BUILDING A 'CULTURE OF PREVENTION':
CHALLENGES TO INSTITUTIONALISING
DISASTER RISK REDUCTION IN LOCAL
DEVELOPMENT IN MEXICO

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This paper is part of a series on “Making communities safer: challenges of creating effective disaster risk reduction partnerships”. The series arose out of a panel on this theme at the World Conference of Humanitarian Studies in Groningen, The Netherlands, 4-7 February 2009 (www.humanitarianstudies2009.org). It includes papers given at the panel and those of others who submitted papers but were unable to attend the conference.
Abstract
A decentralised, partnership approach is promoted by international organisations as being the most efficient and effective way of reducing disaster risk, but little is known about the willingness or capacity of local government to develop and implement suitable policies. Disaster risk reduction (DRR) is a cross-sectoral policy domain so we need to understand how different stakeholders are involved in the policy process (Handmer and Dovers 2007). In Mexico, the National Civil Protection System is decentralised so municipal governments are ultimately responsible for disaster management and building a ‘culture of prevention’. Their willingness and ability to do so is shaped by their relationships with other government agencies and non-government organisations.

This paper examines how different stakeholders interact with each other and influence local disaster policy in one municipality in the State of Quintana Roo, Felipe Carrillo Puerto. The new municipal government elected in 2005 showed signs of willingness to develop and implement DRR policies but during the following three-year administration its capacity to do so was limited by national civil protection structures and problematic inter-institutional relationships. This paper forms part of a broader comparative study of changes in disaster policy across five municipalities in the Yucatan Peninsula.

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1 The National Civil Protection Programme 2008-2012 prioritises the creation of a ‘public policy of cooperation and coordination to generate a culture of prevention and self-protection; that integrates a risk management focus in the three levels of government and the social and private sectors’ (Segob 2008: 1).
2 The case study is part of my PhD research and the findings are provisional.
Introduction

Despite Mexico’s Federal Government commitment to integrating a risk management focus at all levels of government, municipal capacity to develop and implement DRR policies is limited by a number of broad institutional constraints, as well as problems related specifically to the structure of the National Civil Protection System (SINAPROC). In this paper, the institutional and policy environment shaping municipal capacity is first discussed, followed by an assessment of civil protection structures, to see whether or not they support and enable municipal-level DRR. Attempts by the 2005-2008 municipal government in Felipe Carrillo Puerto to implement a DRR strategy are then examined.

The methodology used for this study was a qualitative case study approach. To assess how civil society involvement and intra- and inter-governmental relations influenced the government’s willingness and capacity to reduce disaster risk, semi-structured interviews were carried out with municipal Civil Protection directors, past and present, other municipal directors, representatives of NGOs working in the area, and community leaders in the localities most affected by hurricanes. Direct observation of the Civil Protection committee for hurricanes also informed findings, as well as annual contingency plans for the hurricane seasons from 1999 to 2008, and municipal development plans.

Institutional and policy environment

Municipal governments need to be able to make their own decisions about resource allocation in order to respond to citizen demands and allocate resources efficiently and effectively. Independence from higher levels of government is therefore important, particularly where different political parties control state and municipal governments. Poor, rural municipalities in Mexico are disadvantaged because they have almost no financial resources of their own and their per capita share of intergovernmental transfers is low (Rowland 2001). Resources for disaster management have to be allocated from unconditional transfers as there is no specific funding for municipal Civil Protection departments. In most rural municipalities, including those with high levels of disaster risk, Civil Protection is low down the list of government priorities, and in some municipalities the Civil Protection department is no more than a telephone number.
Human resources are also a constraint. The process of professionalisation of government personnel in Mexico is generating greater continuity of staff at federal level, where all Civil Protection positions require civil service exams, but this is not the case at state and municipal levels. The municipal president and legislators are elected for three-year periods and Article 115 of the Mexican Constitution prohibits immediate re-election of municipal authorities. The municipal Civil Protection director is appointed by the municipal president, and this position is still seen as a political appointment, says Civil Protection general director Ana Lucía Hill, so directors usually change every three years too. In addition, even where directors have some experience it is often the wrong kind: ‘traditionally civil protection was seen as a response activity, so staff are good at logistics. Now that the focus is changing to prevention activities there is more desk-based work’, explains Hill. 

Given the lack of financial and human resources assigned to Civil Protection, the municipal director must rely heavily on other municipal government departments for equipment and manpower and their knowledge of communities throughout the municipality, particularly those in remote areas. S/he must also depend on the state Civil Protection department for help with communications strategies and training.

Participatory approaches to disaster policy and management are believed to be more effective and the participation of civil society in policy making is encouraged in Civil Protection legislation and in planning documents (Segob 2008). However, civil society participation in policy making was constrained until the late 1980s by centralisation and clientelism. Mexico was ruled at federal, state and municipal levels by a single political party, the Institutional Revolutionary Party (PRI): state governors owed their position to the president, municipal presidents owed theirs to the state governor, and all were expected to support presidential policy initiatives. In theory, municipal autonomy was guaranteed by the Constitution of 1917, in particular by the ‘free municipality’ (municipio libre) provisions of Article 115, but in practice, higher levels of government did not respect this supposed autonomy.

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3 Interview with Ana Lucia Hill, General Director of Civil Protection, Mexico City, 11th August 2008.
State-society relations under the PRI were clientelistic, ‘based on political subordination in exchange for the discretionary granting of available public resources and services’ (Heredia 1997: 4). Regular elections were held but control of civil society groups and the marginal role of opposition parties ensured that the PRI always won.

In the late 1980s this curious model of centralised, authoritarian governance began to break up in response to economic crises and social pressures. A new system of electoral competition emerged, forcing governments to re-define their relationship with civil society. Today, municipal governments, regardless of party affiliation, are coming under increasing pressure to respond to the demands of citizens rather than particular interest groups. As Merilee Grindle (2007) notes in her analysis of the impact of decentralisation on 30 municipalities in Mexico, citizens’ groups have begun to participate more actively in public by making demands on local government to try and extract tangible benefits. Committees have been set up and formal and informal networks developed to influence decisions about the allocation of local government resources. Overall, though, there is less evidence that citizens are holding government officials to account on their commitments, except at election time.

**National Civil Protection structures**

SINAPROC has, since its creation in 1986, embraced the concepts of inter-governmental cooperation and civil society participation:

> the System includes permanent mechanisms for public consultation and participation through civil society organisations … so that the general public can put forward proposals, make demands, formalise agreements and play an active role in all areas of civil protection (Cámara de Diputados, 1986: 10).

SINAPROC is designed to involve a wide range of stakeholders in coordinative and functional/advisory relations from national through to municipal level (see Figure 1 below), including government departments, academics and NGOs. Functional relationships flow down from the Interior Ministry to the General Manager for Civil Protection. Thereafter, the relationship between the federal structures and state and municipal level systems and communities is

Fig.1. Mexico’s National Civil Protection System

On paper, Civil Protection in Mexico is one of the most decentralised areas of public administration with an operating structure based on the principle of subsidiarity: municipal governments are charged with overall responsibility for disaster management and only if their financial capacity is surpassed does the state government intervene; only when the state government's capacity is surpassed does the federal government get involved. Neither federal nor state governments can tell municipalities what to do, they can only recommend. ‘Of course, a recommendation from the federation almost has the weight of a demand but it is not the same,’ explains Hill.
Municipal governments are encouraged by the General Civil Protection Law (2000) to plan and implement security measures to reduce the impact of disasters. Their responsibilities are threefold: the identification of high-risk areas; precautionary measures to move and house people in temporary shelters; and the development of appropriate local legislation to increase security (Cámara de Diputados 2000: Article 39). A municipal Civil Protection director is appointed to carry out these activities.

It is unclear, however, how municipalities should reduce risks –as opposed to disasters– with their own limited resources. Additional resources for DRR are available from the federal government through its disaster prevention fund (FOPREDEN) but proposals are considered on a case-by-case basis, and municipal governments lack the human or administrative capacity to put together a project on their own. Here, then, they also need state government assistance. Federal government support to municipalities is also much stronger once an emergency or disaster has been declared.

Disaster management is, in theory, highly participatory, with policies and planning carried out by a Municipal Civil Protection Council, made up of directors of key government departments plus representatives from the business sector and civil society. However, the willingness of Civil Protection directors to consider the needs of the most vulnerable communities and involve social groups in decisions taken by the Civil Protection Council depends on the level of public support.4 Active, broad-based public interest groups pressing for government action to reduce disaster risk are a rarity in Mexico, and community organisations, particularly in poor municipalities, have more pressing day-to-day needs related to basic services (access to drinking water, healthcare and education), employment and crime. Unless civil society organises to demand changes in disaster policy, it is unlikely that governments will take the initiative. As Andrew Maskrey (1989: 87) explains: '[governments] respond more to political pressure than to reasoned arguments to change their policies, and that pressure can best be exerted by those who suffer the effects of disaster'.

4 Interview with Marco Castillo, director of Ayuda en Acción in Mexico, Cuernavaca, 19th June 2008.
Coordinating disaster risk reduction in Felipe Carrillo Puerto

The municipality of Felipe Carrillo Puerto is located within the Mayan Region in the State of Quintana Roo. It has a total population of 65,373 of which 67 per cent live in rural areas and engage in subsistence farming activities, known as the *milpa*. This agricultural method dates back to the Prehispanic period and is adapted to hurricanes through diversification and irrigation: backyard garden production and emphasis on root crops, plus the development of more intensive systems of production involving hydraulics, terracing and ridged fields, all served to reduce crop damage from hurricanes (Konrad 1985: 327).

Fig.2. Maps of Quintana Roo and the central area of the Sian Ka’an reserve

The municipality of Felipe Carrillo Puerto has a 300km coastline and 40 per cent of the whole municipality is inside the nature reserve of Sian Ka’an. Small fishing communities within the reserve are amongst the most remote localities in the municipality, with only an unpaved access road connecting them to the capital. They are the most exposed to hurricanes. Although these hazards have affected Mayan populations living in the region for hundreds of years resulting in
the adaptation of housing and farming methods, more than half of the current population of Quintana Roo is of non-Mayan descent, including those living on the coast. Families in these coastal settlements rely on the effective coordination of disaster prevention, response and recovery activities for their survival.

In 2000, Mexico’s ruling party, the PRI, lost power for the first time at federal level to the National Action Party (PAN), but in the State of Quintana Roo the PRI continues to dominate. Felipe Carrillo Puerto’s municipal government was run by the PRI until 2005 when, for the first time an opposition municipal president was elected from the Democratic Revolutionary Party (PRD). This opened up opportunities for policy reform but also presented problems for inter-governmental cooperation and coordination, as Felipe Carrillo Puerto’s government now had to negotiate with state and federal governments of different political parties.

Until 2005, disaster policy was focused on emergency response. Despite high levels of disaster risk in Felipe Carrillo Puerto, municipal governments paid little attention to the need for effective, coordinated disaster prevention. A department was set up and a Civil Protection director appointed in 1999, but until 2005 Civil Protection remained a marginal activity for municipal government. Hurricane committee meetings were held only if a hurricane was approaching to discuss preparedness measures, and there was minimal participation from civil society groups. This lack of interest in prevention is reflected in the Municipal Development Plan 2002-2005 where the only objective of Civil Protection with regard to hurricanes and flooding was to develop ‘a specialised unit ready to act in the event of any type of emergency’ (see Fig.3 below).

In 2005 when the PRD candidate won the elections in Felipe Carrillo Puerto an opportunity to devise a new disaster policy was created. Civil society organisations were quick to take advantage of this opportunity; however, the government’s capacity to implement this new strategy was influenced by complex intra- and inter-governmental relations.
Fig.3. Felipe Carrillo Puerto’s Civil Protection Strategy 2002-2005

<table>
<thead>
<tr>
<th>Objective</th>
<th>Forest fires and house fires</th>
<th>Hurricanes and flooding</th>
<th>Tourists, accidents and epidemiological risks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>That the public is assured of a rapid fire response</td>
<td>Have a specialised unit prepared to act in the event of any emergency or danger</td>
<td>That specialised paramedics are available</td>
</tr>
<tr>
<td>Goal</td>
<td>Acquire a pipe for fire fighting</td>
<td>Install a permanent operative committee for the period 2002-2005</td>
<td>Acquire a specialised vehicle with medical equipment for the period 2002-2005</td>
</tr>
<tr>
<td>Strategy</td>
<td>Prepare and train a permanent rescue team</td>
<td>Alert the public through the media of the importance of their participation; equip them with necessary tools</td>
<td>Provide periodic training and raise awareness through the media of help provided</td>
</tr>
</tbody>
</table>

Source: Ayuntamiento Felipe Carrillo Puerto 2002-2005

**NGO-municipal government relations**

Policy making in Felipe Carrillo Puerto during the 2005-2008 administration benefited from high levels of civil society participation and the presence of a range of organisations representing different social groups, working on various social and economic issues. Amongst these, the UNDP Local Risk Management Programme is the only international agency working to build capacity for DRR in the region. It began with community projects along the northern coast of the State of Yucatán in 2003 following Hurricane Isidore, extending in a second phase across the peninsula to neighbouring states of Campeche and Quintana Roo, including a number of communities in the municipality of Felipe Carrillo Puerto. UNDP ‘local promoters’ in each micro-region\(^5\) are selected on the basis of their experience working in local organisations and interest in DRR. The programme focuses on building community resilience by helping them to

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\(^5\) The UNDP Disaster Risk Management Programme is funded by the UNDP Global Environment Facility's Small Grants Programme. It works with NGOs in five micro-regions in the Yucatan Peninsula with the Spanish NGO Ayuda en Acción and a number of national NGOs including: Educación, Cultura y Ecología (EDUCE A.C.); Servidores Turísticos S.C.; Yo’olché A.C.; and Marea Azul A.C.
set up an emergency committee, carry out a participatory risk assessment, and develop an emergency plan. It also encourages community-based organisations to apply for funding to carry out risk assessments and risk-proof their investments in productive infrastructure and machinery. The UNDP local promoters coordinate activities with other NGOs working in the same micro-region on a range of development topics. The programme has been extended now to 263 localities throughout the peninsula. Localities are selected on the basis of three criteria: low levels of human development, high levels of risk and the presence of local community-based organisations.

In the municipalities where the programme operates, the UNDP promoters work directly with community members. UNDP-municipal government relations are not always harmonious and Civil Protection directors are often suspicious of UNDP’s community work, if not outright hostile. Civil Protection director Martín Saucedo is uncomfortable with the idea that UNDP works independently of government. He says he is keen to work more closely with them and believes ‘it is important for community emergency committees to coordinate directly with the municipal Civil Protection committee’.\(^6\) He is concerned that communities will be given contradictory instructions on how to prepare for a hurricane if community committees do not align their activities with government policy.

Despite this concern, Felipe Carrillo Puerto is one of only a few municipalities where UNDP promoters have proved to be able lobbyists for DRR. Municipal disaster policy improved under the 2005-2008 administration thanks to effective lobbying from UNDP promoters. In 2005, during the electoral campaign, the promoters helped organise a forum, which all three municipal presidential candidates attended, where civil society groups proposed social and economic issues to be incorporated in municipal development planning, including disaster risk management. Their advice was taken up by the PRD candidate on winning the election: the Municipal Development Plan 2005-2008 includes Civil Protection in its strategic objectives and all three Civil Protection strategies outlines in the Plan focus on DRR (see Fig.4).

\(^6\) Interview with Martín Saucedo, municipal director Civil Protection 2008-2011, Felipe Carrillo Puerto, 22\(^{nd}\) May 2008.
**Fig.4. Felipe Carrillo Puerto’s Civil Protection Strategy 2005-2008**

<table>
<thead>
<tr>
<th>Strategic objective:</th>
<th>Promote a culture of self-protection, prevention, and solidarity in response activities in the event of a disaster provoked by a natural or anthropogenic event.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategy #1</strong></td>
<td>Promote a culture of prevention against natural and anthropogenic disasters</td>
</tr>
<tr>
<td>Activities:</td>
<td>I. Carry out campaigns in schools, offices and strategic locations to provide information on how to prevent disasters</td>
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<tr>
<td></td>
<td>II. Hold permanent meetings with representatives of the public, private and academic sectors to integrate disaster prevention projects</td>
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<td></td>
<td>III. Set up a Municipal Civil Protection Committee</td>
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<td></td>
<td>IV. Carry out campaigns in the local media to explain the Municipal Civil Protection Bylaw</td>
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<tr>
<td><strong>Strategy #2</strong></td>
<td>Strengthen basic infrastructure and the normative basis for disaster prevention</td>
</tr>
<tr>
<td>Activities:</td>
<td>I. Set up a fire department in the municipal capital with adequate installations</td>
</tr>
<tr>
<td></td>
<td>II. Maintain and improve the municipal cyclone shelters</td>
</tr>
<tr>
<td></td>
<td>III. Set up a communications and monitoring system for emergency response</td>
</tr>
<tr>
<td></td>
<td>IV. Update the Civil Protection Bylaw</td>
</tr>
<tr>
<td></td>
<td>V. Prepare and implement an emergency plan</td>
</tr>
<tr>
<td></td>
<td>VI. Finalise the risk map for Felipe Carrillo Puerto.</td>
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<td></td>
<td>VII. Ensure that the community development centres are properly equipped for natural disasters</td>
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<td></td>
<td>VIII. Foster cooperation activities with UNDP programme</td>
</tr>
<tr>
<td><strong>Strategy #3</strong></td>
<td>Professionalise and strengthen human resources in the Civil Protection department.</td>
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<tr>
<td>Activities:</td>
<td>I. Prepare and implement an emergency plan</td>
</tr>
<tr>
<td></td>
<td>II. Ensure permanent training of Civil Protection staff</td>
</tr>
<tr>
<td></td>
<td>III. Create an Internal Programme for Security and Urban Emergencies</td>
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<tr>
<td></td>
<td>IV. Provide necessary equipment to Civil Protection personnel</td>
</tr>
<tr>
<td></td>
<td>V. Coordinate activities with State and Federal government agencies and volunteers from civil society</td>
</tr>
</tbody>
</table>

Source: Ayuntamiento Felipe Carrillo Puerto 2008-2012

The Civil Protection Council is the permanent, formal structure for participation in –and coordination of– disaster prevention and response activities. The Council is made up of two committees: one for hurricanes, the other for forest fires. The hurricane committee is convened at the beginning of the hurricane season (which in the Atlantic runs from the beginning of June through to the end of November), and meetings are supposed to be held periodically throughout
the season, then every 24 hours and more frequently as a hurricane approaches. NGOs and local associations are invited to these meetings. In Felipe Carrillo Puerto the attendance rate is high compared to that in other municipalities in the region, partly due to the fact that many NGOs, cooperatives and other business associations are based in the municipal capital, also called Felipe Carrillo Puerto. NGOs also participate actively in the Rural Sustainable Development Council where longer-term decisions are taken about investments in rural productive activities. Unlike the Rural Sustainable Development Council, though, in Civil Protection committee meetings, non-government members do not have a vote so their participation in policy is limited to suggestions. In practice, committee meetings were not held regularly during the 2005-2008 administration so their voices were even less strong.

Hurricane Dean was the most recent hurricane to affect this central region of Quintana Roo, making landfall on the Yucatan Peninsula on 21st August 2007 as a powerful Category 5 storm causing significant damage to crops, housing, and public infrastructure, particularly in the south of Felipe Carrillo Puerto and in the neighbouring municipality of Othón P. Blanco. The Red Cross, Caritas, and UNDP were among the first to reach many rural communities, and two days later government aid was distributed in affected areas. The emergency response was quick but inefficient due to lack of communication and coordination between aid organisations and with the municipal government. According to UNDP promoter Ríger Borges, each organisation wanted to distribute its own supplies separately, using different methodologies for assessing the needs of communities. Current Civil Protection director Saucedo, who was working in a voluntary emergency response group at the time, claims that some affected communities did not received any aid despite making repeated demands. In Noh Bec, a forestry locality in the south of Felipe Carrillo Puerto, by contrast, a community representative explained that they received so much that eventually they had to put a sign up on the main road saying ‘no more aid please’. They felt that other communities, including Mahahual, a coastal village in Othón P. Blanco, needed the help more than them.

Lack of government leadership and planning contributed to poor coordination in aid distribution. The municipal president is head of the committee for hurricanes, but before and after the
emergency he had to leave the capital and visit communities around the municipality to show his concern. The Civil Protection director, who should have coordinated response efforts, had more operational than organisational skills and was out clearing roads, so no one was left in charge of coordinating the activities of those on the committee and aid agencies coming in from outside. According to Borges, ‘there was, literally, no one in the government palace meeting room to tell people what to do. There are well-defined routes for carrying out damage assessment, but only the people in the municipal government knew what they were.’

UNDP has had a difficult time trying to get municipal and state governments to accept and apply a damage assessment method developed by them. The method is participatory, involving a small group of community volunteers trained by UNDP to carry out damage assessments. A basic questionnaire format, approved by the federal government, is used by these volunteers, and the assessment carried out in a few hours. These assessments are then passed on to UNDP promoters in the micro-region and within 8 hours all the data are compiled and sent to the UNDP situation room and to the federal government. In such a large municipality with so many localities that could be affected, this method proved to be more efficient than government damage assessments carried out elsewhere that are not participatory. Within 24 hours of the hurricane passing, UNDP teams and community groups had compiled information about damages in 263 rural localities in the Yucatan Peninsula. At the same time, municipal governments in Solidaridad, Othón P. Blanco, Felipe Carrillo Puerto and José María Morelos, as well as the Quintana Roo state government, carried out their impact assessments in 254 localities, taking 3 days to complete the task; which was just quick enough to be able to declare an emergency and ensure access to resources from the national disaster fund, FONDEN.

The involvement of NGOs in sustainable development promotion and DRR has also helped communities in their relationships with government authorities. The community of María Elena, a fishing village in the Bahía del Espíritu Santo is considered by municipal government officials to be amongst the most vulnerable communities in Felipe Carrillo Puerto, but until recently little

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7 Interview with Ríger Borges, UNDP local promoter, Felipe Carrillo Puerto, 22nd May 2008.
8 According to FONDEN operating rules, initial impact assessments must be filed within 72 hours for state governments to qualify for federal emergency.
Emily Wilkinson, Building a 'culture of prevention': challenges to institutionalising DRR in local development in Mexico
Aon Benfield UCL Hazard Research Centre, Disaster Studies Working Paper 21, February 2009

had been done to address this vulnerability. Hurricane Dean was particularly destructive in María Elena, with winds reaching 300km/hour and sea levels rising two metres destroying the houses of nearly all 40 families. Damage to fishing equipment was limited, however, thanks to effective organisation and an efficient evacuation plan that was set in motion 24 hours before the hurricane, with families taking all motors, nets and other equipment to safer ground. Eight hours before the hurricane hit, the whole community had been safely evacuated (Moya 2008).

The UNDP programme UNDP-COMPACT began supporting sustainable lobster fishing in María Elena in 2005 but the project was seriously affected by Hurricane Wilma later that year. Following a damage and needs-assessment, UNDP decided to begin working with the community to reduce disaster risk, by setting up an emergency committee, developing a local emergency plan, and assigning US$20,000 to reactivate productive activities. The Cozumel fishing cooperative, based in María Elena, decided to use these funds to set up a revolving fund that has since grown with money received by the community from the federal government. ‘The fund is used to reactivate fishing activities after disasters so we do not have to wait for government assistance, which often arrives too late’, explains cooperative vice president José Canto.9 This reflects an interesting shift in community-government relations: from the dependency and paternalism typical of rural Mexico, to greater independence and a better understanding of how to make demands on government. The cooperative has established good relationships with municipal governments of different parties in Felipe Carrillo Puerto and the fishermen’s home island of Cozumel, where many of their family members have stayed to work in tourism. It has successfully accessed resources from different levels of government to support fishing activities, including through the joint federal-state-municipal government fund ‘Alianza Municipalizada’ to set up a shop and sell lobsters' tails directly to hotels and restaurants, cutting out the intermediaries.

The community of María Elena also proved to be less dependent on state government support than others, choosing not to accept the houses being built for families in the nearby village of Punta Herrero. According to Canto, these houses are not good quality structures and will not

9 Interview with Jose Canto, vice president of fishing cooperative SCPP Cozumel, María Elena, 23rd July 2008.
resist hurricane winds. A house built before the hurricane in María Elena by the federal authority of Sian Ka’an Reserve, remained standing during ‘Dean’ so could be used as a temporary shelter while fishermen took advantage of state government resources to repair damaged boats and rebuild their own houses. They hope that soon they will have enough savings to be able to raise their houses on to stilts.

Intra-municipal government relations

Almost all municipal government departments are represented on the Civil Protection committee and directors are expected to attend committee meetings. In Felipe Carrillo Puerto over 30 elected officials and directors attended the first meeting of the committee in 2005, an extremely high turnout. Discussion at these meetings focused on logistics and equipment needed for different disaster preparedness and response activities. During these planning sessions directors were cooperative, putting their staff and equipment at the disposition of the Civil Protection director to coordinate communications campaigns, preparation of the shelters, evacuations and damage assessments, amongst other activities. After the first hurricane meeting was convened, though, subsequent meetings were only held when a hurricane was approaching the peninsula.

Weaknesses in pre-hurricane planning were revealed in the aftermath of Hurricane Dean. The poorly coordinated emergency response was, as already discussed, partly caused by lack of leadership in aid distribution. In addition, according to the Civil Protection director at the time, Carlos Quiñones, there was also insufficient heavy machinery and human resources for response activities. This may be because other government departments were not as willing to donate resources as they had implied in the committee meetings. UNDP’s Borges thinks that the poor coordination was due to lack of financial support from the municipal president, which left the Civil Protection director without an adequate radio and therefore out of contact with other agencies during the response phase. His resources were cut severely towards the end of the three-year PRD administration. The Municipal Civil Protection director was left working on his own with one secretary in an office on the outskirts of the municipal capital. His personal

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10 Interview with Jose Canto, vice president of fishing cooperative SCPP Cozumel, Maria Elena, 23rd July 2008.
relationships with other municipal directors deteriorated as a result. Towards the end of the 2005-2008 administration the municipal government became ineffective and the last annual municipal government report was never written.\footnote{Interview with Basilio Velasquez, UNDP local promoter, Felipe Carrillo Puerto, 23\textsuperscript{rd} May 2008.}

**Inter-governmental relations**

On winning the municipal elections in Felipe Carrillo Puerto the PRD faced the challenge of working with a state government run by the PRI and a federal government run by the National Action Party (PAN). These relationships were problematic in some but not all aspects of disaster prevention and response.

The municipal Civil Protection director was new to the role and lacked management experience. Capacity development programmes were provided by the state Civil Protection department, supported by the General Department of Civil Protection in Mexico City, including advice on how to organise and carry out damage assessments, on the operating rules of FONDEN, and on other aspects of SINAPROC. The state government also supported municipal Civil Protection in its communications campaigns, supplying it with leaflets and posters to distribute in communities. This is one of the mandated tasks of state Civil Protection and also an area of inter-governmental relations that does not appear to have been influenced by political conflict.

Application of the hurricane early warning system in Quintana Roo was not affected by politics either. Instructions and advice to the public on what to do at different stages of alert are standardised throughout the country and disseminated by municipal government departments through their committee structures, and in coordination with the media. The operation of this system for Hurricane Dean was extremely effective in Quintana Roo with municipal governments respecting the State’s decisions on when and where to issue warnings, unlike neighbouring Yucatán where there were disagreements between coastal municipal governments and the state government on how to apply the system in areas that were not directly in the hurricane’s path.
The coordination of disaster response and recovery activities, however, caused greater tensions between municipal and state authorities. Municipal emergency response focused on two main tasks: taking care of those evacuated to temporary shelters, and clearing access roads to communities. Both activities require support from state government; support which, according to Quiñones, was not provided. He complained that food and other supplies were not sent by federal and state governments until just before the hurricane and some did not arrive until afterwards. This affected the municipal government’s ability to adequately stock the shelters. Support needed to clear the roads was also late: according to Quiñones, help needed to remove broken electricity posts took two weeks to arrive.

Disagreements between the municipal and state government also produced serious inefficiencies in damage assessments. The municipal Civil Protection sub-committee responsible for damage assessment and reconstruction began work to assess potential damage as soon as the red alert was issued by the state government: questionnaires, equipment and vehicles needed to carry out the assessment were prepared and once the alert was lifted the assessment teams, made up of municipal authorities and state and federal government representatives based in Felipe Carrillo Puerto, began work, visiting communities along pre-defined routes. However, at the same time, a separate group of state government officials was formed in the state capital of Chetumal, pulling in state officials who were supposed to be part of the municipal Civil Protection sub-committee. It carried out its own damage assessment independently, and this produced inter-governmental tensions and duplication in the damage assessment. While municipal authorities went round house-by-house talking to families and filling in the questionnaires, a process that necessarily took longer because many of the roads were still blocked, state government authorities carried out a much quicker assessment, passing by and estimating damages. Despite the fact that both municipal and state governments had agreed to apply the damage assessment method promoted by UNDP, after ‘Dean’ they carried out their assessments separately, using different methodologies.

Possibly the most contentious area of disaster management in 2005-2008 was related to financing for economic recovery and reconstruction activities. Quiñones complained that
political favouritism played a part in the allocation of reconstruction funds from FONDEN and pointed out that neighbouring municipality José María Morelos, run by the PRI, received more funds, despite being less badly affected than Felipe Carrillo Puerto. There are many different interpretations of what happened and views on why Felipe Carrillo Puerto received less money for building works generally throughout the PRD administration.\(^{13}\) What is clear is that when more funds were involved in the post-emergency reconstruction phase, inter-governmental relations became more politicised, and the municipal Civil Protection director was overshadowed by more powerful municipal, state and federal actors.

Conclusions

The 2005-2008 administration in Felipe Carrillo Puerto made significant progress on developing a comprehensive DRR strategy, but inter-institutional relations were problematic, undermining the efforts of a new municipal government, supported by civil society, to reduce disaster risks. Lack of continued support, financial constraints and low human capacity also contributed to declining municipal commitment to and capacity for DRR.

Civil society participation in planning helped produce a DRR strategy but there was little follow-up and Civil Protection committee meetings proved to be inadequate spaces for policies to be debated and assessed. Meetings were not held often enough and civil society participation declined throughout the three-year term. This lack of continued pressure meant that most of the Civil Protection policies identified in the development plan were never implemented, except those related to improving communications for disaster prevention, where relations between the municipal government, state government and the media were positive.

Financial structures also inhibited effective inter-institutional coordination. All municipal government officials interviewed in Felipe Carrillo Puerto agreed that disaster prevention is

\(^{13}\) State government transfers to Felipe Carrillo Puerto for infrastructure projects were reduced throughout the 2005-2008 administration, reflecting a lack of municipal administrative capacity and worsening political relations with the PRI state government. The PRD municipal government was unable to spend all state transfers for construction projects during the 2006 financial year so subsequent transfers were reduced as a result. It is not clear to what extent tensions between governments of different political parties alone are to blame for what happened, but regardless of who was responsible, emergency response activities suffered from lack of a coherent, concerted strategy.
important and has not been given enough attention in the municipality, but Civil Protection never had its own budget in Felipe Carrillo Puerto. This limited its capacity to implement DRR policies and reduced its leverage with other departments. The large sums of money and experts that flowed in after Hurricane Dean undermined the municipal director's authority even more.

Finally, the lack of capacity and organisational experience of the Civil Protection director made it difficult for him to coordinate other agencies and access funds from higher levels of government for prevention activities.

Despite these inter-institutional problems, the ongoing presence of NGOs working on sustainable development projects in the region is helping to develop a ‘culture of prevention’ within communities, as can be seen in the coastal community of María Elena. Integration of DRR into sustainable development planning and NGO projects would seem to be necessary, as well as more targeted DRR interventions.


References


