

Chapter 16

Peripheral Urban Territories, Disasters and Extreme Events: The Case of Morro Da Boa Vista (Vila Velha, Espírito Santo, Brazil)

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Introduction

Founded in 1535 by the Portuguese, the municipality of Vila Velha (VV) forms part of the Greater Vitória Metropolitan Region (Espírito Santo, ES, Brasil), currently undergoing a process of conurbation, typical of Modernity (Bogus et al. 2010). Being of strategic importance as a metropolitan expansion area, VV is under economic pressure in terms of large-scale development projects which have contributed, since the 1960s and 1970s, to rendering its land area vulnerable.

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Impacted by Modernity, its urban formation is being altered, driven by a project geared towards providing solutions to the “disorganisation” of the former space. The city acquires homogenous spaces in opposition to its tendency of “self-diversification” (Harvey 2004). Such homogeneity thereby becomes evident with the involuntary socio-spatial segregation of less favoured social groups.

Its extensive coastline has ensured such segregation, while the symbolic value afforded to environmental amenities favours property speculation; and, therefore, occupation by the wealthiest in areas of greater value and the marginalisation of low-income groups in areas of low property value—generally speaking, permanent preservation areas (PPAs—such as slopes and floodplain areas¹) (Siqueira 2010; Mattos and Da-Silva-Rosa 2011; Mattos 2011).

Such occupation process takes place on the basis of scarce public policies which include demands from a majority of the population, thereby contributing to a proliferation of sub-normal agglomerates occupying the PPAs. Such subnormal agglomerates emerge as a response of the most needy population group “...the need for housing, which will occupy spaces less valued by the real-estate and land-ownership sector dispersed across the urban fabric” (IBGE n.d., p. 3). The association of urban expansion to the lack of efficient public policies, coupled with property speculation, is intensifying urban issues in VV.

It is in this modern urban context of vulnerability among the population in risk areas which, ultimately, suffer geohydrological events with a certain intensity. In December 2013, heavy rain caused floods which isolated entire communities in VV

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¹Permanent preservation areas are defined by the Forestry Code (Law No. 12.651, of 25th May 2012), and consist of protected areas “... with the environmental function of preserving water resources, the landscape, geological stability and biodiversity” (BRASIL 2012), including in the urban environment.

over several days; and on 1st January 2016, a mass movement (stone block rolling displacement) occurred at Morro da Boa Vista (MBV), in the neighbourhood of São Torquato (VV). Both events exposed gaps in terms of prevention actions and difficulties around the emergency and in addressing disaster risks on the part of communities and local public authorities, showing their weakness when faced with weather extreme events.²

While floods are regular phenomena in ES, no mass movement was recorded between 1991 and 2012 (CEPED/UFSC 2013). The disaster at MBV reveals interesting aspects worthy of explanation, serving as an example case study. The local population was affected by a process whereby stone blocks rolled downslope on the first day of the year, a complex phenomenon which would appear to indicate a set of intervening factors, both in terms of weather and anthropic conditions, which justify a study geared towards understanding the perception of such population groups in respect of tackling this type of event.

The base of this hill (MBV) is occupied by subnormal agglomerates, presenting aspects typical of vulnerable areas and recent disorganised occupation. The mass movement event occurred at the height of summer, during typically rainy months—however, since 2014 an unusual annual dry period has been observed in the VV area, leading the State Civil Defence Department to decree an emergency situation³ throughout the state. As such, the example mass movement case at MBV is a local event which may reveal the social impacts and human interactions in respect of climate change, such as the dynamics of disorganised urban land occupation and the human consequences of the development model.

This study is aimed at understanding the vulnerable situation of the MBV community, population perceptions of the land use process, socioenvironmental risks and public disaster risk reduction (DRR) management. This study is part of an interdisciplinary research project entitled “Understanding socio-environmental vulnerability construction in modern urban contexts: The case of Vila Velha (ES)”, funded by CNPq. The article is divided into three sections. The methodological procedures are presented in the first section. In the second section, the conceptual framework on the modern urbanization process and DRR is discussed. In the third section, results of the public perception survey are presented and discussed.

Methodology

This case study involved residents directly or indirectly affected by the fall of rocks in the MBV area in January 2016. Different methodological procedures were

²<http://www.cpqr.fiocruz.br/pg/blog/fiocruz-cria-software-para-avaliar-vulnerabilidade-a-mudanca-do-clima-no-espírito-santo/>, accessed on 20 May 2016.

³<http://www.defesacivil.es.gov.br/files/meta/9c79332b-f0d2-4891-8f9c-b26d981b2258/9c1190db-65a8-46bf-8157-87f307e62998/91.pdf>, accessed on 20 May 2016.

employed: semi-structured questionnaire and observation, carried out by the multidisciplinary team of researchers of the Centre for Urban and Socio-environmental Studies/NEUS (UVV-ES).

The questionnaire sought to determine the perception among the affected community, and comprised three parts—a total of 15 questions. Eighteen (18 = n) residents were interviewed during the week of the event, each from a different family. Based on actions conducted by municipal agencies [VV Municipal Authority (PMVV) and the VV Civil Defence VV/DCVV] with the 57 families housed in a local municipal school, this was applied in accordance with the devised schedule.

In parallel, interventions were made in the area with the assistance of residents, seeking to observe conditions in the higher risk area, in order to plot the overall disaster situation, and included visits to households. Written records were made, based on the perceptions of researchers and photographs taken. The action also sought to map the dynamic between organised social actors involved in the event, with special attention between local members of the MBV residents' association and the VV Municipal Authority (PMVV).

Conceptual Framework

Land Use in Modern Urban Development

From the outset, the land occupation and use process in VV appears not to have been concerned with its biogeophysical base when implementing urban layouts. Could the modern city, replacing the small town, have failed to consider the specifics of its land area, of the local environmental aesthetics (Blanc and Lolive 2009)? It is into this context of “absence” of the local geography which fits the urban perspective discussed here, capable of understanding the construction of problems faced today by its community.

The idea of “absence” is adopted in the sense provided by Santos (2002) when, from a perspective of the sociology of absences, it is placed at the margins or “discrediting the alternatives” possible as the only hegemonic possibility imposed by modern western thinking: that of the modern city, which fragments reality, impacting on spaces and exposing its communities to risk. Such “absence” reflects the positivist, Cartesian, western way of thinking about and interpreting the world when one considers oneself able to ignore the Place. What we see is the materialisation of a hegemonic and dominating rationality which breaks with other rationalities, as is the case with environmental rationality (Leff 2006). The space is occupied, then, as if nothing existed originally. The modern city imposes itself upon this “void”, emerging as the “indolence of reason” (Santos 2002).

In this sense, the proposal is to transpose from the critique of Santos (2002), at the minimum the ideas below, understood as being capable of sustaining the argument of this study:

- (1) the sociology of absences may unveil that which was covered up by hegemonic rationality, i.e., the biogeophysical base on which the city lives and survives—such base as would confer another identity on the urban if it had been “accredited” by the modern urban development process;
- (2) the pre-existing “local urban”, understood as the impotent reasoning that “nothing” could be done against hegemonic rationality, a hostage of the absence of a really public power, understood as relating to the people;
- (3) the “modern urban”, perceived as an arrogant reasoning which “imports” a foreign and strange rationality that ignores the “local urban”; and takes a single, hegemonic stance, both from a metonymic reason perspective (id 2002) ignoring what previously existed—natural or ecological rationality inherent in the biogeophysical base, land identity; and from one of proleptic reason (id, 2002) when no thought is given to the future consequences of imposing western hegemonic rationality, ignoring the characteristics of local natural rationality.

Such modern land occupation process has made the modern city possible without initially conceiving the likely consequences of this form of land use, emerging as the expression of a rationality which is modern, though alien to local rationality. This calls for knowledge and respect of environmental aesthetics as “... la base d’une appréhension riche de sens des milieux de vie et, par extension, de l’environnement”⁴ (Blanc and Lolive 2009). After all, each environment has its own sense, its own characteristics, differentiating it, where arrogant reason, through “homogenisation” and fragmentation of Modernity (Löw 2013), would have no place.

Giving rise to significant wastage of space, such land homogenisation is considered, by the materialistic aspect of the sociology of space, as typical of the capitalist economy (Lefebvre 2000; Harvey 2011; Löw 2013). At the same time, one acknowledges the role of historicisation as a central element (Soja 1993) of formation of fragmented and homogenous spaces—comparable and controllable—of Modernity. It is thereby understood that the space is a social product (Löw 2013). Going beyond this, it is acknowledged that space is also capable of producing action in terms of its structuring element (Urry 1991 *apud* Löw 2013). As such, space has a dual character: *productive* of the action and its product (Löw 2013). Even from such productive point of view, space is perceived in a highly socio-logical profile, leaving aside its potential as a biogeophysical *entity* with its own feeling, capable of organising the action of human beings. Such is the approach of Blanc and Lolive (2009) to the idea of environmental aesthetics problematizing the urban, highlighting essential elements for comprehension of the urban space.

⁴The basis of a rich understanding of the senses of living environments and, by extension, the environment itself.

Despite its recent, rapid occupation, VV lacks scientific studies on its occupation process which would explain the vulnerabilisation of communities affected by disasters such as that which occurred on the MBV hillside. This disaster illustrates the case of PPA occupations by a population with low income or greater socio-economic vulnerability (Araújo and Da-Silva-Rosa 2014). Just as river straightening actions are works of hegemonic rationality, aimed at controlling the space, structural prevention measures may also be seen as such. These measures only make sense, today, if associated to non-structural actions, including environmental education (Mendonça et al. 2016) linked to public policies on land-use regulation and risk management (Tominaga et al. 2015). Occupation of hillsides by communities excluded from the development process, in addition to placing them in a position of socio-environmental vulnerability (Mattos and Da-Silva-Rosa 2011), demonstrates the inadequacy of public policies to deal with complex problems arising from disorganised land occupation and use.

Disaster Risk Management

Disaster risk management is a systematic process of the employment of administrative guidelines, institutions and operational skills and abilities from different sources to implement strategies and policies to reduce the impacts of adverse events (UNISDR 2009).

Risk management actions may be organised according to a cyclic sequence of interrelated stages of prevention, mitigation, preparation, alert, response, rehabilitation and recovery. Such actions basically consist of: risk identification, analysis and mapping; structural actions (engineering works); public information; professional training; actions for public participation in risk management; planning, regulation and reorganisation of land use and occupation; planning for emergency situations; evacuation and treatment of those affected; damage assessment; damage repair and re-establishment of activities in the affected community (Cardona 1996).

The UN Sendai Framework on DRR for the period 2015–2030 (UNISDR 2015), which reviewed and reaffirmed several points of the UN Hyogo Framework (UNISDR 2007), includes priority actions such as “understanding of disaster risk; enhancing governance to manage disaster risk; investment in the reduction of disaster risk for resilience; improvements in disaster preparedness in order to provide an effective response and build back better during recovery, rehabilitation and reconstruction”.

In respect of understanding disaster risk, the Sendai Framework stated that disaster risk management policies and practices should be based on a clear understanding of the risk in all its dimensions of vulnerability, capacity, exposure of people and assets, hazard characteristics and the environment. To achieve the above, one should, among other actions, use traditional and local knowledge and practices to supplement scientific expertise in disaster risk assessment and for development and implementation of specific DRR policies, strategies and plans.

Therefore, knowledge of the vulnerabilisation process and of risk perception among the affected community are necessary for planning more efficient disaster risk management.

Results and Discussion

Morro Da Boa Vista: An Announced Tragedy?

At an altitude of 220 m, MBV is located in the Espírito Santo intrusive suite known as *Maciço Vitória* (the Vitória Mass Brazil 2014) and in a well-sited neighbourhood on the southern coast of Vitória Bay, facing the ES state capital (Vitória), some 10 km from the centre of VV and with the largest municipal bus terminal. Such geographical situation influenced the occupation process in the neighbourhood, in parallel with the urban development process in VV, intensified in the second half of the 20th century. São Torquato is a mixed residential and commercial area with few leisure facilities and a high level of social disorganisation, a land area of 11.3 km² and approximately 6100 residents. A railway passes through the neighbourhood en route to the industrial and port area in contiguous neighbourhoods, there are three schools (two municipal) and a health centre which services four other neighbourhoods.

As the greater part of the VV land area is a floodplain crossed by rivers, now straightened [transformed into sewage channels, locally known as “valões” (large ditches)], the base of MBV is an option for occupation despite its geophysical characteristics, observed during field studies carried out: the presence of boulders, susceptible to movement, with vegetation stumps, indicating deforestation, denser at the higher hillside points where there were few households. The characteristics of MBV are those of subnormal agglomerates. According to the Jones dos Santos Neves Institute,⁵ the majority of residents earn up to half a minimum salary per month. There is neither refuse collection nor a collection point, generating disease focus proliferation, and public lighting is sparse, generating a feeling of insecurity.

The observation found that, within the area defined by the PMVV affected by the rock fall of January 2016, there were households and small bars; channelled sewage, confirmed by 83% of those interviewed; however, there is no record of sewage treatment, and some points were found to be leaking with runoff into alleyways. There was no indication of a fresh water supply on the slope, despite the fact that some residents commented on the existence of springs, which may have been deactivated over time. Along the travel path of the rocks, the presence of relatively large rocks fragments was noted which, with heavy rainfall, may undergo movement and strike the houses below. This area was part of a sector at high risk of mass

⁵Field log notes made during the lecture on the “Social Occupation research project”, given by technicians (Livia Tulli and Thiago Guadalupe) on 17 May 2016, at Vila Velha University, ES.

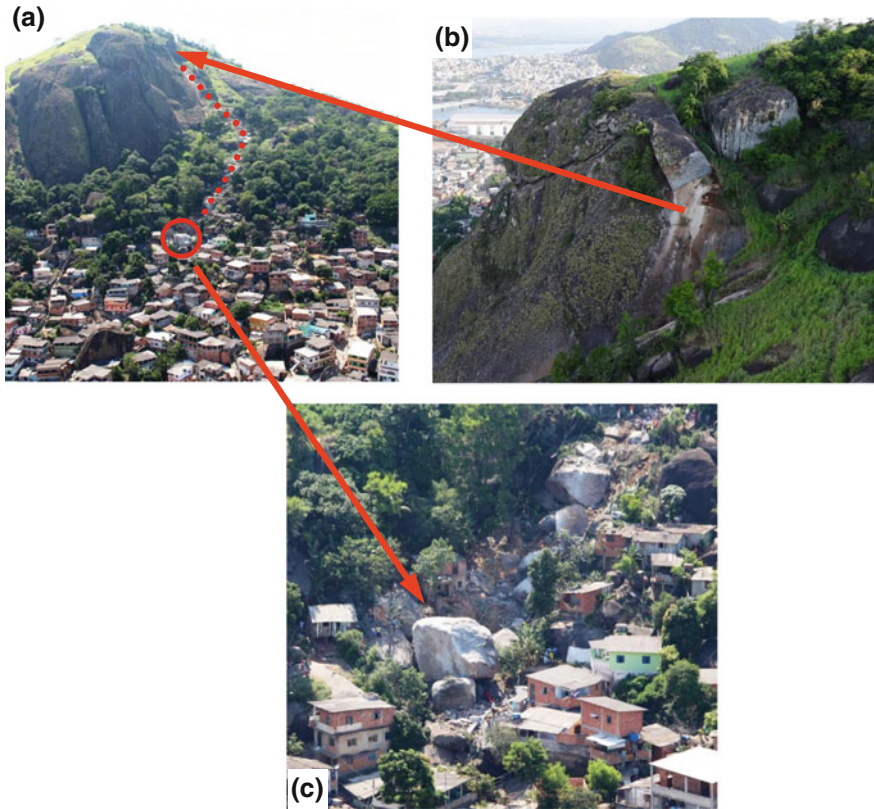


Fig. 16.1 Photos of rock boulder roll: **a** roll trajectory of boulders, **b** detachment point of largest boulder high on the Morro Boa Vista and **c** situation at end of boulder roll trajectory

movements defined in a study conducted by the Brazilian Geological Service (CPRM *apud* VV Contingency Plan 2013), described as a hill featuring fractured granite rock, with large relief fractures, with a significant number of loose or enclosed boulders which could strike residences.

It is in this context of socio-environmental vulnerabilisation that, on 1 January 2016, between 17:40 and 18:00 h, the boulders rolled (the largest of which was approximately 3000 tons in weight), which struck family households situated at the highest part of this precarious occupation, causing material losses and all manner of damages (Fig. 16.1). Four houses were hit, 15 people injured and 400 families left homeless.⁶ If those families presented the aforementioned characteristics, how do they perceive the ordeal experienced?

⁶<http://g1.globo.com/espírito-santo/noticia/2016/01/ministerio-publico-vai-investigar-desastre-no-morro-da-boa-vista-es.html>, accessed on 7 June 2016.

The Interviewed Families

In all, 18 (n = 18) residents were interviewed—family representatives, of which two families had houses in the affected area. Among the respondents, 66.7% were female and 87.6% over the age of 21. Some 83.3% stated that their property was self-owned, and all households were single or multifamily residences (33.3%), with no commercial activity. Up to six people live in the single-family households (66.6%). Whereas all households of those interviewed have access to potable water from the municipal authority or concessionaires, only 38.8% have access to a sewage system and 33.3% stated that they paid urban property and land tax (IPTU), a municipally applied tax. Such levy indicates that real estate in VV is worth more than R\$30,000 in a paved street and, without this, the owner may forego exemption. Such data therefore point to vulnerability conditions of 66.7% of the families interviewed.

The Families' Response to the Incident

None of the families interviewed suffered fatalities as a result of the incident. 54.5% Stated that, in the post-incident moment, it was the neighbourhood (understood as neighbours and the resident's association) which provided assistance, followed by the municipal Civil Defence (DCVV, 27.3%). The PMVV was mentioned by 3% of those interviewed. Half considered the response of government institutions unsatisfactory and indicated "failures" of DCVV actions, as they were not sought by any agency. This would appear to refer to possible actions in the preparation phase as provided for in DRR management. However, some information on possible risks of mass movement and new risk mapping to be conducted were provided by those agencies to the residents; i.e., only during the response phase.

Evidently, this type of information should have been provided before, during the response preparation phase. This demonstrates inadequacy on the part of the State in respect of DRR, and this is not due to a lack of information. If, on one hand, the geological map of ES exists (CPRM 2014), its scale of 1/100,000 is not suitable for risk studies. On the other hand, PMVV has had a contingency plan since 2013.⁷ On its page 43 there is a map, prepared by the Brazilian Geological Service from reconnaissance of areas subject to high and very high risk of mass movements and floods for the MBV and São Torquato region, with a description of the local situation and an estimate of approximately 400 households at risk—some 2000 people who could be affected. A risk area was defined from the top of the hill to the high part of existing urban occupation—encompassing the area affected by the

⁷[http://www.vilavelha.es.gov.br/midia/paginas/PLANO_CONTINGENCIA_2013-2015_21-10-13_assinado\(1\).pdf](http://www.vilavelha.es.gov.br/midia/paginas/PLANO_CONTINGENCIA_2013-2015_21-10-13_assinado(1).pdf), accessed on 20 May 2016.

incident in January 2016. In addition, several suggestions for risk reduction interventions are made:

... immediate removal of residents closer to the top of the hill, area with a large concentration of stone blocks; containment works in regions where removal is not possible; organisation and capture of rainwater with construction of hydraulic routes; environmental lectures and courses on raising awareness of the requirement for protection of hillside areas; qualification of community leaders, trained to provide guidance in the event of an emergency; revegetation of more exposed areas; refuse collection and group clean-up events. (Contingency Plan, 2013, p. 43)

It is clear that such interventions were ignored. No removal took place. There was no plan for reallocation of residences. There was no containment work or rainwater capture. There was no environmental education geared towards DRR. No revegetation took place. The solidarity demonstrated by the neighbourhood does not appear to have been a result of training for emergency situations. After all, they related that many people were scared at the time, without knowing what to do. Some went to the aid of the injured. In this light, the solidarity demonstrated may be seen more as a spontaneous strategy of adaptation, based on community ties created by the residents themselves—ties reinforced and organised by the residents' association, as identified during field trips.

One observes a scenario of abandonment, reinforcing what the interviewees expressed above: lack of assistance from public agencies. Such feeling is also observed in other states, such as in the case of Mendonça and Pinheiro (2012) in a community in Niterói (Rio de Janeiro State), where 90% of residents state that they do not rely on such agencies in an emergency situation caused by landslides. As a result of such abandonment by the State, in MBV 83.3% of families were temporarily rendered homeless, with 38.8% housed in a shelter set up in the neighbourhood's municipal school. For almost two months, these families were dependant on the State or the solidarity of neighbours, relatives and friends, under conditions of psychological stress, in many cases not easily overcome.

Of the families interviewed, 44.4% were in households, even post-incident, in a risk situation, and 16.6% were directly affected, partially or totally destroyed. Cracks were observed in some residences whose families had been displaced. Based on accounts by residents, there was an air of tension on the days following the incident. Some mentioned the difficulty in sleeping due to flashbacks of the occurrence, primarily the running around on the day of the disaster, with a lot of frightened people running to retrieve their belongings.

Perception of the Incident

Of the total interviewed, 61% were within the community—either in their own homes or in those of neighbours. It was the first day of January, just after the New Year celebrations, where parties can extend into the early hours of the morning. According to the description given, some people were outside at the time of the

Table 16.1 Possible causes of incident according to families interviewed

Possible causes	%
Natural causes	11.11
Heat in the rocks	27.78
Occupation of area	5.55
Act of god	5.55
Bomb	16.67
Excess weight	5.55
Soil erosion	5.55
Don't know	22.22
Total	100

incident and saw the rocks falling. Those indoors felt a tremor and a loud, frightening noise. 83% stated that they did not notice anything which attracted their attention—only 17% said they heard bangs or explosions, which may have been interpreted as a result of rocks breaking loose. One interviewee mentions shocks generated by works at the nearby port as a reason for the rocks coming loose.

In respect of possible causes of the event (Table 16.1), “heat in the rocks” was quoted by the majority, followed by the option of “bomb” and “natural causes”. 44.5% of answers allude to what one could call geophysical causes (action of heat on the rocks, soil erosion...). A natural cause for the incident appears as an option alongside occupation of the area as a contributing factor.

Finally, it is worthy of note that the questionnaire was applied during the week following the incident, when rumours about possible causes were circulating in the local media. Even while the more detailed official technical finding was awaited, the media indicated natural processes (meteorisation of the rocks, wear or tension relief), which may have influenced the interviewees’ responses.

Fear, Love, Insatisfaction... Reflections Based on the Stance of Families

With an end to giving the affected community a voice, some parts of the questionnaire allowed for free expression of opinions. In respect of a return to the site of their households, 61% stated that they would return even if in a risk area. Some said they would reoccupy provided the local authority gave clearance to do so. Others said they would look for housing in lower areas within the same community, far from the site affected by the incident. “Love for the neighbourhood” is cited by just one person, pointing out the necessity for works in the region despite the fact that, at another time, other personal reasons appear as justification to remain in the area (“leave the house I built”, “got used to the place”).

“Fear of the rocks” appeared among the reasons for those not intending to return (38.8%). Such fear appears to indicate the psychological impact suffered, accentuating the subject’s vulnerability. Living far from a slide risk would be something

in the imagination which, at the time of the interviews, was still in a situation of significant psychological stress. Others stated their expectation that PMVV would pay for them to be relocated—either social rental or compensation.

In truth, these people appear to be living a certain dilemma between “love for the place” and “fear of the rock”. Even when fear is not at the forefront in some responses, material losses or psychological impact are not always so easily overcome. Love for the place, in some cases, may be linked to personal or family history in the place or neighbourhood, or proximity to a workplace or accessibility to a bus terminal and services. The neighbourhood was indicated as having been responsible for post-disaster first response, demonstrating the importance of the social fabric as a factor of resilience among the affected community. Mendonça and Pinheiro (2012) stated that, in emergency situations, it is the residents themselves that most assist the community.

It is worth reiterating the dissatisfaction expressed during interviews around the State involvement in this situation—essentially PMVV—and around the lack of an adequate response and housing assistance. It is worth noting the role of DCVV in DRR management, primarily in the preparation phase. It would appear that the opportunity for a more focused action was lost, in terms of what the Brazilian Geological Service (CPRM) identified in the 2013 Contingency Plan. Of significant concern, this factor seems to indicate a lack of alignment in respect of the role of each social actor responsible for prevention in DRR management provided for in the Hyogo and Sendai Framework (Araújo and da-Silva-Rosa 2014). In contrast, what one sees in the operation of this actor is persistence in an outdated DRR management perspective, focused only on the response to the disaster. Araújo and da-Silva-Rosa (2014) draw attention to the fact that the responsibility of this state actor in the DRR scenario is complexified in the process of providing social conditions which, instead of mitigating, create potential for a disaster to occur. By omission...

Final Considerations

This article was primarily aimed at critically evidencing how the urbanisation and development process, established late in Espírito Santo, was a determining factor for creation of risk areas and socially vulnerable spaces, even where this is not the exact perception of communities occupying such areas, as demonstrated in the results discussed. Against the backdrop of this process in VV, the case of MBV was presented and discussed, in terms of the mass movement which occurred at the beginning of 2016, illustrating the manner in which vulnerable communities deal with disaster situations. As a result of this incident, despite the fact that no fatalities occurred, personal injury and psychological trauma were recorded, with a significant amount of people displaced and made homeless.

Based on the study conducted, one could say that these are communities living in a risk situation, with a low capacity for resilience given the difficulty in reacting to

the occurrence. This is a warning for other disaster cases related to floods or mass movements triggered by a difficult-to-control element—extreme weather events. Given the lack of assistance from and dissatisfaction with the action of the public authority, residents are compelled to adopt a spontaneous adaptation strategy to face these problems, basically asking their neighbours for help.

It should be noted that if structural containment actions at MBV are important, then non-structural actions such as this community's access to information on DRR and participative management thereof are of paramount importance in the sense of making efforts to tackle disasters influenced by weather events. This is a suggestion of the UN Sendai Framework. In the case of MBV, discussion over the intervention proposal presented by the Brazilian Geological Service in the PMVV contingency plan, including the evacuation of residents. The feasibility study around this last measure is complex in light of the difficulty of knowing disaster trigger mechanisms providing conditions for rock-body movements and their respective trajectories which, in turn, will define the areas to be evacuated. Additionally, the study reveals the dilemma between “love for the neighbourhood” and “fear of the rocks”, demonstrating the complexity involved in DRR. Such dilemma complexifies the feasibility analysis for interventions as it demands action not just from the State, but from all the actors involved, giving them an active voice.

In light of this and by way of conclusion, it is clear that issues involving vulnerabilized communities have “...a political and ethical characteristic...” (Da-Silva-Rosa and Maluf 2010) as Sachs (2008) discusses for climate-change related cases. When all is said and done, would we not be dealing with a situation of environmental injustice such as Monteiro (2016) discusses in his work about VV, where disrespect of human beings, as Sachs (2003) reminds us, places at risk the basic living conditions for vulnerabilized communities through a process of development which is socially unjust and ecologically unsustainable? This appears to be the case for residents of MBV, VV.

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