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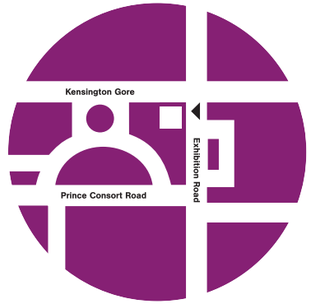

From Caribbean Hurricanes to Indian Floods

Experience and Lessons Learned for Disaster Risk Reduction

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Environment & Society Forum
Summary Statement 19

In conjunction with actionaid

Dinner discussion report

Background to the Hyogo Framework for Action 2005-2015

2005 saw an unexpected increase in the frequency and intensity of natural disasters. From January to October 2005, an estimated 97,490 people were killed in disasters globally and 88,117 of them in natural disasters, according to the Centre for Research on the Epidemiology of Disasters (CRED, 2006). The average number of disasters reported during 2000-2004 was 55 per cent higher than during 1995-1999. With 719 reported disasters, 2004 was the third worst year of the decade (1994-2004) (International Red Cross, World Disaster Report 2005).

Experts agree that disaster risk reduction (DRR) is not sufficiently prioritised by the world's governments and such disasters are affecting progress of agreements such as the Hyogo Framework for Action 2005 (HFA).

The HFA was agreed by the world's governments at the World Conference on Disaster Reduction in Kobe, in January 2005 and was designed to build the resilience of nations and communities to disasters. It was produced as part of the United Nations International Strategy for Disaster Reduction (ISDR) and ensures that DRR is a national and a local priority with a strong institutional basis for implementation;

- identify, assess and monitor disaster risks and enhance early warning;
- use knowledge, innovation and education to build a culture of safety and resilience at all levels;
- reduce the underlying risk factors and strengthen disaster preparedness for effective response at all levels.

The ISDR was instructed to implement and follow up these priorities through inter-agency cooperation. To ensure this happens the ISDR will need to build relationships with multi-stakeholder partners. Discussions such as the one that this report summarises are important in promoting and facilitating follow-up.

In order for these issues to be tackled, the HFA identified the need for a multi-hazard approach. This is to take into account gender and cultural perspectives, local communities and voluntary organisations, and capacity building and technology transfer. Moreover, strong communication between disaster managers, development sectors and the government is critical to success in implementing the actions.

For DRR to become a priority, governments need to act quickly to design policies that reflect the recommendations of the HFA. The HFA has been successful in so far as 40 countries have improved their policies for DRR since its launch in 2005. The UK has its part to play in ensuring that its policies complement the work of the ISDR and the Department for International Development is responsible for ensuring targets are met.

Faced by the increased number of disasters and the demand for a rapid response and implementation of early warning systems, governments have been forced to interact with policy makers and field experts to devise global, national and local responses to disaster risk reduction.

This dinner discussion was held on 18 January 2006, the one year anniversary of the launch of the Hyogo Framework for Action, to bring representatives of stakeholders together to consider progress in the light of recent 'disasters' and to discuss how the HFA can be implemented effectively. *From Caribbean Hurricanes to Indian Floods: Experience and Lessons Learned for Disaster Risk Reduction* was convened by Roger Yates, Head of Emergencies, ActionAid International and involved 70 invited participants from across the DRR constituencies. The following statement includes points raised during the discussion as well as the key points made by the speakers.

The speakers, who set the scene for discussion, were drawn from a variety of backgrounds. Jim Drummond, United Nations Conflict and Humanitarian Division, Department for International Development opened the discussion by discussing how DFID are addressing disaster risk reduction. Kristina Peterson, University of New Orleans, Centre for Hazard Assessment and Response Technology spoke with first hand experience on how a developed country (the United States of America) had responded to the disaster that Hurricane Katrina (2005) had caused. Dr Unnikrishnan PV, Emergencies and Human Security Advisor for the Asia region, ActionAid International described the response of a developing country to a recent natural disaster (Mumbai Floods, 2005) and Helena Molin Valdes, Deputy Director, International Strategy for Disaster Reduction outlined the policy behind the Hyogo Framework and the ISDR's commitment to action.

UK policy on Disaster Risk Reduction

In late 2004 and early 2005 some of the world's most severe natural disasters were witnessed: the Asian Tsunami, droughts across much of Africa, flooding in eastern Europe and the hurricanes which hit the Caribbean, Central America and the US. Hundreds of thousands of lives were lost, millions of livelihoods were lost and billions of pounds worth of damage was caused. With these disasters came an increased number of people living in poverty. For example, in Aceh, Indonesia, the number of those living in poverty rose from 30% to 50%. Disasters cause damage to the infrastructure of a country and the impact on poorer communities can be severe. Disasters can increase poverty and malnutrition and reduce resistance to disease. The economic losses resulting from the 1990's natural disasters totalled over US$608 billion – this was greater than over the four previous decades combined. So as the number and intensity of natural disasters rise how will this affect economic development and what can be done to reduce Disaster Risk? The Secretary of State for International Development committed DFID to give a higher priority to DDR in a speech made in 2004. The Kobe World Conference, 2005 and disasters such as the Asian Tsunami, reinforced the need for the UK to address its policy of DRR. The Hyogo Framework failed to include targets for implementation, instead focusing on the goals for action.

DFID ministers are currently reviewing a new draft policy that will drive DRR across the department. How best to contribute to the following key issues is being considered.

1 Effective integration of DRR into development planning of national and local governments and of donors. World governments all recognise the need to respond following a disaster, but there needs to be increased focus on risk reduction policy. DFID will work with developing country governments to consider how DRR can be more effectively incorporated into national level planning processes. The long-term impact of disasters currently lacks the information required to help governments make the choices of where to invest. Should governments invest in health and education that will bring rapid benefit or DRR, not knowing when the next disaster may strike or how severe it will be?

2 Good governance, including participation of people in government decision making, rule of law, transparency and accountability is vital for sustainable development and DRR. Good governance can ensure legislation is properly implemented and monitored and can reduce vulnerability, in particular in poorer countries.

3 The implementation of the Hyogo Framework at the community level is vital to ensuring sustainable improvement. Good communication, coordination and awareness at the local scale is needed if the impact of disasters is to be reduced. DFID committed £12.5 million (over 5 years) in late 2005 to support the community level DRR work of several NGO's. ActionAid is one of five agencies to receive this DfID funding. ActionAid's project focuses on promoting DRR through schools by building awareness of pupils, parents, teachers and officials in seven countries.

4 DRR policy needs to include slow-onset issues, such as drought. Even when largely predictable, the international community mostly responds with emergency relief. These efforts save lives but do not tend to address the underlying vulnerability experienced by poorer communities, neither does it protect or rebuild assets. This move towards safety nets approach is favoured by DFID.

5 Climate change and population growth both increase the impact of disasters. UK policy will follow on from the Hyogo Framework and G8 outcomes by supporting international efforts to adapt to climate change.

6 The introduction of an international disaster risk reduction system fit for purpose. DFID and the ISDR have been inquiring as to whether the Hyogo Framework is adequate. DFID is working with the World Bank to incorporate disaster risk issues into the Poverty Reduction Strategy.

7 To increase spending on DRR. All policy makers now face the challenge of turning the commitments outlined by the Hyogo Framework into action. The only way to do this is to work in partnership.

Disaster Risk Reduction in the developed world: the case of the USA

In March 2005 the World Bank issued *The Natural Disaster Hotspots: a Global Risk Analysis* in which it stated three keys facts. Half the world's population live in a significant risk area; one third of the USA live in a hazard prone area, and in developing areas 90% of the populations live in high risk areas. The world's population is becoming more coastal with larger cities in 'at risk' areas. In two years, urban populations will out number rural populations, increasing vulnerability of marginalised areas. As global warming increases, affecting global climate patterns and sea level change, these risks will increase.

Hurricanes Katrina and Rita in 2005 should have been expected. So why were the effects of these so devastating? Were issues such as institutional racism, loss of coastal wetlands, economic and political exploitation the real reasons that the region and people were so vulnerable? To respond to the increased impact on human and environmental systems, the Decade of Disaster Reduction has produced challenging recommendations through the Kobe World Conference on Disaster Reduction (Hyogo Framework) in January 2005 and the Yokohama Strategy and Plan of Action for a Safer World in May 2004. The resulting effects of Katrina testify that these declarations are not being taken seriously in the USA.

The devastating effects of the 2005 hurricanes were seen most dramatically in the marshes of Louisiana. The biodiversity of these marshes provide some of the richest concentration of natural resources: bird rookeries and migration, fish and wildlife, tree, flora and fauna. All of which are at risk with the loss of marshes and the increasing gulf water dead zone. The wetlands of Louisiana account for 40% of the US's coastal wetlands. They are the wintering ground for 70% of migratory water fowl. The marshes produce one third of the US's seafood, one fifth of the US's oil and a quarter of its natural gas. The loss of wetlands is the biggest issue that is agreed upon by all sectors of the population in Louisiana. The coast looses 35 square miles of marsh per year, an area the size of Manhattan. In a three week period, the combined loss of wetlands from Katrina and Rita was 118 square miles.

Recovery efforts were hampered by the lack of trust among the communities. Historical 'credibility gulfs' existed between every sector of society. The speaker argued that these were intensified by the actions of the government leaders, NGO's, academics and others before and after the event. Outside agencies are prescriptive in their reaction and this can often lead to an exploitation of the available resources. Professional organisations and academics need to be brought to task on not consulting with their local counterparts for direction. The local knowledge of researchers and universities was often overlooked and not utilised. Businesses were not forced to bid for contracts and were criticised for profiting from the disaster. NGOs and FBOs from outside the region went against state principles and made top down prescriptive decisions. In some cases staff were not even present in the region. The Louisiana example highlighted beyond doubt the need for a collaborative approach.

Grassroots groups and local community organisations emerged as the responders to the disaster, in spite of the presence of the traditional agencies. The essential resources and tools were often held by the traditional agencies and in some cases these never reached the local communities where they were most needed. The most immediate response came from the religious communities in Louisiana, who developed more than 200 shelters to house the displaced populations.

The response to the 2005 hurricanes in Louisiana has highlighted future practical recommendations. External resources are most effective when supported by pre-existing and emergent local groups. Questions and issues evolving from the local community should be developed by collaborative local stakeholders and researchers. Policy makers and politicians who can not personally profit from the contracts and spoils of disaster money should be used. Pre-existing institutional racism in media and agencies needs to be addressed. Establish relocation systems that keep local communities and kinship groups together for mutual support. Utilise communication systems that bring together the displaced so that energy and expertise can be part of the planning process. Put in place coastal protection systems that can withstand the highest category of storm level. Restore and rebuild the damaged areas. Redirect the revenue from the oil and gas reserves to the state of Louisiana instead of the federal government. Address trade policies, such as the importing of shrimp, to prevent future declines in the environment and people's livelihood. Prevent careless future developments. Ensure that emergency preparedness

and mitigation is the responsibility of all at all levels.

Several broader conclusions can be drawn from the example of the Louisiana disaster. A commitment towards solidarity in marginalised communities is required in order to prevent the poor from being exploited. Governments need to be willing to commit for the long term and review and change strategies when necessary. It takes time to fully explore all the solutions and all stakeholders need to be transparent in their actions. Above all, the emphasis should be on prevention and preparedness, rather than on response. All segments of society need to take on board the challenges set out by the Hyogo Framework.

Disaster Risk Reduction in the developing world: the case of the Mumbai Floods 2005

Mumbai is the Gateway of India. With a population of 16.5 million it is the fifth largest city in the world. With this comes some of the largest slum settlements, with over half of the population believed to be living in slums. It is in one sense a highly developed area, providing one tenth of India's factory employment and responsible for creating one third of the country's income tax. As well as the traditional employment market, it also earns 40% of India's foreign trade and produces over 900 'Bollywood' movies per year. Mumbai has a cosmopolitan culture that has developed partly in response to the sectarian violence in 1992, bomb blasts in 1993 and the earthquake of 1993. The government response to that earthquake was to formulate a state disaster management policy.

The Mumbai Floods 2005 were the result of heavy monsoon rain in Maharashtra in July 2005, most particularly the 944mm of rain in Mumbai on one day, July 26. The cause of this intensity and volume was an offshore vortex, which is a rare but very localised meteorological phenomena. In Mumbai the first signs were high winds in the Arabian Sea. The winds turned 360 degrees to form a vortex and when combined with low pressure it caused the winds to shoot up in to the atmosphere resulting in heavy rain.

The flooding resulted in 500 deaths and a further 100 missing people. The financial loss is estimated to be around US$1 billion. Almost the entire urban sprawl of Mumbai and Thane district were under water, paralysing the city. The flooding led to power cuts, transport network standstills, aviation restrictions and loss of telephone communications. All of which posed problems for the response teams.

Despite these constraints, the 'Mumbaikars' were quick to respond. Rescue teams responded rapidly, food and water supplies were available immediately and reached the people that needed them, local boat owners offered their boats for use, all of which showed their solidarity and support. The local area committees (Mohalla) that have been set up in response to the 1992 riots were quick to react to the effects of the flooding. Youth groups worked with the Army, and voluntary and NGO's groups provided direct action. In addition to this, corporations and charity foundations offered relief and educational institutions offered advice and volunteers.

The government responded initially with a 'knee-jerk' reaction, however once the local communities began to take control this forced the government into more sustained action. The Army was called in and the days immediately after the flooding were declared public holidays. The government also agreed to work closely with the NGO's in order to distribute relief.

The response made several key differences. Fewer lives were lost, the aid was targeted and reached most of the needy quickly, and Mumbai was back on its feet in less than a week. More importantly, people's confidence in the system was never lost. Mumbai had learned its lessons and was better prepared. Since the floods, the response has been to further strengthen the disaster preparedness measures that are in place.

The disaster was well managed, mainly due to the state disaster management policy that was put in action. The plan states 'Preparedness focuses on plans to respond to a disaster threat or occurrence. It takes into account an estimation of emergency needs and identifies the resources to meet these needs. It also involves preparation of well-designed plans to structure the entire post-disaster response, and familiarising the stakeholders, particularly the communities through training and simulation exercises. The best examples of preparedness activities are the development of local warning and community evacuation plans through community education, evolving local response structures and administrative preparedness by way of stockpiling of supplies; developing emergency plans for rescue and relief' (The Government of Maharashtra, Relief and Rehabilitation, 2005). The plan lays out clear guidelines on how to respond, outlines a timescale for the response and provides detailed information about who is responsible. The plans were developed using experience and informed bureaucracy.

The main advantage of Mumbai was that the senior national political leaders are committed to disaster management. Politics therefore was not a constraint. Mumbai has a history of responding to disasters, both natural and man-made. Despite the huge population, the civic amenities work well. There is resilience amongst the population and the government which leads to a strong and vigilant society. This culture has led to local communities training themselves to self help.

The lessons learnt from Mumbai are reflected across the rest of India. Community experience is well respected and has been used to help pass the recent Disaster Management Bill 2005. Mumbai provides clear evidence that empowered communities respond better, and that informed bureaucrats can offer co-ordinated a response. The two must work in collaboration.

Despite the positive response to the flooding, the 2005 floods still highlighted two major problems in Mumbai. First, losses could have been minimised by keeping the city's Mithi River free from encroachment. Secondly, the unrestricted building construction around the city's green areas amplified vulnerability.

Local capacity building is the key to disaster response. Government-civil society synergy can be successful. Investment in preparedness is essential. Material and emotional need must be taken into consideration when planning for DRR. Dovetail components of disaster preparedness need to be included in long term plans of cities.

Reducing disaster risk. What are we waiting for?

In January 2005 representatives of 168 countries gathered in Kobe, Japan and

pledged to make the world better prepared for, and less vulnerable to, natural hazards. The Hyogo Framework for Action, a global plan for disaster risk reduction over the next decade was adopted. The framework calls on governments to make disaster risk reduction a political priority and to invest in measures such as national and local risk assessments, people-centred early warning systems, public awareness and education, better urban planning, safer building construction codes and well-rehearsed evacuation plans.

If the Indian Ocean tsunami, followed by the extreme hurricane season and the South Asia earthquake in 2005, was our "wake-up call" to invest in and focus our efforts to reduce disaster risk, then the Hyogo Framework (HFA) is our blueprint to how to move forward.

The Hyogo Framework is important as a way to focus government interest and understanding of the issues, and to influence decision makers. The HFA, together with the major disasters during 2005, have already shown that decision makers need to ask several questions.

- what global framework do we have to generate greater political commitment?
- how can we empower local stakeholders and give greater leverage to NGOs and community based leaders?
- how can we seek funding to improve disaster risk reduction?
- is the solution to developing accountability to introduce risk indexing?

Much progress has been made since last year – many more countries and communities now understand that it is not enough to respond to disasters after the event, but necessary to attack the root-causes of people's vulnerability. Among the 40 plus countries that have changed or improved their policies for disaster risk reduction since the launch of the Hyogo Framework in 2005 are Bangladesh, Cuba, Ethiopia, India, Indonesia, Iran, and Uganda.

It is clear that these policy changes are largely reactive, triggered by recent disasters. With the current trends in disaster impact increasing many times per decade, owing to growing social, economic and environmental vulnerability and further compounded by global warming, we cannot afford to wait. Disaster risk reduction must be part of all development investments, and more governments must invest in poverty reduction, which clearly helps reduce disaster risk. That is the only way we can reduce the losses of lives and livelihoods and dream of achieving the Millenium Development Goals.

Countries have also moved on many other fronts in advancing the Hyogo Framework. India has introduced stricter building codes in seismic hazard zones. African governments have established a disaster reduction action plan for the continent, and so has the leaders of the Pacific Island States. The Association of Southeast Asian Nations (ASEAN) recently held their first regional evacuation exercise that mobilised personnel and emergency equipment across national borders. Asian Ministers met in Beijing to discuss what the priorities for Asia should be, committing in the first place to review their institutional settings to be able to tackle the Hyogo Framework. NGOs like ActionAid have refocused projects and programmes towards risk reduction.

In Bolivia, Costa Rica, Venezuela, and elsewhere in Latin America, local citizens have gained more control over the allocation of public works budgets, allowing them to prioritise safety.

Caribbean and Central American nations affected by the hurricanes in 2004 and 2005 are revising and strengthening their warning systems and also, as in Jamaica, linking water resource management to management of hurricane-related hazards such as landslides and floods.

These are all very good first steps but we must accelerate our efforts and overcome continuing impediments. We still lack an understanding of the benefits, the incentives, of investing in risk reduction and how to do it. There are also competing priorities and threats, such as terrorism, a globalised world and drive for quick profit versus long-term participatory approaches to development and equity of resources. We already possess the skills and knowledge to make the world safer and better prepared for natural hazards. We know what can be done. The life-saving and economic benefits are clear. What are we waiting for?

Conclusion

The discussion concluded that approaches should be both top down and bottom up. Systems are not currently sophisticated enough to allow one approach alone to be used. The need for an interdisciplinary and inter-sectoral commitment to a participatory model became apparent. Multinationals should be utilised rather than treated with suspicion. Governments should be transparent and accountable in order to encourage good practice. Policies should move away from reactive measures and focus on disaster preparedness, taking into account climate change. Change requires time, political will and collaboration amongst all stakeholders.

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Front cover image
Hurricane Rita in the Gulf of Mexico, September 21, 2005

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