



An International Center
for Soil Fertility and
Agricultural Development

Success Story

Building Capacity in Systems Research

The National Agricultural Research System in Ecuador (INIAP) and IFDC are partners in a strategic alliance designed to improve agricultural research in Ecuadorian institutions. Like other agricultural research systems, INIAP is facing the challenge of producing more food with less impact on the environment but being asked to do so with declining resources. To be successful in meeting this challenge, INIAP recognizes that it needs to place greater emphasis on the efficient organization of research and the knowledge that it generates.



The IFDC/INIAP alliance aims to train a multidisciplinary team of Ecuadorian scientists in the use of a systems research approach and systems analysis tools such as Geographic Information Systems (GIS) and simulation models. The team is made up of 12 scientists from INIAP, the Ecuadorian Institute for Meteorology and Hydrology (INAMHI), and the Natural Resources Program (DINAREN) of the Ecuadorian Ministry of Agriculture. Disciplines represented on the team include soil science, agronomy, plant breeding, plant pathology, entomology, and economics. Activities are being partially funded through Ecuador's Agricultural Services Modernization Program (PROMSA), which is financed by the World Bank. The Project Leader is Victor Barrera, Head of Technology Transfer at the INIAP Santa Catalina Experiment Station in Quito. Input from IFDC is being coordinated by Walter Bowen, Leader of the Soil and Nutrient Dynamics Program.

The team is learning not only how to develop and apply simulation models and GIS but also how to work together more effectively. While focusing on the quantitative description of soil and plant processes, they are also learning the importance of good communication and inter-personal skills, which are critical for successful team work. IFDC hopes to apply this approach to building research teams in other Andean countries through a continuing partnership with the International Potato Center (CIP) and the Consortium for the Sustainable Development of the Andean Ecoregion (CONDESAN).