

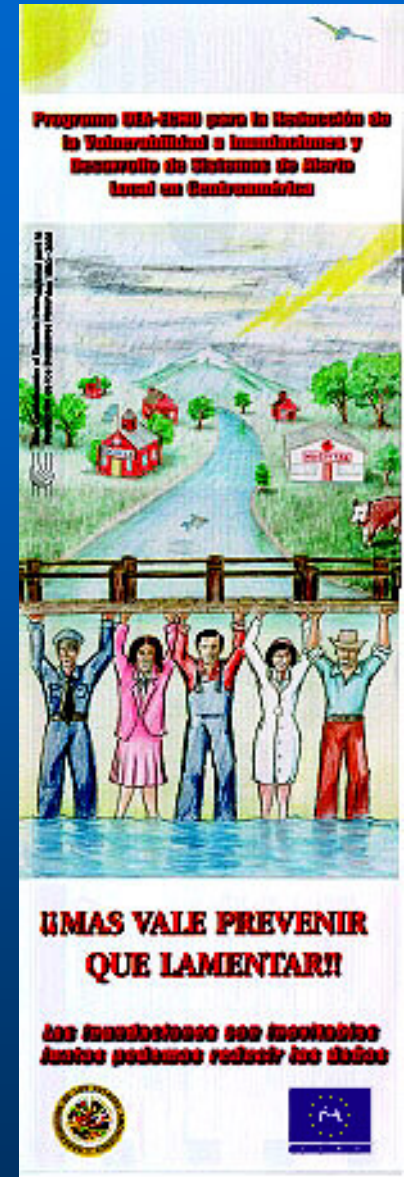
# Community Based Flood Early Warning System for Small Valleys



**Organization of  
American States**

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# Program Structure

- **Vulnerability Analysis and Identification of Mitigation Measures for long term risk reduction of a community's population, and economic and social infrastructure**
- **Hydrological Analysis, Alert System Design and Hydrological Measurements for constructing, installing and monitoring rain and river gages upon which to base flood hazard warnings**
- **Community Preparedness for undertaking flood alert, evacuation and response actions**



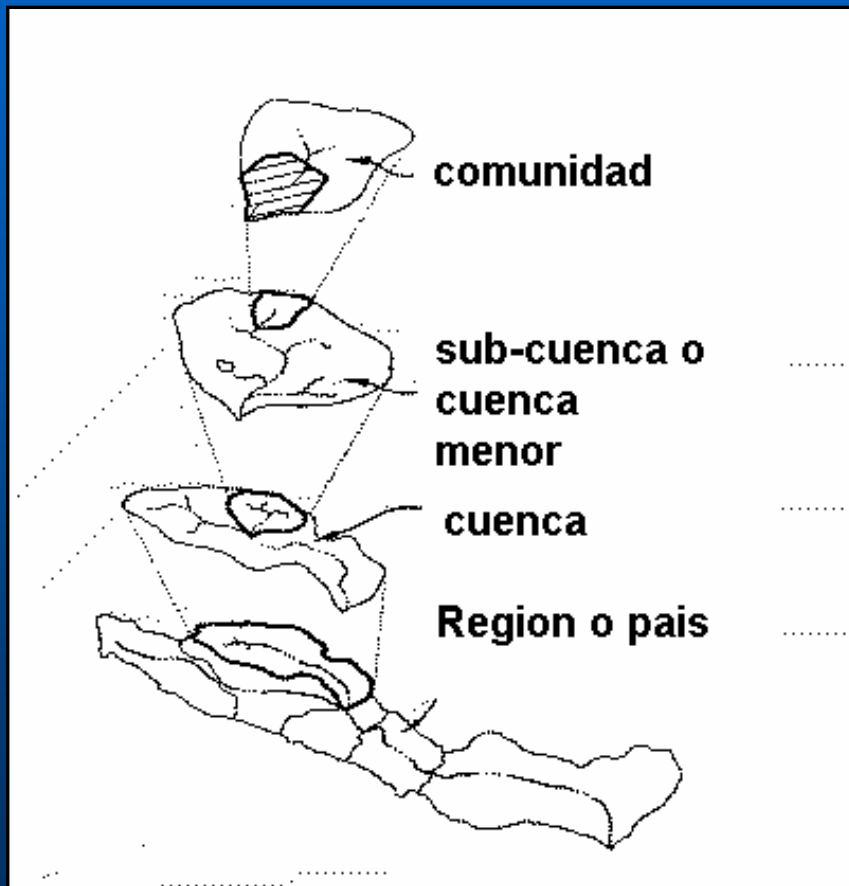
# Vulnerability Analysis

- Reducing social and economic infrastructure's vulnerability to floods





# Hydrological Analysis, Alert System Design and Hydrological Measurements



- Collection and analysis of basic hydrologic data for the small tributary river basins.
- Characterization of floodplains and definition of flood hazards according to the hydrological data collected.
- Installation and maintenance of flood alert and warning system to give floodplain residents advance notice of flood status with sufficient time for evacuation.



# Hydrological Analysis, Alert System Design and Hydrological Measurements

## River valley general information:

- Location and characteristics
- Hydro meteorological information
- Flood problems
- Community assessment

# Hydrological Analysis, Alert System Design and Hydrological Measurements



## Hydrologic measurement:

- Measurement instruments, production and maintenance.
- Instruments location and operation
- Data compilation, recording and communication

# Hydrological Analysis, Alert System Design and Hydrological Measurements

## Hydrologic analysis:

- Hydrologic information analysis
- Flood vulnerability assessment
- Flood forecasting parameters



# Hydrological Analysis, Alert System Design and Hydrological Measurements



## Early warning system

- Flood forecasting
- Alert
- Response action plan





# SVP Regional Platform Development

- Disseminate information and expand the cadre of knowledgeable and experienced persons from the public and private sectors at the local level who can work with municipalities and development groups in setting up and implementing the Small Valleys Flood Alert and Vulnerability Reduction Program (SVP).
- Support the creation and development by local users of a regional platform for small valley flood alert and vulnerability reduction mechanism responsible for supporting national and local actions through training, technology transfer and technical assistance.

