



Florida
(2118 people in risk)

Nariño
(454 people in risk)

A self-organizing participative approach

as an alternative to preventive human resettlement for the slopes of Galeras volcano, Colombia

n risk)

Johnny Tascon Valencia

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Thesis Plan for the Master's Programme in Urbanism

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0. Introduction

This document presents a one year plan to develop the project entitled “**A self-organizing participative approach**, as an alternative to preventive human resettlement for the slopes of Galeras volcano, Colombia”.¹ Participative approach stands for the search of methods to engage the local community in the transformation of their own territory due to external factors that require actions to be taken. The case hereby presented describes the situation of 3 rural communities located for more than 200 years in the fertile slopes of the volcano Galeras in the south-western region of Nariño, Colombia, whose reactivation process has been under studies by scientists since 1997. According to them, an 83 km² area inhabited by near of 9000 people from these communities will be severely affected in an eruption that can happen in any moment. Governments in many countries have opted for proposing human resettlement in situations like this, when a risk reduction measure is urgently needed. However, the community has resisted more than 13 years to the relocation , and the situation does not seem to find a solution.

The first section of this thesis plan report serves as a presentation of the study case. It displays a preliminary site analysis and the main aspects of the affected community, as well as the problem statement, research question, objective of the project and personal motivation. The second part describes the theoretical framework of the project, as well as its relevance, methodology and expected results. Finally, a preliminary one year schedule is provided.

1. Project Description

Resettlement as a strategy

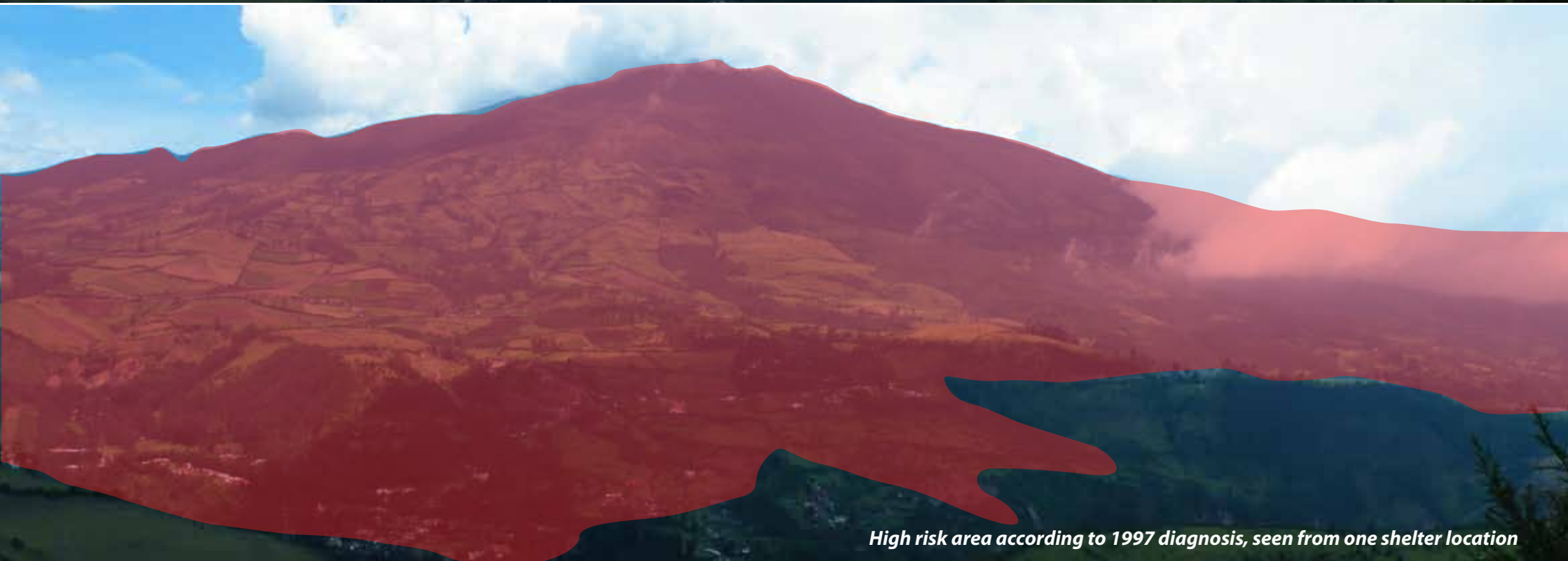
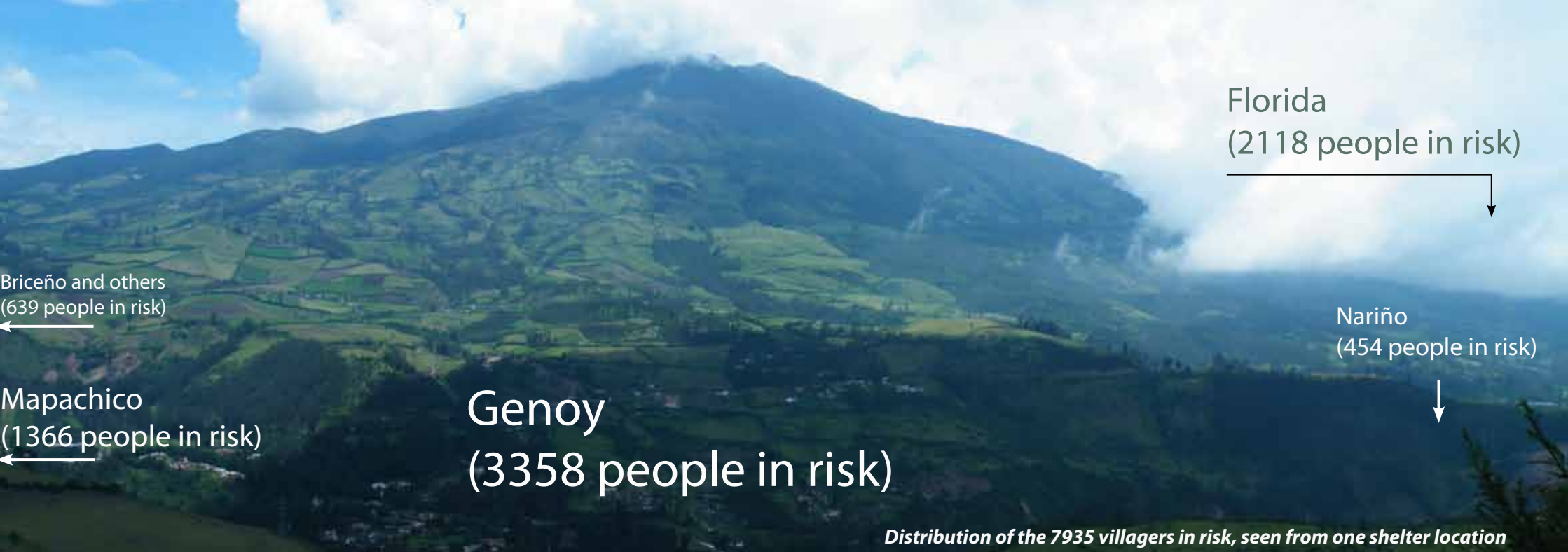
According to Red Cross International there are currently 15 million people displaced by hazard and disasters (IFRC, 2012). Most of them are actual victims of disasters who lost everything and need to build a new life after the event. However, some others are vulnerable communities settled in locations where the risk of a disaster to occur is so high that as a response, the governments define plans to preventively resettle these communities

to a safer urban, rural or suburban locations, either designed from scratch, or by increasing density on existing communities. These solutions can generate a social disruption reflected in aspects such as the failure of the new settlement or the impoverishment of the community among others.

Preventive resettlement of communities has being defined as a risk reduction measure by several national governments around the world (Correa, 2011). However, when not addressed properly it often creates a major problem in terms of disruption of social and economic dynamics. An example of this phenomenon can be seen in the preventive resettlement of San Cayetano, a small village at Colombia’s central region, where mass movements caused cracking of houses and buildings. Local governments ordered the preventive evacuation of the village and the resettlement to a new terrain people chose among three options in a democratic selection process. However, what this measure caused was the displacement to a new town of a rural community accustomed to temperate climate plantations with the commercial activity provided by a nearby highway. This new town is more elevated, then colder, all the houses look the same, and it is completely away from the activity of the road. The people have expressed their dissatisfaction through local media, but even they are not aware of how could it had been any better.

To this point, the main question is, Which are the spatial strategies that can prevent the disruption of social and economic dynamics that have evolved along with the community when the preventive resettlement strategy is unavoidable given scientific evidence of risk? The case of the communities located at the slopes of the Galeras Volcano provides enough elements to address this question as a spatial problem but considering at the same time its underlying political implications This thesis project will focus in collecting evidence material that outlines an alternative approach to this question.

¹ This project is being guided by Ekim Tan and Henco Bekkering. Ir. Tan as research mentor from the chair “Design as Politics” is orienting me in finding alternative approaches to people’s participation methodology applicable to this case study. Prof. Ir. Bekkering as urban planning and design mentor is guiding me towards a concrete spatial outcome for the proposed case.



Motivation

As a Colombian, I try to keep myself in close contact with the difficulties our country has faced throughout its recent history. As an architect, I have been interested in the sociopolitical phenomena that determines the built environment in general, such as the forced resettlement by natural causes that can be prevented if planning actions are taken with proper planning.

The Galeras resettlement case has been a major concern in my home country in terms of both social policy and regional planning which has not been solved after 15 years of discussions. Furthermore, I strongly believe that even though this master thesis is not intended to actually solve a specific situation from the real world, it does have the capability to help me in better understanding a relevant social problem and dedicate one year to provide ideas that can be helpful in this or any other similar future process in which I can contribute as an urbanist.

Problem field definition

These three aspects have been identified as core problems for the proposed case:

- *Top-down approach* (political problem): The measures conceived to be implemented have been defined from the central government or from institutions that represent it. The action from the rural and semiurban community is being expressed as protests or civil disobedience, but not as an organized project at all.
- *Mistrust* (Social problem): the community sees the efforts from the government as attempts to dispossess them from their productive lands. No proposal seems to compensate effectively the sacrifice of rural people of giving away their lands and starting from scratch at an unknown location.
- *Lack of land* (Spatial problem): 200 years of parcellation and mini parcellation has increased the pressure over the land at the slopes of the volcano. Rural families used to own 1 to 3 Hectares before. Newer generations can have access to plots of 500 to 700 m² that can hardly produce the livelihood of an entire family.

Detailed problem definition

1. *Physical and social situation (What)*: After the definition of the Galeras' high risk area by the National agency of mining and resources (INGEOMINAS) three municipalities resulted affected as they are located (or partly located) within this area. The national government declared the State of Emergency in order to facilitate the issuing of funds to resettle the three communities. However, the communities have mostly rejected the resettlement approach as it can be seen in news media, and in the fact that the collective resettlement has not been achieved yet.

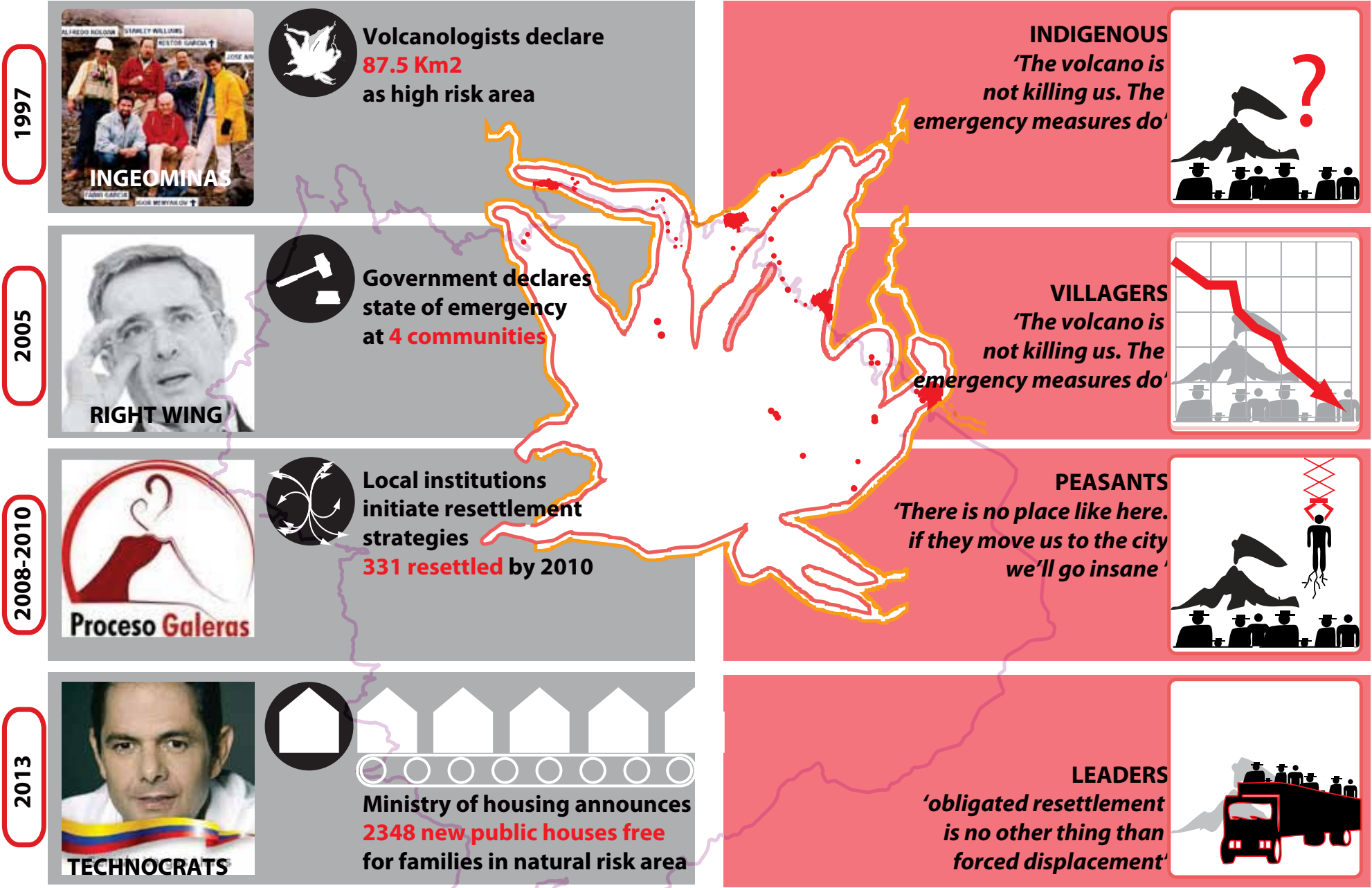
2. *What are the spatial characteristics (Where)*: These communities are located in an area known as *Circunvalar del Galeras* (Galeras Ring Road) a touristic circuit that connects several rural villages. Due to their indigenous heritage, many of the villagers and peasants have a deep attachment to the land, not only because of the fertility of the volcanic soil, but also because as they say "*The land owns us. As we are part of it, we belong to it*".

3. *Who is involved (Who)*: The high risk area affected near to 9000 people among villagers and peasants to the north of the ring-road. The strategies towards a resettlement have come from the side of the national and local government. Even though these processes have been participative by definition, the people still claim for a solution that minimizes the disruption of their lifestyle.

4. *What is the political system*: In the Colombian democracy system, decisions are made in the central government seated at Bogota, miles away of this region. Most of the ruling parties are right wing and local governments have little ideological differences with the central authorities which generate reaction from communities with different ideas of government, such as indigenous communities of this zone.

5. *What are the policies over the territory (The red tape)*: Besides the definition of the High risk area and the declaration of State of Emergency, several social and spatial plans have been proposed to mitigate the risk. However, these plans are far away to constitute a solution the people can trust.

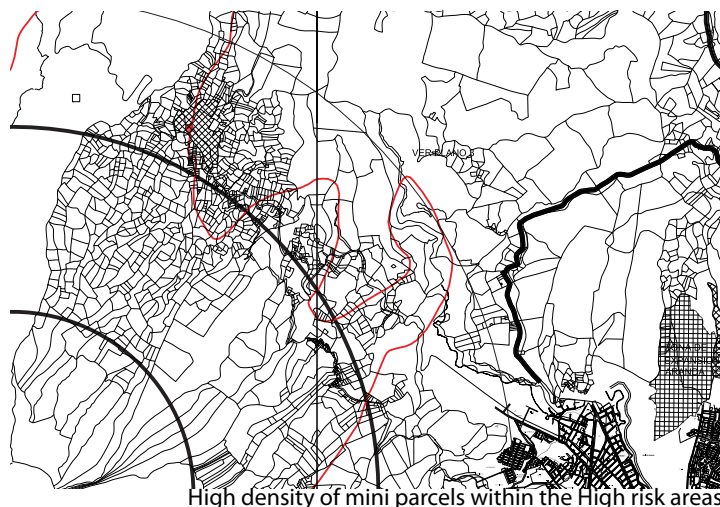
to move.... or not to move....



Problem statement

From the administrative, financial, and even political points of view, the resettlement measure seems to be a right strategy in order to save lives when the high risk is identified and it is unavoidable like in this case. However, it should not be considered as the only one. As it was expressed by a community leader:

“Since the propositions by the communities at the High Risk Zone are not heard, the only alternative available will be the one of the Government that seeks to impose an obligated resettlement, which is no more than a forced displacement”.



High density of mini parcels within the High risk areas

Objective

The objective of my graduation studio is **to design a participatory process that can turn people’s cultural background into feasible scenarios of strategies within their territory in which the right to life can be ensured** not only by reducing the risk of dying by causes that can be prevented, but also minimizing the disruptions in the people’s current way of living. To achieve this, the main inputs will be the discourses of the residents (collected from previous works and to be collected in a field trip) and data related with the spatial resources available (shelter locations, roads connecting the risk areas to the shelter etc.).

Research question

How can a participatory process empower a vulnerable community to decide the urban transformations required at their own territory for ensuring their right to life?

Sub research questions are:

- What are the cultural characteristics of the Galeras region society that can trigger a participatory process within the region?
- What are the set of actions that the community is willing to support, and that can be used in the construction of a participatory Galeras regional project in which their right to life is safeguarded?
- What set of theories and approaches about community participation in spatial decisions can be applied to the specific case of the communities on risk at the slopes of Galeras Volcano in Colombia?
- What are the spatial strategies that can prevent the disruption of social and economic dynamics that have evolved along with the community when the preventive resettlement strategy is implemented?

Expected outcome: The case of Genoy

4. Voluntary resettlement: When the new centrality succeed, and new urban activity has been activated around it, the existing village can start to move step by step.

1. Induced Activity: A relocation of activities and centralities can be proposed instead of a resettlement of households. This can activate the use of the shelter location as a public space.

2. Self organization: By allowing the community to intensively use the shelter location, new facilities can be built replacing the existing shelters, thus activating the neighbouring plots.

3. Spontaneous growth: The new centrality will generate more mobility between the village and the new location, thus new activity will arise around the existing road, and new roads can show up.

Genoy is a 3500 people municipality completely inside the high risk area. It is connected with Pasto directly by the Galeras Ring Road that borders it to the South.

For evacuation purposes, a 2 Hectares plot was designated to develop a shelter location for Genoy inhabitants. However, people feel uncomfortable when they are obligated to evacuate here (about 4 times a year)

2. Relevance

As stated above, the Galeras study case has been nationwide discussed after defined the high risk zone back in 1997. Three different governments have tried to come up with a feasible plan able to permanently move the people to a safer place, one they can actually engage.

This project is relevant in at least three aspects:

Societal relevance: The communities located in the slopes of the volcano are constantly demanding for governmental attention to their main complaints: There is an increasing impoverishment process related with the official declaratory of the high risk area. Touristic activity has diminished, local scale businesses have left the area and once the people who have agreed with the call for individual resettlement have left the area, the loss cannot be replaced by law (the house must be demolished), severely damaging the fragile local social network. Furthermore, The recent growing influence of indigenous groups adds new complexities to the discussion, such as the indivisibility of people and land according to indigenous beliefs.

Scientific relevance: There are considerable scientific research done in the field of participatory approaches. However, these work have been more focussed on enabling communities to create innovative means of production or organization. Few examples of how to transform the initiatives from an organized community into spatial transformations of the region and the built environment have been broadly analysed

Political relevance: There is no policy that regulates resettlement in Colombia as there are in several countries applying this mechanism. This lack makes it difficult to generate effective social processes when resettlement is imperative. Instead, national regional and local governments are applying emergency measures with apparently no coordination between them. The community is divided and the spaces for debate are being criticized by spontaneous activists that have emerged in news and social media with new political agendas.



My personal position: The main ethical struggle in a case like this has to do with understanding what right to life mean. In a government like Colombia, the state is responsible to ensure the right to life of every citizen. Therefore, it makes sense to focus the efforts in relocating an endangered community to a safer place, away from the risk of being erased by a potential deadly volcanic eruption. However, for the communities at the Galeras' slopes, right to life means the right to perform the activities they have performed by generations in order to get their livelihood; in this case, territory should no longer be understood as a production unit, but as a vital component of people's lives, as part of their right to life. Then the role of the planner should no longer be how to convince or educate a community in the benefits of a measure that detaches them from their root, but how new alternatives can arise by understanding the unique dynamics of the people that have been building livable territories through their history.

3. Methodology

The methods that are being used in this project aim to address the above mentioned sub research questions:

Discourse Analysis: In order to identify the cultural characteristics present on the Galeras Region, the main source of information has been the stories found in news papers and magazines since 1997. Interviews with actors have been also implemented in order to find deep reasons why people prefer to stay at the territory than moving to a safer New Town.

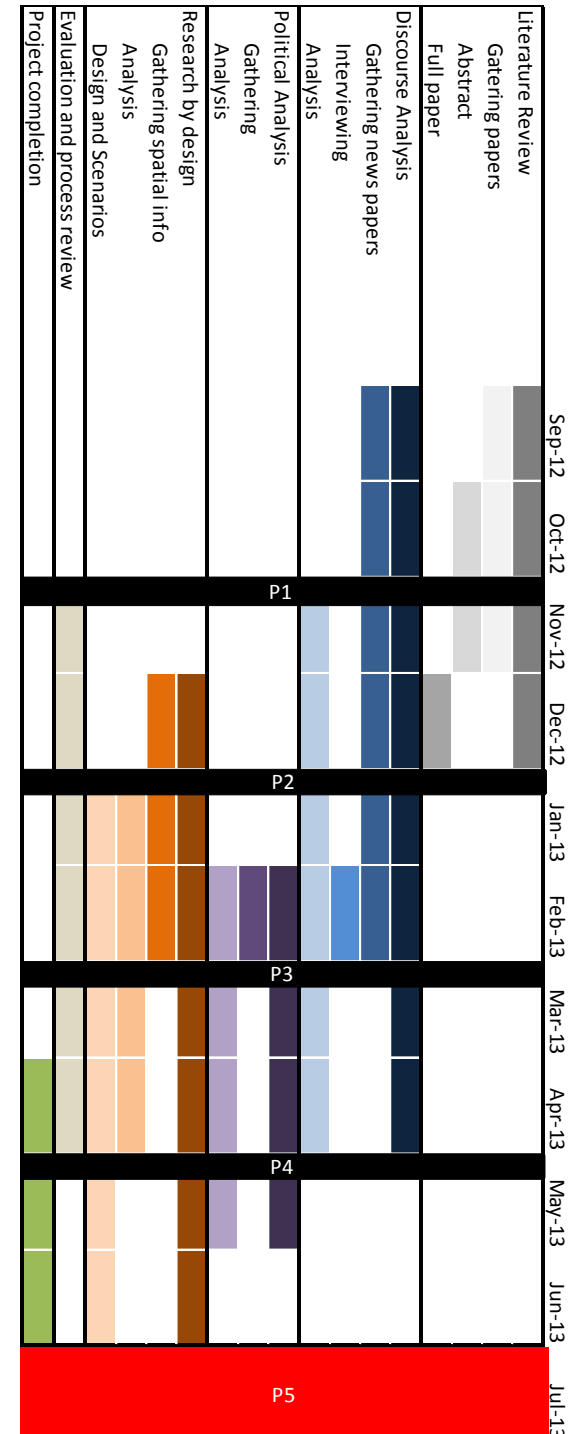
Political Analysis: In order to find the actions that the community is willing to support, or those that have been completely rejected, political programs of candidates for Major at the localities can be analysed ¹. The data about the voting results in the specific communities of study is available from the National electoral Authorities and can be used to analyse the support from the community to different positions and spatial strategies.

Literature Review: This is proposed to review existing approaches on participation theory by scholars and researchers from different experiences engaging local community as the core of a given spatial strategy. The resulting set of tools can be evaluated according to its suitability to the specific case of the communities of this study case

Research by Design (and design by research): The main findings from the site analysis provide alternatives to on-site implementing solutions from the other methods. The appropriate implementation of this method must end up with simulations of feasible spatial scenarios that address the main goal.

¹As an example, the current Major of Pasto proposed a Geothermal energy plant to make use of the heat from the volcano. The community of Genoy highly supported this candidate during the recent elections. How will this proposal affect the urban and social dynamics of the region?

Phasing and time planning



4. Theoretical Framework

The following is the literature review paper submitted to the Department of Urbanism:

Participatory approaches for spatial planning processes

Opportunities to enhance human resettlement projects with community participation

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Abstract – Human resettlement has been proposed as a risk reduction strategy for communities affected by natural disasters around the world, and specifically in developing countries (Correa et al. 2011). Formerly, resettlements have been implemented as pre-disaster planned developments (namely new-towns) aiming to ensure the right to life of human communities that are exposed to high natural risk. Due to international regulations in human rights, governments and resettlement practitioners have been recently encouraged (often by multilateral organizations such as World Bank and IBD) to include community participation as a key component for these processes. Nevertheless, these community participation components are often characterized by sporadic on-site workshops with poor participation of community key members. As a result, people that have been moved to a planned resettlement express dissatisfaction related with the disruption in their lifestyles, as well as a dispossession feeling (Oliver-Smith 2009) they hardly can overcome in a lifetime. As an alternative, it can be considered the fact that communities have the inherent ability to produce urban settlements with minimum or no external intervention (Alexander et al. 1975: p. 46). What are the inherent characteristics of local communities that make urban settlements successful? By implementing participatory approaches in spatial planning processes (e.g. resettlement projects), core characteristics of local communities can be identified in order to achieve a bottom-up spatial solutions that the community can accept.

Key words – Preventive resettlement, community participation, Collaborative Planning approach, Deliberative Planning approach, Participatory Rural Appraisal (PRA), Participatory Theory.

4.1. Introduction

It has been estimated that 2.3 billion people in the world will be affected by natural disasters in 2020 (World Bank, 2011). In regions where mitigation is not a feasible option, resettlement of population vulnerable to natural risk has been proposed as a social, political and spatial strategy for preventing human losses and macro economic impact when a disaster comes. However, study cases in Latin America show that this measure is far to be a straight forward solution. Among the causes for failing in resettlement processes the most important are: lack of finance for planning and implementing resettlement, lack of capacity in terms of numbers and expertise of resettlements staff, lack of development opportunities for improving livelihoods, and lack of community participation in the resettlement process (Scudder 2009).

The way preventive resettlements have been performed in Latin America can be compared with top-down new towns development: both are attempts to create urban life from scratch, disregarding the role of history and communities in place making. In both cases the new settlement results from a design idea that is valid for one moment in time and a specific point of view, with urban scale consequences in a highly inflexible context (Provost, 2010). Moreover, new towns as preventive resettlement of endangered communities fail in resembling the past conditions of a prosper town, neighbourhood or village that worked properly during its history until the danger is identified and the imperativeness of the resettlement measure is determined by science and law.

Then, why do master planned resettlements fail if the community of users is the same and the new settlement resembles

and sometimes improves the physical conditions of the original settlement? According to Christopher Alexander, what master planned urbanism actually lacks are the historical and cultural processes that underpin the evolution of cities: *'Almost all the environments in human history have been designed by lay people. Many of the most wonderful places in the world, now avidly photographed by architects, were not designed by architects but by lay people'* (Alexander et al. 1975: p. 46). This argument highlights how people participation can be more relevant in a place making process than financial or administrative factors as initially presented.

The mainstream resettlement practice in developing countries (which is summarized by Correa et al. in the World Bank's resettlement handbook) recognizes community participation as a key element in understanding their vulnerability and the causes that generate risk and therefore motivate the resettlement measure (Correa et al. 2011). Nonetheless, little relevance is given to people's role in defining the spatial strategy that can mitigate the risk without disrupting their ways of living, livelihoods and traditions. This means that participation is central in identifying that the resettlement is required, but the spatial strategy that ends up with a new settlement for the affected community is mainly defined by external planners and experts that are able to produce a fast emergency master plan but are not forced to involve the community in the overall process.

The position presented in this paper does not neglect the role of experts and planners in the process. What is presented here is a set of available techniques and theories in community participation with different approaches on what the role of the planner should be. The starting point is the question proposed by Alexander in the Oregon Experiment: *'Is the kind of participation we advocate attainable under modern social conditions?'* (Alexander et

al. 1975: p. 49) And furthermore, what kind of role should the urban planner play in a participatory process? What are the inputs, outputs and internal processes required to end up with a concerted agreement on the spatial decisions to be made? Are these processes suitable in resettlement cases? This paper reviews different approaches to community participation that has been analyzed by scholars in successful spatial planning processes involving communities and ends up with recommendations on how these approaches can benefit a community resettlement process in a high natural risk context.

4.2. Participation from planning perspective

4.2.1 Participation as a deliberative process.

Resettlement is considered in essence a conflict situation that planners and policy makers often fail to manage in a way that builds trust. Oliver-Smith (2009) states that *'The often extremely negative, concrete impacts of resettlement projects on affected peoples compound the disorientation generated by the loss of control and understanding, creating motivation for resistance'* The Deliberative approach on community participation (Forester 1999) defines alternatives to create a trust environment out of conflict.

According to Forester, deliberation is the practice to *'work and learn with others'* (1999: p. 2). Moreover, the deliberative practice constitutes a dialogic strategy for mediation that is especially helpful in the design professions. Involving citizens in spatial decision making may delay the achievement of goals. Nevertheless, it represents a unique opportunity to identify and detail what the key elements are from the users point of view in a spatial planning process: *'How we can learn not only about technique but about value; how we can change our minds about what is important, (...) and, more, change our practical sense about*

what we can do together' (Forester, 1999: p. 62). In sum, deliberative approach seeks to enhance the knowledge developers have of a place, by the contributions of the community that inhabits the place about what really matters to them.

One property of deliberative participation as a mediation tool is its conflict solving capacity. During local processes of spatial planning, planners have a mediating role between conflicting parties in order to obtain results (Forester 1987). Mistrust is presented in Forester as directly related with conflict and as a noise element that impacts the performance of deliberative discussions (Forester, 1999: p. 62). In order to defeat mistrust, planners must understand that success in a participative process is more than finding agreement in technical details of the spatial process that is being discussed. From this point of view, success is achieved when conflicting parties manage to present their substantive issues to each other, and these issues are heard and understood by each other. Therefore, the goal of a participatory process based on a deliberative approach can be understood as the evolution of both physical spaces (the subject of the meetings) and dialogic spaces in which actors can present and debate about the topics that are really relevant for the sake of the local community.

Another characteristic of the deliberative approach is the use of negotiation as a technique to achieve agreements. A deliberate planning process leads to a negotiated production of public welfare through social mobilization (Adaman & Devine 2001). However, this represents a main source of critics to participation based on deliberation. In order to achieve benefit for the represented community, actors involved adopt negotiation strategies in presenting their points of view. These strategies are often based in the information inequality and power imbalances (Forester 1987). In order to deal with these asymmetries, Forester

recommends planners to separate negotiation from mediation (Forester 1987) (Forester 1999: p. 158). In so doing, planner's role is positioned as an external third party when conflicts arise. Furthermore, deliberative approach highlights the value of negotiation as a method that unveils hidden information from the parties, which brings benefits to the overall process.

To sum up this approach, deliberative processes can be understood as those in which planners act as mediators between spatial developers and communities affected with the development, in which the developer complements the previous knowledge about community's issues with the direct input of people involved in a dialogic space induced by the deliberative practitioner. Nevertheless, the planner's role can shift from mediator to external observer in order to keep independence and provide the parties with autonomy in conflict solving. The expected output of the deliberative participatory process is the shared social and spatial knowledge and the resolution of explicit and implicit conflicts that arise during the spatial planning process.

4.2.2. Collaborative Planning (CP) approach.

Another conflict generator in preventive resettlement projects is the lack of information in the community side. People facing resettlement *'must often cope with great uncertainty and a lack of information concerning their future, resulting in conditions of considerable stress, disorientation, and trauma'* (Oliver-Smith 2009). In this direction, the work of Patsy Healey (1998) focuses on the communicative nature of community participation.

Collaborative planning can be defined as an interactive place-making strategy that goes beyond the generation of spaces for stakeholders to share visions of how the city could be: *'In the collaborative approach to place-making, the regulatory object is the*

way people think about place and the meanings they give to it' (Healey, 1998). Furthermore, in a collaborative approach, the goal of place-making is a result of the collaboration between stakeholders (Healey 1998). Instead of negotiating as in the deliberative approach, in the collaborative approach planners, community and government are encouraged to work as a team in the construction of urban space.

As introduced before, one key concept for this approach is communication. Communicative acts in a participatory process have the power to sustain or challenge power structures that are set before the beginning of the planning process (Healey, 1992). This power of communication requires a higher responsibility that Healey positions in the planners role: *'The detailed study of planner at work (...) also lead to an understanding of knowledge available to the communities they serve, and when they are merely serving powerful established interests'* (Healey, 1992). This means that in collaborative planning, the participation requires an external guidance in order to ensure the effectiveness of the underpinning communicative process, and that guidance role should be separated from particular interests from the involved parties in order to generate trust.

Communication represents also a main source of criticism about collaborative approach to participation. In a participatory process focused on interactive communication, the process itself acquires more importance than the goal of the process (Healey 2003). Fainstein (1999) criticizes the communicative orientation of collaborative approach: *'Instead of asking what is to be done about cities and regions, communicative planners typically ask what planners should be doing, and the answer is that they should be good (i.e. tell the truth, not be pushy about their own judgments). Like technocrats whom they criticize, they appear to believe that planners have a special claim on disinterested morality'* (Fainstein, 1999).

Healey responds to Fainstein's and other's comments by stating that *'Processes have process outcomes. Engagement in governance processes shapes participants' sense of themselves'* (Healey 2003). This way, collaborative participation can be understood as process with multiple results including place-making agreements and redistribution of power among participants.

In practical terms, it can be said that collaborative approach defines planners as participants with no particular interests in the outcome but focused in ensuring an effective communication process. Collaborative approach is nourished by the multiple perspectives of spatial and social reality that can be found in the participants and aims for establishing a common ground in which everyone involved has equal access to the available knowledge. At the end, the social outcome of collaborative participation is an agreement that represents most of the participants' interests. However, attention must be set at the capacity of participants to actually understand their needs and transmit their knowledge; otherwise these agreements might produce unjust spatial results (Fainstein 1999). Next chapter focuses on a research approach to participation that attempts to enable communities to better communicate their understanding of territory and social issues.

4.3. Participatory Rural Appraisal (PRA): Participation from research perspective

One of the reasons for resettlement failure is the gap of technical and cultural knowledge between the rural affected community and the experts, planners and policy makers. Filling this gap requires time process of deep understanding of the community' necessities and values, but the pressure of governments to come up with a solution to the resettlement

prevents the implementation of participatory approaches like PRA which can enhance the knowledge of the affected community.

In PRA, local people are enabled to share, enhance and analyze their own knowledge of territory and society so they can benefit better of planning processes (Chambers 1994). In PRA, Territorial knowledge is collected by local people using participatory social mapping and community generated statistics, among other mapping, modelling and report techniques that involve communities regardless of their literacy levels.

According to Chambers (1994) four outcomes have been documented as the main contributions of PRA to participation theory: firstly, by implementing PRA rural communities subjected to spatial changes have developed analytical capabilities that were not present before, enabling them to analyze their own territory and social networks in a way that researchers can better understand what does really matter to the community. Secondly, PRA techniques that enable community to build their own maps and to report their reality in their own terms have also the by-product of increasing the trust between rural people and outsiders. Thirdly, the visual outcome of the participatory mapping methods commonly used in PRA has represented an opportunity to spread the local knowledge about territory in a more efficient way. Finally, the variations on standard methods introduced by communities when implemented have created a new diversity of methods that have been also documented and included as PRA methods, thus increasing the existing knowledge on this matter.

The main source of criticism on PRA comes from the idea that communities might feel that sharing their knowledge is a form of disempowering themselves (Sharma 2012). However, one main difference between traditional interviewing methods and

PRA is that the former aims to extract information, while the latter makes people realize how much they know about themselves (Chambers 1994), which actually generate more local power when deliberating about place making with outsiders. In other words, the approach debates the idea that power relies on knowledge, by stressing the fact that power is more related with the capability of actually producing new knowledge.

In sum, PRA as a participatory research technique based on the premise that poor and marginalized are capable to analyzing their spatial and social reality. The role of planner is as mediator between local community and policy makers, stressing the importance of the former over the latter (Chambers 1997: p. 234). The outcomes are primary data that avoids scientific biases that are induced in other data collection techniques.

4.4. Conclusions: the role of participation in defining spatial strategies.

After reviewing different approaches on participation, contrasting aspects from the different authors can be identified. These aspects can be further analyzed in terms of their suitability for spatial planning process such as resettlements. It has to be said that there is a wide variety of participatory approaches that can be further analyzed besides the planning and research perspectives presented here. However, those presented here can be directly applied in the generation of spatial strategies with people participation.

Firstly, differences on how can the planner be positioned within a participatory process can be outlined. The deliberative approach defines the planner's role as a mediator between negotiating parties. Although there are many similarities between this one and the collaborative approach, the role of planners in the latter is as a guarantor of the communication process. Finally in PRA, the planner in a research stage is defined as an outsider,

initiator and catalyst (Chambers 1994) of knowledge production processes within the community.

Secondly, the processes themselves have divergences and similarities. While deliberative participation is nourished by the expertise of people, PRA for instance is based on the existence of an optimal ignorance level (Sharma 2012). On the other hand, since collaborative approach is better defined as a communicative approach, the main input is knowledge itself, regardless of who owns it. This opens a discussion on who is able to participate in a place-making process. There are no details in literature about the participation of excluded groups of society in Collaborative and Deliberative approach. For PRA on the other hand, poor and marginalized are the most important group in the production of knowledge (Chambers 1997).

Finally, one common topic for the three analyzed approaches is the balance of power among participants. In deliberative and collaborative approaches, community is empowered by being heard (Forester 1999: p. 123). However, it cannot be ensured that policy makers and developers will share the same of information as the community participants do. The argument about power in PRA is that there cannot be disempowering when the participatory process is actually empowering people by enabling them to produce new knowledge.

Approach	Role of planner	Inputs	Type of process	Main Goal
Deliberative	Mediator	Stakeholders	Negotiated	Spatial planning by consensus
Collaborative	Guidance	Multiple perspectives of communities issues	Communication	The plan as a process' outcome
PRA	Initiator-Outside observer	Marginalized community members	Learning	To Generate knowledge for further spatial solutions

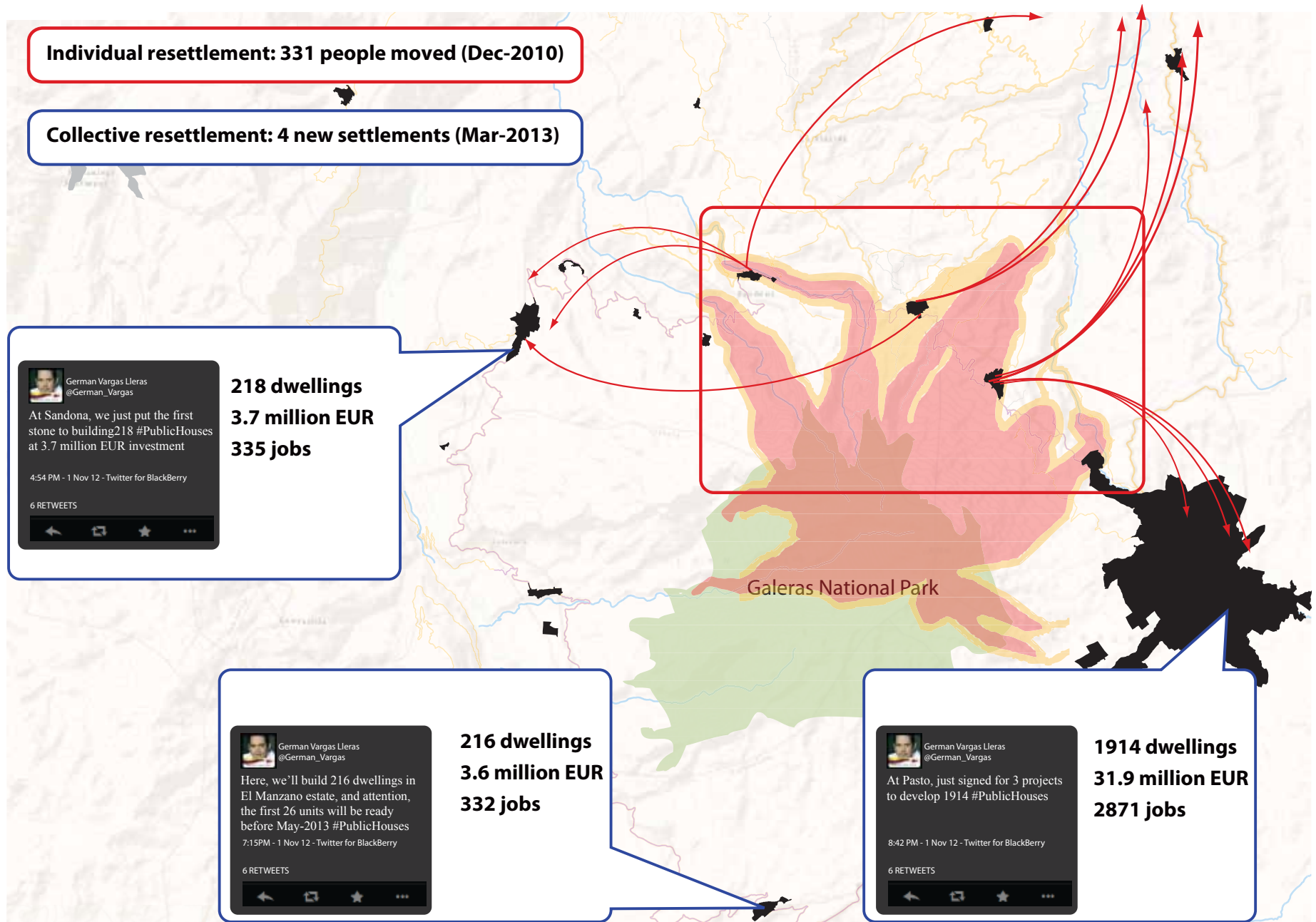
Table 1: Comparison of participatory approaches reviewed.
Source: This work

4.5. Recommendations.

As it was stated earlier, the practice of resettlement in developing countries is mostly performed by spatial planners and designers with little participation of communities. This practice leads to top-down master planned settlements and disruption in the living conditions of resettlers. The analyzed approaches represent opportunities to minimize the negative aspects of top-down spatial decisions. However, is still required that policy makers and planners recognize the need for community participation as an input for spatial strategies. Even though lack of participation is identified as a main factor of failure in resettlements, theoretical approaches on participation have few cases of their application in resettlement strategies. Practical approaches to participatory new-town planning in developed contexts might represent an opportunity to include these theories in the ongoing discussion about resettlement in developing countries, e.g. city gaming (Tan & Portugali 2012), and self-planned urbanism (Portugali 2012).

5. Preliminary results

The government approach



The people and the guiding principles

After analysing the perception and opinions of the people about the problem situation, three principles were outlined as baseline for this proposal

Principle of life

Life preservation must be the ruling objective and the only reason for any spatial change

Principle culture

Urban changes can only be successful if they are originated by locals' social and cultural expressions.

Principle of territory

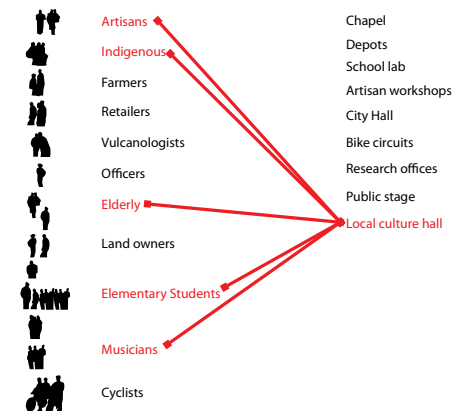
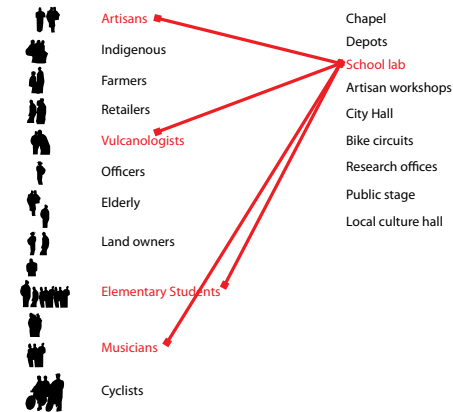
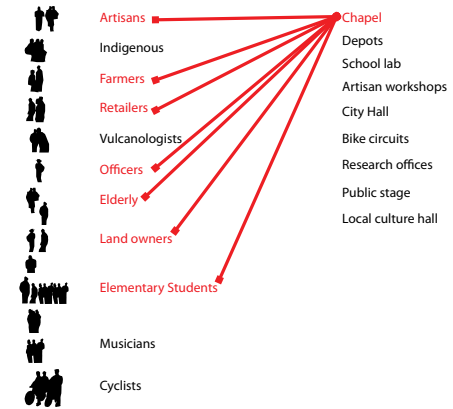
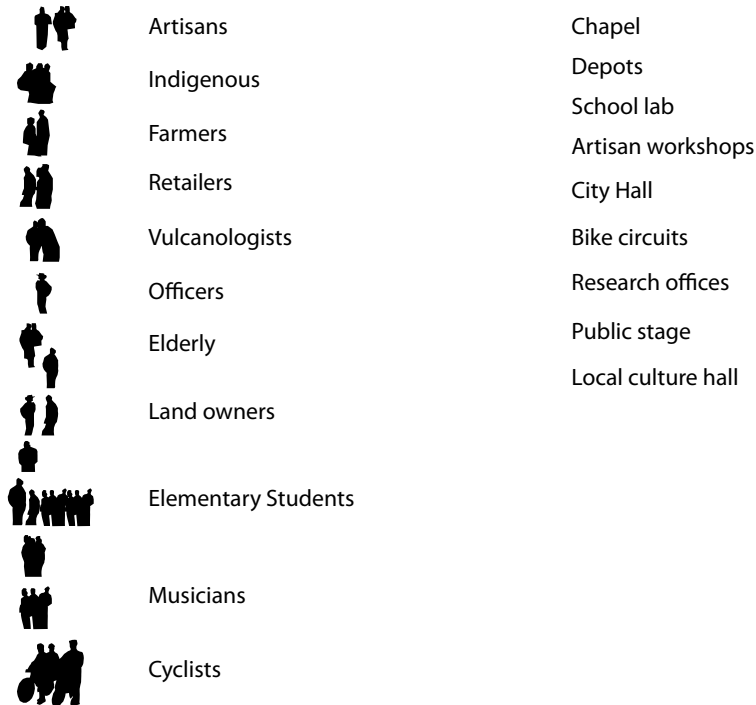
The highest Right: Urban changes are only possible within the territory where the community belongs.

Parade at Genoy, High risk zone.

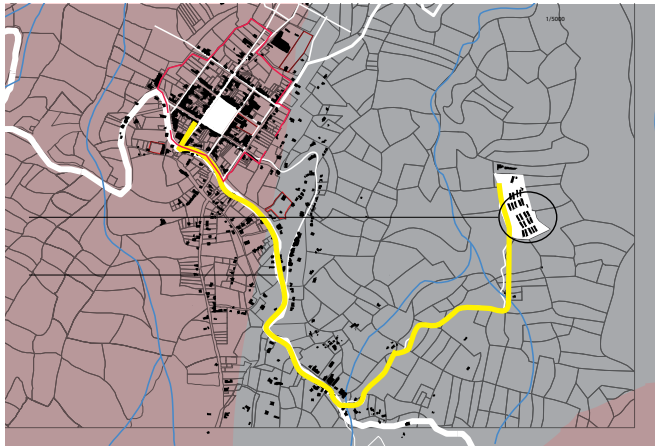


Groups and centralities

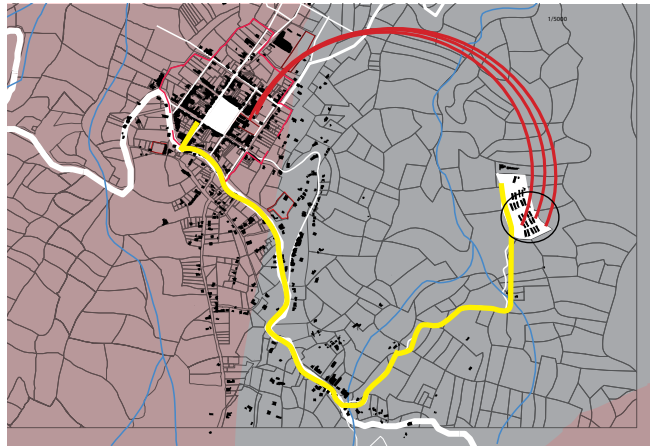
Governments are evaluated in terms of results. In the field of resettlements as a strategy for risk reductions, results are the number of people moved to the new settlement or to a safe environment. However, What would it happen if rather than moving people, centralities are moved first to a safer location within the territory. According to Alexander et al (1975) and Portugali (2012) the organic nature of communities can lead to self organizing urban process, if the proper conditions are given. In this case, conditions can be created by moving to a safer area of the existing city the centralities that people identify the most, and providing new connections between the expansion/safe area and the current village.



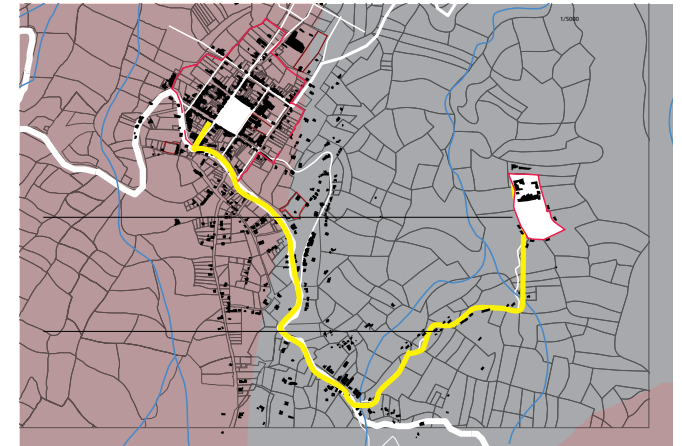
Work in progress... The piecemeal growth paradigm



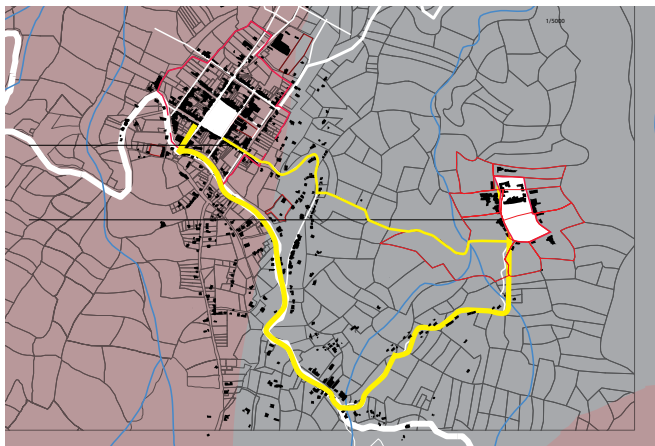
1. **Shelter Areas** are evacuation zones located in safe areas close to the city and with easy access. Due to the size, people can stay no more than few days in a shelter.



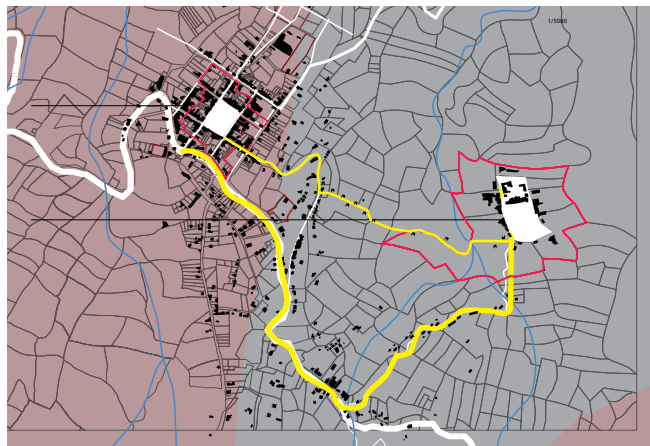
2. However, this areas are sub utilized, since evacuations happen 3 to 4 times a year. Given some spatial conditions, **this land can house existing or required centralities** for groups in the community.



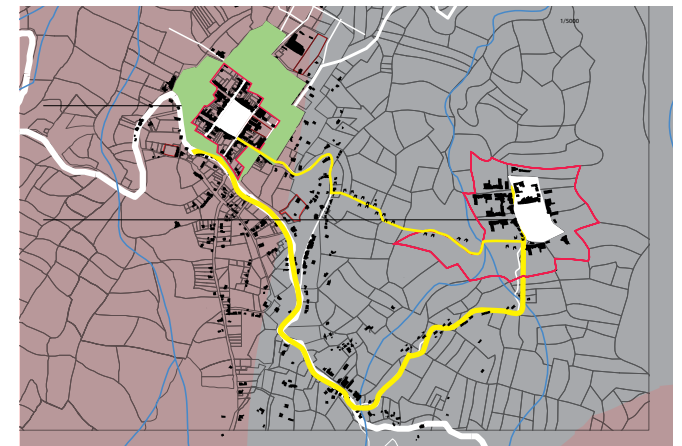
3. The new functions and the renewed activity in the area can lead to a **spatial transformation** of the shelters into facilities suitable for housing resettled and proposed centralities.



4. This new activity can also lead to a **generation of alternative routes** to the one people take during evacuations.



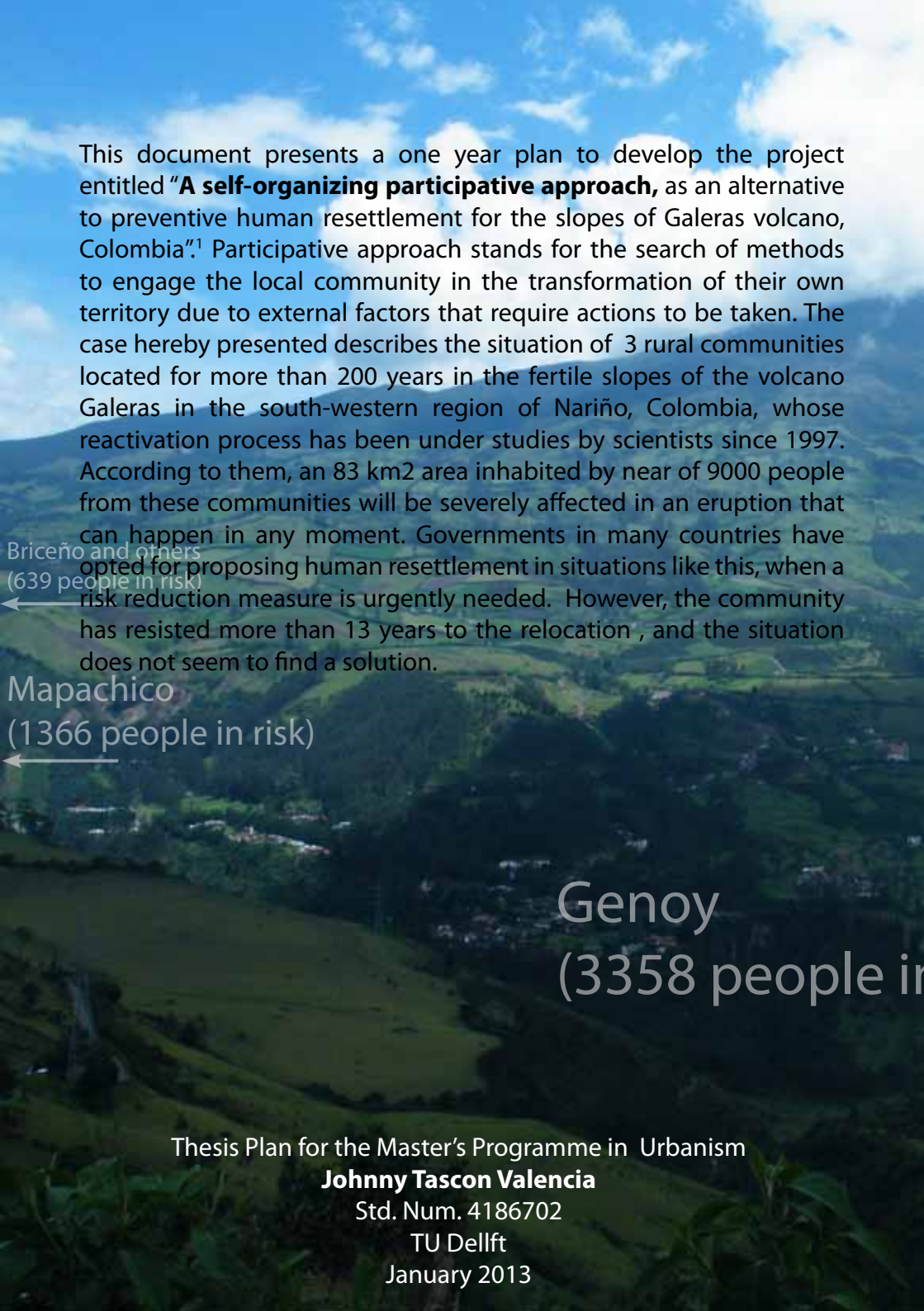
5. The increased traffic in the routes generate conditions for new activity along the paths, as well as for **new housing and commercial constructions in plots adjacent to the centralities**



6. With new housing stock in the safe area, the **inhabitants from the high risk zone can move** towards the safe area in a piecemeal growth process

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This document presents a one year plan to develop the project entitled "**A self-organizing participative approach**, as an alternative to preventive human resettlement for the slopes of Galeras volcano, Colombia".¹ Participative approach stands for the search of methods to engage the local community in the transformation of their own territory due to external factors that require actions to be taken. The case hereby presented describes the situation of 3 rural communities located for more than 200 years in the fertile slopes of the volcano Galeras in the south-western region of Nariño, Colombia, whose reactivation process has been under studies by scientists since 1997. According to them, an 83 km² area inhabited by near of 9000 people from these communities will be severely affected in an eruption that can happen in any moment. Governments in many countries have opted for proposing human resettlement in situations like this, when a risk reduction measure is urgently needed. However, the community has resisted more than 13 years to the relocation , and the situation does not seem to find a solution.

Briceño and others
(639 people in risk)

Mapachico
(1366 people in risk)

Genoy
(3358 people in risk)

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