

INPUT PAPER

Prepared for the Global Assessment Report on Disaster Risk Reduction 2015

LEADERSHIP AT THE LOCAL LEVEL

Community participation in Municipality of Amadora | Portugal

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Introduction

In an era of change and uncertainty, policy makers recognize the need to engage community voices to pave the way to develop shared strategies for creating even stronger communities. Recently, public participation has been recognized as a vital component for establishing effective partnerships to strengthen resilience within communities (Council of Australian Governments, 2011). The term 'resilience' has been adopted by scientists and policy makers in an attempt to describe the way in which they would like to reduce a nation's susceptibility to major incidents of all kinds, by reducing their probability of occurring and their likely effects, and by building institutions and structures in such a way as to minimize any possible effects of disruption upon them. Community resilience is described as 'the ability to maintain, renew or reorganize' (VARGHESE ET AL, 2006), 'the ability to accommodate abnormal or periodic threats and disruptive events' (AMARATUNGA & HAIGH 2011). There is increasing recognition that emergency and disaster preparedness will not be effective without the engagement of vulnerable communities. The prime component is to involve the vulnerable community in the mitigation and preparedness process. Building capacities in coping mechanisms and involvement creates confidence within a community, paving the way for a self-reliant community. Hence, mitigation and preparedness have to be supported by public participation in operational planning, education and training of vulnerable groups and related formal and informal institutions (AMARATUNGA & HAIGH, 2011).

A review of literature within a variety of fields, including management, politics, community development and communication found a multiplicity of terms used to describe public participation. Some of the most frequently used include: 'community consultation', 'citizen engagement', 'stakeholder engagement', 'community engagement' and 'democratic participation'. In spite of the variety of definitions and terms used, the central premise retains a belief in the transformative potential of citizen participation and a view that engaging citizens in policy making is not only beneficial but essential in seeking solutions to major challenges, including issues of disaster risk reduction and sustainable development.

In recognition that disaster risk reduction, climate change adaptation and sustainable development are mutually linked challenges, the United Nations Office for Disaster Risk Reduction (UNISDR, 2012a) developed the *Making Cities Resilient-My City is Getting Ready!* Campaigns, to support local-level leadership address the challenges of rapid global urbanisation. Launched in May, 2010, the Campaign reflects the United Nations policy shift (since 1999), from a traditional emphasis on disaster response to disaster reduction. The Campaign aims to support local governments in their role as both 'first responders to crises and emergencies and as those responsible for local development plans, building regulations and basic services', to promote a culture of prevention within their respective communities to improve their cities' resilience to disasters (UNISDR, 2012a).

Strengthening community resilience sits at the core of current Australian national policy, as detailed in the National Strategy for Disaster Resilience. (Council of Australian Governments, 2011). The Australian National Strategy provides a high level framework to help emergency

services and practitioners working in the field of disaster management to shift their focus from disaster response to disaster reduction, promoting community engagement and developing a culture of prevention (BURNSIDE-LAWRY, ROGERS & AKAMA, 2013).

In response to these and other international policy advancements in a rapidly changing global environment, a small team of UK, New Zealand and Australian researchers are collaborating to advance practical, theoretical and conceptual communication solutions for increasing the engagement of communities in building societal resilience to disasters (BURNSIDE-LAWRY, et.al, 2013). The international research team developed a collective research agenda focused on six themes:

1. Interfacing & Partnerships;
2. Communication strategies to build community resilience;
3. Theories of communication & the disaster management cycle;
4. Gendered work & community leadership;
5. Relationship between communication & resilience;
6. How to measure community resilience.

It is within this context that we selected our case: the stakeholder engagement process by the Municipality of Amadora to build community resilience. This paper is the result of collaboration between the Municipality of Amadora, UNISDR and an Australian member of the international research team described earlier.

Disaster Risk Reduction at national and local level, Portugal

In Portugal, there is still no legal framework that fits "Ten Essentials" (UNISDR – Making Cities Resilient) in the perspective of promoting resilience. However, there are different laws that include measures of prevention, adaptation and recovery in urban and emergency planning process. The Law on National Civil Protection reveals that Civil Protection is the activity performed by the State, Regions and Local Authorities, citizens, public and private entities for the purpose of preventing disasters and mitigates their impact.

The Civil Protection is one of the many entities with responsibility to empower the communities with necessary conditions to disaster risk reduction. Building a resilient city falls into three of the seven civil protection principles:

- Prevention, under which the disaster risk must be considered in advance;
- Precaution, according to which measures should be taken to DRR;
- Information, ensure the dissemination of relevant information on DRR;

In terms of urban planning, the inclusion of DRR has revealed the concerns to put the risk assessment not only in the context of civil protection but also in land use planning. In the National Spatial Planning we can find measures and policies about DRR:

- Identification and delimitation of risk areas, including a process of regular assessment;
- Restrictions and regulation of building in risk areas;
- Structural and non structural measures;
- Emergency plans and emergency and warning systems.

However, due to gaps in monitoring urban growth and a clear perspective on prevention in the national civil protection, the DRR culture has been poorly implemented. To ensure the resilience of a community is not enough just to consider the risk in urban and emergency planning it's crucial to develop an approach to involve, share information and implement different levels of knowledge with stakeholders.

After Portugal ratified Hyogo Framework for Action 2005-2015 (HFA), the national government has done little to promote the UNISDR's Making Cities Resilient campaign to local governments within Portugal. This campaign should have been a national commitment and an opportunity to promote the participation and involvement of the whole society in the DDR. In Portugal the strategy adopted for DDR is predominantly reactive.

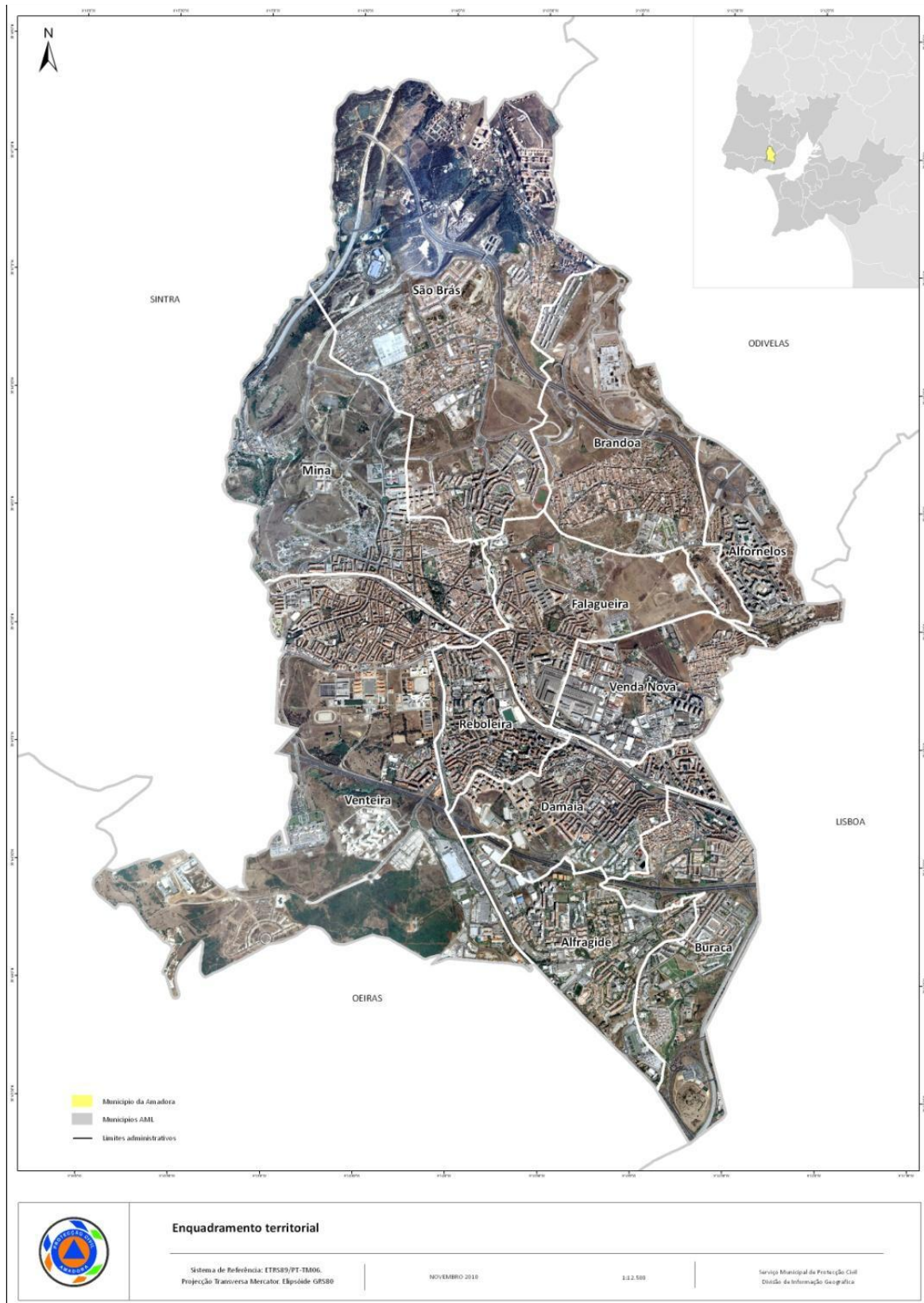
Only four municipalities joined the campaign in a total of 361. First the Municipality of Amadora, after Lisbon, Cascais and Funchal. Joining the campaign has never been through the national government, but through the UNISDR Europe. Although the municipalities are required to follow policies set at national level (National Authority for Civil, with the supervision of the Ministry of Internal Affairs and Ministry of Environment), they can always develop programs and initiatives about DRR.

In the case of Amadora, joining the campaign results in the need for a clearly and simple national strategy and guidelines for the local government concerning the culture of risk and disaster. The Mayor's motivation and commitment for these issues was enough for the municipality launched a local campaign and ensure community involvement.

The Municipality of Amadora, Portugal

Amadora is a satellite city of Lisbon located in the northwest of the Lisbon metropolitan area (map 1). Composing an area of only 23.77 square km, Amadora municipality is one of Portugal's smallest municipalities; however, with 7,343 inhabitants per km, Amadora has the highest population density of any municipality in Portugal. Amadora's population is characterised by an increasing proportion of elderly people. As a satellite city of Lisbon, younger people often leave the city to look for work in other Portuguese cities such as Lisbon, Sintra or Montijo, whilst the elderly people remain. The city also has a growing immigrant population, mainly from the former Portuguese colonies in Africa - Cape Verdian, Angola and

and São Tomé. Amadora also has a large community of Roma gypsies who have given up their nomadic lifestyle to settle in Cova da Moura in Junta de Freguesia da Damaia, a neighbourhood with no real urban structure or planning in the streets and houses. One of the challenges facing emergency services is the lack of access and difficulties in evacuating this neighbourhood during fires or floods. These challenges support insights to emerge from the recent UNISDR report that the demands of effective disaster risk reduction are increasing from a range of factors, such as emerging risks, population migration patterns and the effects of climate change (UNISDR, 2013).



Map 1 : Municipality of Amadora

Over the last 20 years the major disaster risks have been flash floods (urban area), urban fires, industrial fires, landslides, storms (fallen trees, damaged buildings, infrastructure, etc.)

and road accidents. As a highly urbanized territory with a population insufficiently aware and/or sensitized about the risks and hazards, Amadora face a number of challenges:

- Growing urban population and increased density, which put pressure on land and services;
- Weak local governance and insufficient participation by stakeholders in planning and urban management;
- The decline of ecosystems, due to human activities;
- Adverse effects of climate change that will likely increase or decrease extreme temperatures and precipitation;
- A need to build capacity, identify, assess, monitor and reduce risks to build a culture of safety and resilience;
- How to place the issue of risk, disaster and resilience on the municipality agenda.

In August 2010 the municipality of Amadora joined the *Making Cities Resilient* Campaign to face these challenges and to implement UNISDR’s Ten Essentials¹. Amadora’s Mayor created a multidisciplinary team comprised of six personnel from different municipal departments: Civil Protection Service (2), Health and Safety at Work Service (3), and an architect from the Urban Planning Department (1). As permanent staff, each member of the team’s work load includes working on the Campaign.

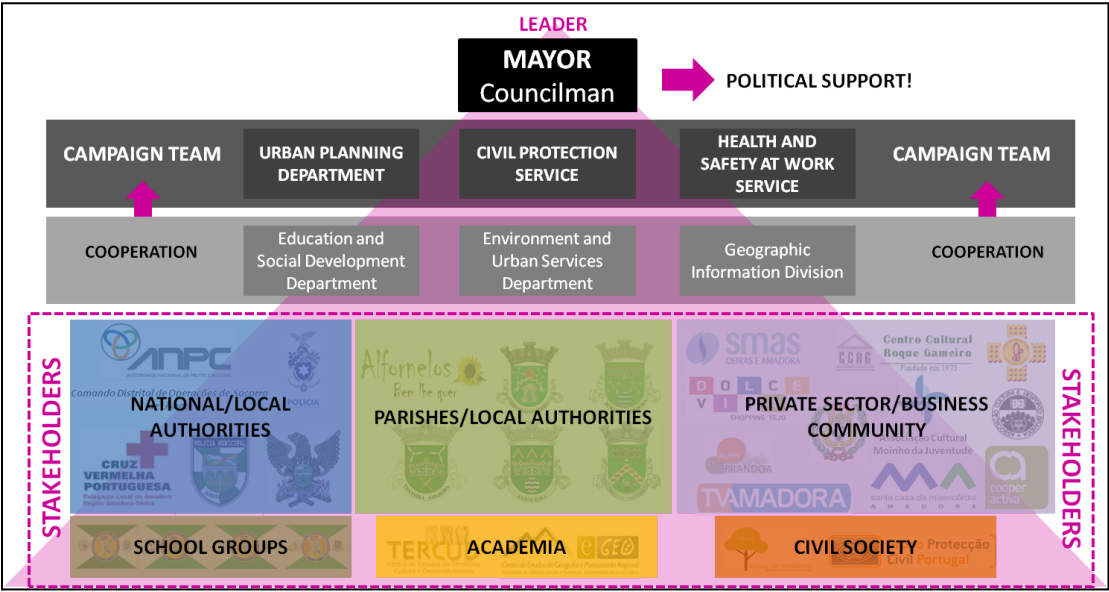


Image 1 : Leadership and stakeholder’s involvement

The Campaign team's mission is to develop an approach to increase engagement and information sharing among different stakeholders, including the community, in disaster risk reduction issues. To ensure local authorities and the population understand the risks facing

¹ UNISDR Ten Essentials: 1.Organization and coordination to understand and reduce disaster risk; 2. Assign a budget; 3. Prepare risk assessments; 4. Critical infrastructure that reduces risk; 5. Assess the safety of all schools and health facilities; 6. Building regulations and land use planning principles; 7. Education programs and training; 8. Protect ecosystems and natural buffers; 9. Early warning systems; 10. Reconstruction and response capacities.

Amadora, and to facilitate developing and sharing local information on disaster losses, hazards and risks-including who is exposed and who is vulnerable, the team identified two key priorities:

- Risk, hazard and vulnerability assessment: to be taken into account in the urban planning process and political decision-making;
- Information, training and awareness in order to reduce the number of disasters.

The advantage of a multi-disciplinary team situated within the local council departments, allows access to other resources within Council as required. For example, the Council's communication department can be called upon to provide support in issuing media releases or promoting Campaign events within mainstream Council public relations collateral-newsletters, council website etc.

So far we have outlined the United Nations and Australian policy developments in the area of public participation to build community resilience and disaster risk reduction, referred to communication research needs for building societal disaster resilience-as identified by an international team of scholars from disaster resilience, design, communication and anthropology disciplines (BURNSIDE-LAWRY, et.al, 2013), and provided background on the Municipality of Amadora, and its challenges. It is within this context that we now examine the stakeholder engagement planning and practice undertaken by Amadora's Campaign team since the Municipality joined UNISDR's Making Cities Resilient- My City is Getting Ready Campaign, commencing with a description of the methods used to collect and analyse data.

Method

Case study methodology was used to gather empirical data between January and May, 2013, during an exploratory study of the Municipality of Amadora's policies and practice to engage their community in disaster risk reduction. Using qualitative research methods, Amadora's Campaign team's (the team), stakeholder engagement strategies are examined from the perspective of policy makers, practitioners and community participants. Primary material collected during observation of meetings, workshops, community and school-based activities supplement semi-structured interviews with disaster management practitioners, civil protection personnel, police and fire authority representatives, leaders from Amadora's business and community sectors, residents and local politicians. Documents, web-sites and exchanges on social media sites from the project's dedicated website were also examined. As this study is a work-in-progress and data analysis is in the early stages, interview transcripts included in this paper are limited to members of the team and their Director, Amadora Town Councillor for Civil Protection Services.

Preliminary Findings

Recurring categories that have emerged during preliminary analysis of documents, web-sites, observation at meetings and workshops, and the team interview transcripts, are divided into two sections: Awareness and Implementation.

Section 1: Awareness

A strategic approach to stakeholder engagement: 5 Axes of Intervention.

When the team was formed in 2010, they commenced by listing the institutions they believed necessary to engage as partners in the Campaign, and to identify issues of mutual concern to both the Campaign and stakeholder (partners); their aim was to identify areas of mutual need and thus commence to build a long term relationship with potential partners.

Box.1.1 Stakeholder engagement

“When we first all sat down together we were thinking how are we going to bring the Campaign to people, what are our future partner’s realities and needs?”

Amadora Local Campaign Team

In reviewing the team’s list of ‘partners’, it has been found that, although unlikely to have ever read Freeman’s (1984), seminal work on stakeholder approaches, their descriptions of partners sound remarkably similar to Freeman’s (1984) definition of a stakeholder as ‘ a group or individual who can affect, or is affected by, the achievement of the organization’s objectives’. For this reason, we use the term ‘stakeholder’ and ‘partner’ interchangeably in this paper.

With their combined expertise of civil protection, health and safety and urban planning, the team turned to Portugal’s legal framework for guidance on a strategic approach to achievement of their mission, noting that new national regulations for Safety against Fires had been launched in 2009. Some members of the team were familiar with the problems that private and public organizations experienced in complying with these laws, which related retrospectively to established buildings as well as for planned new buildings. As a result, the team developed their ‘5 Axes for Intervention’-a check-list to assist organizations comply with Portugal’s Legal Regulations for Safety against Fires (LAW 220/208, 2009).

The ‘5 Axes for Intervention’ are:

1. To identify non-compliance to Fire Safety Regulations and to make recommendations;
2. Technical support to implement recommendations or self- protective measures;
3. Training and Information for staff of partner organization and users of the service;
4. Simulations, evacuation drills , increase training and capacity to resist situations;
5. Organize and present thematic workshops to users of services;

Box.1.2 Strategy to meet both the Campaign and future partner needs

“We started out from a need that they would have and that we would be able to help them with, given our professional knowledge and expertise, not only as regards training, but also support and infrastructures, so we established these 5 axes for intervention with that concept in mind”.

Amadora Local Campaign Team

The team organized several public presentations to the private and public sectors within Amadora's community. In these sessions, presented by the local council and municipal social entities, the team presented an overview of Portugal's Legal Regulations for Safety against Fires (2009), the benefits and opportunities in reducing hazards, a description of 'the 5 Axes of intervention' and ways the Campaign team could help organizations to make a provisional diagnosis of what they need in relation to the 5 Axes. Organizations were invited to join the Campaign by completing an application form. When an application form was received, one or more members of the team would make a field visit to discuss what the organization felt they need in relation to the 5 Axes. While working on awareness, in addition to the fire safety regulations, the National Law on Civil Protection mentioned earlier in the text was used to ensure multiple hazards were addressed, not only fire.

Box.1.3 Stakeholders network

"It is as if we were working in a network or web, the Mayor is at the centre of the web, then we have the six members of the campaign team who start to weave the web. Each of us is then able to reach our partners through the Juntas de Freguesia (local councils), who, in turn, are able to bring in more partners"

Amadora Local Campaign Team

The team has disseminated the concepts of disaster risk reduction to the various institutions (social welfare, schools, elderly people), who are partners in the Local Campaign. In addition to technical support to implement recommendations or self-protective measures for the institution, the team has developed information and awareness sessions for the target audience of each institution. In the social welfare (immigrant and needy population) and elderly people institutions we promoted sessions about risks at local scale, safety equipment (how to use fire extinguishers) and the entities that we can and should use in a disaster situation. These actions have the support of Firefighters Department, National and Municipal Police, Red Cross and members of the team from Civil Protection Service. The main goal is to approach this target group with the concepts of security and resilience and make them more active in the community. For example, the elderly people (the most isolated and vulnerable group) who live alone have ongoing support by the social department (Amadora Campaign stakeholder) of the municipality of Amadora. The home support involves receiving information about disaster risk reduction (flyers) and all contacts of emergency entities.



Image 2 : Session about domestic fire procedures at home for elderly people

Each member of the campaign team, with different skills and training, enables different approaches to stakeholders, for example:

- Members of civil protection service: promote activities on disaster risk reduction;
 - Members of health and safety at work service: promote evacuation procedures and measures of self-protection;
 - Members of urban planning department: technical support in the preparation of security plans and emergency plans
- The range of skills brought to the Campaign individual team members enables a holistic, broad view of target audience needs, rather than a single focus on 'risk reduction' 'emergency services', or 'safety education' This multidisciplinary approach allows working more broadly with all institutions in order to identify and address their weaknesses regarding disaster risk reduction, and to use this as an entry point for their participation in the Campaign. In addition to public presentations, individual members of the team bring their own knowledge of local associations and organizations to the Campaign. In addition to finding an entry point that meets the needs of the institution, the team's strategy is to maintain 2-3 contact points in each local council (neighborhood), in order to disseminate concepts of the Campaign to a wider audience within the neighbourhood.



Image 3 : Public presentation to the local council

Currently the Amadora Campaign has more than thirty stakeholders (academic-scientific entities, local councils, municipal services, public-private organizations, rescue and emergency services, private social solidarity organizations, non-governmental organizations and schools). A summary of stakeholder involvement follows:

- Academic-scientific entities: have developed a set of studies about risk and vulnerability assessment;
- Local councils: promotes contacts with local associations and citizens' groups in order to increase their awareness;
- Municipal services: gives cooperation and collaboration to the campaign team (facilitate contacts and disseminate information for all municipality: education, environment, urban services);
- Rescue and emergency: provides data about disaster losses and support the stakeholders (on the local campaign) training and awareness for first aid and drills;
- Public-private entities and private social solidarity institutions: receive technical support (by the local campaign team) to improve their emergency plan and to provide social and cultural activities about disaster risk reduction to their clientele;
- NGO'S: support public awareness initiatives; provide free training (first aid; risk, disaster and resilience frameworks) to campaign stakeholders;
- School community: organise training activities and awareness about risk and disaster. Some schools have created civil protection centres for students to develop skills and facilitate a culture of safety.

Box.1.4 Relationship developed between the team and their stakeholders

“The participation of stakeholders is based on a give and take perspective. Our...team provides technical support and on-going training (first aid, lifesaving techniques, presentations on risk, disaster and prevention measures), to all stakeholders in exchange for their active participation in Campaign events (conferences, workshops, seminars) and data for updated database of disaster losses”

Amadora Local Campaign Team

All inputs provided by stakeholders are converted into outputs available to the population. Communication outputs include traditional communication mediums including newsletters, mailing lists and awareness sessions, to meet the communication preferences of the large proportion of elderly, migrants and Roma communities; however the Campaign includes new media technologies to target the younger population, including school children (a focus of the Campaign) and young adults. For example, some stakeholders (rescue and emergency) provide data that is organized by the team into risk assessment and/or the municipal emergency plan, weather warning system and/or contingency municipal plans. Others lend their facilities to Campaign events. In three years since joining the Campaign, the Amadora team has increased the number of stakeholders and maintained all original participating stakeholders. The stakeholders see practical results of their participation (publications, flyers on self-protection measures, risk information across communication channels); and the team promotes their stakeholders within the community as strong organisations able to face a disaster.

A model of stakeholder inputs converted to community outputs follows:

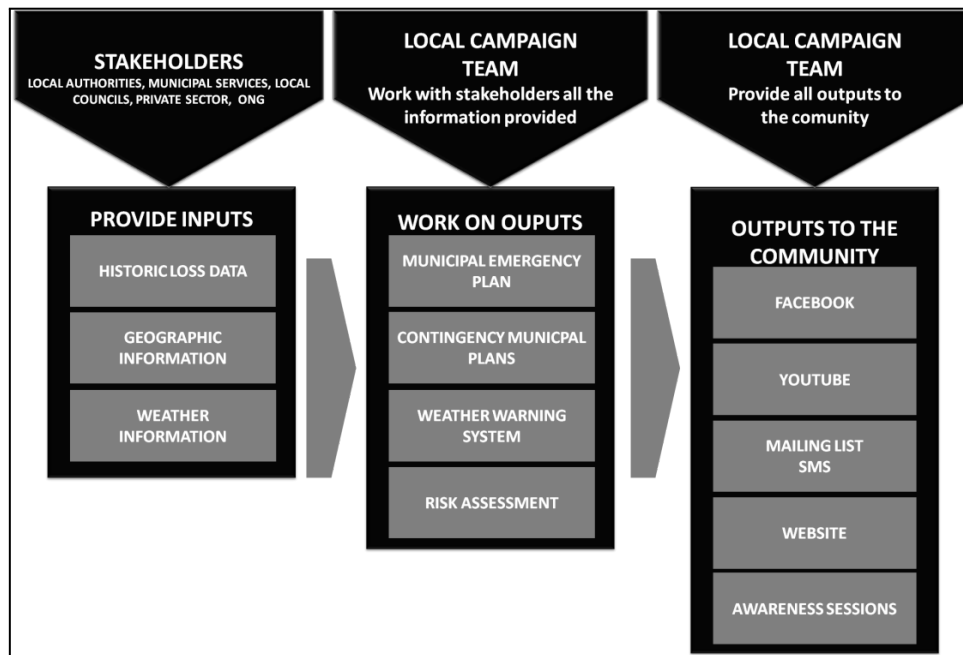


Image 4 : Stakeholder inputs converted to community outputs

All outputs produced by the campaign team are converted to simplified language about the municipality risks and recommendations to reduce disasters impacts. This reflects an important strategy of the team - to ensure complex technical data is communicated to stakeholders in language that is understandable to them. Activities are included in presentations (question-and-answer games, quizzes, simulations), to ensure that the audience has understood information presented.

In addition to organization-community engagement strategies, the team focused on creating awareness of risks facing the Amadora community. Major challenges initially identified by the team were lack of information about risks in the municipality, and the lack of a mentality of prevention in the community. The team’s stakeholder engagement strategy to address these challenges follows.

Partnerships for data gathering and analysis

The team began from the premise that the entire community must know about hazards and risks to which they are exposed if they are to be better prepared and take measures to cope with potential disasters. Before they could increase community knowledge and awareness it was important for the team to source, collect, and analyse information on hazards and population vulnerability, in order to make decisions regarding timely interventions before, during and after a disaster.

<p>Box.1.5 Involve, connect, share information and implement</p> <p>“To ensure community resilience, it is not enough to just consider the risk in the different stages of land use management and emergency planning. It takes something more, we needed to develop an approach to involve, connect, share information and implement the different levels of knowledge”.</p> <p style="text-align: right;">Amadora Local Campaign Team</p>
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The team’s aim was to mobilise organisations within the municipality and to create a strategy for participation. A strategic approach was developed, in consultation with a range of stakeholders for regular data provision and analysis. Internally, the council’s Geographic Information Division provides information for the team to assess risks, the Education and Social Department provides demographic statistics and the Environmental Urban Services Department provides climate change information. External stakeholders include the Municipal Fire Authority, providing annual statistics of accidents including road accidents, domestic, urban and regional fires; and the National Civil Protection Authority providing data on floods, landslides and earthquake activity in the area. With the technical support of local universities and the Fire Authority, the team prepares and constantly updates a comprehensive risk assessment and a series of risk maps with loss scenarios. The campaign team, in partnership with a local university, Universidade Lusófona, prepares and circulates the data to achieve better planning for urban areas, to manage flood areas and to identify areas of risk (map 2).

Historical data

During the decade 2000-2010 the Municipality of Amadora recorded more than 12,000 disasters with small and medium intensity that caused extensive damage and loss. The number of disasters forced the local campaign to set risk assessment as a priority. In a partnership with the Geography Department at Universidade Lusófona, the campaign team is compiling historical data related to disasters in Amadora:

As part of the University partnership, a 6-12 month internship program has been established, with 2-3 students, each working in the Campaign office to develop historical risk assessment data and conduct fieldwork with the team:

The team aims to publish a 10-year historical risk profile of Amadora, in partnership with the University. When published, the team hopes the National Civil Protection Authority will circulate this publication as a model to other municipalities.

Box.1.6 Historic loss data

“We started working with the data that the fire department sent us...we’ve tried to understand what’s been going on in the past... to help us prepare for the future.

Currently we have one student and the Deputy-Director of the University’s Geography Department working on historical data regarding landslides in Amadora. We now have historic loss data, a database of disaster losses from past events and current potential hazards in the city.

This information is available to the public”

Amadora Local Campaign Team

The second section of findings reports on the implementation of disaster risk reduction activities within the Municipality and the impact of this engagement in building /community resilience.

Section 2: Implementation

Social media as a tool to build community resilience

The use of design and social media at different phases in the disaster management cycle is identified by scholars as an area for further research (BURNSIDE-LAWRY, et.al, 2013). The Amadora case study provides empirical evidence of a Campaign team that have embraced the use of social media as a strategy to assist constructive collective action and participatory communication amongst all stakeholders involved in disaster risk reduction.

Participatory development research, combining organisational and community development dimensions of democratic participation, acknowledges more work is required to develop methods of evaluating effective two-way, participatory communication (BURNSIDE-LAWRY, et.al, 2013; CHENEY, 1995; DEETZ, 2001; JACOBSON, et.al, 2004; SERVAES, et.al, 2005).

Participation necessitates listening and trust to help reduce the social distance between communicators and receivers and methods to engage in genuine dialogue-gear toward listening to explore shared interests, joint problem-solving and relationship-building (GAO & ZHANG, 2001; SERVAES, 1996; SERVAES & MALIKHAO, 2005).

The Amadora Campaign team describes their use of social media as a mode of discourse similar to the model described in the preceding paragraph. The team report that all outputs produced with stakeholder inputs are disseminated in social networks (Facebook and YouTube pages), website and mailing list. To encourage community participation, the team provides information about emergency and contingency procedures, weather warnings, risk assessments online and instructions on what needs to be done in case of fire or other type of emergency in their neighborhood (image 5) . The purpose is to create community interaction and to gain an understanding of their perception about the risks where they live. In the team’s latest publication on Facebook involving a forest fires risk map, more than 560 visitors and 55 comments were registered².

FRIO – RECOMENDAÇÕES GERAIS

Uma redução significativa da temperatura, por vezes repentina, pode afetar a saúde de qualquer pessoa, quer esta se encontre dentro ou fora de casa. Os grupos de maior risco são as crianças, os idosos, os doentes crónicos (do foro respiratório ou cardíaco) e os sem-abrigo. O frio extremo pode estar associado a temperaturas baixas, queda de neve, ventos fortes e formação de gelo. Ao proteger-se, tenha isso em atenção.

1. ESTAR PREPARADO

NO DOMICÍLIO

- Antes do Inverno, verifique os equipamentos da sua casa;
- Se tiver lareira mande limpar a chaminé, por precaução;
- Mantenha a casa arejada, abrindo um pouco a janela/porta para evitar acumulação de gases;
- Calafete janelas e portas para evitar a entrada de ar frio e a saída de calor acumulado;
- Mantenha a temperatura da sua casa entre os 18°C e os 22°C;
- Evite dormir/descansar muito perto do aquecimento;
- Faça uma reserva de: água potável, alimentos ricos em calorias, comida enlatada ou embalada (que não necessite de cozedura ou refrigeração), combustível de uso doméstico (diesel de gás ou lenha);
- Prepare um estojo de emergência com: Rádio e lanterna a pilhas, pilhas de reserva, material de primeiros socorros, agasalhos e medicamentos essenciais.

CUIDADOS DE HIGIENE

- Mantenha a pele hidratada: hidrate todo o corpo tipo esmagando mãos, pés, rosto e lábios.

EM VIAGEM

- Leve um estojo de primeiros socorros, agasalhos, alimentos, um pano cobridor e telemóvel;
- Garanta o adequado aquecimento do veículo e respetivo arrojamento.

VESTUÁRIO

- Use vestuário adequado à proteção contra o frio e a chuva;
- Proteja a boca e nariz para impedir a entrada de ar muito frio nos pulmões e, se necessário, use luvas, chapéu e cachecol.

EXERCÍCIO FÍSICO

- Opte por fazer exercício pouco intenso.

ALIMENTAÇÃO

- É fundamental a ingestão de sopas e bebidas quentes, como leite, chá e alimentos calóricos.

2. TELEFONES DE EMERGÊNCIA E DE INFORMAÇÕES

LINHA SAÚDE 24 808 24 24 24	BOMBEIROS VOLUNTÁRIOS DA AMADORA 21 492 11 00	POLÍCIA DE SEGURANÇA PÚBLICA 21 492 95 90
AUTORIDADE DE SAÚDE DA AMADORA 21 492 62 30	SERVIÇO MUNICIPAL DE PROTEÇÃO CIVIL 21 492 90 15	CVP DELEGADAÇÃO AMADORA 21 492 90 11

CALOR - RECOMENDAÇÕES

O calor intenso caracteriza-se por temperaturas máximas muito elevadas que, sem as devidas precauções, podem afetar a saúde de qualquer pessoa, desde as crianças, idosos, pessoas com doenças crónicas (respiratórias e circulatórias) e doentes acamados particularmente mais vulneráveis. Em dias de muito calor, para evitar situações de desidratação e o aumento da temperatura corporal, siga as recomendações das autoridades.

1. O QUE FAZER

INGESTÃO DE LÍQUIDOS

- Mesmo que não sinta sede beba com regularidade água e sumos naturais, pois estes fazem a reposição de sais minerais perdidos na sudorese; incentive os idosos a beberem, pelo menos mais um litro de água por dia, de que é habitual;
- Evite bebidas alcoólicas pois estas aumentam a desidratação e são facilmente absorvidas por um organismo desidratado levando a estados de embriaguez;
- Evite bebidas gasificadas, com cafeína e demulçante açucaradas ou quentes, pois estas aumentam a desidratação;
- Pessoas com epilepsia, doenças cardíacas, renais ou de fígado, assim como pessoas com dietas ou restrição de líquidos, devem aconselhar-se junto do médico;
- Recem-nascidos, crianças, idosos e pessoas doentes podem não sentir ou não manifestar sede, por isso ofereça-lhes água regularmente e mantenha-se vigilante.

REFEIÇÕES

- Devem ser feitas refeições leves e mais frequentes, evite refeições pesadas e muito condimentadas.

VESTUÁRIO

- Use roupas de algodão e de preferência com cores claras, pois este tipo de roupa diminui a transpiração e absorve menos calor;
- Evite vestir roupas de fibras sintéticas e lã.

EM CASA

- Tomar banho de água tépida ou fria na hora de maior calor, mas evite sempre as mudanças bruscas de temperatura, pois estas podem causar hipotermias;
- Evite que o calor entre nas habitações, mantendo as persianas ou portadas corridas dentro da habitação;
- Abra as janelas durante a noite para diminuir a temperatura dentro de casa.

NATURA

- Sempre que sair à rua use protetor solar (com índices de 15, em adultos, e 20 ou mais em crianças), óculos escuros e chapéu;
- Evite a exposição solar entre as 11 e as 16 horas;
- Use menos roupa, sobretudo na cama de bebés e acamados;
- Evite esforços físicos desnecessários, sobretudo nas horas de maior calor.

EM VIAGEM

- Viaje nas horas de menos calor e redobre os cuidados com bebés, crianças e idosos;
- Evite percursos longos.

2. ONDA DE CALOR

Uma onda de calor caracteriza-se pela ocorrência de temperaturas máximas superiores à média usual, para a época do ano, para um período longo de dias. Segundo a Organização Meteorológica Mundial (OMM), "ocorre quando num intervalo de pelo menos seis dias consecutivos a temperatura máxima diária é superior em 5°C ao valor médio diário na período de referência".

ONDAS DE CALOR EM PORTUGAL

A ocorrência de ondas de calor, que se verifica com alguma frequência em Portugal Continental, tem um grande impacto em termos de mortalidade. No passado recente, é possível identificar períodos de calor que aumentaram o número de mortes entre a população. Em 2003, a onda de calor que assolou Portugal, e afetou todos os distritos, atingiu um número inesperado de mulheres e, maioritariamente, pessoas idosas. Nesse ano, foi estimado um excesso de óbitos de 1953.

SALONAS AMADORA

As temperaturas elevadas induzem o aumento de poluentes atmosféricos, maior probabilidade de carência de água e de alimentos contaminados que podem resultar em problemas de saúde, manifestando-se por emergências médicas. O Serviço Municipal de Proteção Civil da Amadora (SMPC) disponibiliza a população toda a informação sobre as condições meteorológicas e alertas da proteção civil para situações de calor intenso. De modo a prevenir-se, solicite essa informação através do contacto protecao.civil@amadora.pt.

3. TELEFONE DE EMERGÊNCIA E INFORMAÇÕES

LINHA SAÚDE 24 808 24 24 24	BOMBEIROS VOLUNTÁRIOS DA AMADORA 21 492 11 00	POLÍCIA DE SEGURANÇA PÚBLICA 21 492 95 90
AUTORIDADE DE SAÚDE DA AMADORA 21 492 62 30	SERVIÇO MUNICIPAL DE PROTEÇÃO CIVIL 21 492 90 15	CVP DELEGADAÇÃO AMADORA 21 475 00 11

Image 5 : Cold and heat wave instructions and procedures

All social and digital media play a role: Amadora’s Campaign website has general information and technical-scientific publications on risk, disaster and resilience for the municipality; Facebook share the activities developed by the team to encourage dialogue and provide risk mapping; YouTube share videos about public information and awareness on reducing risk disaster. The steady increase in social and digital media participants is shown in the following table. Evidence suggest that, of all the social and digital tools used to encourage two-way, participatory communication (website, Facebook, YouTube) between the team and the community, Facebook is definitely the most effective and dynamic. Since November 2012,

² <https://www.facebook.com/amadora.resiliente> (May 2013)

the Campaign's Facebook page has had over 26,000 visits with more than 1800 people sharing contents (chart 1).

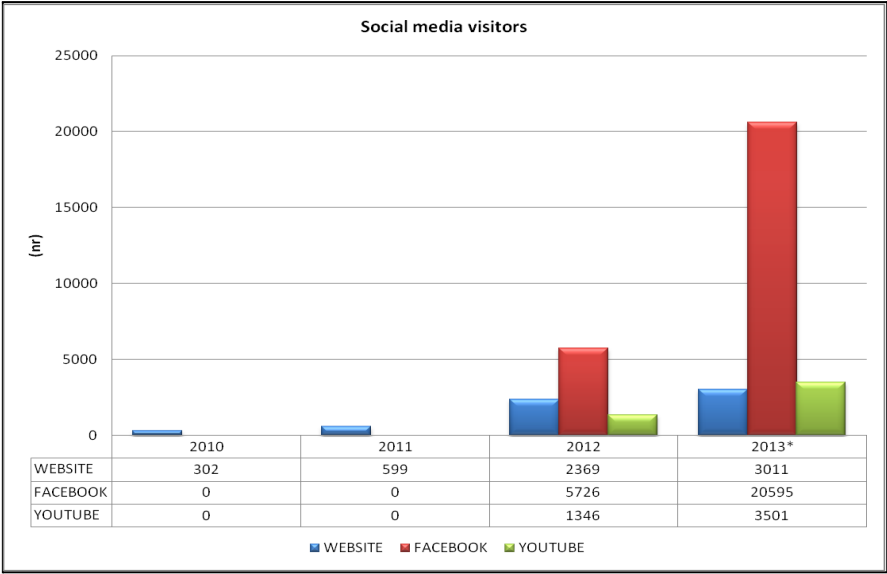


Chart 1 : Amadora My City is Getting Ready Campaign social media visitors by year

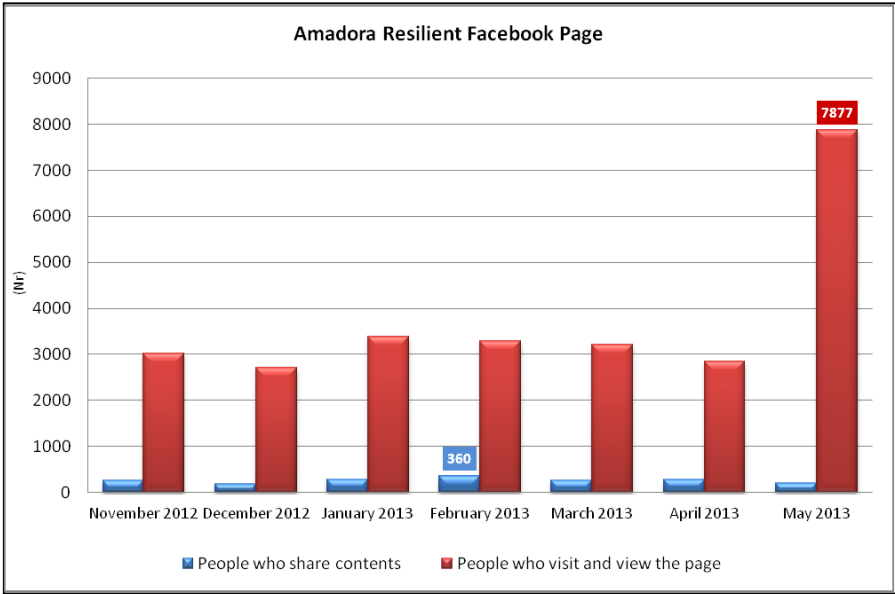


Chart 2 : Amadora My City is Getting Ready Campaign Facebook statistics by year

Further analysis reveals that the female population is more active on the Facebook page and the predominant age groups are 35-44 and 25-34 (chart 3). The people who visit and follow the local Campaign comprise Amadora residents (90%), approximately 8% live in other cities of Portugal and 2% live in other countries (Brazil, United States, Germany, France, Australia and Spain).

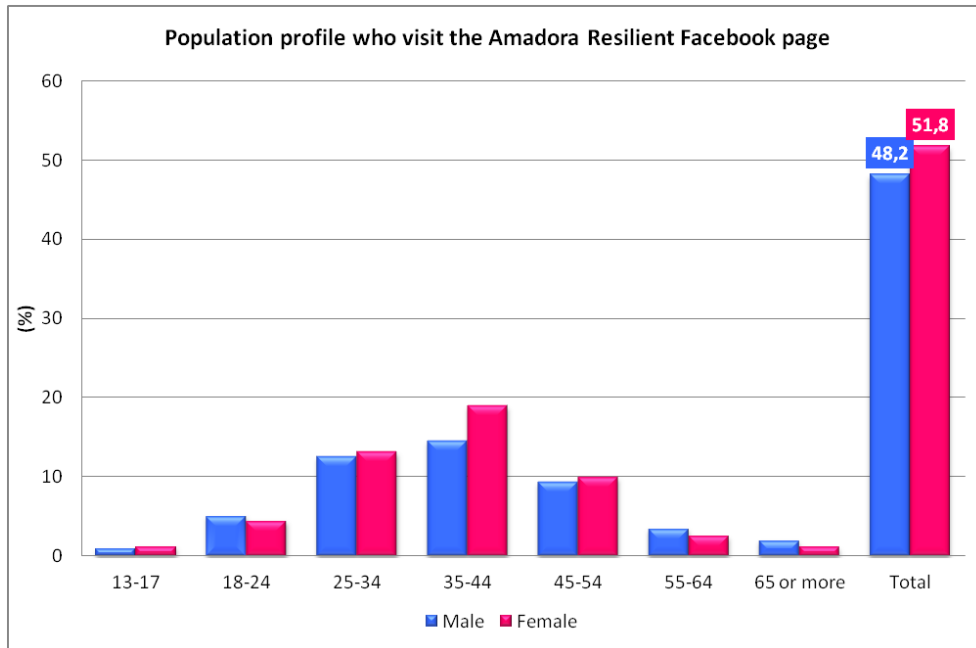


Chart 3 : Amadora My City is Getting Ready Campaign Facebook Population profile

In addition to the use of social and digital media, the team has implemented a program of face-to-face disaster reduction workshops with stakeholders within the Municipality, and, by invitation from the UNISDR, the team participate in workshops and conferences to encourage city-to-city learning between other cities involved in the *My City is Getting Ready* Campaign. A description of each program follows.

Stakeholder workshops

With the support of the Education and Social Department (Amadora municipal service linked with Local Campaign), the campaign team developed workshops to inform various age groups, especially the most vulnerable (children and the elderly), about the procedures for adequate prevention. On average the team present more than 100 sessions per year for the school community (children) and about 20 sessions for the elderly population. The content of awareness and training programs for schools are designed as follows:

- Primary schools (called Prevent and Protect) - the team present a video about self-protection measures in schools and a number of activities about risks, prevention and safety (quiz, puzzles and paintings);
- Secondary schools (called Civil Protection Club)-the team make presentations about the risks in the municipality and what the community can do to mitigate them (fires, earthquakes, accidents, floods, landslides).

The team's strategy is to work with the educational authorities, professors, students to include disaster risk reduction at all levels of the school curriculum and in all public and private institutions. Currently the team work with six primary schools (6-10 years) and five secondary schools (11-17 years) (table 1). The team's philosophy is that the children are at the centre of the neighbourhood network, able to disseminate information to their families.

Primary School	2009	2010	2011	2012	Secondary School	2009	2010	2011	2012
initiatives	8	16	45		initiatives	60	39	82	
students	154	241	740		students	303	241	1464	

Table 1 : Statistics of School Program

The team perceives the community as constituted by families who communicate with the wider neighbourhood via word of mouth. Every day, the families visit the institution to leave their children while they are at work, and observe the improvements the institution has made as part of the Campaign-from the signs and the fire extinguishers, to training their children in emergency response, so that they know how to leave the facilities safely in case of an emergency.

Training sessions teach practical steps for the community to reduce the population's exposure to risk, the disaster causes and consequences. For example, in the seismic risk session for secondary schools, the team present the impact of an earthquake in our society and what we can do to prevent them. Students make an oral presentation about the preventive measures to take into account in emergency and urban planning. Some secondary schools have created volunteer civil protection teams to encourage various activities (query's, games, flyers) and support the local campaign by spreading awareness messages (image 6).



Image 6 : School student presentation about Amadora's Seismic Risk

City-city learning

As a member of UNISDR's campaign, Amadora is gaining a reputation as a model city for intra-national and international city-to-city learning. The team believe that joining UNISDR's *Making Cities Resilient* Campaign has provided opportunities to gain visibility for their work and commitment. In 2012 and 2013, by invitation of UNISDR, representatives from the Amadora campaign participated in several workshops and conferences (image 7):

- Lebanon, Beirut–Training of trainers on the role of local governments in making cities more resilient to disasters;
- Croatia, Dubrovnik–3rd European meeting for disaster risk reduction;

- Egypt, Cairo–Urban Risk Management;
- Switzerland, Genève–Global Platform for Disaster Risk Reduction;



Image 7 : Train the Trainer Workshop, Beirut (September 2012)

Lack of adequate resources

Results from this case study support assertions in the recent UNISDR report that significant challenges remain in implementing the Hyogo Framework for Action (HFA). Lack of adequate resources to support disaster risk reduction measures remains the most severe constraint (UNISDR, 2013). The Councillor responsible for Civil Protection Services in Amadora has no doubt that the Global Financial Crisis has stymied Portugal’s ability to provide financial support at the National level for disaster risk reduction. He is also proud of the relative financial stability of Amadora.

Box.1.7 Financial support

“In principle, we should receive financial support from the Ministry for Internal Administration, through the State Secretary for Civil Protection, but we haven’t received any kind of support so far. In fact, the agents for civil protection themselves receive very little support- fire-fighters for example, who play a fundamental role here”

In the midst of the [financial] storm hitting Portugal at this moment, the municipality of Amadora is one of the country’s most solid [municipalities].

What we’ve been doing is maximising the resources that we have...to create synergies with other agents, with universities and other partners....we spend very little money because we have a pro-active attitude, we have a lot of partners, we a very important know-how in people, and we have a particularity that is that the main agents of Civil Protection are absolutely motivated”.

Deputy Mayor Eduardo Rosa – Municipality of Amadora

Amadora Local Campaign Team

Preliminary results indicate that in spite of a limited budget, the Municipality of Amadora has developed an innovative disaster risk reduction strategy based on coordination, motivation

and participation. It is evident from observation, data gathered and interviews with the team that strong leadership is combined with strategic stakeholder engagement with community groups, private sector, national/local authorities, academia, school community and non-governmental organisations to promote cooperation among different sectors of civil society.

In spite the lack of national financial support, the team believe the UNISDR 's Ten Essentials framework has provided guidance on how to improve the performance of a city in reducing disaster risk.

Through local alliances, coordination and the involvement of organisations, working methodologies for stakeholders, educational programs and the forecasting system, response has been possible to improve the Amadora community's disaster risk perception.

Lessons learned

Building a close relationship between stakeholders and the campaign has been crucial to ensuring the team understand the principal needs of each institution. Disaster risk reduction is not a priority in the broader community, and we can see that in the lack of security conditions in some entities. The efforts of the campaign team have resulted in increased interest from stakeholders in seeking information on risks and disasters. For them it is now important to keep their population safe.

But it was important for the team adapt their strategy to meet the needs of each target audience, to implement the concepts of risk, disaster and resilience. The most collaborative and participatory public was always school students. The less-educated population, immigrants and the elderly people showed a lack of interest in the beginning, which was solved with practical actions with emergency institutions.

As a team, we have learnt the importance of finding an entry point that is of importance to each target audience; of designing interactive education /training engagement strategies that include 2-way communication that allows dialogue and input /feedback from the target audience; and the importance of including content that can be adapted according to the specific needs of that target audience on that day. Every month the team makes the time for self-reflection and a debriefing to improve our performance and relationship with stakeholders. To keep disaster risk reduction on the agenda, it is important that the people feel that something is being done. The creation of '*Amadora Resilient*' in the social networks (facebook and youtube) enables daily contact between the team and the community. More than 20 posts with activities, events and news about risk, disaster and resilience in the municipality of Amadora, are posted weekly.

Conclusion

The desire to study stakeholder engagement is based on both authors' belief in the transformative potential of citizen participation in policy and decision-making. In our analysis of empirical data in Amadora we see evidence that, without a supporting legal framework

or significant financial resources, one dedicated team has managed to motivate and encourage public participation by listening to stakeholders, building trust and engaging in genuine dialogue-to explore shared interests, joint problem-solving and relationship-building using a pro-active, strategic approach. This research is a work-in-progress; interview data with community groups, private sector, national/local authorities, academia, school community and non-governmental organisations have been gathered but is yet to be analysed. The logical next step in this research is to compare the team's perceptions of the efficacy of the Campaign's stakeholder engagement strategies with their stakeholders' perception. This will be the focus of a forthcoming paper.

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