create long-lasting benefits and generate substantial social returns on the investment. TERRA collaborates with

1. Communities that take the initiative for their development.
TERRA favors communities that present to TERRA projects that address specific needs. The most successful projects are in communities that have a vision.
2. Communities with strong leadership.
TERRA prefers communities with a stable local government or with leaders who transcend political affiliations.
3. Communities that receive little attention from national and international aid programs.
Small communities typically are more organized and have a stronger sense of community. Small populations also lower the cost of materials, enabling the purchase of higher quality equipment and ensuring the project's benefits extend to every community member.
4. Communities that are incapable of overcoming environmental and technical obstacles because they lack financial resources and expertise.

Where financial resources are insufficient to develop vital resources communities often act out of desperation. Many communities purchase cheap equipments and rarely perform needed analysis. In some cases, new water systems provide contaminated water, making people sicker.

VI. Model for Water Development

TERRA's model for working in communities is composed of three parts: a site-development phase, an execution phase, and a monitoring phase. For each community-based program, TERRA provides the following services:

1. TERRA centralizes its efforts in specific areas in the Bolivian Andes to increase our effectiveness, build trust with the local municipalities, and maximize our resources.
2. TERRA mediates the formation of local water and resource committees that execute community-approved, binding regulations, such as the collection of a monthly fee for water use.
3. TERRA leverages each community's monetary contribution to raise additional funds from sources in Bolivia and the U.S. Communities are responsible for paying up to 50% of the total project costs.
4. TERRA supervises the construction of wells, water storage tanks, distribution networks, irrigation systems, and soil management projects to ensure that the systems are properly built; TERRA builds the projects to U.S. standards. Spending more in this phase is cost effective.
5. TERRA performs necessary water or soil analysis
6. TERRA integrates health education and provides workshops on improving agricultural productivity and proper water system maintenance.
7. TERRA supports a roving engineer who provides technical expertise for maintenance, conducts water and soil quality analysis, conducts repeated seminars on health education and the maximization of agricultural productivity, and oversees the local water committee.
8. TERRA monitors the project over a five-year period to ensure long-lasting benefits and to evaluate successes and failures that will guide future projects.

VII. Operations

United States

TERRA is a 501(c)(3) non-profit corporation incorporated in the state of California in December, 2005. TERRA achieved both federal and California state tax-exempt status in November of 2006.

TERRA is composed of five directors, three of whom serve as officers. Two officers serve on the executive committee and are responsible for planning and operating TERRA's activities.

Maxwell Borella - President, Executive Committee

Zackry Guido - Treasurer, Executive Committee
Michael Stephenson - Secretary
Joshua Vinograd
Robert Jameson

The executive committee currently operates on a voluntary basis. Maxwell Borella contributes to TERRA approximately thirty hours per week and Zackry Guido contributes approximately twenty hours per week.

Bolivia

TERRA is not registered as a non-profit organization in Bolivia and therefore can not receive payment from Bolivian organizations.

For some projects TERRA partners with Bolivian contractors and/or international non-profit organizations to increase resources or improve technical capacity. Employing Bolivian organizations has the advantage of aiding the economic growth of small Bolivian companies while providing them with technical training and oversight.

TERRA executes projects between October and November and March and June when the climate is dry and Bolivians are not planting or harvesting their crops.

VIII. Fundraising and Income

TERRA generates income through fundraising, grant awards, and collaboration with U.S. universities.

Fundraising

TERRA's fundraising activities include organized functions and mailing campaigns. In 2007 TERRA organized two fundraising events that raised \$10,130 and \$850.00, respectively. Mass mailing campaign generated an additional \$8,692.

Grant writing

TERRA solicits private foundations for funding. In March, 2007 TERRA was awarded a \$9,950 grant from the Foundation of Sustainability and Innovation to support an irrigation water project. In 2006 The Turkey Creek Investment Partnership awarded TERRA a \$10,000 grant to support a community water system and micro enterprise tree nursery. Save the Children Bolivia administered this grant since TERRA had not yet achieved tax-exempt status.

Collaboration with U.S. universities

TERRA is currently collaborating with Duke, Stanford, and Pomona College to develop humanitarian aid student internships that couple scientific research with community development projects. In these programs students will conduct research immediately helpful to TERRA's development projects and will work with TERRA to execute the project. Students will pay a program fee which will be covered by the university.

IX. Short-Term Objectives (within 5 years)

Administrative Objectives

- Secure funding to pay the salary of the executive director(s)
- Establish TERRA as an international organization in Bolivia which will require a small Bolivian staff

Project Objectives

- Partner with 3 to 5 communities per year, improving the lives of more than 1000 Bolivians
- Supervise all TERRA-supported projects
- Forge new partnerships with Bolivian and international organizations
- Implement scientific research and international development internships with universities
- Evaluate our development model continuously to maximize resources and benefits

Earning Objectives

- Receive 3 to 5 grants per year and generate through grants \$50,000 to \$100,000 per year
- Generate more than \$20,000 per year through individual donations
- Receive \$50,000 per year through TERRA's internship program
- Begin grant approval process with USAID and National Science Foundation
- Develop strong relationships with foundations having similar missions and goals.
- Encourage large donors to be active members of TERRA
- Leverage the Bolivian community living in United States to be active in TERRA's projects
- Create an endowment to grow TERRA and secure future operations

X. Long Term Objectives (5-10 years)

Administrative Objectives

- Employ a U.S. staff that consists of an executive director, a project director, a project coordinator, a fundraiser and grant writer, and an office manager

- Employ a Bolivian staff that consists of a project director, an office manager, and 3 to 7 roving engineers

Project Objectives

- Partner with more than 5 communities each year
- Continue supervision of all TERRA-sponsored projects
- Create a water quality monitoring database and an interactive webpage that provides free access of all acquired data
- Lead education campaigns to increase awareness of environmental degradation due to acid mine drainage in Bolivia
- Operate and own a drilling machine to construct wells
- Purchase 2 to 5 field vehicles to establish mobile laboratories for TERRA's roving engineers
- Integrate 20 students per year in projects
- Become a leading organization in water development in the Bolivian Andes

Earning Objectives

- Raise \$250,000 to \$1,500,000 per year
- Develop and sustain key partnerships with foundations and organizations
- Publish comprehensive annual reports to all donors
- Foster an intimate relationship between donors and the communities receiving their support

