



# Federalism and Disaster Management

P.G.Dhar Chakrabarti

# FEDERALISM AND DISASTER MANAGEMENT

P.G.DHAR CHAKRABARTI

 ${\hbox{\o c}}$  Forum of Federations, 2012

ISSN: 1922-558X (online ISSN 1922-5598)

Occasional Paper Series Number 10 Federalism and Disaster Management By P.G.Dhar Chakrabarti

For more information about the Forum of Federations and its publications, please visit our website: www.forumfed.org.



Forum of Federations 700-325 Dalhousie Ottawa, Ontario (Canada) K1N 7G2 p. 613-244-3360 forum@forumfed.org

#### Abstract

Disaster management has often been described as *Everybody's Business.*<sup>1</sup> Disasters affect everybody and therefore managing the effects of disasters or reducing the risks of disasters is the responsibility of everyone. Those responsible include national, state and local governments, regional and international organizations, corporate, media, scientific and technical organizations, academic institutions, non-profit organizations, communities, families and above all individuals. But it is governments – the national and state governments – that are primarily responsible for disaster management. The government creates the legal and institutional mechanisms, provides technical and financial support and further co-ordinates the roles of all other stakeholders in this process.

Disaster management offers special challenges and opportunities in federal countries where powers and responsibilities of governance are distributed between the national and state governments and further between the state and the local governments. While the local governments in the urban and rural areas would always have major roles to play when disaster strikes them, the intervention of the state governments becomes necessary when disasters overwhelm local government capacities. Similarly interventions by national governments are required when state government capacities and resources are not adequate enough to meet the demands of the situation.

For a long time the responsibilities of the governments in disaster management were limited to providing humanitarian assistance to the victims - rescue and evacuation to safer places, emergency medical facilities, shelter, food and other relief assistance and rehabilitation in safer places. Therefore the provincial and local governments could handle the tasks well with financial and technical support from the national governments and humanitarian agencies, whenever necessary. In recent years disasters are becoming more complex as the exposures to risks of disasters are changing with unplanned growth and urbanization in high-risk areas. The Fukushima disaster of 2010 in Japan demonstrated that an earthquake in a deep sea could trigger a massive tsunami and damage a highly-protected nuclear power plant in one

Everybody's Business became the campaign theme of the United Nations International Strategy for Disaster Reduction (UNISDR) after the adoption of the Hyogo Framework of Action 2005-2015: Building the Resilience of Nations and Communities to Disasters.

of the most advanced countries, destroying life and property in an unprecedented scale. Scientists have predicted that with the global warming and climate change the frequency and intensity of disasters could increase to an unprecedented scale, making disaster management as much a global as a local and national issue.

During the recent years there has in fact been a paradigm shift in disaster management around the world—from post-disaster relief and rehabilitation to pre-disaster prevention and preparedness.<sup>2</sup> Governments have assumed greater responsibilities to assess the hazards, risks and vulnerabilities of disasters through multi-disciplinary research and analysis and provide early warning services for impending disasters. Governments today also work to prevent or mitigate the adverse impacts of disasters by various structural and non-structural measures and maintain a high level of preparedness among all the stakeholders to face the disasters as and when they strike to reduce the damage and loss to lives, property, livelihood and economy.

These are all very important functions which can be better planned, resourced and co-ordinated at the national level, but implemented with very active participation and support of the provincial and local governments. The changing framework of disaster management has necessitated redefining traditional roles of national and state governments in federal countries so that there is less chaos, fewer conflict and more co-ordination and co-operation to reduce the risks of disasters and manage the emergency situations created by disasters. This is a necessity that makes it imperative for federal, provincial and local government to work together to develop robust systems and processes that minimizes the risks and losses in disasters. Such teamwork provides opportunities for strengthening the roots of co-operative federalism in countries having multiple structures of governance at the centre and in the states.

**Keywords:** co-operative federalism, disaster management, disaster relief, emergency planning, emergency preparedness, federalism, mitigation, reconstruction.

<sup>2.</sup> This shift in approach was heralded by the Yakohama Strategy of a Safer World 1995 and further strengthened by the Hyogo Framework of Action 2005-2015: Building the Resilience of Nations and Communities to Disasters. The Yakohama Strategy was adopted by the countries during the first World Conference on Disaster Reduction held in Yakohama in 1995. The Hyogo Framework was adopted by 168 countries at the second World Conference on Disaster Reduction held in Kobe in 2005.

#### FEDERALISM AND DISASTER MANAGEMENT

#### P.G.DHAR CHAKRABARTI

# **Legal and Institutional Mechanism**

Federal countries around the world are redefining the roles and responsibilities of the national and provincial governments for disaster management by enacting new comprehensive legislation on the subject. Wherever such laws have not been possible due to domestic politics or other constraints, governments have been developing new systems and processes to adjust the existing systems in favour stronger co-operative framework for disaster management.

The **United States of America** was probably the first country to enact a new federal law, known as the *Disaster Relief and Emergency Assistance Act 1988* (also known as Stafford Act, after Senator Robert T. Stafford who introduced the law) which replaced the Disaster Relief Act of 1974. The Act created the system by which a presidential declaration of a disaster triggers physical and financial assistance through the Federal Emergency Management Agency (FEMA). FEMA monitors potential major disasters and emergencies and when advance warning is received, deploys liaison officers and personnel to a state emergency operations centre to assess the emerging situation. The state and federal officials conduct the Preliminary Damage Assessment (PDA) in co-ordination with local officials as required and determine whether the event's impact warrants requesting a Presidential declaration of a major disaster or emergency.

Based on the results of the PDA, the Governor may request a Presidential declaration specifying the kind of federal assistance needed. Section 501 of the Stafford Act authorises the President to declare an emergency without the Governor's request if he determines that 'an emergency exists for which the primary responsibility for response rests with the United States because the emergency involves a subject area for which, under the Constitution or laws of the United States, the United States exercises exclusive or preeminent responsibility and authority'. The Stafford Act further provides for disaster assistance to states, local governments, and certain private non-profit organizations for mitigation and preparedness activities.

**Canada** enacted its *Emergency Management Act of 2007* which provides that the Federal Minister of Public Safety and Emergency Preparedness

shall be responsible for 'exercising leadership relating to emergency management in Canada by coordinating, among government institutions and in cooperation with the provinces and other entities, emergency management activities'. Section 4 of the Act states that the Minister's responsibilities include the following:

- (a) establishing policies, programs and other measures respecting the preparation, maintenance, testing and implementation by a government institution of emergency management plans
- (b) providing advice to government institutions respecting the preparation, maintenance, testing and implementation of emergency management plans;
- (c) analyzing and evaluating emergency management plans prepared by government institutions;
- (d) monitoring potential, imminent and actual emergencies and advising other ministers accordingly;
- (e) co-ordinating the Government of Canada's response to an emergency;
- (f) co-ordinating the activities of government institutions relating to emergency management with those of the provinces and supporting the emergency management activities of the provinces and through the provinces, those of local authorities;
- (g) establishing arrangements with each province whereby any consultation with its lieutenant governor in council with respect to a declaration of an emergency under an Act of Parliament may be carried out effectively;
- (h) co-ordinating the provision of assistance to a province in respect of a provincial emergency, other than the provision of financial assistance and the calling out of the Canadian Forces for service in aid of the civil power under Part VI of the National Defence Act;
- (i) providing assistance other than financial and other assistance to a province if the province requests etc.

Section 6 of the Act outlines the emergency management responsibilities of each minister to identify risks that are within or related to his or her area of responsibility—including those related to critical infrastructure—and to prepare emergency management plans to address those risks.

The framework further provides that 'the FPT governments shall operate co-operatively within the jointly established FPT emergency management governance structure, which facilitates co-ordination and collaboration in full respect of each government's legislated jurisdiction'.

Although the **Swiss Confederation** is strongly based on the principle of autonomy of the cantons and municipalities, the practical difficulties of planning and co-ordination in a mountainous and multi-hazard country needed an integrated framework, linking the Federal and

Cantonal governments vertically and connecting the technical entities and intervention bodies horizontally. Therefore the Swiss Constitution has mandated the federal government to legislate on civil defence in the event of disasters,<sup>3</sup> but the responsibility to implement effective prevention measures to protect the population against hazards associated with natural disasters and major accidents rests with the cantons and the municipalities. The Federal Office for Civil Protection (FOCP) which is part of the Federal Department of Defence, Civil Protection and Sports does the planning and co-ordination of emergency measures to be implemented in the case of disasters and emergencies. Early warning in is facilitated by a National Emergency Operations Centre, which was established in 1984 as a division of FOCP.

The Swiss Federal Office for the Environment is responsible for the sustainable use of natural resources, including soil, water, air and forests and is tasked to minimize natural hazards, protect the environment and reducing risks to human health from excessive pollution. The PLANAT was created in 1997 by the Swiss Federal Council as the national platform for disaster reduction and made responsible for coordinating concepts in the field of prevention against natural hazards. The main objective of the extra-parliamentary commission is a paradigm change from pure protection against hazards to the management of risk. The PLANAT consists of 18 specialists representing the Confederation, the cantons, faculty/ research, professional associations, the economy and insurances.

Recently, the Federal Council approved an Act – *ABCN-Einsatzve-rordnung* (Federal Intervention Law for Nuclear, Biological, Chemical and Natural Disasters) – which came into force on 1<sup>st</sup> of January 2011. The Act regulates responsibilities and procedures regarding nuclear, biological, chemical and natural disasters; for the first time, risks from different sources are looked at in comprehensive way. Furthermore, a national task force for the management of nation-wide disasters has been built up. A further Act – *Alarmierungsverordnung* (Federal Disaster Warning Law) – empowers the responsible national institutions to warn the population about major disasters in a co-ordinated manner. At federal level, interdepartmental co-operation has been improved through a Steering Committee on Intervention against Natural Hazards.

The **Commonwealth of Australia** always remained proactive in disaster management in home and abroad, but the rigidity of its constitutional system did not permit any federal legislation being enacted on disaster

<sup>3.</sup> Article 61 of the Federal Constitution of Swiss Federation 1999 which updates the Constitution of 1874 without changing it in substance has provided that 'the Confederation shall legislate on the deployment of civil defence units in the event of disasters and emergencies'.

management. Under the Constitution of Australia, passed by the British Parliament in 1900, the six former colonies became the states of Australia with their own Constitutions. Under the constitutions of each of the states, a state parliament can make laws on any subject of relevance to that particular state, subject to the only exceptions that the states cannot impose duties of customs and excise and cannot raise defence forces without the consent of the Commonwealth Parliament. The states have jealously guarded their autonomy and did not permit any federal legislation even on subjects like education, criminal law, and interstate transportation. The primacy of state responsibility on disaster management is based on the premise that 'the size of a state in Australia is so large that it is uncommon for a disaster to overwhelm the capacity of a state or territory governments to deal with the situations effectively, state and territory governments have arrangements with each other to share resources when necessary. In particularly major disasters a state or territory administration may still seek federal assistance'. <sup>4</sup> The fallacy of the state autonomy was exposed when major disasters struck the states, such as Cyclone Tracy, which devastated Darwin in 1974; the drought of 1992, which affected agriculture and livestock of the entire country; or the bushfires of 2011, which engulfed the entire state of Western Australia. In 1974 the National Disaster Organization (NDO) was created by the Federal Cabinet to co-ordinate federal physical assistance to states and territories in the event of a natural disaster. The federal government increasingly made use of the Constitutional provision on Specific Purpose Payments<sup>5</sup> in the form of the Natural Disaster Relief Assistance (NDRA) and National Disaster Mitigation Program (NDMP) which provided in an indirect manner a channel to influence the policies and programs of the state governments.

In 1992 the Council of Australian Governments (COAG) was established as 'the peak intergovernmental forum' with Prime Minister in chair and the State Premiers, Territory Chief Ministers and the President of the Australian Local Government Association (ALGA) as members 'to initiate, develop and monitor the implementation of policy reforms that are of national significance and which require co-operative action by Australian governments' 6. The COAG tasked a high level group of senior officials, representing the federal government, state and territorial governments and the Australian Local Government Association to

<sup>4.</sup> National Strategy for Disaster resilience: Building our Nation's Resilience to Disasters.

<sup>5.</sup> Specific purpose payments have been used extensively by the Commonwealth of Australia under section 96 of the Australian Constitution to provide for state-administered programs across a wide range of policy domains that lie within the constitutional jurisdiction of the states.

undertake a review of the way Australia manages natural disasters. The report released in 2002 under the title - Natural Disasters in Australia: Reforming Mitigation, Relief and Recovery Arrangements - recommended several measures which were approved in principle by the COAG.

The COAG constituted a National Emergency Management Committee (NEMC) was set up to provide advice and direction on national and strategic emergency management issues. The NEMC is co-chaired by the Secretary, Attorney-General's Department and the Deputy National Security Adviser, and comprises two senior representatives from the federal, state and territory governments and a representative from the Australian Local Government Association. The NEMC drafted the National Strategy for Disaster Resilience: Building our Nation's Resilience to Disasters which focuses on priority areas to build disaster resilient communities across Australia. It also recognizes that 'disaster resilience is a shared responsibility for individuals, households, businesses and communities, as well as for governments'.7

The Republic of India enacted its Disaster Management Act 2005 on the first anniversary of the Indian Ocean Tsunami to create the National Disaster Management Authority under the chairmanship of Prime Minister at the national level, the state Disaster Management Authority under the chairmanship of the Chief Ministers at the state level and District Disaster Management Authority under the cochairmanship of the District Magistrate and the Chairman of the Zilla Parishad at the district level. These authorities were given the tasks of preparing plans and co-ordinating disaster response, preparedness and mitigation at the national, state and local levels respectively.

On the aftermath of the devastating earthquake of October 2005, Islamic Republic of Pakistan passed a largely similar Disaster Management Ordinance 2006 (later became an Act in 2010) which similarly created National, Provincial and District Management Authorities at the national, provincial and district levels with similar functions. The major differences are that the chairmen of the National and Provincial Authorities in Pakistan are nominated by the Federal and Provincial governments respectively while the National Disaster Management Commission under the chairmanship of the Prime Minister oversees the entire arrangement and lays down the policies, plans and guidelines on disaster management. A similar Provincial Disaster Management Commission under the chairmanship of the Chief Minister oversees the arrangements in the provinces.

<sup>6.</sup> COAG Website, <a href="http://www.coag.gov.au/">http://www.coag.gov.au/</a>7. National Strategy for Disaster Resilience: Building our Nation's Resilience to Disasters, National Emergency Management Committee, 2009.

In Federal Republic of Germany the Constitution of 1949 – Grundgesetz - makes the 16 constituent states responsible for protection of the population in peacetime. Federal responsibility and legislation is applied only in case of war or if the Parliament has determined that a state of tension exists (e.g. a preliminary stage of war). Therefore, the responsibility for emergency planning and operational preparation lies with the states and their structures. The states therefore have their own laws regulating the measures for urgent medical assistance and fire fighting, as well as procedures for disaster management. The federal government supplements the states' equipment with wartime resources, e.g. special NBC-vehicles, which can be used during peacetime as well. However it was felt that the federal government should have a greater co-ordinating role in disaster management and therefore the German Civil Protection and Disaster Assistance Act 2009 was amended and a new Federal Office of Civil Protection and Disaster Assistance - Bundesamt für Bevölkerungsschutz und Katastrophenhilfe (BBK) – was created as part of a new strategy for protecting the people of Germany agreed upon by the Federal Minister of the Interior and colleagues from the states. The BBK supports the local and regional authorities and the states with operational forces (e.g. the Federal Agency for Technical Relief - THW), the federal police, and, with certain limitations the Armed Forces when asked for assistance.

Since the 1990s, a National Policy of Civil Defense has been the cornerstone for the Federative Republic of Brazil's National System of Civil Defense, which has as its core the National Secretariat of Civil Defense, based on the Ministry for National Integration. This National Secretariat is under way of changing its name to Civil Protection, as to reflect a more comprehensive approach to disaster management. The principles of the National Policy, along with the actions taken under its guidance, align with the priorities of the Hyogo Framework (a United Nations plan, stretching from 2005 to 2015 to make the world safe from natural hazards). The First National Conference on Civil Defense and Humanitarian Assistance took place in 2010. This conference comprised several phases involving more than one thousand municipalities and brought together more than 35,000 representatives from Government, research institutions, organized civil society and civil defense workers. Hitherto, several of the recommendations of the National Conference are being implemented, with a vision of forming a Brazilian Platform for Disaster Risk Reduction.8

The **Republic of South Africa** enacted its Disaster Management Act in 2002 to provide for the setting up of Disaster Management Centres

<sup>8.</sup> Official Statement of Brazil at the Third Session of Global Platform on Disaster Reduction, Geneva 8-13 May 2011.

at the National, Provincial and Municipal levels. The Act further stated that the President was to establish an *Intergovernmental Committee on Disaster Management* under the chairmanship of Minister in charge of disaster management, in which all the provincial ministers and members of municipal councils selected by the South African Local Government Association shall be members. The Committee is responsible for implementing the principles of co-operative government on issues relating to disaster management; and establishing a national framework for disaster management aimed at ensuring an integrated and uniform approach to disaster management in the Republic by all national, provincial and municipal organs of state.

The National Disaster Management Policy Framework (NDMF) 2005 describes the processes and mechanisms to be followed to establish co-operative mechanisms with international role-players and countries within and beyond Southern Africa.

# Holistic Framework of Disaster Management

The recent paradigm shift has changed disaster management from disaster response and rehabilitation to a holistic framework which covers the issues of prevention, mitigation, preparedness, response, relief, early recovery and long term reconstruction. This transformation has been reflected in the emerging legal and institutional framework of all countries, including federal countries. The Disaster Management Policy of India 2009 announced: 'There will be a paradigm shift, from the erstwhile relief-centric response to a proactive prevention, mitigation and preparedness-driven approach for conserving developmental gains and to minimise loss of life, livelihood and property.' Similar declarations are available almost in every piece of national legislation or framework of disaster management, but the manner in which such declarations are made and the processes that are followed for implementation of such policy statements vary considerably.

The United States of America has invested heavily on its scientific and technological institutions to develop advanced systems of early warning of disasters and high-tech assessment of risks, the creation of specific zones and microzones of hazards and vulnerabilities. Based on these assessments, land use planning and building regulations have been developed and existing life line structures and infrastructures in vulnerable zones have been retrofitted and strengthened to prevent and mitigate the risks of disasters. Incentive structures have been built around income, wealth and property taxation and insurance systems to integrate the market and encourage the private sector and individuals

<sup>9.</sup> Section 4 of the Disaster Management Act 2002 of the Republic of South Africa.

to invest in risk reduction measures. In this process the risks of disasters have been reduced to a large extent, but still there are residual risks for which comprehensive disaster preparedness plans have been developed involving the state and local governments. Learning from what went wrong in Katrina, FEMA released its *National Response Framework* in 2008 replacing the earlier National Response Plan. The framework document presents the guiding principles that enable all response partners to prepare for and provide a unified national response to disasters and emergencies – from the smallest incident to the largest catastrophe. FEMA further developed *Strategic Plans 2011-2014* based on a "whole of community" approach.

"Whole Community" is a distinct operational approach that reinforces the fact that FEMA is only one part of our nation's emergency management team; that we must leverage all of the resources of our collective team in preparing for, responding to, recovering from and mitigating against all hazards; and that collectively we must meet the needs of the entire community in each of these areas.<sup>10</sup>

In Canada the Minister of Public Safety and Emergency Preparedness announced the *Federal Policy for Emergency Management* in December 2009. The objective of the policy is to "promote an integrated and resilient whole-of-government approach to emergency management planning, which includes better prevention/mitigation of, preparedness for, response to, and recovery from emergencies". In 2010 Canada's *Emergency Management Planning Guide* was issued. The guide provides a step-by-step approach for federal institutions to undertake all-hazards risk assessments and planning activities specific to the mandate. In January 2011, Federal, Provincial and Territorial (FPT) Ministers agreed to an *Emergency Framework for Canada* which is comprised of four independent components of prevention, mitigation, preparedness, response and recovery.

Traditionally, emergency management in Canada has focused on preparedness and response. It is now recognized that addressing the modern hazardscape requires FPT governments to deal with specific risks, hazards and vulnerabilities through prevention and mitigation as well recovery measures. Greater attention or investment in prevention and mitigation can prevent disasters or significantly reduce the social, economic and

<sup>10.</sup> National Strategic Plan 2011-2014, Federal Emergency Management Agency, USA.

<sup>11.</sup> Federal Policy for Emergency Management, Ministry of Public Safety and Emergency Preparedness, Canada.

environmental costs and damages when events occur. Forward looking recovery measures allow communities not only to recover from recent disaster events, but also to build back better in order to help overcome past vulnerabilities.  $^{12}$ 

For more than ten years the emergency management system in Australia has been built on the concept of prevention, preparedness, response and recovery (PPRR). Based on the gains made through this approach, the *National Strategy for Disaster Resilience: Building our Nation's Resilience to Disasters 2009* advocated "action based resilience planning" to involve and empower the communities to take shared responsibility for coping with disasters.

In the past, standard emergency management planning emphasised the documentation of roles, responsibilities and procedures. Increasingly, these plans consider arrangements for prevention, mitigation, preparedness and recovery, as well as response. Building upon our existing emergency planning arrangements, we need to focus more on action-based resilience planning to strengthen local capacity and capability, with greater emphasis on community engagement and a better understanding of the diversity, needs, strengths and vulnerabilities within communities. Disasters do not impact everyone in the same way, and it is often our vulnerable community members who are the hardest hit.<sup>13</sup>

The Swiss Federation has developed over the years an integrated approach of disaster management that lays considerable emphasis on risk assessment, land use planning and regulation and investments in disaster mitigation and early warning involving the federal government, cantons and the municipalities. The system is being reviewed for integrating the issues of climate change adaptation with disaster risk reduction. The Swiss Agency for Development and Cooperation (SDC) also contributes to the global efforts to reduce disaster losses by systematically integrating Disaster Risk Reduction (DRR) in development co-operation and humanitarian aid projects abroad.<sup>14</sup>

The developed federal countries have been resourceful in implementing various measures for disaster prevention, mitigation and

<sup>12.</sup> An Emergency Management Framework for Canada: Ministers Responsibilities for Emergency Management, January 2011, page-4.

<sup>13.</sup> National Strategy for Disaster Resilience: Building our Nation's Resilience to Disasters 2009, page-2.

Swiss National progress report on the implementation of the Hyogo Framework for Action (2009-2011)
 http://www.preventionweb.net/english/countries/europe/che/

preparedness. However, the developing federations have been struggling hard to mobilize resources and develop capacities to implement the integrated approach they have adopted in their national policies, frameworks and strategies. The Disaster Management Act of India 2005 defined disaster management as

... continuous and integrated process of planning, organising, co-ordinating and implementing measures which are necessary or expedient for (i) prevention of danger or threat of any disaster; (ii) mitigation or reduction of risk of any disaster or its severity or consequences; (iii) capacity-building; (iv) preparedness to deal with any disaster; (v) prompt response to any threatening disaster situation or disaster; (vi) assessing the severity or magnitude of effects of any disaster; (vii) evacuation, rescue and relief; and (viii) rehabilitation and reconstruction ...

The act provided for setting up a Disaster Mitigation Fund at the national, state and district levels, but these funds are yet to be constituted by the government. The Finance Commission did not agree to allocate funds for mitigation, suggesting that these should be sourced to the five-yearly and annual development plans of the state governments and central ministries, while the Planning Commission felt that instead of any dedicated body for mitigation, funding support should be provided to mitigation projects. The only disaster mitigation project that has been taken up so far is the National Cyclone Risk Mitigation project, which is financed by the World Bank. Similar experience has been encountered by other developing federal countries like Brazil, South Africa and Pakistan where large gaps exist between the professed policies and their actual implementation.

# **Financial Arrangements**

In this context, financing disaster management assumes crucial importance not only in the developing federations of the south but also in the developed federal countries of the north. The common features of federal countries around the world irrespective of their status of development is that federal governments have generally the control over the major sources of revenue while the constituent units (states or provinces) have the major burdens of responsibilities.

Federal constitutions have made arrangements for devolution of resources to the provinces but usually such devolutions do not meet the needs of the provincial governments which look towards special grants from the centre to meet their burgeoning expenses. This gives opportunities to the federal governments to impose conditions with the grants which may result in interference in matters which are exclusive responsibilities of the states. Therefore fiscal relations between

the federal government and the states or provinces are always sensitive issues which may cause frictions and tensions in the intergovernmental relationship between the two orders of government. Such tensions are rarely visible immediately after disasters, when humanitarian considerations prevail over other considerations and federal governments come to the assistance to the states to the extent possible. These tensions also disappear when it is beyond the fiscal means of a country and it makes appeals for humanitarian assistance from the United Nations, donor countries and agencies.

But federal countries have been found to be less accommodating to the demands of the states in funding projects on disaster prevention, mitigation and preparedness and on long term reconstructions after disasters, which are generally underfunded in almost every country. The reasons may well be based on competing demands from other sectors for which the federal governments may have genuine constraints of resources or these may be due to lack of proper cost-benefit analysis of disaster mitigation projects. However, denial of federal assistance on such projects has been one of the causes of tensions in intergovernmental relations.

In the United States of America, the Federal Emergency Management Agency (FEMA) under the Department of Homeland Security administers various programs for disaster response and recovery under the *Public Assistance Grant Program*. Assistance is provided to states and tribal local bodies to enable communities to quickly respond to and recover from major disasters or emergency declared by the President. Under this program assistance is provided for debris removal; emergency protection measures; as well as repair, replacement, or restoration of disaster-damaged, publicly-owned facilities. The federal share of assistance is not less than 75 per cent of the eligible cost for emergency majors and permanent restoration. FEMA also implements many disaster-specific assistance programs like a fire management assistance grant program, a flood mitigation assistance program, a national earthquake hazards reduction program and a repetitive flood claims program.

However, despite the express provision of the Stafford Act that the federal government shall support disaster prevention, mitigation and preparedness plans of the states to the extent of fifty per cent of the costs of such projects, <sup>15</sup> the states have been complaining that the federal governments have not been coming forward with the required assistance with the result that there are huge gaps in funding many mitigation projects. The most classic example of the recent years was the reluctance of the federal government to provide a grant of

<sup>15.</sup> Section 201 (d) and section 406 of the Stafford Act.

US \$450 million to the State of Louisiana for upgrading the levees to protect the city of New Orleans. Had this grant been provided, it has been pointed out, the damage and loss of US \$150 billion due to hurricane Katrina in 2005 could have been avoided. Widespread criticism of the manner in which the emergency management before, during and after the hurricane was handled by the city Mayor of New Orleans, Governor of Louisiana and the President of the United States<sup>16</sup> led to an amendment to the Stafford Act, known as Post-Katrina Emergency Management Reform Act of 2006.

FEMA now administers the *Hazard Mitigation Grant Program* (HMGP) that provides grants to states and local governments to implement long-term hazard mitigation measures after declaration of a major disaster. The purpose of the HMGP is to reduce loss of life and property due to natural disasters and to enable mitigation measures to be implemented during immediate recovery from the disaster.

Over many years, Canada has developed an effective Disaster Financial Assistance Program (DFAA) to facilitate quick response to disasters and speedy recovery from disaster impacts. Funding arrangements have been generally adequate and there have not been any significant points of difference between the federal and provincial governments on the issue. However the critics have pointed out that "Canadian political leaders have paid little attention to disaster mitigation though some provincial governments have started to revise disaster management policies to incorporate mitigation (e.g., Ontario, Quebec). Where mitigation happens, it is generally ad hoc and piece meal and is underfunded relative to other disaster management activities". <sup>17</sup> This is probably due to the fact Canada has been relatively free from catastrophic disasters and the return period of major disasters have been so large and insurance coverage so wide that there has not been strong incentives for investments on mitigation. Further, it has been pointed out, mitigation has been marginalized due to shared responsibilities among federal, provincial and local governments. The local governments are best positioned to implement mitigation due to their close proximity to hazards and because they control many of the most effective tools to reduce vulnerability to hazards, such as land-use regulation and building-code enforcement, but local governments appear to

<sup>16.</sup> Evans, Desiree. Study on Government Response to Katrina Highlights Need for Stafford Act Reform, Institute for Southern Studies, April 8, 2006; Pamela Winston, Olivia Golden and other, Federalism after Hurricane Katrina: How Can Social Programs Respond to a Major Disaster? Assessing the New Federalism, The Urban Institute, 2006.

<sup>17.</sup> D. Etkin, Risk Transference and Related Trends: Driving Forces Towards more Mega Disasters' Environmental Hazards, 1(2), 69-75.

have weak economic incentives to invest in loss-reduction measures. The federal government has substantial resources but lacks an administrative apparatus to implement mitigation unilaterally. Ottawa's attempts to deal directly with municipalities have often been resisted by the provinces. Thus, it is the provincial governments that seem to play a pivotal role in influencing local mitigation, since they are constitutionally empowered to intervene directly or to mandate this responsibility to local governments. Yet provincial politicians seem reluctant; only a handful of provinces require mitigation as a component of local disaster management.<sup>18</sup>

The Australian federal government provides funding through the *Natural Disaster Relief and Recovery Arrangement* (NDRRA). Under this arrangement, a state or territory may claim NDRRA funding if it has spent more than \$240,000 on relief and recovery expenditure in case of a natural disaster. The amount of NDRRA funding depends on a predefined threshold derived on the state's revenue. The federal government also runs the *Natural Disaster Mitigation Programme* which is aimed at identifying and addressing natural disasters in order of risk priority across the nation. Under this scheme, the federal government contributes up to one-third of the costs of the project, other than certain specific projects like installation of flood warning systems, infrastructure upgrades, etc., where it bears half the cost. Fifty per cent of the central share is paid in advance by the Australian Government and the remaining 50 per cent is paid out in quarterly instalments on receipt of claims from the states.

In addition, the federal government has used the *Specific Purpose Payments* under article 96 of the constitution to provide grants to the states for the mitigation of disasters. The states have generally welcomed the grants but not the conditions that are usually attached with the grants. Analysts have pointed out that the application of Special Purpose Payments (SPP) to mitigation and long-term recovery activities has the potential to reduce social policy autonomy of the states. <sup>19</sup> Nevertheless the provision of these SPP for disaster mitigation and preparedness has come to continue and in fact increase with the every passing year.

The expansion of Australian Government powers under the banner of fiscal federalism, from Whitlam through to Howard, has created an intergovernmental framework that has influenced the management

Dan Henstra and Gordon McBean, Canadian Disaster Management Policy: Moving Toward a Paradigm Shift?, Canadian Public Policy – Analyse de Politiques, Vol. XXXI, No. 3, 2005.

<sup>19.</sup> Michelle Grattan, Federalism turns on financial carrots and Canberra's big stick, The Age, 5 March 2010.

arrangements of natural disasters in Australia. The shift from mere fiscal assistance in the immediacy of a natural disaster to one of greater social policy involvement highlights the ever changing relationship between the two levels of government.<sup>20</sup>

In India the Finance Commission allocates funds to the states for disaster management for a five year fiscal cycle under the Calamity Relief Fund (renamed State Disaster Response Fund). If the funds so allocated are found inadequate to meet the needs of any state additional allocations may be released by the federal government from the National Calamity Contingency Fund (renamed National Disaster Response Fund) on specific request of the concerned state government after the claims are verified by a central team and approved by a high-level committee of the federal government. However, allocations under both the funds can be spent only for the purposes of disaster response, relief and immediate rehabilitation and restoration works. These funds cannot be used for long term reconstruction or for mitigation purposes. There has been a consistent stand taken by successive Finance Commissions that funds for disaster mitigation should be provided under the plan budget of the federal government and the states. This position was reiterated by the Thirteenth Finance Commission, which had the specific mandate to recommend measures for the constitution of disaster mitigation funds at the national, state and district levels as provided by the Disaster Management Act (NDMA) of 2005.

As far as disaster mitigation is concerned, we believe that it should be a part of the plan process and that the expenditure therein should be met out of the plan resources of the respective ministries of the Union and the states. This is also advisable as there are already schemes at the central as well as state levels that are targeted towards mitigation, in areas such as drought-proofing, flood and water management, soil erosion and promotion of earthquake-resistant structures. While we realise that the current levels of funding of these schemes may not be adequate, it is our view that this aspect is best left to be decided by the Planning Commission and the NDMA.<sup>21</sup>

In South Africa the national government maintains a *Disaster and Emergency Fund*, which is used to supplement the efforts of the local

<sup>20.</sup> Anita Dawyer, Cyclone Tracy and Whitlam's 'new' federalism: Implications for the Management of Natural Disasters in Australia', The Australian Journal of Emergency Management, Vol. 21 No. 3, August 2006.

<sup>21.</sup> Report of the Thirteenth Finance Commission 2010-2015, Government of India, 2009, page 198.

and provincial governments for providing immediate relief to the victims. Activities relating to post-disaster reconstruction are funded from a national reserve established in line with budgetary requirements under the medium-term expenditure framework to provide contingency funds for a range of situations. The mitigation activities are carried out by the respective ministries from their budgeted grants.

In Brazil the disaster management activities of the state and municipal governments are funded by the National Civil Defence Secretariat out of the Civil Defence Action Programme of the federal budget. The respective states and municipalities have similar budgetary provisions to meet the expenditure on disaster management.

#### Conclusion

Disaster management requires co-ordinated response of the federal, provincial and local governments. It further requires a holistic approach which addresses the issues of pre-disaster prevention, mitigation and preparedness as much as the post-disaster response, relief and reconstruction. These necessarily involve a multitude of stakeholders outside the government including the scientific and technological organizations, academic institutions, corporate sector, media, civil society and communities. Such a co-ordinated and holistic framework can function effectively in federal countries only if all the three tiers of government work in a co-operative environment. The legal, institutional, financial and political set-up in federal countries may create tensions and frictions. Therefore, what is needed is to strengthen institutions, develop partnerships, promote networking and find innovative solutions which bind the three layers of governments in their common endeayour in the face of disaster. This common endeayour, when successful, can reduce the risks of disasters and respond quickly and efficiently to disasters as and when these occur to minimize losses of lives, assets and livelihoods. Federal countries - old and new, rich and poor - have made significant adjustments and innovations to develop such partnerships and co-operation. There is a need to learn from the experiences of each other and further strengthen the bonds of co-operative federalism.