

# Natural Disasters in Peru: From damage limitation to risk management and prevention



UN Trust Fund for Human Security



## Fast Facts

**Country:** Peru

**Duration:** June 2006 to March 2009

**Implementing UN Agencies:** UNDP; UNICEF; FAO; PAHO; WFP

**Other Implementing Partners:** Civil defense district committees; local municipalities; regional authorities; community networks and NGOs

**Budget:** \$1,576,484.62

**Key Words:** Climate change; natural disasters; livelihoods; food security; health

## BACKGROUND

The threat of natural disasters had been a constant source of insecurity for vulnerable rural communities living in the Andean Mountains of Peru. In particular, the provinces of Quispicanchi and Carabaya had faced repeated cycles of severe drought, frost, snowstorms, landslides, earthquakes and forest fires. Although small in scale, the recurrent nature of these natural crises had resulted in transforming would-be temporary emergencies into serious disasters that exerted further pressure on already vulnerable

communities. Furthermore, these recurrent natural disasters had triggered a progressive loss of capacities and livelihoods by further jeopardizing access to basic health services, undermining already poor housing conditions, and stifling economic opportunities both within and across communities. Subsequently, as persistent natural disasters took their toll, the region was faced with one of the highest levels of extreme poverty in the country and experienced serious situations of food, economic, and health insecurity.

## PROGRAMME OVERVIEW

### GOALS AND OBJECTIVES

Grounded in the protection and empowerment framework of the human security approach, the project advanced a culture of prevention in remote areas prone to recurrent natural disasters by promoting locally based disaster risk management mechanisms. This was achieved through: (i) empowering district municipalities with improved capacities in disaster preparedness, response, and coordination; (ii) improving the ability of communities to better mitigate the risks of natural disasters to their survival,

health and food security; (iii) strengthening coping capacities of communities and reducing vulnerabilities through better nutrition, improved health services, and more adequate farming techniques; (iv) improving community awareness and knowledge of practical preventive measures in the event of natural disasters; and (v) disseminating lessons learned at the regional level, as well as implementing standing agreements between regional, provincial, and district institutions.

### BENEFICIARIES

The project reached over 39,000 vulnerable people in around 9,400 rural households. Beneficiaries included peasant farmers such as small crop producers and alpaca and llama raisers; school-aged children in local

primary and secondary schools, and their teachers; local authorities and officials of public institutions, especially from the health, agriculture and education sectors; and local women's committees.



## NOTABLE ACHIEVEMENTS

(i) Towards strengthening the capacities of district municipalities to prepare for and respond to disasters, 116 training workshops were implemented covering issues such as risk management, community-level response mechanisms, and the implementation of low-cost communication, monitoring and Early Warning systems. These workshops reached 986 local officials and 3,459 community leaders and were instrumental in changing the attitude of the communities and increasing their knowledge and awareness of disaster risk mitigation, prevention and preparedness.

(ii) In responding to the harmful effects of freezing weather conditions, the project worked with local organizations to develop a solar heating system which increased the temperature inside homes by 12 degrees centigrade. Meanwhile, the provision of polar fleece jumpers and blankets mitigated the effects of freezing weather on new-born babies and fostered a culture in which children were protected from the cold. As a result, 80% of new-born babies were protected from

cold and pneumonia. Moreover, 233 health staff, community leaders, and local women were trained to operate mobile health brigades. These brigades played an active role in expanding health care coverage for the benefit of the more disadvantaged and vulnerable groups and encouraging the dissemination of good health and disease prevention practices that helped reduce the number of pneumonia and acute diarrheal cases.

(iii) The project was also successful in strengthening the coping capacities of local communities to protect their livelihoods and food security, and to more quickly recover from natural disasters. Moreover, during the project period, the loss of livestock decreased by 20 per cent due to the construction of sheds using local materials. Meanwhile, 5,508 people were trained in soil conservation, irrigation, and greenhouse construction to protect crops from harsh winter conditions.

## LESSONS LEARNED

At the core of the human security approach are contextualized solutions that are responsive to the particular situations which they seek to address. By adapting activities to local needs, as well as to the region's agricultural calendar and weather patterns, the project ensured maximum participation by local communities and the development of well-targeted and sustainable responses. For example, the integration of traditional knowledge into disaster prevention plans and the adaptation of risk management technologies to local types of crops and

livestock were essential in securing the engagement of local communities and benefiting from their knowledge and commitment. Moreover, the cost-benefit of using locally sourced material was critical in gaining the support of local authorities for disaster preparedness activities. Lastly, awareness raising activities were also critical in engaging communities to identify their own risk management needs, thereby encouraging local ownership and sustainability of the project.