



Forum of Federations

The Global Network on Federalism and Devolved Governance

FORUM REPORTS

Emergency Management in Federal Countries



Emergency Management in Federal Countries

**Proceedings of the
Workshop on Emergency Management
in Federal Countries**

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FOREWORD

The increasing human toll and costs associated with natural disasters has focused considerable attention on issues of emergency management in recent times. Natural disasters including the Indian Ocean Tsunami of 2004 and the ever greater damage from recurrent forest fires in countries such as Australia, together with terrorist strikes in the United States of America on 9/11 and in Mumbai in November 2008, highlight the diversity of emergencies that governments increasingly need to grapple with.

Federalism adds an additional layer of complexity to emergency management and coordination. No single government agency, big or small, can handle all aspects of an emergency response, except for the smallest, most localized, and routine of emergencies. Effective action requires coordination of state and local government, the private sector, voluntary associations, communities and individuals, and federal officials. The division of power between various levels of government can create overlapping mandates. Fragmentation can paralyse a federal system in the face of an emergency, leading to an inability to take timely and decisive measures.

It is in this context that the Forum of Federations launched a program on emergency management in federations. This focus was a natural outgrowth of the Forum's comparative study and publication on public security in federal systems. Recognizing that questions, such as what level of government is in charge in which circumstances and the impact of federalism on emergency management, warranted attention, the Forum sought to facilitate greater understanding of disaster management in federal systems.

Countries have already made progress towards effective emergency management, most notably through a shift from primary focus on disaster relief to a more holistic approach that emphasizes prevention and preparedness measures. Many national governments have passed legislation delineating the roles and responsibilities of diverse levels of government. Innovative policies abound, including those presented in this report.

Although the learning curve in emergency management can be steep, having detrimental impact on populations, the economy and governance structures, it can be significantly lessened through the sharing of knowledge. Collaboration produces mutual benefit in emerging disciplines like emergency management, as underscored by the Forum's principle *learning from each other*; countries are able to learn not only from best practices but also from the shortcomings of existing policies. By bringing together representatives from Forum partner countries Australia, Canada, India and Pakistan, and representatives from the United States of America, this workshop facilitated dialogue on national and innovative policies, regional coordination mechanisms, common concerns and the outlook for emergency management in federal systems.

Thanks are due to the participants of the workshop whom presented on emergency management practices and contributed to thought-provoking and insightful discussions. Deepest thanks are also due to the Attorney-General's Department of the Commonwealth Government of Australia for hosting this workshop, without whom none of the insight gleaned from the event would have been possible.

It is my hope that the products of this workshop be of use in emergency management, and that the Forum continue to contribute to this discipline. Better understanding of the needs of federal systems in emergency management is essential to create resilient systems that are able to plan for, respond to and mitigate the occurrence of such disasters and emergencies.

Rupak Chattopadhyay
President and CEO
Forum of Federations

INTRODUCTION TO THE REPORT

The Forum of Federations, Ottawa, Canada, in collaboration with the Attorney-General's Department of the Commonwealth Government of Australia, organised a two-day Workshop on 'Emergency Management in Federal Countries' on 20-21 February 2014. The Workshop was held in the premises of the Australian Emergency Management Institute at Mt. Macedon in the State of Victoria. The Workshop was attended by representatives from four member States of the Forum, namely Australia, Canada, India and Pakistan, in addition to the United States of America and the office bearers of the Forum. The list of the participants is included in Annex-I.

This report serves as a summary of presentations made by state representative on emergency management structures and policies of their countries, as well as serving as a summary of key themes, challenges, opportunities and emerging issues in emergency management in federal states discussed during the workshop.

The idea of holding a workshop on emergency management was mooted by Mr Roger Wilkins AO, Board Member of the Forum of Federations. In his capacity as Board Member and as Secretary of the Commonwealth of Australia Attorney-General's Department, Mr Wilkins underlined the critical importance of disaster management in federal countries and suggested that an international workshop should be convened to discuss the various aspects of disaster management in federalist countries.

The Forum is highly thankful to the Attorney-General's Department for graciously hosting the workshop. The Forum is thankful to the four member countries of the Forum and the USA who agreed to participate in the workshop.

OPENING REMARKS

The Workshop was inaugurated and presided over jointly by Mr. Chris Collett, Assistant Secretary, Crisis Coordination Branch of the Attorney-General's Department, Australian (Commonwealth) Government and Mr. Rupak Chattopadhyay, President and CEO of the Forum of Federations. Welcoming the participants, Mr. Chris Collett thanked the Forum of Federations for taking the initiative for organising the Workshop on an important aspect of federal governance on which cooperation and coordination between the federal and state governments is extremely crucial for better and holistic management of disasters. Every federated country has enormous experience in managing disasters and sharing such experiences and good practices shall be mutually beneficial to each country. In Australia, like in any large federal country, emergency management is the responsibility of the states, but the federal government plays a major role in building and promoting disaster resilience; coordinating national strategic emergency management policy; coordinating and providing operational support for emergency response to the states and territories; and providing a national emergency relief and recovery framework and resources on a cost-sharing basis with the other levels of government. The Attorney-General's Department of the Government of Australia is responsible for this national coordinating role of the federal government. The Australian Emergency Management Institute is the education and training arm of the Department which trains the key functionaries of the central, state and local government authorities, undertakes research and advises the federal and state governments on various aspects of emergency management.

Rupak Chattopadhyay gave a brief resume of the Forum of Federations. It is an international governance organisation set up by the government of Canada in 1999 as a platform to deliberate on the role and contribution of multi-level governance for building and consolidating democracy around the world. The Forum was internationalised in 2005 and at present ten major federal countries - Australia, Brazil, Canada, Ethiopia, Germany, India, Mexico, Nigeria, Pakistan, and Switzerland – are contributing members of the Forum. Over the years, the Forum has expanded the focus of its work to include not only established federal countries but also countries in post-conflict situations adopting federal forms of governance and those involved in processes of devolution and decentralization, such as Tunisia, Yemen, Nepal, Myanmar and Libya. Mr. Chattopadhyay also said that the workshop may be followed by a larger conference later this year.

COUNTRY PRESENTATIONS

After these brief introductory remarks the workshop started its deliberations on the substantive issues. The deliberations were structured in four parts – country presentations on institutional arrangements for emergency management; regional mechanisms on disaster management in federal countries; presentations of innovative practices of disaster management in respective countries; and discussion on issues of common concern and future outlook. The country presentations on institutional arrangements for emergency management were supported by detailed information papers that were circulated in advance to the participants.

Canada

Mr. Shawn Tupper, Assistant Deputy Minister, Public Safety, Government of Canada, explained that in Canada emergency management adopts an all-hazards approach to address both natural and human-induced hazards and disasters. Traditionally, emergency management in Canada has focused on preparedness and response; it is now recognized that addressing the modern hazardscape requires all levels of government to deal with risks, hazards and vulnerabilities through prevention and mitigation as well as prudent recovery measures.

Emergency management responsibilities in Canada are shared by federal, provincial, territorial and municipal governments and their partners, including individual citizens who have responsibility to be prepared for disasters and contribute to community resiliency. Provincial and Territorial (P/T) governments have responsibility for emergency management within their respective jurisdictions. Each P/T government has its own emergency management office which coordinates emergency management activities related to all four pillars (prevention and mitigation, preparedness, response and recovery) at the P/T level. Many large cities have also established their own emergency management offices.

At the federal level, Public Safety Canada's mandate is to keep Canadians safe from a range of risks, including terrorism, natural disasters and crime. In this capacity, Public Safety Canada exercises leadership amongst its federal counterparts relating to emergency management responsibilities in its exclusive fields of jurisdictions and on lands and properties under federal responsibility. Many other federal departments are accountable for specific areas that are interconnected with emergency management, including transportation, telecommunications, agriculture and agro-food, energy production and distribution, public health and essential human services, environment, human and social services, law enforcement, international coordination, government services, logistics operations management, communications, and border services. These are referred to as Emergency Support Functions, which are laid out in the Federal Emergency Response Plan.

The *Emergency Management Act* recognizes the roles that all stakeholders must play in Canada's emergency management system. It sets out the leadership role and responsibilities of the Federal Minister of Public Safety and Emergency Preparedness, including coordinating emergency management activities among government institutions and in cooperation with the P/T and other entities. Each P/T has its own legislation on emergency management.

In 2009, the Government of Canada approved the Federal Emergency Response Plan pursuant to the *Department of Public Safety and Emergency Preparedness Act* and the *Emergency Management Act*. This plan, which was updated in 2011, is designed to harmonize federal emergency response efforts with those of the P/T governments, non-governmental organizations, and the private sector. The plan has both national and regional level components, which provide a framework for effective integration of efforts, both horizontally and vertically, through the federal government. Thus, its purpose is to limit, to the greatest extent possible, any duplication or overlap in response at the federal level.

The *Government Operations Centre*, housed at Public Safety Canada, supports response coordination across the federal government in collaboration with P/T and other key players concerning emerging or occurring events of national significance. Public Safety Canada's

network of Regional Offices across Canada serves as the Department's primary link to P/T emergency management counterparts, as well as federal departments in the region to ensure whole-of-government response. An integrated federal response to events of national significance is supported through continuous monitoring and reporting. This includes provision of products to support senior officials and Ministers, risk assessments, alerting and warning products to support responder communities, contingency plans to guide the integrated whole-of-government response and logistical support.

In 2007, F/P/T Ministers Responsible for Emergency Management endorsed *An Emergency Management Framework for Canada*, which was updated in 2011. The Framework supports legal and policy frameworks, programs, activities, standards and other measures in order to enable and inspire all emergency management partners in Canada to work in better collaboration to keep Canadians safe. Using this Framework as guidance, F/P/T governments work together to develop national strategies and mechanisms which are employed to help each level of government advance their emergency management activities. Relevant policy and guidance documents, such as the *National Strategy and Action Plan for Critical Infrastructure*, and the *National Emergency Response System*, enable effective F/P/T emergency management coordination at the national level.

F/P/T Ministers Responsible for Emergency Management occupy the top tier in the F/P/T emergency management governance structure, meeting annually to discuss key policy issues, and provide guidance and approval. F/P/T Deputy Ministers Responsible for Emergency Management are the second tier of the structure, and speak two to three times per year to implement ministerial decisions by setting priorities and assigning F/P/T Senior Officials Responsible for Emergency Management (SOREM) to take responsibility for specific action items. SOREM meets more frequently (approximately every two to three months) to discuss and provide direction to subordinate Working Groups on these action items.

Historically, standing SOREM Working Groups have been organized according to the four pillars of emergency management. There are additional horizontal Working Groups, and sub-working groups, which are set up as per requirement depending on the ministerial priorities. In some case, other federal departments co-lead or participate in these F/P/T Working Groups.

The Canadian Council of Emergency Management Organizations (CCEMO), represented by senior officials of P/T governments responsible for emergency management, works to develop consensus and develop a proactive national agenda. CCEMO'S objectives are to strengthen emergency management capacity nationally; provide national leadership on emergency management issues; coordinate inter-jurisdictional emergency management initiatives ensuring that structures and processes are sustainable; and provide an efficient mechanism for information exchange between P/T and the Federal government. CCEMO is also working on the development and implementation of national certification and standards for emergency management professionals.

External stakeholders from the voluntary sectors, such as the Canadian Red Cross, St. John Ambulance, and the Canadian Association of Fire Chiefs, play an important role in emergency management in Canada, as they possess significant assets, resources, and networks that allow them to provide assistance and support to local authorities across all four pillars. Engagement with the private sector on emergency management is a new but growing

area of activity, particularly for market-based disaster-related insurance products. In June 2009, Canada announced the establishment of National Platform for Disaster Risk Reduction to build multi-stakeholder coordinated leadership in disaster risk reduction.

All these developments definitely indicate a trend that rigid constitutional arrangements between federal, provincial and municipal governments are giving way to more cooperative partnerships in which every stakeholder has a role to play in building communities resilient to disasters.

India

Dr. Vinod Agarwal, Adviser-cum-Additional Secretary, Inter State Council in the Ministry of Home Affairs of the Government of India gave a presentation on *Intergovernmental Dimensions of Disaster Management in India*. India is the largest federal country, with three tiers of constitutional governance –Union government; State governments and Union Territories; and local governments in rural and urban areas, known as Panchayats and Municipalities. The Union and State governments have their jurisdictions well defined under the Seventh Schedule of the Constitution.

Three mega disasters in quick succession – Orissa Super Cyclone 1999, Gujarat Earthquake 2001 and Indian Ocean Tsunami 2004 – triggered a paradigm shift in disaster management in India, which is institutionalised by the *Disaster Management Act 2005*. The Act has defined the roles of all three governments.

The *National Disaster Management Authority* (NDMA) with the Prime Minister of India as its chairman is responsible to lay down policies on disaster management, approve national plans, approve plans prepared by the ministers or departments of the Government of India, coordinate enforcement and implementation of the policies and plans, and take other measures to prevent disasters and prepare for capacity building for dealing with disasters or threatening disaster situations.

The *National Executive Committee* (NEC) with Union Home Secretary as its ex-officio chairman is responsible to prepare the National Plan, coordinate and monitor implementation of national policy, and guidelines laid down by NDMA, and give directions regarding the mitigation and preparedness measures to be taken by different ministries/ departments and agencies of the Government of India.

The *National Institute of Disaster Management* (NIDM) is responsible for training and capacity building; research, documentation and development of national information base on disasters; provision of assistance to state governments in the formulation of state level policies and strategies for disaster management; and development of education materials for disaster management, including academic and professional courses.

The *State Disaster Management Authority* (SDMA) with Chief Minister of the State as its chairperson has the responsibility to lay down the state disaster management policy, approve the state and district plans and provide guidelines to be followed by the departments of the state governments for the integration of measures for prevention and mitigation. The *State Executive Committee* (SEC) chaired by the Chief Secretary of the state is responsible to

implement the national and state plans and coordinate and monitor implementation of the plans and guidelines in the state.

The *District Disaster Management Authority* (DDMA) co-chaired by the District Commissioner and President of the District Council is responsible to prepare district disaster management plan; coordinate and monitor implementation of the national and state policies, plans and guidelines; and ensure that areas in the district vulnerable to disasters are identified and measures for prevention of disasters and mitigation of its effects are undertaken by the departments of the government at the district as well as by the local authorities.

The newly created disaster management institutions of India have taken several new initiatives on disaster management. The *National Policy on Disaster Management* was announced in 2009. *National Guidelines* for management of various types of natural and manmade disasters and preparation of State and District Plans were issued. More than 20 States and 300 districts have drafted their plans on the basis of these guidelines. A state-of-art early warning system for tsunamis was developed and early warning systems for cyclones and floods were improved. Ten battalions of NDRF were raised and positioned in strategic locations throughout the country. National Platform on Disaster Risk Reduction was established involving different stakeholders across sectors. NIDM established a very strong and vibrant network of training, capacity building and knowledge management. SAARC Disaster management Centre was set up in the premises of the NIDM to lead regional cooperation on disaster management.

Mr P.G. Chakrabarti presented case studies of two recent disasters– flood and landslides in the northern Himalayan State of Uttarakhand and cyclone in eastern coastal State of Odisha - which demonstrate both strengths and weaknesses of disaster management systems of the country. Unprecedented cloudbursts and rainfall in upper reaches of the Himalayan State in June 2013, without advance warning to the local administration, exposed large numbers of pilgrims trekking to the high altitude shrine of Kedarnath and the population of the surrounding and down side villages to the risks of disasters. Evacuation, search and rescue of the affected people posed serious challenges for the army, air force and NDRF personnel. Nearly 6000 thousand people lost their lives, roads, bridges and buildings constructed on hilly slopes and flood planes were severely damaged and restoration of communication and other facilities proved a stupendous task.

Conversely, category 4 tropical cyclone Phailin striking the east coast in October 2013 was predicted accurately by the meteorological agency, early warnings were disseminated to the last mile, nearly a million people living along the coasts were evacuated to safer places, cyclone shelters were activated and roads and other communication networks blocked by the storm were restored and life returned to normalcy within a couple of days, compared to nearly ten thousand casualties in a similar cyclone in 1999.

The differences in the two situations is attributed to the fact that while Odisha, having previously faced the super cyclone, was better prepared with well laid down State and District Plans, functional disaster management authorities, better early warning system and network of cyclone shelters, Uttarakhand had not drafted its plans and operating procedures. Uttarakhand allowed the disaster management authorities to remain dormant without any contingency planning and preparedness to face the disasters, and further allowed unplanned developments in the fragile ecosystem of the region to compound the crisis. The lessons

learnt in the two disasters provide opportunities for learning and sharing good practices, particularly among the States which have been lagging behind.

Pakistan

Brig. Mirza Kamran Zia, Member (Operations), National Disaster Management Authority of Pakistan gave a detailed presentation on the *Disaster Management System of Pakistan and Contingency Planning*. He explained that the paradigm shift in disaster management in Pakistan - from post disaster relief and rehabilitation as ordained in the Calamities Act of 1958 to the holistic management of disasters as prescribed in the Presidential Ordinance on Disaster Management 2006, subsequently enacted as *Disaster Management Act* of Pakistan 2010 - was triggered by the devastating earthquake of October 2005. The earthquake killed nearly 75000, affected more than 500,000 people besides damaging houses and infrastructure over a large part of Pakistan, and exposed the weakness of the existing systems of disaster response, prevention, mitigation and preparedness, necessitating systemic changes in disaster management policies and institutions.

The new institutional framework of disaster management of Pakistan has the *National Disaster Management Commission* (NDMC) as the apex policy making body headed by the Prime Minister of Pakistan. The Commission has the Chief Ministers of all the provinces and Ministers of all key departments of the Federal government as its members. The functions of the Commission include laying down policies on disaster management; approval of national plan and plans of ministries / divisions; laying down guidelines for federal / provincial governments; taking measures for prevention, mitigation and preparedness and capacity building for disasters; arranging funds for implementation of disaster management plans; and supporting other countries affected by major disasters.

The *National Disaster Management Authority* (NDMA) acts as the implementing, coordinating and monitoring body of disaster management in Pakistan. It is responsible for the preparation of the national plan to be approved by the NDMC, laying down guidelines for preparation of disaster management plans by ministries/ departments and the provincial governments, providing necessary technical assistance to the provincial governments and authorities for preparing their disaster management plans and coordinating response in the event of threatening disaster situations or disasters. The NDMA is headed by its Director General as Chairman and such number of members as appointed by the Federal government.

Disaster Management is a devolved subject in Pakistan and each province is primarily responsible for disaster management within its jurisdiction. The *Provincial Disaster Management Commission* (PDMC) is headed by the Chief Minister of the Province and has the Leader of Opposition and other members nominated by the Chief Minister as Members. The Provincial Commission performs the same functions in the province that the National Commission performs at the national level - laying down provincial policies and plan; approving plans of provincial departments; taking measures for prevention, mitigation and preparedness for disasters; arranging funds; and reviewing implementation of plans.

The *Provincial Disaster Management Authority* (PDMA) headed by a Director General appointed by the Provincial government is responsible for the preparation of provincial plans and coordination and monitoring of implementation of the plans. Below the PDMA's are the

District Disaster Management Authorities (DDMA) whose composition and functions are largely similar to that of the DDMA's in the neighbouring India.

These newly created institutions of Pakistan dealt with some of the major disasters in the recent years - cyclones Yemyin of 2007 and Phat of 2010, earthquakes Ziarat in 2008, Dalbandeen in 2010, Maskhel and Awaran in 2013, Landslides / GLOF in Attabad in 2010, Gyari in 2012; and devastating floods four years in succession from 2010. All these disasters gave tremendous opportunities for the disaster management system of Pakistan to improve and achieve many significant milestones in a relatively short period.

Pakistan conducted its macro level hazard and risk assessment across the country and initiated pilot projects for micro-zonation of hazards in critical areas. *National Hazard and Vulnerability Assessment* was taken up and *Multi-hazard Early Warning and Evacuation Systems* were established.

Pakistan formulated its comprehensive *National Disaster Management Plan 2012-22* (NDMP) which addresses the complete spectrum of disasters through policies, strategies and actions involving all stake holders. NDMP is divided in 4 Parts – the Plan, Human Resource Development, Early Warning System, and Community Based Disaster Risk Management. The Plan identifies ten disaster management priority areas, aligned with the Hyogo Framework of Action, to be implemented over next ten years at an estimated cost of USD 1041 million.

Pakistan announced its *National Disaster Risk Reduction Policy 2012* and issued *Guiding Principles and Key Objectives* on risk knowledge, prevention, mitigation and preparedness. Programmes were initiated for mainstreaming disaster risk reduction into development.

Pakistan strengthened its disaster response systems significantly. The *National Emergency Response System* was established. Mechanisms were put in place for continuous analysis and monitoring of weather, river and terrain situations and issuance of advisories and warnings to all concerned. Urban Search and Rescue Teams were raised all over the country. Logistic supports for rescue and relief were pre-positioned and strategic warehouses were developed. *National Health Emergency Preparedness Network* and *Disease Early Warning Systems* were established.

Pakistan developed a comprehensive framework for the protection of socially vulnerable groups based on gender (women in distress), age (children, elderly) and disability (physical, mental, visual) during all phases and all types of disasters.

Pakistan promoted a multi-stakeholder approach to disaster risk management by reaching out to all stakeholders - communities, civil society, academia, media and corporate sector and above all the citizens.

United States of America

Mr. Timothy Manning, Deputy Administrator for Protection and National Preparedness, Federal Emergency Management Agency (FEMA) of the US Department of Homeland Security presented on emergency management in the USA. In the United States emergency management is the joint responsibility of all four tiers of governments – federal,

state, tribal and local. The federal government has legal authorities, fiscal resources, research capabilities, technical information and services, and specialized personnel to assist local, tribal, and state governments to respond to and recover from emergencies and disasters.

FEMA is the overarching institution of the federal government for disaster management. The role of FEMA is to support citizens and first responders to ensure that the Nation works together to build, sustain, and improve capability to prepare for, protect against, respond to, recover from, and mitigate all hazards. FEMA leads and supports the Nation in a risk-based, comprehensive emergency management system of preparedness that includes prevention, protection, response, recovery, and mitigation. FEMA's role is to coordinate federal resources that support state, tribal and local efforts when a federal emergency or disaster is declared. One of FEMA's most important supporting roles is to provide disaster assistance to individuals and communities.

Each state government has legal authority for emergency response and recovery and serves as the point of contact between local and federal governments. At the state level, the Governor's Authorized Representative (GAR), State Director of Emergency Management, and State Coordinating Officer can share information with State agencies (e.g., Department of Agriculture) and FEMA regional representatives to bring the necessary response and recovery resources to bear on the incident.

The tribal governments are responsible for coordinating resources to address actual incidents. When local resources are not adequate, tribal leaders seek assistance from the State or the Federal government. For certain types of federal assistance, tribal governments can opt to work with the State; however, as sovereign entities, the Chief Executive of a federally recognized tribe could elect to work directly with the Federal government. A federally recognized tribe has the option to obtain federal assistance via the Stafford Act working through the State in which they reside or they may request directly a Presidential declaration.

The local governments have direct responsibility for the safety of their people, knowledge of the situation and accompanying resource requirements, and proximity to both events and resources. Within local government are emergency service departments that are capable of responding to emergencies 24 hours a day. These include law enforcement, fire service, emergency medical service, and public works.

In the United States, there are a number of vertical and horizontal intergovernmental cooperation mechanisms. These are:

- a) The *National Preparedness System* which outlines an organized process for everyone in the whole community to move forward with their preparedness activities and achieve the National Preparedness Goal of a secure and resilient nation with the capabilities required across the whole community for five missions - prevent, protect against, mitigate, respond to, and recover from the disasters.
- b) The *National Planning Frameworks* which are part of the National Preparedness System. These Frameworks foster a shared understanding of roles and responsibilities from the community firehouse to the White House. They help emergency managers understand how to coordinate, share information, and work

together for a more secure and resilient nation. There are five frameworks for the five preparedness mission areas.

- i. *National Prevention Framework* which provides context for how the whole community works together and how terrorism prevention is an important part of national preparedness.
 - ii. *National Protection Framework* which describes what the whole community should do to safeguard against acts of terrorism, natural disasters and other threats or hazards in a manner that allows American interests, aspirations, and way of life to thrive.
 - iii. *National Mitigation Framework* which provides context for how the whole community works together and how mitigation efforts relate to all other parts of national preparedness.
 - iv. *National Response Framework* which serves as a guide to how the Nation responds to all types of disasters and emergencies– from the smallest incident to the largest catastrophe.
 - v. *National Disaster Recovery Framework* which provides context for how the whole community works together to restore, redevelop and revitalize the health, social, economic, natural and environmental fabric of the community.
- c) The *National Incident Management System* (NIMS) provides a consistent, nationwide approach and vocabulary for multiple agencies or jurisdictions to work together to build, sustain and deliver the core capabilities needed to achieve a secure and resilient nation. NIMS identifies concepts and principles for how to manage emergencies regardless of their cause, size, location or complexity.
- d) The *Incident Command System* (ICS) which is a standardized, on-scene incident management system that applies to all threats and hazards. It allows users to adopt an integrated organizational structure to match the complexities and demands of single or multiple incidents, without being hindered by jurisdictional boundaries.

The emergency management system of the United States is based on the premise that the government does not, and cannot, work alone in protecting the lives and property of citizens and promoting their well-being. The whole-of-community-approach emphasizes that FEMA is only one part of the emergency management team and that all resources should be leveraged in preparing for, protecting against, responding to, recovering from and mitigating against all hazards. This larger collective emergency management team includes not only FEMA and its partners at the federal level, but also local, tribal, state and territorial partners, non-governmental organizations like faith-based and non-profit groups and private sector industry, as well as individuals, families and communities who continue to be the nation's most important assets as first responders during a disaster.

Australia

Ms. Samantha Chard, Assistant Secretary, Emergency Management Policy Branch of the National Security Resilience Policy Division in the Attorney-General's Department (AGD) presented the emergency management framework of Australia. In Australia, the state and territory governments have the primary responsibility within their own jurisdictions for emergency management. They control most of the functions essential for effective emergency prevention, preparedness, response and recovery. The responsibilities of the state and territory governments include:

- a) Building and promoting disaster resilience;
- b) Developing, implementing and ensuring compliance with comprehensive emergency mitigation policies and strategies in all relevant areas of government activity, including planning, infrastructure provision, and building standards compliance;
- c) Strengthening partnerships with, and encouraging and supporting local governments and communities (including remote and Indigenous communities) to undertake emergency risk assessments and mitigation measures;
- d) Ensuring provision of appropriate emergency awareness and education programs;
- e) Ensuring warning systems and evacuation and refuge arrangements are in place;
- f) Ensuring community and emergency management agencies are prepared for, and able to respond to, emergencies;
- g) Maintaining adequate levels of well-equipped and trained career and volunteer emergency response personnel;
- h) Ensuring appropriate emergency relief and recovery measures are available;
- i) Ensuring post-emergency assessment and analysis is undertaken; and
- j) Providing relief and recovery assistance (including financial assistance) to disaster affected individuals, communities and businesses (including in the form of cost sharing arrangements with the federal government).

The local governments have responsibilities, in partnership with states and territories, to contribute to the safety and well-being of their communities by participating in local emergency management. In most circumstances, the principle roles and responsibilities of local governments may include:

- a) Building and promoting disaster resilience;
- b) Undertaking cost-effective measures to mitigate the effects of emergencies on local communities, including routinely conducting emergency risk assessments;
- c) Systematically taking proper account of risk assessments in land use planning to reduce hazard risk;
- d) Representing community interests in emergency management to other spheres of government and contributing to decision-making processes;
- e) Ensuring all requisite local emergency planning and preparedness measures are undertaken;
- f) Ensuring an adequate local emergency response capability is in place, including local volunteers' resources;
- g) Undertaking public education and awareness to support community preparedness measures;
- h) Ensuring appropriate local emergency warnings are provided;

- i) Ensuring appropriate local resources and arrangements are in place to provide emergency relief and recovery services to communities; and
- j) Participating in post-emergency assessment and analysis.

As the scale of impact and complexity of an emergency increases, states and territories can request assistance from other states or territories, and/or from the Federal Government. AGD of the Federal Government has the primary responsibility for national coordination of emergency management. AGD collaborates with other federal government agencies that have a role in emergency management, such as Geoscience Australia, Bureau of Meteorology, Department of Defence and Departments of Infrastructure, Environment and Human Services. The main role and responsibilities of the federal government for emergency management in Australia are the following:

- a) Building and promoting disaster resilience, by developing and implementing national policy in collaboration with states and territories;
- b) Undertaking and supporting the conduct of natural disaster research of national significance;
- c) Providing vital public warnings and information services such as meteorological, hydrological, geophysical and other geo-data services that inform and underpin emergency management;
- d) Coordinating and providing operational support for emergency response to the states and territories where their individual resources are overwhelmed; and
- e) Providing a national emergency relief and recovery framework and resources on a cost-sharing basis with the other levels of government.

The Australian Government Crisis Coordination Centre (CCC), operated by Emergency Management Australia (EMA), AGD, is a dedicated all-hazards monitoring facility that operates 24 hours a day, seven days a week. The CCC provides whole-of-government situational awareness to inform national decision making during a crisis.

EMA coordinates the provision of federal government physical assistance to an affected jurisdiction under the Australian Government Disaster Response Plan (COMDISPLAN), including the deployment of Australian Government Liaison Officers.

Policy decisions on emergency management take place on a collaborative basis through various national forums, such as:

- a) The Council of Australian Governments (COAG), which includes the Heads of Australian governments;
- b) Council of Ministers meetings responsible for emergency management and tasked to deliver COAG objectives related to emergency management;
- c) A Senior-officials forum that supports the Ministerial Council (the Australia-New Zealand Emergency Management Committee, ANZEMC); and
- d) Permanent sub-committees at working level: Capability Development Sub-committee; Community Engagement Sub-committee; Recovery Sub-committee, and Risk Assessment, Measurement and Mitigation Sub-committee. These committees oversee a broad program of collaborative work to build capability, improve the national understanding of disaster risk, and find new ways to communicate risk to

the community, business and markets, consistent with the National Strategy for Disaster Resilience.

The federal, state and territory governments have agreed to adopt a resilience-based approach to managing disaster risks. This approach is articulated in the *National Strategy for Disaster Resilience*, which was adopted by COAG in February 2011. The Strategy outlines the role and responsibilities of all stakeholders including the family, communities, volunteers, NGOs, businesses and primary producers, land use planners, critical infrastructure owners and operators, broadcasters and other information providers.

REGIONAL COORDINATION MECHANISMS

Dr. P.G. Dhar Chakrabarti Distinguished Fellow, the Energy and Resources Institute, New Delhi and former Adviser Inter State Council Secretariat, Government of India made a presentation on *Regional Coordination Mechanism on Disaster Management in Federal Countries*. Almost all the large countries in the world have constitutional system of governance which is federal in nature. Discourses on federalism have focused traditionally on the relationship between the federal and provincial governments; in the recent years the role of local government in federal countries has been deliberated in the context of constitutional mandates in many countries to devolve powers and resources to local governments.

However, one of the largely explored areas of federalism is regional coordination and cooperation within federal countries, which are substantial, particularly in the areas of emergency and disaster management. Many provinces of the federal countries are large in geographical area and population. The average size of a province in Australia, for example, is larger than ninety percent of countries of the world. Population of the largest State of India is larger than the fifth largest country of the world. Many natural and manmade disasters are regional in nature and therefore the regional coordination and cooperation among the States in different regions in federal countries is extremely useful for every aspect of disaster risk management, particularly risk assessment, early warning and risk mitigation. Disasters occurring in one State may affect more than one State, directly by loss of life or property of its people residing or travelling in the affected State, or indirectly through cascading effects on economy and supply chain for products and services. Therefore States have an important stake for coordination with other States, particularly neighbouring States, not only for humanitarian reasons but also for more practical reasons related to minimising its impact.

Such coordination and cooperation takes place in every federal country through various bi-lateral, multi-lateral or regional arrangements - executive, contractual or legal. In Australia, the Council of Australian Governments (COAG), which comprises the state and territory governments, established a ministerial council – the Law, Crime and Community Safety Council (LCCSC) – to assist COAG by developing a national focus on fighting crime and promoting best practice in law, criminal justice and community safety. One of the LCCSC's key priorities is to build the resilience of Australian communities to deal with disasters. The Australia-New Zealand Emergency Management Committee (ANZEMC) is Australia's peak national policy forum and the senior officials group supporting LCCSC on emergency management matters.

In Canada, the *Council of the Federation* (COF) addresses various federal-provincial issues such as fiscal imbalance, negotiating international agreements by provinces, and other issues

of common concern. The Council promotes multilateral exchanges between provinces, territories and five main Aboriginal national organizations. Regional meetings of the Council are also organised to address issues of regional importance, such as the Council of Atlantic Premiers; Western Premiers' Conference etc.

In the USA, the Emergency Management Assistance Compact (EMAC) is the nation's state to state mutual aid system. It has been ratified by Congress and is law in all 50 states, the District of Columbia, Puerto Rico, Guam, and the U.S. Virgin Islands. EMAC offers assistance during governor-declared states of emergency through a responsive, straightforward system that allows states to send personnel, equipment, and commodities to help disaster relief efforts in other states.

In India, the *Inter State Council* constituted under Article 263 of the Constitution provides the institutional mechanism for cooperation and coordination among the States. The Council in its ninth meeting held on 28.6.2005 developed national consensus on *Disaster Management - Preparedness of States to Cope with Disaster*, which was the precursor to the Disaster Management Act enacted in December 2005. The National Policy on Disaster Management of India 2009 has mandated NDMA to promote mechanisms on the lines of Mutual Aid Agreement for coordinated strategies by the States, Central departments and other concerned agencies. Inter State Council and Zonal Council Secretariats are discussing with NDMA how best such regional mechanisms can be set up in various territorial zones of the country for effective regional response to disasters.

In Pakistan, *Inter Provincial Coordination Committee* (IPCC) was set up in 1993 for general coordination between the Federal Government and Provinces and among the Provinces on economic, social and administrative fields.

Collaboration and coordination among provincial governments of the region or even beyond have been ongoing in an informal and ad hoc basis in every federal country. There is need to institutionalize such coordination and cooperation among the regional States in large federal countries for better response and preparedness for disasters that affect more than one state of the region.

INNOVATIVE PRACTICES

Each participating country presented one recent innovation and best practice, which was followed by discussion.

Public Alert System, Canada

Mr. Duane McKay Commissioner Ministry of Government Relations, Government of Saskatchewan, Canada, made a presentation on National Public Alerting System (NPAS) in Canada as an innovative and cost effective public-private partnership initiative for issuing accurate and authoritative warning to as many Canadians as possible, and as quickly as possible, in the event of a threat to their life and safety.

The partnership works through a multi-jurisdictional and multi-sectoral approach involving several stakeholders, namely (a) Federal/ Provincial/ Territorial / Municipal alerting

authorities; (b) Private sector owner/operator of national public alert collection/ dissemination system; and (c) Public and private sector TV and Radio broadcasters and other distributors.

NPAS has three main components – (a) generation or originator of alert; (b) collection, authentication and dissemination of alert; and (c) distribution of alerts. The alerts are generated by the concerned agencies of the Federal/ Provincial/ Territorial/ Municipal agencies as per the Common Alerting Protocol (CAP) format. The alerts are collected, authenticated and disseminated by the National Alert Aggregation and Dissemination System (NAADS). Pelmorex Media Inc, a private company which operates the broadcasting licence for the Weather Channel and MétéoMédia is fully involved with the NAADS. Alerts issued by the NAADS are disseminated through the Pelmorex channels, Twitter, RSS feeds and subscription e-mail. These are also kept at the Alert Repository for voluntary distribution through radio, television, cable and satellite distributors, wireless phones and internet service providers. Distributors check the repository for alerts and if there is an alert for their area they pull the content and present it over the applicable media.

The NPAS model of public-private partnership has provided an efficient and cost-effective solution for the generation and dissemination of public alerts in Canada through all possible networks with no costs for issuing and distributing alerts, while retaining complete Government control over the generation and issue of alerts and oversight over key operational policies on distribution.

The weakness of the system is that dissemination of alerts through private radio, television and other networks is still voluntary. In a recent communiqué issued following the meeting of F/P/T Ministers Responsible for Emergency Management the Ministers agreed to request the Canadian Radio-television and Telecommunications Commission to take steps to ensure that Canadian commercial broadcasters, cable and satellite companies broadcast emergency alerts compulsorily.

Disaster Response Force, India

Dr. P.G. Dhar Chakrabarti, former Secretary of National Disaster Management Authority of India, presented the case study on National Disaster Response Force (NDRF) as an innovative mechanism of emergency response in India. The need for a specialised response force to conduct evacuation, search, and rescue operations in the event of disasters was strongly felt in India during successive disasters. The civil defence and fire services were not found adequate for such specialized response and armed forces were not always available for response and further they were not always trained and equipped for civilian search and rescue operations. A specialized National Disaster Response Force (NDRF) was created under the provisions of the Disaster Management Act 2005 to provide specialist response to threatening disaster or disaster situations. The general superintendence and direction of the Force is vested and exercised by the NDMA, while the command and control of the Force rests on its Director General.

NDRF has strength of 10 Battalions, contributed 2 each by 5 Central Para-Military Forces of India, namely, Border Security Force (BSF) Central Reserve Police Force (CRPF), Central Industrial Police Force (CISF), Indo Tibetan Border Police (ITBP) and Sashatra Seema Bal (SSB). Each Battalion has 1144 personnel comprising of 18 specialist teams of 45 members each.

Each battalion is fully equipped with state-of-art equipment for detection, access, extrication, decontamination, emergency lighting and power, radio and communications, fire fighting, diving, mountaineering, boats, medical first response, dewatering, desalination, personnel protective gears, prefabricated shelters etc. NDRF personnel are given basic and advanced training on collapsed structure search and rescue, rope rescue, flood and marine search and rescue, nuclear, biological and chemical emergencies, medical first responders and dignified disposal of dead bodies.

NDRF Battalions are located strategically in different parts of the country - specialised NBC Battalions around four mega cities, Mountain Battalions in the north and Marine Battalions near the coasts. Operational deployment of NDRF takes place on the requests of the State Governments by the orders of NDMA in consultation with Ministry of Home Affairs. NDRF Teams are placed at the disposal of the State Governments, but internal deployment at specific disaster locations takes place on the advice of District Magistrate who has overall responsibility of disaster management in the district.

During the past 6 years NDRF has responded to 73 different types of disasters in India and 5 abroad, saved 133,192 lives and retrieved 1276 dead bodies. During non-operational times NDRF battalions are engaged in training community volunteers, including school and college students. NDRF has so far trained 855,681 Community Volunteers on first response throughout the country.

NDRF is the only dedicated disaster response force of the world, with multi-disciplinary, multi-skilled, high-tech, standalone capabilities for undertaking disaster response, capacity building and disaster preparedness activities in every situation of natural and man-made disasters.

Cash Transfer Programme, Pakistan

Brig. Mirza Kamran Zia, Member (Operations) National Disaster Management Authority of Pakistan presented the innovative Cash Transfer Programme (CTP) for disbursement of ex-gratia relief to people affected by emergency situations. Following the earthquake of 2005 cash assistance was provided to 250,000 affected families for a period of six months, but the traditional method of targeting, verification and disbursement could not ensure the required speed and transparency in the delivery of the programme, leaving many people dissatisfied.

Therefore innovative procedure was introduced for disbursing cash assistance to 1.5 million people affected by militancy in Swat and Milikand in 2009. Customized ATM cards were issued to 230,000 beneficiary families, which expedited the process besides bringing in much needed transparency in the system. This further helped to overcome social and cultural barriers to accept cash handouts as well as introducing large populations to the banking system.

The floods of 2010 which affected over 20 million people provided an opportunity to improve the cash transfer system for disbursing initial relief assistance and subsequent housing reconstruction assistance to the affected households. The National Database Registration Authority (NADRA) of Pakistan, in collaboration with the Provincial

governments, registered the affected families with on-site biometric verification and transferred the records to partner banks which created Virtual Accounts and issued ATM Cards for disbursement of cash. Seven step processes were followed for the issuance of the cards to take care of all eventualities including the special requirements of missing persons, female headed households, minorities and vulnerable populations who could not be registered in the normal process. Point of Sale (POS) machines/ terminals were also established to widen the disbursement network. Payments could be received from any place that accepted Visa. The average time for issuing an ATM card to a beneficiary was only 13 minutes.

The speed, cost effectiveness and transparency of the system provided good satisfaction to the beneficiaries. The success of the programme was possible due to strong political support, innovative application of technology, comprehensive electronic database of population, and partnership with a number of agencies involving national, provincial and local governments, NADRA and the banking agencies. Good public grievance redressal mechanisms and a public information campaign further contributed to the success of the programme.

The success of the programme encouraged the institutionalization of the system through the development of guidelines and procedures, capacity building and adoption of the system in the *Future Disaster Response Action Plan* (FDRAP) of Pakistan. This also opens up the possibility of transferring cash benefits under various social protection programmes of Pakistan.

National Preparedness System, USA

Mr. Timothy Manning, Deputy Administrator for Protection and National Preparedness, Federal Emergency Management Agency (FEMA) of the US Department of Homeland Security presented on the National Preparedness System of the United States of America. The National Preparedness System outlines an organized process for everyone in the whole community to move forward with their preparedness activities and achieve the National Preparedness Goal. The National Preparedness Goal is: “A secure and resilient nation with the capabilities required across the whole community to prevent, protect against, mitigate, respond to, and recover from the threats and hazards that pose the greatest risk.”

NPS is based on a whole of hazard (natural, manmade, accidental, and terrorism related), whole of government (federal, state, tribal and local government) and whole of community (individuals and families, businesses, community and faith-based groups, non-profit organizations) approach.

The National Preparedness System has six parts:

- a) Identifying and Assessing Risk. This first step involves collecting historical and recent data on existing, potential and perceived threats and hazards. The results of these risk assessments form the basis for the remaining steps.
- b) Estimating Capability Requirements. Next, determining the capabilities and activities to best address those risks. Some capabilities may already exist and some may need to be built or improved. The National Preparedness Goal provides a list of core capabilities related to protection, prevention, mitigation, response and recovery, the five mission areas of preparedness.

- c) Building and Sustaining Capabilities. This part involves figuring out the best way to use limited resources to build capabilities. The risk assessment can be used to prioritize resources to address the highest probability or highest consequence threats.
- d) Planning to Deliver Capabilities. Because preparedness efforts involve and affect the whole community, it's important to coordinate plans with other organizations. This includes all parts of the whole community: individuals, businesses, nonprofits, community and faith-based groups, and all levels of government.
- e) Validating Capabilities. This part is intended to determine if the activities are working as intended. Participating in exercises, simulations or other activities helps identify gaps in plans and capabilities. It also helps identify progress toward meeting preparedness goals.
- f) Reviewing and Updating. It is important to regularly review and update all capabilities, resources and plans. Risks and resources evolve—and so should preparedness efforts.

The unique feature of NPS is that it provides an integrated framework of disaster risk management and does not compartmentalize disciplines, sectors, groups or hierarchies. In this framework every individual, group or organization has a role to play, irrespective of its position, location, interests and specialization. This promotes integration of knowledge, coordination in action, and participation of all, and serves as a model framework which prevents fragmentation in approach, strategies, policies and action.

Nationally Consistent Risk Assessments, Australia

As noted previously, Australia has adopted a whole-of-nation resilience-based approach to disaster management, which recognises that a national, coordinated and cooperative effort is needed to enhance Australia's capacity to withstand and recover from emergencies and disasters. This approach is reflected in the *National Strategy for Disaster Resilience (NSDR)*.

The NSDR is the first step in a long-term, evolving process to deliver the sustained behavioural change and enduring partnerships that are essential to building disaster resilient communities.

Federal, state, territory and local governments are using the NSDR to inform approaches to building disaster resilience at all levels. It focuses on seven key areas for action:

1. Leading change and coordinating effort
2. Understanding risk
3. Communicating with and educating people about risks
4. Partnering with those who effect change
5. Empowering individuals and communities to exercise choice and take responsibility
6. Reducing risks in the built environment
7. Supporting capabilities for disaster resilience

There is a broad program of collaborative work that is being delivered by the Federal, state and territory and local governments in support of the NSDR, including the development of the National Emergency Risk Assessment Guidelines (NERAG) and the publication of state-wide risk assessments.

All states and territories have made, or will shortly make, their existing emergency risk assessments public. Governments are also in the process of revising the NERAG, which provide a nationally-consistent methodology for assessing risk, with the intention of using it to develop future risk assessments.

While in a federation there are strong arguments for flexibility in how risk assessments are undertaken to meet local needs, there are significant benefits to adopting a consistent national emergency risk assessment methodology. A consistent methodology:

- Helps promote best practice;
- Gives governments and industry a comparable view of risk from a national perspective, which is important when assessing competing mitigation strategies; and
- Means that border communities can be confident that risk is assessed in the same way in their community, even where governments are different.

One Australian state, South Australia, has championed the NERAG and used it to undertake a detailed state-wide risk assessment and a number of regional assessments across the state. These assessments inform their state government resource and capability planning and their approach to communicating risk and preparation measures to the public. South Australia also provides full technical versions of their assessments to industry and critical infrastructure owners to inform their risk planning. South Australia has found that the process has been effective in engaging good cross sections of local communities and building networks among public and private sector risk managers, promoting the concept of shared responsibility for disaster risks.

Mr. Mark Duckworth, Executive Director, Citizenship and Resilience, Department of Premier and Cabinet, the State Government of Victoria presented the emergency management system in Victoria, which is undergoing major reform to create a more disaster resilient and safer Victoria. The Victorian Government has issued a *White Paper on Victorian Emergency Management Reform* which provides a 'road map' for emergency management reform over the next ten years that will result in more resilient and safer communities. This is a long-term commitment that will require sustained effort as well as cultural and behavioural change from the government, emergency service agencies and the Victorian community.

ISSUES OF COMMON CONCERN

The fourth part of the workshop was an interactive session on some issues of common concern. It was noted that despite difference of size, population, hazards, risks and vulnerabilities, and levels of development, the five federal countries present in the workshop have remarkable similarities in their approach. All the countries follow a multi-hazard, multi-stakeholder, and multi-level governance approach for disaster risk management.

Chairman pointed out that while the country presentations were quite comprehensive, a few aspects of emergency management required more discussion to have adequate understanding

of the systems and processes followed in the respective countries. These are (a) financing disaster management; (b) consistency in federal and provincial approaches to disaster management; (c) role of armed forces in disaster management; and (d) key challenges.

Financing disaster management

In Canada, Municipal and P/T governments are responsible for setting aside funding in their annual budgets for emergencies and emergency services. However, when their resources are insufficient to respond, Public Safety Canada provides financial assistance through the *Disaster Financial Assistance Arrangements* (DFAA). The funding formula for the DFAA is linked to the P/T population - \$1 per Capita- and was established in 1970 as the entry threshold for cost-sharing. As the impact and cost of DFAA-eligible disaster increases, the Government assumes a larger proportion of the costs, based on an escalating scale, on the premise that the greater the costs, the more significant are the burden on P/T economies.

Besides, several other federal departments have their own assistance programs that are unique to their mandates, such as for agriculture-related disasters or for emergencies affecting First Nations.

To ensure a sustainable funding regime, F/P/T Ministers responsible for emergency management endorsed the *National Disaster Mitigation Strategy* in 2008, which sets out a comprehensive, multi-dimensional approach that anticipates joint contributions, community-based partnerships, and national-level initiatives. Officials are currently developing a National Disaster Mitigation Program that would see a shift in the way that mitigative enhancements are funded.

In India, the Finance Commission, set up under the provisions of the Constitution, allocates fund to the States under *State Disaster Response Fund* (SDRF) for the entire fiscal cycle of five years, which is shared on a 50:50 basis (90:10 for Special Category States) by the Central and State governments. If the funds are not adequate to meet the expenses of response and early recovery, the State governments submit memorandums to the Central government seeking additional central assistance. A High Level Committee in the Central government recommends allocation of additional funds on the basis of the report of a Central Team that visits the affected States. Such allocations are made from the *National Disaster Response Fund* (NDRF).

Besides various Ministries/ Departments of Government of India assists the State Governments for implementation of various disaster mitigation programmes, such as Drought Prone Area Programme, Flood Protection Programme, etc. NDMA also implements some disaster mitigation programmes, such as National Cyclone Risk Mitigation Programme, School Safety Programme, etc. which provide for central funding for implementation in the States.

Disaster Management Act of Pakistan provides for creation of a *National Fund for Disaster Management* (NFDm) which would be financed from grants made by the Federal Government, loans, aid and donations from national or international agencies, and donations from any other source. The *Provincial Disaster Management Fund* (PDMF) similarly consists of grants from Federal and Provincial Government, loans, aid and donations from national or international agencies. Recently the National Disaster Management Commission,

under the chairmanship of Prime Minister of Pakistan, has taken a decision that 2% of the budgetary allocation of every department of Federal Government can be earmarked for disaster management. This is expected to mobilize the required resources for financing disaster management in the country.

In USA, FEMA administers several programmes for funding the state, local and tribal governments. These are:

- a) Disaster aid to individuals, for example disaster housing, disaster grants, low-interest disaster loans, crisis counselling, disaster-related unemployment assistance, legal aid and assistance with income tax, social security and veteran's benefits.
- b) Public Assistance aid to state, tribal, or local governments to pay part of the costs of rebuilding a community's damaged infrastructure. Public Assistance may include debris removal, emergency protective measures and public services, repair of damaged public property, loans needed by communities for essential government functions and grants for public schools. Generally, public assistance programs pay for 75% of approved project costs.
- c) Hazard Mitigation Grants Programme makes available FEMA funds for hazard mitigation measures, such as elevation or relocation of chronically flood-damaged homes away from flood hazard areas, retro fitting buildings to make them resistant to earthquakes or strong winds, and adoption and enforcement of adequate codes and standards by local, state and federal government.
- d) National Flood Insurance Program (NFIP) is a federal program created by Congress to mitigate future flood losses nationwide through sound, community-enforced building and zoning ordinances and to provide access to affordable, federally backed flood insurance protection for property owners. Participation in the NFIP is based on an agreement between local communities and the Federal Government that if a community will adopt and enforce a flood plain management ordinance to reduce future flood risks to new construction in Special Flood Hazard Areas (SFHAs), the Federal Government will make flood insurance available within the community as a financial protection against flood losses.
- e) Grants are awarded to fire departments to enhance their ability to protect the public and fire service personnel from fire and related hazards.
- f) FEMA provides state, tribal, and local governments with preparedness program funding to enhance their capacity to prevent and respond to chemical, biological, radiological and nuclear emergencies, and cyber-attacks.

In Australia, the Federal Government provides financial support directly to eligible individuals that have been severely affected by a major disaster through the *Australian Government Disaster Recovery Payment* and the *Disaster Recovery Allowance*.

The Federal Government provides assistance to the states and territories for disaster clean-up and recovery activities, through the *Natural Disaster Recovery and Relief Arrangements* (NDRRA) – a cost sharing arrangement whereby the state and territory governments decide

the type and level of necessary assistance within certain guidelines. In addition, the Federal Government funds state and territory projects designed to enhance Australia's resilience to natural disaster through the *Natural Disaster Resilience Program*.

The Federal Government recently announced a Productivity Commission inquiry into natural disaster funding arrangements. The proposed inquiry will respond to the fact that most existing disaster funding in Australia is weighted towards response and recovery, with a focus on immediate humanitarian and economic relief and restoration of infrastructure to its previous standard, instead of longer-term resilience. The Productivity Commission will analyse the full scope of current Commonwealth and state expenditure on natural disaster mitigation and recovery, and look at options for achieving a more sustainable funding model with a better balance between recovery and mitigation funding.

Consistency in approaches

Chairman flagged the issue of consistency in approaches and policies on emergency management in federal countries where the state governments have the primary responsibilities of disaster management. It was noted that in most of the federal countries, the provincial governments have had their own laws and policies on disaster management, which are framed taking into account the specific hazard, vulnerability and risk scenarios of the provinces. Most of these laws and policies predate the federal laws and frameworks, which are comparatively of recent origin. The provincial and local governments have well established machineries and years of experience in emergency management. The federal laws are built on these mechanisms and practices, address the gaps in the existing systems and provide holistic frameworks with a multi-hazard, multi-stakeholder and multi-level governance approach that does not violate the autonomy of the provinces, but reinforces it with strategies, plans and resources that enhance the capacity of the provincial and local authorities for effective management of emergency situations.

Provinces generally welcome federal logistic and financial support for emergency management as also for risk assessment, risk mitigation and recovery, even though there have been instances when provinces have delayed or even been reluctant in seeking federal assistance for political or other reasons. More common are the situations when the provinces find that federal assistances and interventions have not been quick or adequate enough to deal with the situations. Therefore the efforts in all the federal countries have been to devise systems, processes and protocols that ensures that federal assistances are available as per the standard framework.

Another remarkable feature in all the federal countries is that national consensus has developed on federal legislations, policies and frameworks on disaster management largely on the realisation that disasters may overwhelm capacities of provincial and local governments and that federal resources are absolutely necessary for reducing the risks of disasters and for effective response and recovery.

The experiences of most of the federal countries have been that there are general acknowledgements of the gaps in the capacities of the provincial and local governments, which federal assistance may help to bridge to some extent. Therefore coordination and cooperation among the three tiers of governance is an absolute necessity which ensures that there is consistency in approach in emergency management in federal countries.

Role of armed forces

Chairman introduced the subject of civil-military relations during emergency situations in federal countries. It was noted that armed forces of the federal government – army, air force, navy and other special forces – are called upon to deal with complex emergency situations which overwhelm the capacity of the civilian authorities of both provincial and federal governments. Every federal country considers that armed forces are national assets which must be used when necessary, but armed forces should be used as sparsely as possible.

The dependence of the armed forces for emergency situations can be reduced by augmenting the capacity of the civil defence, fire services and other civilian agencies. India has set up its specialised disaster response force to deal with emergency situations, but this has not obviated the need of the armed forces as was demonstrated in extensive engagements of the army and air force for search, rescue and evacuation operations during catastrophic flooding and landslides in Uttarakhand. In Pakistan, armed forces were heavily engaged following the earthquake of 2005 and flood of 2010. Foreign military forces took part in evacuation and relief operations after the earthquake. In USA, the U.S. Army Corps of Engineers was deployed for repair and reconstruction of the levees that were damaged by Hurricane Katrina.

Deployment of the defence forces in federal countries during emergency situations takes place on the express request or in consultation with provincial governments. In some countries, like in the USA and Australia, such deployment takes place only with the approval of the highest authority of the government, but in countries like India, local commanders have been delegated with the authorities to exercise their judgement if the situation so demanded to save lives and property, in anticipation of formal approval of the government.

When defence forces are deployed for emergency response these are generally placed at the disposal of the provincial governments for deciding the specific areas where they will be sent or the specific tasks they will be assigned, but once this is decided the armed forces have operational autonomy to perform their tasks.

The common tasks for which defence forces are deployed are to search for and rescue victims particularly in difficult areas that are not easily accessible to the civilian authorities, provide emergency medical assistance and restore essential communications, for which the army is better equipped. Armed forces are withdrawn soon after they have accomplished their tasks.

Key Challenges

Given the size, geographic diversity and distributed governance, disaster management is always a challenging task in federal countries. Each federal country has developed significant legal, institutional and policy framework; still there are formidable challenges.

In Canada, one of the greatest challenges is that the risks vary from coast to coast. The variance in seasons also impacts on the type and frequency of threats and risks that are faced. For instance, British Columbia in the west is concerned with earthquakes, central Manitoba is concerned with flooding, the Maritime Provinces are susceptible to hurricanes, and the Northern territories focus on the ability to respond to emergencies in remote communities.

The development of policies and programs has to take into consideration the collective and individual needs, and strike the right balance.

With the frequency of natural disasters increasing, there are also concerns about the mounting impacts and costs associated with response and recovery. This is a significant driver for the growing importance of shifting focus to prevention, mitigation and prudent recovery.

To better address these challenges, the federal, provincial and territorial governments in Canada, individually and collectively, are engaged in developing more robust body of knowledge to better inform decisions for comprehensive disaster management and training more people in emergency management for building the resilience needed of the communities.

In India, the greatest challenge is to implement the laws, policies, guidelines and standards that have been developed over the past decade. There are serious challenges of risk governance at all levels, particularly at the municipal and local level, which is seriously handicapped to enforce building codes, zoning regulations, and other standards for reducing the risks of disasters, due to a complex web of factors that do not show signs of being addressed.

Disaster management in India is getting compartmentalised within the newly created institutions and therefore one of the important challenges is to mainstream disaster risk reduction across different sectors of development. This has been identified as one of the priority areas of action in the national policies and guidelines issued by the NDMA, but there has not been much progress in this regard.

Another challenge is to develop capacities at all levels, particularly at the community level in rural and urban areas where various social and economic factors make people, particularly poor people, extremely vulnerable to disasters. Education, awareness and training and community based disaster preparedness can make a difference in the situation.

India is experiencing rapid urbanisation which is making the cities, particularly the metropolitan cities in different hazard zones, extremely vulnerable to disasters like floods, cyclones and earthquakes. Making the cities resilient to the risks of disasters and climate change is one of the key challenges of India.

Pakistan has learnt many lessons from the successive disasters during the past decade and developed significant institutions and frameworks on disaster management, yet there are formidable challenges. Some of the important challenges flagged in the country presentation are the following:

- a) Climate change and its possible impacts on the frequency and intensity of various hydro-meteorological disasters;
- b) Collection, compilation and analysis of data on hazards, vulnerabilities and risks of disasters for planning and response;
- c) Assessing risks of disasters at macro level;
- d) Developing capacities of newly created institutions for disaster risk management;
- e) Availability and allocation of resources for disaster risk reduction and preparedness;
- f) Retrofitting critical infrastructure for making these resilient to disasters;

- g) Enforcement of laws, regulations and codes on flood management, building regulations, fire safety etc.;
- h) Sensitizing media about the risks of disasters; and
- i) Developing capacity for management of major industrial disasters, urban disasters and large scale pandemic / epidemic.

In USA the *National Preparedness Report 2013* identifies two important challenges of disaster management: (a) enhancing the resilience of infrastructure systems and (b) maturing the role of public-private partnerships. Hurricane Sandy demonstrated that stressed infrastructure systems - water and waste water treatment, surface transportation, airports, inland waterways, marine ports, electricity, communications and fuel systems - present obstacles to effective response and recovery operations. Response and recovery operations were affected due to significant degradation of power and transportation infrastructures. 73 percent of States and Territories rated infrastructure systems as one of the high priorities requiring action for improvement.

The *National Infrastructure Protection Plan* (NIPP) outlined a public-private partnership model to establish strong collaborative relationships between critical infrastructure owners and operators across infrastructure sectors and relevant federal agencies. The National Business Emergency Operations Center was established as a virtual clearinghouse for information sharing between businesses and FEMA. In addition, through the National Infrastructure Coordination Center, the Department of Homeland Security (DHS) Office of Infrastructure Protection enhances situational awareness and coordinates with owners and operators of critical infrastructure during response operations. However, recent assessment of preparedness-related public-private partnerships revealed significant challenges in long-term resourcing and sustainability of partnerships across all mission areas.

The Australian *National Strategy for Disaster Resilience* (NSDR) has identified the key factors that are increasing the risks of disasters. These include the increasing impact of natural disasters and increasing vulnerabilities due to an ageing population, population shifts towards higher risk areas, and sustained economic growth. The increasing complexity and interdependencies of social, technical, and infrastructure systems are also playing a role in increasing vulnerabilities to disasters. Pressures for urban development to extend into areas which are typically more prone to frequent and severe weather events are compounding the problem, as are the increasingly urban expectations of the people living in these areas and the strong culture of deniability – i.e. that ‘it won’t happen to me’. The NSDR intends to address these challenges by empowering the community to share responsibility for coping with disasters.

FUTURE OUTLOOK

Distributed governance in federal countries in three or more tiers poses challenges for rapid and unified response to disasters and other emergency situations, but every federal country has developed significant legal and institutional framework for holistic management of disasters to meet these challenges. Sometimes political, financial and other institutional factors have constrained timely and effective coordination between federal, provincial and local governments, but countries have been quick to learn lessons and develop systems, frameworks and processes to overcome these constraints.

Primary responsibilities of disaster management in federal countries rests with the provincial governments, but federal governments play an important role in coordination and developing a common protocol for risk assessments, early warning, building codes, damage assessments, minimum standards of relief, recovery and reconstruction and providing technical, financial and logistic resources to the provincial governments when disasters overwhelm their capacities.

Despite the autonomy of the provinces in dealing with emergency situations, every federal country has developed remarkable national consensus and frameworks for disaster management, preparedness and resilience which are applicable to the whole of the country. Federal structures of governance provide complete freedom to the provinces to mobilise all its resources and capacities for managing emergency situations. Relative insulation of the federal government from day to day management of disasters gives it the advantage of strategic thinking, planning, oversight and monitoring to supplement the efforts of the provinces. In this way the federal and provincial governments complement and supplement each other.

RECOMMENDATION

The workshop concluded with the recommendation that the initiatives, innovations and good practices of the federal countries for coordination and cooperation among all the tiers of governance for emergency management and building disaster resilient communities should be documented and shared for mutual benefit. This workshop attended by five large federal countries highlighted the need for organising a larger international conference in which other federal countries may be involved.

Rupak Chattopadhyay, President of the Forum of Federations informed that the National Disaster Management Authority of India has indicated its willingness to host this international conference later this year to mark the tenth raising day of NDMA. It was suggested that the federal experiences of disaster management may also be shared in a special session or side event at the World Conference on Disaster Reduction in March next year.

The workshop ended with a vote of thanks to the chairs and the participants.

**PROCEEDINGS OF THE
WORKSHOP ON EMERGENCY MANAGEMENT IN FEDERAL COUNTRIES**

Mt. Macedon, Victoria, 20-21 February 2014

List of Participants

Name		Title	Organisation
FORUM OF FEDERATIONS			
1.	Rupak Chattopadhyay	President and CEO	Forum of Federations Ottawa, Canada
2.	Phillip Gonzalez	Program Manager	Forum of Federations Ottawa, Canada
AUSTRALIA			
3.	Mr. Chris Collett	Assistant Secretary Crisis Coordination Branch Emergency Management Australia	Attorney-General's Department Australian Government
4.	Ms. Raelene Thompson	Assistant Secretary National Security Training Education & Development Branch Emergency Management Australia	Attorney-General's Department Australian Government
5.	Ms. Samantha Chard	Assistant Secretary Emergency Management Policy Branch	Attorney-General's Department Australian Government
6.	Mr. Mark Duckworth	Executive Director Citizenship and Resilience	Department of Premier and Cabinet State Government of Victoria
7.	Ms. Prue Walker	Assistant Director International Engagement Crisis Coordination Branch Emergency Management Australia	Attorney-General's Department Australian Government
8.	Mr. Daniel Gleeson	Director Crisis Communication Crisis Coordination Branch Emergency Management Australia	Attorney-General's Department Australian Government

CANADA

- | | | | |
|-----|------------------|---|---|
| 9. | Mr. Shawn Tupper | Assistant Deputy Minister
Emergency Management and
Programme Branch | Public Safety Canada |
| 10. | Mr. Duane McKay | Commissioner | Ministry of Government
Relations
Government of Saskatchewan
Canada |

INDIA

- | | | | |
|-----|------------------------|----------------------------------|--|
| 9. | Dr.P.G.DharChakrabarti | Distinguished Fellow | The Energy and Resources
Institute (TERI)
New Delhi |
| 10. | Dr. Vinod Agarwal | Additional Secretary and Adviser | Inter State Council Secretariat
Ministry of Home Affairs
Government of India |

PAKISTAN

- | | | | |
|-----|-----------------------|---------------------|---|
| 11. | Brig Mirza Kamran Zia | Member (Operations) | National Disaster Management
Authority
Pakistan |
|-----|-----------------------|---------------------|---|

UNITED STATES OF AMERICA

- | | | | |
|-----|----------------------|---|---|
| 12. | Mr. Timothy Manning | Deputy Administrator for
Protection and National
Preparedness | Federal Emergency
Management Agency,
United States Department of
Homeland Security |
| 13. | Ms. Candice Abinanti | International Relations Specialist,
Office of Policy, Program
Analysis, and International Affairs | Federal Emergency
Management Agency,
United States Department of
Homeland Security |

THE CIVIL PROTECTION SYSTEM IN GERMANY

Executive Summary

For the purpose of non-police danger prevention, Germany traditionally maintains a vertically structured emergency preparedness and response system. This system relies largely on volunteers and is based on the principle of subsidiarity with the Federation, the Länder (States) and the local authorities cooperating closely with each other and with the major relief organisations and the fire brigades. Primary responsibility for civil protection lies with the Länder. The Federation has only limited responsibility for civil protection in case of military conflicts.

1. Federal Structure

In Germany, civil protection is subject to the stresses and strains that are inherent to federalism. National emergency preparedness is not organised centrally, instead it is a responsibility shared between the Federation and the Länder (including the municipalities).

This vertical structure is effectively reflected in a dual terminology – civil protection versus disaster management. Civil protection is the legislative task and responsibility of the Federation, with responsibility strictly limited to protecting the civilian population in case of military crises. Civil protection is the "civilian" annex to the military defence mandate. This reference to war implies that there is a clear distinction between civil protection as a sub-category of national defence and so-called "peacetime" disaster management. The latter is part of general danger prevention and thus an exclusive responsibility of the Länder.

Even though responsibilities are divided in line with Germany's federal system, civil protection (which is a responsibility of the Federation) and disaster management (which is a responsibility of the Länder) are not strictly separate and do not form isolated systems that exist independently of each other. There are no independent civil protection structures at the Federal level or independent disaster management structures at the Länder level, nor are there any parallel or duplicate structures. In the case of defence, the Federation relies on the disaster management structures of the Länder whose resources are reinforced and supplemented for this purpose by the Federal Government, which not only funds additional vehicles and equipment but also provides the material and human resources of the Federal Agency for Technical Relief (THW). By the same token, the Länder rely on these supplementary resources that are provided by the Federal Government in case of peacetime disasters and accidents (dual benefit). In practise, civil protection and disaster management are intertwined, they build upon each other, they are interdependent and form an integrated whole. There is a system in place which encloses and interconnects civil protection and disaster management.

2. A system based on volunteers

What is specific about the German national emergency preparedness system is that it relies on honorary and voluntary helpers who form the backbone of the system. The German civil protection system depends on the approx. 1.8 million voluntary helpers of the relief organisations

(German Red Cross, Workers' Samaritan Column, German Lifesaving Federation, St. John's Ambulance Service, Maltese Voluntary Agency), the fire brigades and the THW. A relief system operated exclusively or primarily by full-time staff would never be able to ensure the same level of presence throughout the country which is so typical of the German system and accounts for its particular strength.

3. Bottom-up force build-up

Depending on the emergency situation the resources of the national emergency preparedness system are built-up on the basis of a bottom-up approach. This build-up capability makes the system efficient and cost-effective.

Responsibility for preventing and controlling everyday hazards (including regional neighbourhood assistance) lies with the local authorities. The backbone of this local operational danger prevention and control system is formed essentially by the fire brigades which provide fire and NBC protection as well as technical assistance, the THW, the emergency medical services which provide emergency rescue services and professional ambulance services, and the voluntary relief organisations with their potential. Another element of the local health care system are the hospitals.

The Länder strengthen and support the local agencies and units in their emergency preparedness and control efforts primarily with regard to regional and supra-regional operations but also with regard to local danger prevention, particularly in the field of fire protection. Since primary responsibility for disaster management lies with the Länder, it is for them to provide the necessary resources and the necessary operational crisis and coordination management, including in case of disasters and accidents that affect the territory of more than just one Land. While the Act Amending the Federal Civil Protection and Disaster Relief Act dated 2 April 2009 provides the Federal Government for the first time with the option to take central coordinating measures in case of extraordinary damage situations and in particular in case of emergencies affecting more than just one Land (section 16 paragraph 2 of the Civil Protection and Disaster Relief Act), the Federal Government does not act at its own initiative or in its own right. Instead, the Federal Government will act only upon request of the Länder concerned. Nor is the Federal Government free to decide which measures should be coordinated at the central level; this again is a decision to be taken in agreement with the Länder concerned. Section 16 paragraph 3 of the Civil Protection and Disaster Relief Act stipulates clearly that the responsibility of the Länder for operational crisis management shall remain unaffected. Thus, the Federation does not have the power to issue operational instructions or orders to the Länder and/or their disaster management agencies.

The Federation is directly responsible in the framework of its primary responsibility for protecting the civilian population against threats and risks emanating from external military attacks. In case of supra-regional and extraordinary incidents, the Federation also supports the Länder in the framework of administrative assistance and disaster relief (article 35 of the Basic Law, sections 12 et seq. Civil Protection and Disaster Relief Act). In particular, this is done by making available the resources and services of the Federal Office for Civil Protection and Disaster Assistance (BBK) which is more strategically oriented, and those of the THW which has a strong operational focus, but also by providing access to the resources of the Federal Police and the Federal Armed Forces.

The Forum of Federations, the global network on federalism and multi-level governance, supports better governance through learning among practitioners and experts.

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