

Disaster Mitigation and Preparedness in Nicaragua after Hurricane Mitch

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1. Introduction

Hurricane Mitch was an event that profoundly affected how Central America perceives its development path for the future. A process of critical reflection and spirited debate by the state, civil society, international NGOs and even the private sector has followed the hurricane. In Nicaragua a call emerged for ‘transformation’ rather than merely rebuilding what was destroyed before. This study reviews the instances of where the mitigation of and preparedness for future disasters have been included in the discussions of what this transformation should consist of. NGO roles in this transformation have been shaped by the changing nature of co-operation with the government and the political polemics that have dominated the post-Mitch debate. These controversies are far from over. The central question remains not, however, what the disaster mitigation and preparedness agenda will be in the future, but rather if issues related to future disaster risks and hazards will retain prominence in the agendas of the government and the NGOs in the face of conflicting and competing priorities.

Any review of Nicaragua’s history certainly shows that disaster mitigation and preparedness should remain on the agenda. Between 1972 and 1996 alone 11 disasters occurred that seriously affected the economic and social development of Nicaragua. Nine of these were natural disasters: an earthquake in Managua (December 1972), heavy rain followed by drought (1982), Hurricane Joan (October 1988), eruptions of Cerro Negro (April 1992), a tidal wave (tsunami) in the Pacific (September 1992), tropical storms Brett (August 1993) and Gert (September 1993), eruption of Cerro Negro (November/December 1995), and Hurricane Caesar (July 1996).¹ All these have been overshadowed by humanitarian impacts caused by the conflict of the late 1970s and 1980s.

These eleven disasters have resulted in 107,118 dead, 123,071 injured or disabled, 6,533 missing, and 656,011 displaced people, have left a further 1,861,002 people without homes, and affected directly or indirectly another 3,201,737 people. That is more than 77% of the total population of the country if one uses the calculated parameters of the actual total population.²

The classic short history of Central America by Hector Perez Brignoli (1990) entitled “Land of Contrast”, depicts the risky nature of the country’s geography, illustrating the opposition between the high plateaux of the mountains in the centre, the slopes which descend in soft undulation to the Pacific coast and cut abruptly to the plains of the Atlantic sector which cover an extensive hot climate zone and an abundant tropical forest. A similar opposition exists between the fertile soils of volcanic origin, and the temperate climate, with an even distribution of rain between the wet and dry seasons in the central zone and the whole of the Pacific coast. The opposite is to be found along the deceptive paradise of the *latirico* soils of the Atlantic coast, which create constant problems of drainage and decay.

Despite this propensity to natural disasters, in the political and economic agenda disaster mitigation and preparedness have largely been absent. Projects to prevent natural disasters appear to lack political support, and attract little attention from development planners.

In Nicaragua the prevalence of short-term visions is called “*cortoplacismo*”. It has been suggested that history has created a cultural tendency towards short-sightedness in Nicaragua. Despite great disaster risks, further measures are rarely taken after initial rehabilitation to

¹ Fundación Augusto C. Sandino, 1996

² *ibid.*

prevent future risks. This is despite the fact that after each disaster there are forums, workshops and seminars intended to stimulate the mitigation of future disasters.

NGOs have tended to participate in the short-term visions, even when they work in development. This is part of the paradox in Nicaragua. Disaster relief is not linked to long-term development, and long-term development does not take into account the fact that sooner or later a major disaster will almost surely strike that will have a profound impact on development processes. The majority of the NGOs work within relatively clear cut categories of (a) relief (supply of foods and other domestic necessities; emergency shelter, etc.), (b) rehabilitation (basic construction materials, seed and tools distribution), or (c) development. The integration between these three is weak. There is an 'either – or' mentality, with little articulation between these three phases. Disaster mitigation and preparedness, as the 'putty' which should help relief workers think developmentally and help developmentally oriented NGOs not to forget disaster risks, is lacking. Mitch should have been a warning sign that something must be done.

Despite the impact of Mitch, and the consciousness that emerged from that experience, there does not exist an effective national system of disaster mitigation and preparedness. Nicaragua lacks a law that determines and defines these functions. This constitutes the main difficulty for NGOs wishing to become engaged in disaster mitigation and preparedness. Smaller projects, even if they are well considered at a community level, have poor prospects for scaling-up if they are disconnected from a broader national process. They may have value for raising awareness and for preventing disaster mitigation and preparedness from being completely forgotten in the national agenda, but their broader impact will be insignificant.

Nicaragua is a country with particularly limited capacity to handle recurrent crises. It is one of the most heavily indebted nations in the world, and is undergoing a drastic structural adjustment programme in an effort to meet conditions for entry into the IMF classification of Highly Indebted Poor Countries (in order to qualify for receiving a modicum of debt relief). With the state hobbled, one would expect that NGOs would be rushing to fill the gap, particularly as there is relatively easy access to donor funding after Mitch. Surprisingly disaster mitigation and preparedness does not appear to be a major priority for the NGOs. Before Mitch, disaster mitigation and preparedness efforts were extremely rare. Some NGOs in Nicaragua have started to become engaged in reflection on the issue, and are now gradually getting more involved in these activities in the wake of Mitch. Although other priorities overwhelmingly dominate efforts to "transform" Nicaragua after Mitch, a modest change of direction is nonetheless discernible.

2. Disaster Mitigation

2.1. Environment

Mitigation is the most notable new focus after Hurricane Mitch, particularly with respect to mitigation through increased efforts to protect the environment. The underlying hypothesis behind many NGO mitigation efforts is that more appropriate agricultural practices and soil conservation measures can best mitigate the impact of events like Hurricane Mitch. Environmental degradation in Nicaragua is occurring at a very serious rate. The months before Mitch struck were the worst ever in terms of forest fires. The destruction of woodland caused by extensive cattle ranching has received the blame for much of the crop losses, landslides and flooding sustained during Mitch. The El Niño drought and the Mitch floods have been used by the promoters of agro-ecological practices to justify calls for redoubled efforts. Mitch is seen as "proof" that conventional agriculture increases risk. Many forums

and seminars organised to reflect on Mitch have pointed to the catastrophe as a conceptual basis for promoting development projects in the name of disaster mitigation. These calls have even influenced the rehabilitation proposals of the Ministry of Agriculture and Forestry in putting greater emphasis on sustainable agriculture.

In the opinion of the NGO World Neighbors, conventional agriculture is part of the problem of vulnerability to hazards such as hurricanes, floods, landslides, and fires. Mitch had such devastating effects due to a series of inadequate agriculture practices. They have presented a study that supports this theory.³ In Nicaragua 45 teams from 19 organisations made 440 observations of plots with and without agro-ecological practices. Each team was composed of a technician, two peasant promoters and the owners of the plots studied. The teams worked in seven regions, nine state departments, thirty municipalities and 181 communities in the country. Observations included the Island of Ometepe, which only received 250 mm of rain during Mitch, and Somotillo, which received 1780mm. The study was geared to determine which better resisted the hurricane: the agro-ecological plots or the conventional plots.

The study found that in many cases the plots using agro-ecological agriculture practices sustained less damage than those with conventional practices. Surface erosion was three times greater in the conventional plots. The conclusions drawn by World Neighbors suggest that services for water and soil conservation should be seen as having significant social value, and thus deserve subsidisation. Conserving soils is a service that farmers give the nation. For this they could be given price support and other forms of subsidy. Those engaging in destructive environmental practices should also be charged for the negative environmental impacts they cause. Erosion, pollution of rivers and deforestation have a cost to the nation.

The programme of Sustainable Agriculture in the Hillside of Central America (PASOLAC), supported by the Swiss Development Co-operation, concurs regarding the disaster mitigation effects of agro-ecological practices. They suggest promoting programmes of reforestation in order to improve soil conditions. PASOLAC's wide network of NGOs and farmer organisations help them to disseminate information on agro-ecological practices.

The Humboldt Centre has fervently promoted environmental measures at municipal level, especially in the indigenous communities of the northern Atlantic Coast. The link to mitigation of natural disasters has recently been incorporated in their projects in the field and through their advocacy work. The Humboldt Centre has played an important role in drawing attention to the environment – natural disasters relationship, as well as the impact of Mitch on pre-existing conflicts over natural resources between indigenous communities, mestizo migrants and resettled demobilised former combatants. New NGOs and other agencies have entered sensitive areas after Mitch, often unaware of the complex historical, social and legal frameworks for natural resource management in protected areas and indigenous communities. NGOs with a longer history in the area have taken on the task of raising awareness among new actors of the delicate nature of the post-conflict and ethnic situations.

There are different measures that agencies have begun to recommend for disaster mitigation after Mitch. Erosion control through planted and stone bunds is commonly promoted. Trees improve the drainage capacity of the soils and bind those soils that are liable to be washed away. In relatively common storms, these practices certainly play a great role. It is not clear, however, what their impact is on a phenomenon of the magnitude of Mitch. A study done for the Swedish Development Co-operation Agency pointed to the need for further investigations to determine the impact of these practices when rains are above a certain threshold.⁴ It is likely that the impact of extremely high levels of precipitation, such as with Mitch, may not

³ Holt-Giménez, E, 1999

⁴ Christoplos, I & C. Bárrrios, 1999

be mitigated by such measures. Evidence of landslides in places with considerable forest coverage suggests that the simple assumptions of a direct soil conservation – disaster mitigation link deserve further analysis. The few existing conservation works in the mountains of the dry zone seemed to prove their effectiveness in areas with gentler slopes, but could not resist the water currents in areas with steeper gradients. Nonetheless, according to the statistical analysis done by INETER, the level of precipitation caused by Mitch will have a 150-year reoccurrence.⁵ One may therefore conclude that agro-ecological practices are effective in reducing erosion and mitigating minor disasters. Major landslides and an event like Mitch represent very different phenomena. It should not be assumed from evidence of positive impact on erosion control that agro-ecological practices mitigate risks of major landslides.

For example, one of the most commonly promoted agro-ecological techniques is the cultivation of *frijol de abono* (*macuna pruriens*), a variety of leguminous plant high in nitrogen and whose rotation with the cultivation of maize is highly recommended by several NGOs as a more intensive and environmentally sustainable alternative to both conventional modern crop and livestock production, and also to traditional swidden production systems. This variety of bean is highly competitive and eliminates weeds. It also works as a herbicide, thereby leaving the ground without much vegetation cover and softening the earth (facilitating aeration and drainage). It may also leave the soils prone to landslides, as has been proven in several occasions. The relationship between different types of hazards and vulnerabilities are complex, and cannot be reduced to simple assumptions that sustainable agriculture is “good” and conventional agriculture is “bad”, even if the former certainly has many beneficial impacts.

It is not clear whether Mitch has actually spawned many new initiatives or fresh analyses of the link between environmental protection and disaster mitigation. Many pre-existing agricultural and environmental development plans have been re-launched in the name of disaster mitigation, with little additional attention to the relationship between earlier priorities (when they were “development” rather than “mitigation” projects) and the new additional objective. Mitigation through environmental protection may therefore often consist of a fund-raising approach rather than a well considered strategy.

2.2 Diversification of Production and Food Security

Food security and its relationship to the diversification of both agricultural production and livelihood strategies are central to understanding the capacities of individuals and communities to reduce their vulnerability and to cope with the effects of disasters. Food security forms a central part of the objectives of many NGOs. Secure access to fertile land, capital, credit and technological investment are seen as key to increasing food security, and with that reducing vulnerability to disaster.

Although natural disasters, such as Mitch, constitute major threats to food security, it is not such large scale disasters that have most impact on food security, but rather the recurrent risks facing vulnerable people. Orlando Nuñez, ex-director of the Centre of Investigations and Studies for Agrarian Reforms, and present director of CIPRES (an NGO specialising in rural development), has the view that the damages to property caused by Mitch are temporary and repairable, whereas the permanent and ongoing damage that producers suffer from low producer prices constitutes a structural disaster of greater proportions. Other NGO representatives emphasise that droughts and crop diseases are the disasters with greatest

⁵ Oxfam América –Nitlapán, 1999

impact on food security. Evidence of this can be seen in the fact that despite the effects of Mitch, agricultural production during the 1998-99 agricultural year was higher than the previous year when the El Niño drought affected harvests.⁶

Whilst NGOs express concern over household food security, the main emphasis of many large development programmes is on increased agricultural production through increased capital investment. Food security itself is often a secondary or indirect objective, except in those initiatives that target the poorest farming sectors. Even these cases rarely explicitly raise the topic of food security, but rather emphasise strengthening small producers, reactivating the small peasant economy, etc.

Some NGOs are beginning to question whether their traditional emphasis on promotion of subsistence production is valid in times of globalisation. Many macro-economic analyses suggest that Nicaraguan household crop production, with the possible exception of beans, cannot compete in an open economy, and that food security is best served by small farmers diversifying out of subsistence production.

There are also examples of critical reflection on the impact of their own relief and rehabilitation efforts on the capitalisation issue. Poor farmers in Nicaragua have become more vulnerable to the impact of poor weather condition in recent years due to their increasing reliance on high-external-input agriculture. The lost harvests of El Niño before Mitch not only affected subsistence, but also increased debt due to inability to repay loans on hybrid seed, fertilisers and pesticides. The distribution of hybrid seed and agrochemical inputs after Mitch was a successful way to re-establish food security in the short term, but encouraging further reliance on external inputs may have more negative affects on food security in the medium and long terms.⁷

Food security as a specific objective has increasingly appeared in NGO activities after Mitch, as part of the rehabilitation phase. Generously supported by donations from the World Food Programme (WFP), a two-year food security programme has begun. Resources have been channelled through municipalities and NGOs, such as the Save the Children. The programme attempts to help in rehabilitating farms and agricultural reconstruction using food for work. This includes construction of fences, sowing, removal of sediment on flooded fields, etc. The programme has been the subject of harsh criticism. It has been suspected that the abundance of food aid has discouraged agricultural workers from working in the coffee harvest (it may also have contributed to an increase in the wages for such work). More careful management (and reduction of the scale) of food distribution has been advised. Such precautions are needed to avoid falling producer prices, which could destabilise national producers. The impact of large-scale food for work in a small country with relatively open labour and commodity markets, such as in Nicaragua, deserves further analysis. The hopes and fears that are generally attributed to these programmes are often based on experiences from Africa and South Asia. Nicaragua is neither Bangladesh nor Ethiopia. Much of the Nicaraguan discourse has drawn on pre-existing assumptions regarding food aid and food for work without sufficient empirical analysis of how such inputs affect Nicaragua's very different economic and social relations.

The strongly critical discourse regarding food aid and food for work in Nicaragua is related to fears that food aid contributes to an overall trend for inexpensive food imports to compete unfairly with domestic production of basic grains. The NGOs have generally seen national and local food security, based on domestic and household production, as major objectives.

⁶ FAO/WFP, 1999

⁷ British Red Cross, 1999.

Campaigns for consumption of maize (as opposed to imported wheat) have been launched, but with little impact.

Concerns about the dangers of food aid have inspired the rehabilitation work done by the NGO Social Action Institute of John XXIII. Their strategy after Mitch has consisted of cash payment for reconstruction and rehabilitation of productive land. This method is justified by the need to avoid depreciation of prices, and to encourage savings and investments chosen by beneficiaries. The stimulation of the local monetary economy and the conscious recognition of rehabilitation work as valuable and dignified are other objectives. Food for work, on the other hand, tends to be seen as degrading and welfare oriented.

Similar programmes for the donation or loan of seeds and other agriculture inputs have been launched by CARE and the Red Cross. These programmes have been aimed at guaranteeing access to agricultural inputs for the post-disaster agricultural cycle and to thereby avoid prolonged dependency on relief. As a pilot effort, a proportion of the Red Cross donations consisted of cash, rather than in-kind support.⁸ This approach, which was highly controversial with the national Red Cross Societies of the region, was chosen in order to compare the impact of donations intended to enable farmers to engage in their own livelihood strategies with traditional assumptions that the NGOs/donors/government know best how farmers should "be rehabilitated". A detailed study was undertaken of this approach, which judged the inclusion of a cash component to be very beneficial in enabling beneficiaries to choose their own rehabilitation priorities. One of the most notable aspects of this experience has been the fact that it was so controversial. Many NGOs apply state-of-the-art rhetoric regarding community participation, but in the rush to establish expanded programmes after Mitch, a more traditional technocratic paternalism can often be observed.

Another of the principal objectives of those development programmes that are based on disaster mitigation is the diversification of production. "Diversification", however, has several different meanings, some of which may reduce risks by spreading production strategies, whereas others may actually increase risk. Agricultural producers are encouraged "not to place all their eggs on one basket." According to several studies of the impact of non-conventional credit programmes, the best repayment rates are from clients who have diversified by, for example, combining coffee, grain production and livestock. Peasants who depend exclusively on one or two crops have poor repayment rates. Recommendations are therefore given to credit recipients to diversify their sources of income and thereby reduce the risks.

Another "diversification" agenda can be found in the promotion of non-traditional export crops. This has, paradoxically, often been based on encouraging small-scale producers to engage in producing a single non-traditional crop, with great risks due to increased capital investment, uncertainty regarding adaptation to local agro-ecological conditions, uncertain markets and lack of experience. When these risks are combined with risk of hazards such as hurricanes, this export-oriented diversification agenda can be seen as working against the mitigation of disasters. NGOs have actively involved themselves in this debate, which is also linked to a wider debate on aspects of risk related to the technocratic and neo-liberal diversification agenda.

Another diversification route is through small industry and greater urbanisation. Nicaragua is an increasingly urbanised country, and many rural dwellers clearly do diversify their livelihoods by combining employment in Managua or other urban centres with agricultural production. The NGOs, however, do not appear to have strategies that explicitly relate this form of diversification to disaster mitigation.

⁸ British Red Cross, 1999

A related theme that is also weakly dealt with in NGO analysis is that of migration. Several NGOs decry migration as a cause and/or symbol of vulnerability. From the point of view of rural people, however, nothing could be further from the truth. International, regional and local migration is a central feature of Nicaraguan life. Throughout Nicaraguan history, migration has been poor people's main strategy to reduce vulnerability. Migration is a way to diversify income and to keep alternative options open in the event of disaster. This is an area where preconceived and perhaps romanticised notions of village life are out of phase with the livelihood strategies of villagers in rural Central America today. Hurricane Mitch stimulated a massive influx of capital from migrants in the US.⁹ The view of migration as an 'evil' has perhaps prevented the NGOs from identifying how they might synchronise their own support with migration and remittance, which is obviously a major disaster mitigation and preparedness strategy of their erstwhile constituencies.

2.3. Housing and Infrastructure

After Mitch many NGOs have also become heavily involved in the construction of housing and infrastructure, within which some attention has been given to disaster mitigation. This is the case, for example, in the construction of barriers for flood control at riverbanks and to contain landslides. Some of the food for work programmes focus their efforts on this type of work.

Others, as in the case of several NGOs co-ordinated by Ocotal municipality, emphasise housing that takes disaster risks into consideration. The houses in this project were carefully constructed, including small details to mitigate the risks of flooding and earthquakes. A combination of traditional techniques and recent knowledge was applied. Adobe replaced concrete blocks in the houses of the poor, using a mixture and dimensions that made it more resistant than usual. The project had as a secondary effect the transfer of technology, because many bricklayers were trained in these new techniques.

But this has not been the norm in post-Mitch housing programmes. Most projects focused on the recent risks of hurricanes, even in areas far more prone to earthquakes. In a country like Nicaragua, it is striking that disaster mitigation appears not to be a major concern in most of the massive investments in housing after Mitch. It may be hypothesised that the pressures to channel large levels of donor funding to highly visible beneficiaries (such as those in Posoltega) have superseded other more long-term concerns.

3. Disaster Preparedness

Disaster preparedness in Nicaragua primarily consists of planning and institutional development, two different but inter-related areas of work. On the planning side efforts are concentrated on the design of local emergency response plans, the mapping of risks, analyses of capacities and vulnerabilities, and land use planning.

3.1. Disaster Preparedness Planning

Civil Defence is the main governmental institution responsible for preparation of disaster preparedness and emergency response plans. Some NGOs such as FACS, CEPAD and the

⁹ Kidder, 1999

Nicaraguan Red Cross have collaborated with the Civil Defence. Eleven emergency plans have been prepared in different municipalities in the provinces of Leon and Chinandega, eight in Managua neighbourhoods, ten in Granada and Rivas municipalities, one in Chontales and five in the Northern Atlantic Autonomous Region: in total 35 emergency plans. This implies a limited coverage, with less than one quarter of the 147 municipalities in Nicaragua being covered. Many municipalities that are prone to flooding have not been covered. Mario Perez Cassar, Second Chief of the Board of Civil Defence has admitted that “the National Civil Defence System is implementing plans based on very poor and obsolete basis, a problem which will need to be solved by passing a proper law, which will take into account and focus on activities of prevention.”

NGOs have a radio communication network that complements emergency response planning. This helps them to alert the population prior to an emergency and also serves to increase awareness in matters of disaster. This network has been shown to be particularly useful in zones that are far away from the cities.

Oxfam GB and the Nicaraguan Institute for Municipal Promotion (INIFOM) have performed a series of ambitious studies at the national level, while at the local level certain municipalities are preparing their own risk mapping with the help of various NGOs. In both cases, the at-risk areas have been identified and the degree of danger established. Identification of these risks is relatively simple. Taking actions to mitigate them has proven to be far more difficult.

For example, after Mitch the municipality of Posoltega wanted to relocate the survivors from the volcano El Casita, which buried over 2000 people. The landowners saw a financial opportunity in this situation because they were able to sell their land to agencies responsible for relocating those who had lost their homes for US \$3000 per hectare, which is ten times its previous value. The difficulties of directly addressing the reduction of risk by moving people to safer locations could be one reason why disaster preparedness has tended to shift from the technological sphere to the institutional and political sphere.

3.2. Disaster Preparedness as Institutional Development.

NGOs have concentrated most of their disaster preparedness efforts on community organisation, and have achieved their greatest successes in this area. Given the vast diversity of hazards facing Nicaragua (floods, volcanoes, hurricanes, droughts, earthquakes, landslides, tsunamis, etc.), and the limited capacity of small individual NGOs in the face of these threats, improving community capacity to deal with crisis in general terms may be a more effective use of limited resources than struggling to confront the myriad overwhelming specific technical challenges. Several organisations that have been working in disaster-affected areas for many years have now created their own networks of promoters to help them channel aid more quickly and effectively, thus having a positive influence on local organisational capacity. Other NGOs have attempted to build their specific disaster training on top of already-existing local organisational structures. Such is the case with the introduction of disaster preparedness work to the efforts of Community Committees, also known as Rural Community Committees or Rural Community Development Committees, depending on the NGO concerned. When these committees act to manage natural disasters, they assume the title of Emergency Committees. There are also other institutions involved. The Red Cross naturally works with their own existing branch structures, and churches with their local parishes

During Mitch, some committees proved to be very effective in evacuating the population and distributing aid. Many of the committees emerged in the conflict years of the 1980s to support the municipalities. Their leaders are often considered as representatives of the public municipal

authorities, although in reality collaboration between formal municipal structures and the committees varies according to political affinities. As the committees are generally made up of the most active people in the communities, the NGOs seek those involved as collaborators, liaisons and promoters either individually or in their capacity as committee members. These individuals are often politically active, which in turn leads to polarisation and politicisation.

There is a consensus among NGOs that investing in institutional development has proven to be an important priority in disaster preparedness. Local organisational capacity is essential for emergency response, since destruction of the road network and the lack of transport leave many communities isolated. In certain zones, particularly those most affected by the armed conflict of the 1980s, there is already an installed and consolidated organisational capacity that enables the local population to rapidly establish collaboration to successfully tackle different problems. This is surprising, as development efforts have been difficult to establish in these areas due to political polarisation and distrust. In a crisis, pragmatism apparently takes precedence over the political divisions that usually hinder community development efforts. The extent of these capacities was demonstrated during Hurricane Mitch in the conflict affected municipalities of Wiwilí and Jalapa, for example, where evacuation was done rapidly and the provision of emergency shelter was very effectively managed. This openly contradicts the common assumption that civil society is at its weakest in war-torn areas.

This is an area that deserves further analysis. Metaphors regarding damages to the “social fabric” in post-conflict areas may hide the complexity of how people may pull together in a disaster, even though they are otherwise divided and politicised. In order to better understand how disaster mitigation and preparedness can function in such areas it is essential to go beyond simple dichotomies between whether civil society is “strong or weak”. Disaster norms emerge that supersede the conflicts that usually divide. This may even provide useful knowledge for supporting community development efforts. Through action research, communities could be supported to reflect on the fact that “we actually did work together,” a realisation that may provide ways to introduce hope into situations where negative attitudes toward collaboration across political boundaries normally prevail.

In order to strengthen institutions to take on major roles in disasters, some NGOs are investing in training. It appears that these initiatives are still in an embryonic stage. NGO training for institutional development related to disaster preparedness is managed both by community development experts and by others coming from a relief and/or civil defence background. The methodologies employed involve a peculiar combination of participatory methods, based on the popular education model developed by Paulo Freire, together with hierarchical and mechanical Civil Defence-style approaches. Though this may appear to be an illogical mix, harmonisation may be possible. The blend of local ownership and awareness combined with relief skills and predetermined chains of command may be quite effective in practice. Actual operations carried out during emergencies have been characterised by Civil Defence-style approaches, with former military personnel often taking the lead. Long-term institutional development, however, relies on other skills.

Where disaster preparedness functions well, it has relied on problems being resolved at municipal and community levels where there is strong and respected governmental leadership. Disaster response is not just a technical and organisational process. It is obvious that problems tend to be resolved better where there is a local, charismatic political figure, particularly in the light of the Nicaraguan tradition of gathering behind strong local chiefs and emotionally following charismatic leaders (for better or for worse). Such local leaders are often the ones who have created the necessary consensus to co-ordinate efforts to tackle and react to disasters. Where disaster response has functioned well, one can observe that these leaders have the savvy to deal with prevailing politicisation and polarisation at the local level. In addition, local

leaders have the power to informally make up for the lack of a formal judicial framework to define, regulate and distribute functions during emergencies.

Despite the embryonic nature of NGO work in disaster preparedness, some positive trends can be noted. The contraction of the state apparatus due to structural adjustment is cause for concern, but opens positive opportunities as well. The decreased participation of the state in the management of disaster has led to the loss of many key staff, some of whom have joined NGOs. The loss to government structures has proved to be a gain for the NGOs. The two NGOs that are the strongest in disaster preparedness have, as some of their principal staff, professionals that worked in the Nicaraguan Institute of Territorial Studies and Civil Defence during the Sandinista administration. Their technical skills and understanding of governmental procedures are a strong addition to their organisations. They also have an understanding of internal political processes and bureaucratic procedures that is otherwise often lacking among NGO staff.

4. Why is there so little Disaster Preparedness and Mitigation?

It would seem logical that both NGOs and the government would prioritise disaster mitigation and preparedness following Hurricane Mitch, particularly in the light of the glaring evidence of the failures and insufficiencies of disaster prevention and mitigation before the disaster. This has not happened. Disaster prevention and mitigation has by and large been overshadowed by the national debate over different development models. The vast majority of plans and polemics regarding the ‘transformation’ of Nicaragua after Hurricane Mitch focus on the debate over the effectiveness of and alternatives to neo-liberal development models in achieving economic growth, poverty alleviation and inclusive development. Shockingly, many reports and recommendations on the requirements for rehabilitation and future development in post-Mitch Nicaragua totally ignore the impact of natural disasters on these alternative development scenarios, and the impact of these development scenarios on the ability of vulnerable populations to withstand the impact of shocks to their livelihoods. The heated development debate has displaced concern for disasters. The media attention and struggle for accessing donor assistance has meant that Mitch has paradoxically become a platform for ignoring natural hazards yet again.

4.1. Development instead of Disaster Mitigation and Preparedness?

Why has this happened? One reason is the common assumption that the devastating effects of natural disasters are simply a sign of underdevelopment, and that only the poor suffer during disasters due to their levels of underdevelopment. This cliché is widely employed in Nicaragua to justify the lack of specific disaster prevention activities and to suggest that “development is the only solution” to disaster risks. This cliché can even be heard from experienced NGO field staff and researchers, who should know better.

The Nicaraguan experience of natural disasters gives the lie to that cliché. In Mitch, the poor were the most affected in some areas because they had built their houses on land exposed to risk of landslides and flooding, which was the only land available to them. This was not the case everywhere. In Jinotega and Matagalpa the best-irrigated lands in the valleys, belonging to relatively wealthy farmers, were destroyed. The low-quality sloping land, cultivated by the poor, was less affected. The impact of such flooding on the poor is related to their role as labourers in the local economy and their socio-economic relationships with their wealthier neighbours. The poor lost wage opportunities due to the destruction of irrigation infrastructure. At the same time, new employment appeared in rehabilitation activities where wealthier farmers

were able to access capital to invest in restarting their production. This context is far more complex than the “disasters are an indication of underdevelopment” cliché would imply. Furthermore, volcanic eruptions and earthquakes have not only affected the poor population. In other words, whatever the model adopted, development does not eliminate risk.

The controversy over development models has dominated post-Mitch discussions and various groups use Mitch to reinforce their positions. Both sides in the debate mention economic development more than human development, the latter being tainted as being “welfare oriented”. By ignoring human development they also miss the dimensions of human suffering caused by disasters. Both the government and many NGOs ignore the tragedy experienced by individuals in the quantitative studies that have emerged after Mitch of the economic impacts and ways to recover from these capital losses. The humanitarian imperative is forgotten or shunned for fear of “creating dependency”. The victims’ viewpoints and priorities have been generally ignored in official reports and surveys. This absence has made it easier for many observers and planners to jump to the conclusion that there is no better answer to disasters than economic development.

This is not to say that dependency is not a serious problem. Many of the areas affected by Mitch are clearly gravely dependent on aid flows. Community initiative and self-reliance have been seriously affected as a result. The problem is that the baby – the need to prepare for situations where community capacities are actually overwhelmed – has been thrown out with the dependency bathwater.

In some discussions declarations are emerging that farming in Central America is becoming progressively less important. Development therefore becomes largely a process of moving out of agricultural production. This is in line with initial conclusions regarding the livelihoods of the poor internationally,¹⁰ where it has been found that the poor are themselves struggling to reduce their vulnerability by diversifying their incomes. Migrants working in the USA bring in more currency to the country than all agriculture exports. If this is the future trajectory of rural development in Nicaragua, it has profound implications for what types of disaster mitigation and preparedness should be given priority so as not to prepare for and mitigate “yesterday’s” disasters.

This does not mean that agriculture is not important and that more sustainable agricultural methods have nothing to contribute to the disaster preparedness and mitigation discourse. On the contrary, sustainable management of water and the environment are topics of increased focus for many NGOs. The change is that these issues have usually only been addressed in a technocratic manner, and at a micro level. According to NGOs consulted, there is a growing awareness that a more macro vision must be applied to these themes.

4.2. The Gap between NGOs and Civil Society.

In Latin America more than the rest of the world, and in Nicaragua more than the rest of Latin America, the role of NGOs is being strongly questioned.¹¹ NGOs are viewed with great suspicion and are struggling to redefine their niche in a changing world. It is generally acknowledged that they have not always lived up to their own rhetorical aims. There is a recognised lack of congruence, in many cases, between their actions and the ideals they claim to represent. The NGOs are increasingly competing with private sector companies in efforts to

¹⁰ Ashley & Carney, 1999

¹¹ see Bebbington, A, 1997

secure contracts to provide public services. This creates an ambiguous situation for NGOs trying to preserve their identity as institutions driven by values rather than economic gain.¹²

NGOs are also aware that their capacities are limited and that they cannot assume responsibility for all of the public services that the government is abandoning. As one NGO official put it, "For every nurse that we place, the Ministry of Health lays off another five." This makes NGOs wary that getting involved in disaster management could saddle them with massive responsibilities when another disaster strikes.

Individual NGOs are aware that disaster management, while necessary, is too big a package for them to handle alone. They must join together. But broad and practical co-ordination with other NGOs has been limited due to traditional rivalries and the competition for funding needed to work and survive. The Civic Coalition for Emergency and Reconstruction, which was established in the wake of Hurricane Mitch, succeeded in bringing together over 320 non-governmental and social organisations and networks to present a joint alternative vision regarding the 'transformation' of post-Mitch Nicaragua. It is thus a very interesting initiative. Among its achievements has been a Social Audit aimed at monitoring, auditing and evaluating the effectiveness of local participation in and finances used for rehabilitation activities.

Will this effort last? Similar initiatives in the past have not proved sustainable. An attempt was made in the early 1990s, following two eruptions from Cerro Negro and a tsunami, to create an NGO co-ordinating body that would work specifically during emergency situations. That institution, known as CONADES, even managed to obtain legal status but it took little more than a period of emergency-free calm to dampen the original enthusiasm. Furthermore, several institutions with some experience working in emergencies were never even informed that the project existed. Consequently, the new post-Mitch co-ordination initiatives had to start again from scratch. At other times, the formation of such bodies have been orchestrated by a strong donor, and motivated by a desire to access financing earmarked for co-ordination. The main danger with the current initiative is that it is apparently driven by the desire to confront the government, rather than for joint action in the field. As mentioned above, such confrontation has been dominated by economic development polemics rather than the problem at hand of ensuring that the next major disaster is not managed as ineptly as Hurricane Mitch.

These problems with co-ordination are partly rooted in the fact that many NGOs do not represent anybody other than themselves. This contributes to the ambiguity of their own identity. In Nicaragua, many people are starting to openly recognise that NGOs are not part of "civil society," but are rather an intellectual élite of middle-class citizens that develop activities for the people, aim to defend the interests of the people and therefore seek to represent the people. Their staff are often skilled public service contractors and managers of donor-financed projects, paradoxically drawing on their past experience within the public sector during the Sandinista régime. The lack of any real foundation in civil society explains why they have not managed to create sustainable mechanisms that would enable them to act in a common direction, despite having an impressive capacity to confront government policies. It may also explain why they have so easily slipped into a tendency to focus on the economic debate, at the cost of ignoring the humanitarian crisis facing their erstwhile constituencies.

4.3. Disaster Preparedness in a Neo-Liberal State.

The NGOs are aware that many of their efforts – particularly in response to disasters – require a practical modus operandi with the government. Disaster response is not something they can,

¹² Christoplos, 2000

will or should handle alone. The NGOs, however, stress the difficulties they have in co-ordinating with the government, emphasising the institutional aspects in which political polarisation represents a fundamental obstacle. According to the NGOs, the government has displayed as little willingness to communicate and collaborate with them in the face of natural disasters as it has in development. Furthermore, the fact that the state institutions are suspicious of NGOs because so many of their current officials were linked to the Sandinista administration of the 1980s has led to confrontations and a lack of collaboration between NGOs and the Liberal government. Mutual accusations of corruption and inept administration have been more common than discussions of practical mechanisms for determining who could and should do what in disaster preparedness, mitigation and response.

This politicisation also affects the creation of new NGOs. According to Nicaraguan law, a petition to establish a new non-profit association, the legal classification under which NGOs are registered, must be approved by the National Assembly, which is currently controlled by the ruling Liberal Constitutionalist Party. The association of many NGO staff with the Sandinista regime has naturally led to difficulties. The government has tried several times to control the funds coming in to NGOs through the Ministry of Foreign Co-operation and to get the General Tax Division to apply discretionary taxes on goods imported by certain NGOs, in violation of a law exempting them from taxation.

The government's role and responsibilities to its citizenry are ambiguous in many areas in neo-liberal regimes such as Nicaragua, and disaster management is no exception. One of the problems that arose with Hurricane Mitch was that there was no legal framework stating the roles of each institution at either national or local level, their different responsibilities and chains of command for assigning different functions during emergencies. As the threat from future natural hazards has faded from the public debate, so has any sense of urgency in sorting out these matters for the future. Nicaragua's political and economic agenda is overloaded and littered with 'normal' crises. Once the actual moment of emergency has past, concern over natural disasters gets pushed back down the list of priorities.

There may be other reasons why this seemingly glaring issue has not been addressed. The predominant neo-liberal ideology does not accept that the state has basic responsibility for public welfare. Defining responsibilities and attributing roles for disaster management would represent implicit acceptance that the state has the greatest responsibility to attend to the most basic survival needs of its population during a crisis. To side-step admitting this, the Nicaraguan government has apparently opted for the chaos that comes with changing command structures with each new disaster. When Cerro Negro erupted in 1992, the presidential offices co-ordinated efforts, a job left to the Ministry of Transport during the tidal wave, the Ministry of Agriculture and Forestry during the drought caused by El Niño and the Vice President of the Republic during Mitch.

The government never declared a state of emergency during Mitch, arguing that doing so would involve suspending constitutional guarantees. Although experts in constitutional law stated that it was possible to make a selective suspension of guarantees to ensure that Nicaraguan citizens did not lose their rights, the government did not change its decision, preferring instead to declare a "state of disaster," a term with no legal significance whatsoever.

What was the reason for this absurd decision? It was possibly because recognising the magnitude of the disaster would have had two consequences that the government wanted to avoid. First, the government would have been forced to allocate massive resources for emergency assistance, thus increasing public spending and violating the conditions imposed by the structural adjustment programme. Second, accepting the need to mobilise large-scale human resources for the relief effort would have exposed the extremely limited capacity to

respond to such situations by the scaled-down civil service, which has been further aggravated by structural adjustment. Therefore, the problem of how to deal with disasters and ensure that future strategies are effective in a neo-liberal state continues to be a point calling for serious reflection.

The United Nations Development Programme (UNDP) has taken the lead in encouraging all actors, including NGOs, municipal authorities, journalists and others, to press for the establishment of a legal framework for disaster preparedness, mitigation and response. A workshop was held on June 18, 1999, which resulted in a communiqué (the Managua Declaration) which called for the creation of a national co-ordination body and increased professionalisation of disaster mitigation and preparedness. Perhaps as a result of this initiative, a long dormant bill to create a “National Disaster Prevention, Mitigation and Awareness System” has been presented to the National Assembly. Though vague in some strategic areas (e.g. the role of NGOs), if passed this law should create a new playing field for future disaster mitigation and preparedness. The basis for the national debate will have changed fundamentally, even if the municipalities and Civil Defence are not provided with the resources they require to carry out their newly defined roles (as is likely).

4.4. Pragmatism at the Frontline: Surprising Alliances Between NGOs and Municipalities.

The post-Mitch period has been characterised by centralised decision-making and a weakening of an incomplete process, already underway before the disaster, of devolving authority to municipal governments. Central government strategy has aimed at retaining control over relief and rehabilitation resources. The municipalities are more financially stretched than ever. They cannot even cover their ordinary costs with their own resources, let alone the costs generated by an emergency. Creative and surprising alliances have appeared to confront this situation. In many cases the Mitch disaster was managed through novel collaboration between NGOs and local governments. Surprising capacities have emerged due to the fact that local political and institutional actors are much closer to the people involved, and therefore understand or even share their needs. The NGOs found that local structures were often less politicised than those involving the central government, making it possible to carry out many actions in conjunction with the municipal authorities.

The leadership assumed by municipal authorities turned out to be an essential factor during the emergency and the post-Mitch rehabilitation. In situations such as these, it becomes apparent to everyone that somebody has to take responsibility for orchestrating efforts. Leaders appear. Many mayors acted decisively, more as an expression of their natural leadership than as the result of any formally established arrangements. This is not to say that leadership is enough. Although local leaders are a basic necessity when it comes to co-ordinating efforts and activities, a law is needed that establishes responsibilities, hierarchies and functions to legally back up these leaders. This would keep the central government from creating ad hoc bodies and changing those in charge with every new emergency, or, as also happened during Mitch, giving local Catholic priests the leading role just because they are Catholic Church officials, independent of their qualifications to be working on emergencies in a society that is no means exclusively Catholic.

The new collaboration between the municipalities and NGOs, born out of Mitch, could perhaps help address certain of the NGOs’ weaknesses that get in the way of developing co-ordinated efforts in responding to disasters. Closer collaboration between NGOs and the municipalities could prove to be the cornerstone in helping to fill the current vacuum in Nicaraguan discourse on disaster mitigation and preparedness.

The good intentions associated with decentralisation are, nonetheless, bound to stumble across many obstacles. Even together, municipalities and NGOs cannot shoulder the full burden of disaster mitigation and preparedness. Co-ordination with central government institutions is essential. The Civil Defence is key in this respect, but it is also an institution that clearly lacks the needed resources to fulfil these tasks. Some NGOs remember with nostalgia the collaboration they had with the Civil Defence after Hurricane Joan, and point out that reductions in staff and other cut backs have prevented them from playing a similar role in Mitch. Perhaps future financial injections by CEPREDENAC (El Centro de Coordinación para la Prevención de Desastres Naturales en América Central) will help the Civil Defence and return it to its former prominent role. The complex relations between the Civil Defence, civil society and political authorities are a key factor in future reinforcement of disaster preparedness capacity. It has been noted that Civil Defence has been largely left out of the process of planning Nicaragua's post-Mitch transformation.¹³ This is one of many examples of where NGOs could and should advocate for more government involvement and leadership.

5. Summary and Conclusion: Gaps, Dangers and Possibilities in Disaster Mitigation and Preparedness in Nicaragua

In Nicaragua today, interest in disaster mitigation and preparedness is very low. This is particularly striking when one takes into consideration the impact of Hurricane Mitch and the extremely disaster prone nature of the country. There are, however, areas where disaster mitigation and preparedness have a foothold in the national discourse on the transformation of Nicaraguan society. This study has reviewed two basic issues. First is the question of what disaster mitigation and preparedness consists of today, including what the underlying assumptions and objectives are of these activities and their prospects for achieving a sustained impact. Second is an analysis (admittedly somewhat speculative) of why there is so little attention given to disaster mitigation and preparedness in view of the massive amount of attention devoted to Mitch. The "Mitch" that is discussed is not only the hurricane and its immediate effects, but also "Mitch: the debate", the polemic discourse on Nicaragua's 'transformation' that has paradoxically overshadowed "Mitch: the hurricane" in the policy formation process in which the government, NGOs and donors are engaged.

5.1 What does Disaster Mitigation and Preparedness mean in Nicaragua today?

- The strongest aspect of disaster mitigation and preparedness is mitigation, and mitigation (from the perspective of the NGOs) is focused primarily on mitigation through environmental protection. The landslides, erosion and crop losses associated with Mitch have revived interest in an issue where there has long been awareness. The disaster – environment issue had already begun to be raised the year before with the impact of El Niño, which actually had greater impact on overall agricultural production than Mitch. There are four major issues associated with this linkage:
 - Many NGOs are "tagging" and "marketing" their earlier environmental projects as "mitigation" ("prevention" is the term most commonly used). There is, however, little indication of a change in the actual content of these initiatives.

¹³ OCHA, et al, 1999.

- In many areas there is a clear relationship between environmental initiatives and efforts to address ethnic and land conflicts. There is thus a close relationship between natural disaster and conflict issues.
 - There is strong evidence that sustainable agriculture practices reduced erosion and crop losses from Hurricane Mitch. It is, however, not certain that many NGO projects actually mitigate other more extreme, life threatening risks. There is clear evidence that cover crops, for example, reduce erosion during extreme precipitation. However, these methods may actually loosen the soil (part of the intended effect for increasing production) and thus increase the risk of landslides. The mitigation impact of these practices on the risk of massive flooding is questionable.
 - After Mitch the government became very interested in environmental protection for mitigation. There are indications, however, that this interest is waning as the focus shifts more to production issues. The NGOs are playing an important advocacy role in keeping environmental mitigation on the agenda.
- A major focus of attention has been risk mapping related to landslides and other hazards. Although NGOs are contributing to these efforts, the more central question is how to act on the hazards thus identified. This effort, inevitably including major relocation, has been stymied by the enormous property speculation stimulated by local land owners' awareness that NGOs have funds they must spend. Chaotic land titling stemming from the changing land tenure and redistribution policies of different regimes has also contributed to a near paralysis regarding resettlement.
 - Hazards in Nicaragua are extremely varied (including hurricanes, volcanic activity, seismic activity, tsunamis, floods, landslides and drought), which in turn demands a broad variety of technological approaches. Since existing institutions lack the capacity to mount broadly effective technical programmes to meet this enormous challenge the NGO focus has been more on organisational technologies and advocacy. This is exemplified by the fact that, with the new-old understanding of the environmental change – disaster risk relationship, the current interest has been more focused on the institutional and political arena. Technocratic disaster mitigation and preparedness is a thing of the past.
 - An important aspect of “institutional development as disaster mitigation and preparedness ” that has emerged after Mitch is the realisation that NGO support to local government structures is essential. When municipalities have been isolated due to destroyed infrastructure and overburdened central disaster management institutions, local actors have realised that they must work together across political and institutional divides. This realisation varies, however, from municipality to municipality, according to local socio-political relationships and the charisma and skills of individual political leaders. A very interesting finding has been that this collaboration generally functions better in post-conflict areas where local emergency committees still operate and where there is a history of and practical experience in pragmatically pulling together in an emergency. The assumption that civil society is weakened by conflict does not hold true.
 - Another major aspect of mitigation in Nicaragua is the focus on diversification of production. This is an area where the Sustainable Livelihoods concept, supported by the UK Government's Department for International Development (DFID), may be validated. Diversification of livelihood strategies is central to how poor people reduce their own vulnerability. NGOs are contributing to this with respect to home gardens and other local production strategies (primarily by expanding and relabelling pre-existing development projects). They do not, however, support the diversification strategy that is perhaps most

important for the poor, that being migration. Mitch resulted in a massive inflow of capital from migrants in neighbouring countries and the US. This factor has been largely ignored in the aid discourse. An important aspect of the issue of agricultural diversification in Nicaragua is the debate over how high risk production of new export crops impacts on farmers' own efforts to diversify their livelihood strategies to reduce risk. The NGOs are engaged in the debate here. This is related to the broader debate on the limits of neo-liberal and technocratic market approaches to development in addressing vulnerability.

- NGOs are involved with housing and infrastructure investments, some of which pay explicit attention to mitigation. This is rarely mentioned, however, as a mitigation issue. It has been noted that several NGOs are building houses in highly earthquake prone areas without paying attention to this hazard, as they are still focused on the lesser hazard of hurricanes.
- Preparedness per se, as in disaster preparedness planning and organisation, is only dealt with by three NGOs in a limited number of municipalities. There are a variety of approaches ranging from Freire-inspired participatory assessment of local vulnerabilities and capacities to traditional hierarchical civil defence-inspired chains of command. The three agencies combine these seemingly opposite approaches. It appears that this is received and interpreted positively at local level. Harmony is achieved due to the fact that institutional and community development relies on participation, whereas disaster response demands clear-cut and predetermined roles and responsibilities.
- The NGO staff who are leading disaster mitigation and preparedness efforts are usually former civil servants who worked in relevant ministries during the Sandinista period. These individuals possess both technical experience and an understanding of public policy formation that is invaluable in their current tasks. The possibility of NGOs strengthening their capacity in disaster mitigation and preparedness is an unexpected upside of the politicisation of the civil service and structural adjustment. This state of affairs, does, however, at the same time contribute to the polarisation and distrust between political adversaries in the government and NGOs.
- There is a realisation that most NGO disaster mitigation and preparedness activities are mere token efforts that can only achieve broad impact if the government defines its own roles and responsibilities. This legal framework has been repeatedly delayed over the years, though there are now some signs that a resolution may emerge.

5.2. Why is there so little Interest in Disaster Mitigation and Preparedness in Nicaragua?

- It is a seemingly logical assumption that after Hurricane Mitch, a very high profile experience with poor disaster mitigation and preparedness, that there would now be much more attention to disaster mitigation and preparedness issues among NGOs and in NGO – government dialogue. This is not the case. Disaster mitigation and preparedness has quickly been overshadowed by a polemical debate over development models. Many of the reports and recommendations regarding Nicaragua's post-Mitch "transformation" totally ignore the seemingly glaring risks to this transformation from natural hazards. The potential to see rehabilitation and "transformation" also as risk reduction is rarely mentioned in programme documents and recommendations.
- The clichés that disasters are merely an indication of underdevelopment and that it is only the poor who suffer (due to their underdevelopment) are used very widely in

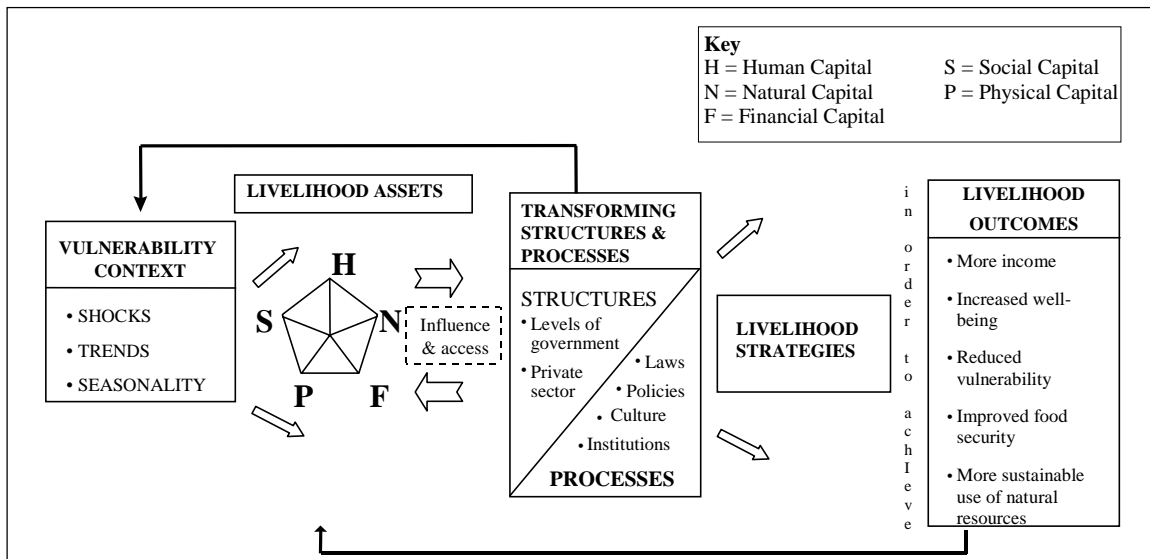
Nicaragua to justify a failure to engage in disaster mitigation and preparedness. Development is said to be the solution for everything, so why worry about disaster mitigation and preparedness. A brief look at Nicaragua's experience of natural disasters, however, shows that these clichés do not tell the full story. In some areas the poor were most affected by Mitch, as they built their homes on the risk-prone land available. In other areas this was not the case. In Jinotega and Matagalpa relatively well-capitalised irrigated garden areas were wiped out, while the low-quality land on the slopes, where the poor were farming, experienced less impact. The poor have suffered due to the loss of wage employment on these irrigated fields, but may also gain due to the demands for labour to rehabilitate this infrastructure. The sum effect is difficult to estimate. Volcanoes and earthquakes in Nicaragua do not only affect the poor. "Development", regardless of which model is employed, will not erase these risks.

- On the other hand, Mitch has served to highlight the links between underdevelopment, ineffective natural resource management and weak institutions.
- Another reason for the lack of interest in disaster mitigation and preparedness is the very negative experience with dependency creating NGO-led humanitarian programmes of the conflict and immediate post-conflict years. Poorly planned initiatives and general NGO amateurism have left a strong suspicion of all programmes that are not explicitly development oriented. In order to avoid critique, there is a tendency among development oriented NGOs to avoid association with emergency programming. Since development NGOs are those with the strongest skills in mitigation, their relative isolation from this area of work is unfortunate.
- In Latin America more than in most of the world, and in Nicaragua more than in most of Latin America, the role of NGOs is highly contested. They are not seen as knights in shining armour, and are struggling to define their niche in a context where it is broadly recognised that they have not always lived up to the ideals that they have espoused. They are increasingly competing with private sector firms for public service contracts. Their niche and identity are ambiguous, which means that they are cautious and selective regarding priorities.
- NGOs also realise that their capacities are limited, and that they cannot fill the gap in rapidly disappearing government services. They realise that disaster mitigation and preparedness could draw them into implicitly accepting massive responsibilities in a disaster.
- Another aspect of the ambiguity of NGO identity is that many are beginning to openly acknowledge that the NGOs are not "civil society", but are rather an intellectual élite that strives to represent "the people". This rootlessness of the NGO movement has meant that, although there is an impressive capacity to pull together to confront the government, sustainable co-ordination mechanisms have not emerged. If the NGOs are to have a broad and significant impact on disaster preparedness they must demonstrate an ability to co-ordinate among themselves.
- The small and short-term "demonstration" or "pilot" nature of many NGO projects can be justified when there is a reasonably stable public service structure in place, i.e., when there is somebody who could be expected to take up and expand or institutionalise the lessons learnt. When the state is rapidly withdrawing, it is more difficult to justify such small projects. The assumption that there is somebody who will take up these "models" is very shaky. Hopes for resolving this issue lie in the evolving relationships between NGOs and municipal authorities.

- The role of the government is also ambiguous, particularly with regard to disasters. There is no law defining roles. The neo-liberal ideology explicitly involves not accepting that the state has basic responsibility for public welfare. Disaster mitigation and preparedness implicitly involves accepting such responsibility in a crisis. This represents a major paradox for disaster mitigation and preparedness.
- After Mitch struck the government failed to declare a state of emergency, and downplayed the affects of the hurricane. It has been speculated that this is due to the fact that acknowledging the extent of the disaster would: (a) force the government to devote resources to relief that would in turn break strict structural adjustment guidelines for government expenditure, and (b) would reveal the extremely weak state of government capacity in the wake of structural adjustment. Once it was clear that a generous donor response was expected, the government shifted course and has taken advantage of the populist political potential in raising its profile in relief efforts. Nonetheless, the fundamental question of how to promote disaster mitigation and preparedness in a neo-liberal state is central to future strategies.
- A unfortunate impact of the government's "better late than never" interest in leading relief and rehabilitation efforts has been that the post-Mitch period has been characterised by a rapid centralisation of decision-making and weakening of an already incomplete process of devolution to local authorities. A strategy has emerged whereby central levels strive to retain control and access to resources, whilst responsibility is devolved to municipalities which have virtually no resources of their own. This has in many cases meant that disaster mitigation and preparedness issues, which are always more obvious to local actors, are promoted by surprising local alliances across the NGO - government divide.
- An important aspect of the current development polemic in Nicaragua is that it is a debate over economic development models. In most post-Mitch planning, the human aspects are overshadowed by the economic aspects. There is very little emic perspective from the victims themselves in most accounts of the hurricane in official reports and surveys. It is therefore easier for many observers and planners to jump to the conclusion that the solution is one of economic development.

5.3. Conclusion: putting Risk back on the Development and Poverty Alleviation Agenda

How then might the pieces of disaster mitigation and preparedness be pulled together and highlighted in the development debate? One possibility could be to promote an application of the Sustainable Livelihoods concept, utilised by DFID, the World Bank, and some NGOs. This conceptual framework has been almost exclusively applied in development contexts, but explicitly includes the impact of vulnerability to 'shocks' on how poor people struggle to make their livelihoods more sustainable (see figure below). Raising attention to this 'arrow' could be a way to bring in the perspective and strategies of the farmers and other 'victims' (*damnificados* is the Spanish term most frequently used) of disasters. The realisation that these people are not passive pawns in the economists' models would be a first step towards introducing an understanding of how disaster risks are a central focus for the most important actors in both relief and development – those who directly experience the disasters.



Ashley & Carney 1999

The Sustainable Livelihoods concept is structured around five forms of capital (social, physical, financial, natural and human). This focus on “capital” provides an opening for those engaged in the economic planning discourse to contribute their data and analyses. It is in many ways a bridge between the economic and anthropological debates. It also has potential for better relating the “human” perspective of humanitarianism to economic development and poverty alleviation. The NGOs, with their institutional capacity to link with community institutions and municipalities would seem to have a self-evident role in testing whether or not this conceptual approach could re-connect disaster mitigation and preparedness to the development debate.

In the neo-liberal regimes of Latin America there is a growing readiness to write off the livelihoods of large sectors of the poor as being simply “non-viable”.¹⁴ They are assumed to be better off simply moving somewhere else and doing something else. The Hurricane Mitch experience has shown that this “somewhere else” is a very risk filled place to live. The “something else” – burning the remains of the rainforest for extensive cattle and grain production – is unsustainable, and increases risks of erosion, crop losses and ethnic conflicts. There is clearly a danger that the categorisation of livelihoods as being “non-viable” opens the door to high-risk alternatives. In order to address this danger, preparedness and mitigation strategies must be linked to, rather than subsumed by, the poverty alleviation discourse.

A UN mission described the impact of Mitch as being directly related to the combination of “extreme poverty, environmental degradation and poor disaster response.”¹⁵ It would seem to follow that an integrated response to these factors is imperative. The humanitarian and poverty alleviation discourses must be brought together, but on a different basis than the old clichés about disasters being merely an indication of underdevelopment. Risk must be related to the discourse on sustainable and inclusive development, without being displaced by it. The relationships between disaster risks and poverty alleviation should instead be analysed drawing on baseline research into how poor people and the local institutions with which they interact are dealing with these risks together with their developmental aspirations. As institutions that ostensibly claim to understand local perspectives, and which also have mandates that combine environmental and sustainability objectives with a humanitarian

¹⁴ Bebbington, 1999

¹⁵ OCHA, et al, 1999.

perspective, NGOs should be in the lead. An understanding of how households combine survival, risk mitigation and development strategies would reveal the fallacies and limitations of the traditional categories of development co-operation and humanitarian assistance in addressing the 'transformations' demanded by an experience such as Hurricane Mitch.

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