



## GIS helps resolve conflicts over ethnic rights and land use in Colombia

### Highlights

**S&T Innovation:** GIS, GPS and mobile phone technology employed to resolve land and natural resources disputes involving indigenous and ethnic minorities

**Sector:** Land and Natural Resources Management

**Program:** Victims and Vulnerable Populations

**Development Challenge:** Economic Growth, Education, and the Environment

**Location:** Colombia (replication site – successfully tested in Guatemala and since expanded to Bolivia)

**Potential for Replication:** Proven. Demonstrated and piloted in Guatemala in 2003, replicated in Colombia in 2009, and now moving to Bolivia.

**Implementing Partner:** Mercy Corps.

Accurate mapping using technology combined with training in alternative dispute resolution has solved hundreds of conflicts in Colombia since the Protierra program was launched in 2009.

Colombia has experienced long-running internal conflicts centered on land rights. Too often, disputes over land result in violence.

The Conflict Resolution on Land and Natural Resources Program, or "Protierra," a Grand Prize winner in the USAID Science and Technology Pioneer Prize contest, uses Global Positioning Systems (GPS), cartographic equipment, Geographic Information Systems (GIS), and an on-line platform to resolve land and resource disputes among indigenous and Afro-Colombians. Offered by the USAID Office of Science and Technology, the Pioneer Prize honors the best USAID projects and activities that are successfully applying science and technology to solve development challenges.

By equipping vulnerable communities with modern tools, the project has peacefully resolved hundreds of disputes and secured land titles directly benefiting over 11,000 indigenous, Afro-Colombians, and small-scale farmers and their families.

"Young people are the key to acceptance of the technological tools by the older generations," notes USAID's Cristina Barrera. "Youth are hungry for modernity and embrace electronic devices. They can easily convince their elders of the benefits of digital mapping", added USAID's partner Mercy Corp's Program Manager, Hugo Gómez.

The project uses a Web 2.0 platform through the website <http://www.redtierras.org/> to encourage knowledge sharing by communities, civil society, and government representatives on land-related topics including access, distribution, and management. The interactive website is a common space for blog entries, photos, videos, documents, and comments.

Study tours through regional exchanges among the three participating countries (Guatemala, Colombia, and Bolivia) promote further sharing of lessons learned.

Protierra supports Government of Colombia efforts to re-establish state control and legitimacy through security, counter-narcotics, and economic and social development initiatives.