

FROM THREAT TO GROWTH

A REGIONAL DEVELOPMENT STRATEGY FOR VOLCANIC

RISK MANAGEMENT AT THE GALERAS REGION, COLOMBIA

This project analyses the situation of three rural communities settled over 300 years ago on the fertile slopes of Galeras volcano in the south-western region of Colombia, whose reactivation process has been under studies by scientists since 1997. The objective of this project therefore, is to develop a regional development strategy that collects the lessons learned from previous local risk strategies, municipality master plans and initiatives from the local communities, using these inputs as the basis for a number of urban and local scale proposals that bring a positive impact in the community at the same time reducing the risks associated to volcanic eruptions.

1 The shelters today are safe public lands sub utilized by the community.



The proposed approach to growth provides an alternative to the cur I rent trend of growth towards the volcano that can be seen in the urban evolution of San Juan de Pasto. New growth areas were defined for the city of Pasto, and the villages of Genoy, Florida and Nariño. These growth areas will have characteristics of expansion zones rather than resettlements or new towns and will continue the spatial qualities of the original village. Furthermore, new growth areas are proposed for the Wildlife sanctuary, including the area between itself and Pasto's western border. This area constitutes a buffer zone that prevents urban expansion towards the volcano. The need for expansion areas is resolved towards the eastern border, making use of Pan-American High way's new path. Productive lands not to be occupied will be created at the high threat zone. New human settlements will implement clear building regulations to make them resilient to volcanic risk.

By this analysis it can be concluded that in order to address the issue of risk reduction in rural and semi-urban communities, innovative alterna tives need to be considered, such as:

- Integrating the shelters areas as part of the solution:
- Creating large areas for food production instead of micro parcels:
- Working together with ancestral communities in understanding risk:
- Letting the community decide their own growth:

Area of study

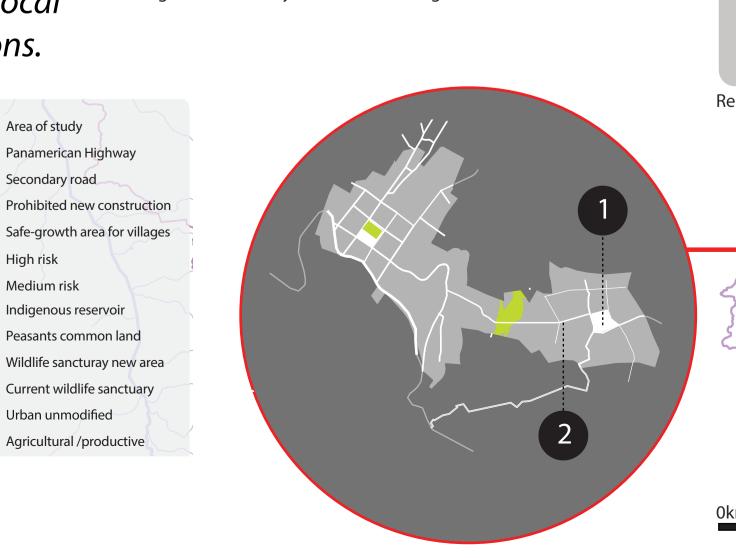
Prohibited new constructio

Peasants common land

Urban unmodified

Agricultural /productive

Wildlife sancturay new area Current wildlife sanctuary



Vulnerability of built environment (OSSO 2010) Inhabited plots (Casa Galeras 2013) Map risk proposed (This work 2013 for construction proposed (This work 2013) s proposed (This work 2013) Expansion wildlife proposed (this work 2013) Common rural land proposed (this work 2013) Regional Development strategy for the Galeras region