



LA CHAPA LANDSLIDE  
- PAZ DEL RIO -

involved the communities at risk, laying emphasis on education with a view to prevention. The models have been used in other parts of the country.

### **Mudslides due to volcanic eruptions in the city of Ibagué**

The proximity of an active snowcapped volcano, a steep river valley and large-scale urban development along the river banks, and the country's painful experience of the eruption of Mt. Ruiz led to the selection of this scenario.

#### **General activities:**

- Review and updating of hazard maps
- Additions to the volcano monitoring system
- Preparation and revision of emergency plans
- Education, training and public information programmes
- Urban planning and regulation in the River Combeima basin
- Seminar/workshop on volcanic hazards and risks.

This was a pioneering effort to develop warning programmes, evacuation plans and public information in Colombia. It was tested on a variety of occasions, in simulations and in real events such as when, in March 1993, the upper reaches of the River Combeima were blocked by a small dam which later broke. The alarm was given and nine districts in the capital of the department of Tolima were evacuated, along with

hamlets and government buildings along the river banks. The event turned out to be less dramatic than expected and produced no significant damage, but the preparations made in the community and support agencies were a clear lesson on how well a well-managed process can work.

### **Flash flooding in the River Combeima basin, Ibagué**

To complement the volcanic scenario mentioned above, a hydrometeorological assessment programme was carried out to assess, as a demonstration project, the hazard

and risk posed by various phenomena in a densely populated area.

#### **General activities:**

- Preparation of a flash-flood map
- Estimates of flood risk and vulnerability
- Monitoring and warning systems
- Education and community preparation
- Updating of the emergency plan
- Urban planning and relocation of housing at risk.

Given the special features of the River Combeima (volcanic and hydrological risk), the considerations mentioned under the point above also apply here ●

*RIO COMBEIMA'S HOUSING  
RELOCATION PROGRAM*

