Compilation of National Progress Reports on the implementation of the Hyogo Framework for Action:

HFA Priority 3, core indicator 3.1:

Relevant information on disasters is available and accessible at all levels, to all stakeholders (through netwoirks, development of information sharing systems etc)

Know the Risks and Take Action

Reporting period: 2007-2009

This document has been compiled from the national progress reports provided by 76 countries through the HFA Monitor.

Note that these extracts are provided for convenience only.
National HFA progress reports should be considered in their entirety and can be found at:

http://www.preventionweb.net/english/hyogo/framework/progress/

Africa

Algeria   (in French)

Level of Progress achieved:
3 - Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:
Au plan législatif, les dispositions relatives aux systèmes d'informations sur les risques sont prévues par la loi 03-10 sur la protection de l'environnement ainsi que la loi 04-20 sur la prévention des risques majeurs.

Les informations sont disponibles pour beaucoup d'aléas existants au niveau des acteurs concernés mais ne sont pas systématiquement diffusées à travers des réseaux, et des systèmes d'échanges d'informations.

Context & Constraints:
L'accès aux sources d'informations au niveau des acteurs intéressés et concernés et le partage de ces informations demeurent problématiques et insuffisamment réglementés (mise en conformité avec les dispositions relatives aux systèmes d'informations environnementales prévues par la loi 03-10 sur la protection de l'environnement dans le cadre du développement durable)
Les défis essentiels à relever consistent ici à développer le maximum de banques de données concernant les différents aléas et à organiser la diffusion de leur contenu à travers des réseaux et systèmes adaptés, conformément à la législation en vigueur.

Angola   (in English)

Level of Progress achieved:
3 - Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:
Existe informação disponível via orgão de comunicação social fornecidos pelos sectores.

Context & Constraints:
Esta informação não é abrangente em todo território nacional, em particular as populações em riscos de desastres, devido a factores de vulnerabilidade das populações em áreas remotas que não possuem rádios e outros meios de comunicação.

Burkina Faso   (in French)

Level of Progress achieved:
3 - Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:
Des systèmes d'information sectoriel existent mais l'acessibilité est limitée par le manque de réseautage et de système d'information performant.

Context & Constraints:
L'insuffisance de ressources financières et de personnels qualifiés pour la gestion des réseaux et des systèmes d'informations.

Burundi   (in French)

Level of Progress achieved:
2 - Some progress, but without systematic policy and/ or institutional commitment

Description:
Des travaux de recherche sont effectués par des instituts spécialisés (Université du Burundi),Institut des Sciences Agronomiques du Burundi (ISABU) et L'Institut Géographique du Burundi (IGEBU).

Context & Constraints:
Les réseaux d' échange d' information n' existent pas.

Cote d'Ivoire   (in French)

Level of Progress achieved:
1 - Minor progress with few signs of forward action in plans or policy

Description:
Même lorsque les informations relatives les aléas existent, elles sont difficilement accessibles eu égard au manque de réseaux et de système d'échanges d'informations à différents niveaux.

Context & Constraints:
Pour rendre disponibles et accessibles les informations relatives aux aléas, il faut d'abord les collecter, les compiler et mettre en place un système d'échanges d'informations. A ce niveau la plateforme RRC qui est un forum multisectoriel devrait pouvoir jouer ce rôle.

Egypt   (in English)

Level of Progress achieved:
3 - Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:
National Information Management System is in the process of building up within the CMDRS. The process has started by establishing a Crisis Management Information System (CMIS), including:
> Integrated database (In the process of revision, development and updating).
> Website (www.crisismanagement.idsc.gov.eg): The website was designed with the objective of raising awareness regarding crisis and disaster management and their risk reduction. This includes relevant information and data regarding capacity building workshops that target concerned staff members of ministries and governorates, organized by CMDRS. The website also includes breaking news on disaster risk reduction, general information on crisis management, potential risks, and relevant ministries responsible for risk management. The website will enable the accessibility to relevant information on disasters at all levels, to all stakeholders (through network development of information sharing systems …etc).
The CMDRS organizes also quarterly workshops on different issues related to crisis and disaster management. Similarly, ministries and relevant agencies organize workshops and develop their adequate information systems.

Context & Constraints:
The National Information Management System, to be launched soon, has to consider developing parallel terminal points at the local level. These terminal points are to ensure the flow of information on disaster risks and protection options, especially to citizens and local authorities in high risk areas. The website will make the information easily available, understandable and accessible to all stakeholders, depending on the input of information and data from various sources at different levels. The availability of resources (both financial and human) would facilitate the establishment of the network.

Ghana   (in English)

Level of Progress achieved:
4 - Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
There are handbills on the major disasters showing when, where they occur and what to do or not to do during emergencies/disasters. Handbills are distributed countrywide, and to all stakeholders.

The NADMO website, www.nadmo.org also provide information on hazards/disasters in Ghana for both domestic and international policies, especially relevant agencies world over. With the support of the UNDP an ICT has been established to exchange information among the three northern regions that suffered flooding in 2007, and also between them and the national headquarters.

Also information is disseminated by VHF radio with the regional secretariats and by telephone to the regions and the districts.

Context & Constraints:
Inadequate funding makes it impossible to produce large numbers of educational materials. Also, adverts and advertiser's announcements via the print media are limited due to the same constraint of adequate financing.

The VHF radio facilities and the ICT/Internet do not reach the majority of districts and communities.

Kenya   (in English)

Level of Progress achieved:
4 - Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
But this information has not been accessed by all.

Context & Constraints:
Technological Infrastructure at the community level is still poor.

Madagascar   (in French)

Level of Progress achieved:
4 - Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
Le BNGRC est grandement conscient du fait de l'importance des informations sur les aléas et les vulnérabilités. Les informations sur les aléas et les vulnérabilités doivent être mises à jour. C'est ainsi que le développement du système d'information est une priorité actuelle.
Le BNGRC disposera aussi, sous peu d'un site web qui permettra de rendre disponibles et accessibles en temps voulu les informations nécessaires sur les aléas et les vulnérabilités.

Context & Constraints:
Les informations sur les aléas et les vulnérabilités doivent être mises à jour pour permettre aux autorités à tous les niveaux de prendre les décisions qui s'imposent.

Malawi   (in English)

Level of Progress achieved:

3 - Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:

DoDMA maintains a national disaster profile which records disasters that have occurred in different parts of the country, the extent of damage or impact and action taken to assist those affected. The profile dates back to the 1960s. It is currently being transformed into a database which will aloow for querries to be made. The database will be completed by early May 2009. The national profile currently is not available to all stakeholders through networks but it is provided upon request.

Context & Constraints:

1. The national disaster profile in its current format was not user friendly. As it is being transformed into a database, it will allow for different reports to be generated which will be useful for different stakeholders.

Mauritius   (in English)

Level of Progress achieved:

4 - Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:

Relevant information on tropical cyclone and heavy rainfall is readily available from the Mauritius Meteorological Services.

A study has been conducted on flood prone areas and this is available at the Ministry of environment and National Development Unit. Sea level data is also available at the Meteorological services for the last 20 years. Quantitative disaster data is located at different institutions and with some effort can be put together.

Context & Constraints:

Community involvement is of prime importance in any programme of disater risk reduction. There is a need of a central data bank and also certain mechanism to record non-meteorological disaster data, namely in the social, economic and environmental sector.

Mozambique   (in English)

Level of Progress achieved:

2 - Some progress, but without systematic policy and/ or institutional commitment

Description:

Relevant information on disaster management in Mozambique is available but not accessible since most recent books with background information are not in Portuguese language and each institution keeps its own disaster records. University institutions have started working on a literature survey but it is at a starting phase. Fortunately universities and national directorate of water are working together informally compiling risk profiles and historical data on frequent disasters in Mozambique. Formal information sharing systems are not available. The INGC as started in 2005 the collection of all relevant information on disaster studies. INGC is presently carrying out a sort of advocacy campaigns based in sharing information, workshops and training activities with academicians and this is bearing valuable results. The starting of teaching activities at graduate and post graduate levels at Mozambican universities will bring new impetus in the collection of existing information as well as in the creation of local knowledge and expertise. In relation to literature sources, an important reference is the "2006 Mozambique food security and vulnerability assessment"

issued by a joint effort by FEWSNET, WFP and FAO which can be assessed at the site vam.wfp.org/thematic/mozambique. Several papers can be assessed on food aid, disaster and humanitarian action related to Mozambique. It is also worth to mentions the working paper by Paulo Zucula, the former Director of INGC relating to food aid and the Unicef 2008 Humanitarian Action Report

Context & Constraints:
There are major challenges in having local institutions sharing information. The lack of finances to develop a shared data base and the lack of enough personnel to maintain the data base is a major concern. The universities must start translating into Portuguese all relevant books on DRR issued about Mozambique to allow the improvement of access to information.

Senegal   (in French)

Level of Progress achieved:
2 - Some progress, but without systematic policy and/ or institutional commitment

Description:
Beaucoup de structures gèrent des informations relatives à divers types d'aléas, mais des efforts doivent être menées pour rendre ces informations disponibles et accessibles à tous les niveaux, pour tous les acteurs.

Context & Constraints:
Une plateforme nationale de RRC fonctionnelle devrait aider à rendre disponible et accessible les informations relatives aux aléas à travers des réseaux et le développement de systèmes d'échanges d'informations.

Sierra Leone   (in English)

Level of Progress achieved:
4 - Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
LEVEL 4. There is readily available information on disasters via the internet and on television but not everybody can afford the luxury of such in a situation of abject poverty. For many members of the public, the only place they get to hear this is through the radio. .Information on risk reduction and safer disaster prevention and mitigation options are shared with the public and are done in the local languages for easy communication and for the people to take the necessary actions to create a disaster resilient country.

Context & Constraints:
The radio discussion programme is done an hour per week and that is not enough to disseminate all that is needed. Thus, the strong need for more networking.In addition, disseminating such information on a wider scale and with increased frequency since this has huge financial implications, especially so when done on a national level. In the absence of Government support, using commercial communications networks can be very costly.

Swaziland   (in English)

Level of Progress achieved:
2 - Some progress, but without systematic policy and/ or institutional commitment

Description:
Information on disaster risk reduction (DRR) is scattered among some sector organizations. Although the

National Disaster Management Act was passed in 2006 not much progress has been achieved in terms of putting in place a national disaster management information system for disaster risk reduction. But it is hoped that with the recruitment of the Director, a coordinated national disaster information system for DRR will be established. Two national action plans have been developed since 2005 but with little significant implementation.

Context & Constraints:

Public awareness campaigns and training on disaster risk reduction through the chiefdom system has not yet been done due to the absence of regional disaster management committees (RDMCs) who are the mandatory coordinators.

Information such as hazards profiles and risks especially climate risk/disasters should be linked to community based interventions. There is need to produce hazard risk maps.

A programme aimed at strengthening national and local/community resilience to disasters in Swaziland is being implemented in partnership between government and UNDP until July 2010. The programme seeks among others to address the issue of an information management system for disaster risk reduction.

Tanzania, United Rep of   (in English)

Level of Progress achieved:

3 - Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:

Institutional commitment attained, but achievements are neither comprehensive nor substantial
National disaster management policy has as part of its objectives encouraging and enabling communities to receive relevant information and achieve acceptable levels of risks through:
Developing higher level of preparedness, response and mitigation capacity for all types of disasters
Promoting public knowledge and awareness of disaster and enhance the involvement of the community in disaster management
Establishing and maintaining an effective institutional arrangement for the coordination and collaboration
Promoting research, information generation and dissemination and,
Mainstreaming disaster risk management issues into development plans and other sectoral policies and programs at all levels

Government Ministries, Agencies, NGOs, Regional and Local Government Authorities have a legislative responsibility to participate in emergency planning at the national and grassroots levels. These arrangements facilitate open information sharing and accountability.
Plans are based on risk assessments to identify priority concerns, and may include hazard risk mapping (ref. National Land Use Frame work Plan 2008 -2028). Hazard and risk information from research Institutions and government agencies is available. Public information campaigns are based on the steps that citizens should take to help protect themselves from hazards and risks.
Stake holders such as UN agencies, Media, NGOs, TRCS and Private sector to mention a few; participate in the National Disaster Management Forums and stakeholders meetings for the Purpose of Information sharing as well as in Technical Committees dealing with specific disasters(e.g National Avian Influenza Technical Committee)

Context & Constraints:

Hazards and risk information is available, principally as result of coordination, networking, public awareness campaign, use of media and training of Regional and District Disaster Management Committees. However, constraints on the use of information have been a priority in using a limited resources government has and the level of poverty to majority of Tanzanians. The constraints have been recognized and are being addressed by the Prime Ministers Office

Togo   (in French)

Level of Progress achieved:
1 - Minor progress with few signs of forward action in plans or policy

Description:
les moyens de vérification de cet indicateur ne peuvent être possibles qu'après l'étude de diagnostic des risques potenciels et avérés et leurs localisations

Context & Constraints:
identifications des zones à risques et les types de risques

Zambia   (in English)

Level of Progress achieved:
4 - Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
A number of assessments have been done on common disasters that the country experiences e.g. droughts and floods. This information is disseminated to all levels and is stored and managed by DMMU.

Context & Constraints:
The challenge is to have information that is in a format that is user friendly and readily available to all stakeholders. Poor technology and infrastructure at community level continues to hamper progress at that level.

The Government through DMMU is now working on the concept of common platform with World Food Programme (WFP. This platform is aimed at providing an online information sharing forum and will be available for all who need the information posted on it. The platform will have links with other institutions at national and regional levels.

Americas

Anguilla   (in English)

Level of Progress achieved:
5 - Comprehensive achievement with sustained commitment and capacities at all levels

Description:
News Papers
Radio Interviews
radio Soap Opera
Plays
Brochures
Posters
Flyers
Displays
News paper Pull Out
Direct Mail
Radio Quizes
School Games

Context & Constraints:
all levels of govt, population and sectors

Argentina   (in Spanish)

Level of Progress achieved:
3 - Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:
Adquirir conciencia sobre que muchos riesgos de desastres pueden activarse más allá de las fronteras (como fue lo del Chaitén) es el reto sobre el que pivotear.

Context & Constraints:
Divulgar ampliamente qué información está disponible, será el reto.

Bolivia   (in Spanish)

Level of Progress achieved:
3 - Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:
Las Instituciones asumen comprometidamente el tema de la Gestión de Riesgo.
Existe la Red de bibliotecas virtuales para la Prevención y Atención de Desastres, BiVa-PAD en el país y está disponible
Las políticas y planes del Gobierno ayudan a concretizar el tema de gestión de riesgo

Context & Constraints:
Las acciones institucionales no han alcanzado un nivel de coordinación óptima.
Falta de difusión de las acciones institucionales emprendidas y sus potencialidades.
Limitaciones de acceso tecnológico en algunos lugares del país.
Limitado uso de las potencialidades de información disponible.

Generar y promover redes, estrategias de información y difusión de socialización y retroalimentación a todos los niveles (institucionales y de la sociedad) para el acceso y uso de la información.

British Virgin Islands   (in English)

Level of Progress achieved:
4 - Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
Promoting awareness of concepts of preparedness and mitigation are achieved by the following actions incorporated into the responsbilities of the DDM Staff.

Execute media campaigns to all levels of society, government & private sector (including events, TV, radio, video, magazines, news, website, etc)

Develop/disseminate disaster/hazard tools and information

Integrate disaster preparedness/ mitigation/response into school curriculum & build capacity

Enhance the awareness of planners, engineers and developers for hazard mitigation integration into building/ development

Building capacity among emergency responders and critical agencies.

Context & Constraints:
No constraints have been identified.

Cayman Islands   (in English)

Level of Progress achieved:
4 - Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
Information about disasters and protection options is available on Hazard Management's website, as well as through narrowcasting network including screens in supermarkets.

Flood maps have been produced and are available at the Lands and Survey Department.

Hurricane Awareness Kits are produced by Government and are widely available, including from the HMCI website.

Public awareness campaigns include the use of print, radio and television.

Outreach targets schools, church groups, voluntary organizations, civic clubs etc.

An informational activity booklet is produced for children under ten years old and is broadly distributed in schools and at public events.

A number of supplements and magazine publications are produced and in most cases, are provided at no cost.

Context & Constraints:

Work still needs to be done to inform the public about disaster risks that carry a low probability of occurrence, such as earthquakes and tsunamis.

Colombia   (in Spanish)

Level of Progress achieved:

3 - Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:

Hay disponibilidad de información virtual y física en torno al tema de los desastres, existen bases de datos desde el año 1993 disponibles y actualizados a diciembre 31 de 2.008 y accesibles al público en general. Los comités regionales y locales poseen toda la información de ocurrencia de desastres en bases de datos, dicha información es compilada y consolidad en la Dirección de Prevención y Atención de Desastres, DPAD. Para acezar a dicha información www.sigpad.gov.co. De igual forma a través de los centros de información de todas las entidades pertenecientes al Sistema Nacional de Prevención y Atención de Desastres, poseen la información sobre experiencias anteriores (desastres) que favorecen el interés en el tema por parte de las comunidades.De forma complementaria la disponibilidad de información sobre Inventarios Históricos de Desastres, también se puede consultar a través de una red de información mediante el acceso a la página www.desinventar.org igualmente se cuenta con el Centro de Información red BiVaPad, biblioteca virtual Andina para la Prevención y Atención de desastres, donde se compilan todos los documentos, informes, estadísticas sobre el tema. Hay establecidas en el país por parte de las universidades líneas de investigación en Gestión del Riesgo que complementan los aspectos del conocimiento a nivel nacional, las instituciones de educación superiores ofertan cursos de posgrado con títulos de Especialización en Gestión de Riesgos en al menos 10 Universidades del orden nacional tanto públicas como privadas. Los planes educativos, los materiales didácticos y las capacitaciones más relevantes incluyen conceptos y prácticas sobre la reducción del riesgo de desastres y la recuperación. En suma se dispone de un sistema unificado de reporte de desastres mediante el cual se comparte información liderado por la DPAD, y el cual es la fuente oficial para los diversos medios de comunicación sector estratégico que apoya los procesos de difusión de la información.

Context & Constraints:

Concomitantemente con la falta de socialización por parte de las instituciones se complementa con la muy baja consulta por parte del público, entre las posibles causas de lo anterior, es las escasas posibilidades de acceso a la información (medios virtuales para ciertos sectores de la población). No necesariamente la disponibilidad de información incide en la toma de decisiones y la reducción del riesgo. Existe información histórica de desastres pero todavía no se ha llegado totalmente a reportes de información de desastres, para su posterior estudio y análisis lo que contribuiría para verificar y/o calibrar el éxito o error en las alertas. Entre otras de las posibles causas es el bajo conocimiento por parte de la gran mayoría de la población y el acceso a Internet todavía es muy limitado para consulta o reporte de información relacionada con emergencias o desastres. Por otro lado, es importante resaltar que aun falta construir e implementar una estrategia mucho más agresiva en los diferentes medios de comunicación, con lo cual se puede fortalecer la cultura en la Gestión del Riesgo y en especial en las diversas temáticas para la prevención de desastres

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Costa Rica   (in Spanish)

Level of Progress achieved:

4 - Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:

Hay disponible información relevante sobre los desastres y la misma es accesible a todo nivel y para todos los grupos involucrados (a través de redes, el desarrollo de sistemas para compartir información, etc.)"

Nivel alcanzado: 4

Costa Rica tiene un importante historial de investigación que alcanza un buen nivel técnico y científico, especialmente desarrollado por las universidades públicas. Diversos organismos estatales han generado sistemas de información, incluida la CNE, en los que se pone a disposición la información. Entre estos destaca la elaboración del atlas de amenazas del país, que se ha llevado a escalas municipales y comunales.

Mediante la informática y el desarrollo de iniciativas tales como las páginas web y el proyecto de "gobierno digital", llevado a cabo por la Presidencia de la República, la información se ha puesto a disposición pública, además del uso que a la misma se le da en los procesos de divulgación y de capacitación que se realizan en las comunidades y los municipios.

Context & Constraints:
Las mayores limitaciones tienen que ver con la capacidad de actualización de la información, y en alguna medida, la necesidad de validar parte de la información con las comunidades afectables. La accesibilidad a la informática no es generalizada, por lo que es evidente que una parte de la población no tiene acceso directo a la información. Es necesario encontrar instrumentos de divulgación que faciliten la entrega de la misma.

Dominican Republic   (in Spanish)

Level of Progress achieved:
2 - Some progress, but without systematic policy and/ or institutional commitment

Description:
Existe material sobre gestión de riesgo, tales como leyes, reglamentos, mapas de riesgos, evaluaciones en diferentes áreas a nivel nacional y local, resultados de proyectos realizados, estudios de caso, etc., los cuales pueden ser compartidos entre los grupos, instituciones y público en general.

Existe generalmente información genérica sobre los desastres, en particular sobre los huracanes. Poca información específica es disponible a nivel local

Context & Constraints:
Hace falta diseñar, elaborar y difundir material que permita incrementar el conocimiento de los desastres.

Ecuador   (in Spanish)

Level of Progress achieved:
2 - Some progress, but without systematic policy and/ or institutional commitment

Description:
•.AVANCE POLàTICA 5. Todas las instituciones, organismos colegiados, grupos técnico-científicos, centros de educación superior, etc., deberán iniciar acciones sostenidas de investigación y generación de información de la temática de gestión de riesgos

Context & Constraints:
Recomendación:

• Se recomienda avanzar en los procesos para mejorar el acceso a la información, la participación de las

instituciones y de las comunidades en el desarrollo del conocimiento.
• Se recomienda generar estrategias de participación ciudadana y acceso a la información.
• Se recomienda que este tema sea entendido y promovido como un componente constituyente de la estrategia de gestión del riesgo del país

El Salvador   (in Spanish)

Level of Progress achieved:
3 - Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:
Existe información disponible con acceso por vía electrónica: sitios web así como difundida a través de los diversos medios de comunicación: radio, periódicos, televisión, folletería, revistas, posters, Ferias, entre otros, generada por entes gubernamentales, municipales, ONG, medios de comunicación. Además de la producción de materiales informativos y educativos difundidos en el ámbito local, departamental y nacional. Los materiales de educación formal tienen incorporada la temática de reducción del riesgo con una cobertura nacional.

Context & Constraints:
Existen ciertas limitantes de acceso a la información en el ámbito nacional y local. Deben de fortalecerse las capacidades instaladas en el ámbito local en cuanto a los sistemas de información. La información técnica científica, en algunos casos, es afectada por las percepciones políticas partidarias. La falta de recursos limita, en muchos casos, el acceso a la información. Identificar una instancia que coordine la recopilación, calidad y difusión de información sobre Gestión para la reducción del Riesgo y atención de desastre. Es importante la validación de los materiales informativos y educativos que permita trasladar una visión lo más cercana a la realidad. En cuanto a los procesos educativos formales, es necesario verificar la calidad de la información que se le brinda a los educandos y la capacidad institucional para darle continuidad al traslado de información.

Jamaica   (in English)

Level of Progress achieved:
4 - Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
The ODPEM continues to use all available media to disseminate information at various levels to the wider population. The Organization's website and sub-site serve as a source point of information gathering for individuals and institutions. The use of the local media is an avenue that is frequently utilized to get the message of Disaster Preparedness out with maximum reach.

Cognizant of the fact that there are individuals with varying disabilities, initiatives have been undertaken to make information available in various formats. The use of the internet and text messaging services, print and electronic media has also aided the organisation to reach numerous persons.

The ODPEM has in the past and currently embarked on partnership with private sector interests with the unified aim of disseminating information through various medium (print/ electronic media). The last two (2) years a number of independent initiatives were undertaken by the private Sector to independently communicate preparedness and awareness building information.

Context & Constraints:
Challenges

• Financial limitations remain the greatest challenge to tap into as many markets as possible. Ongoing dialogue is maintained with media houses, special interest groups and donor agencies for partnerships to make the goal more achievable.

Recommendations

• The organization is making recommendations for some of these services to be available free of cost or sponsored largely by the corporate entities. The ODPEM envisions being able to carry information to the visually impaired, the hearing impaired and other special populations without being restricted by budgetary constraints through the development of cooperative partnerships with other private and public sector entities.

Panama   (in Spanish)

Level of Progress achieved:

2 - Some progress, but without systematic policy and/ or institutional commitment

Description:

Es necesaria mayor promoción de material institucional para la comunidad, documentos que sean informativos sobre los riesgos y que reflejen los avances del país en el tema.

El Ministerio de Educación, mediante sus programas de formación crea la inquietud del estudiante por informarse de la información existente y promueven la consulta de los mismos mediante tareas de investigación, esto hace que los mismos tengan que visitar los estamentos responsables para investigar.

Existe información clave dispersa en el país, en cada una de las instituciones, lo que no existe es una integración de la misma, la iniciativa en este momento se mantienen en el proceso de integración en un solo centro (llevada a cabo SINAPROC) y también se mantiene la necesidad del proceso de la adecuación de la terminología.

SINAPROC les ha entregado a los medios de comunicación social un disco compacto, que incluye las normas de prevención de los principales desastres en la que esta expuesta la ciudadanía en general. Igualmente como parte de la campaña de divulgación se participa en eventos masivos; Ferias de la Salud, programas radiales, noticias preventivas entre otros.

Algunos ejemplos de que existen documentos de utilidad son las publicaciones recientes de GEOCIENCIAS:

• Geofísica Aplicada al estudio de sitios de construcción de obras civiles.
• Geofísica aplicada a Exploración de Aguas Subterráneas.
• Aplicación de la geofísica de detalle en la contaminación de aguas subterráneas.
• Aplicación de los Métodos Potenciales al Estudio de la Geología Estructural.
• Aplicación de la Geofísica al estudio de Zonas Geotermales.

Publicaciones:
• Método Geofísico de Corriente Continua estudio hidrogeológico en Capellanía-República de Panamá. Revista Tecnociencia. Vol. 8, No. 1. 2006.
• Metodologías Geofísicas Aplicadas a la Exploración de Aguas Subterráneas. Revista Lotería, No. 462, 2005.
• Descripción Preliminar de la Radiación UVB y del Nivel de la Columna de Ozono Estratosférico en la Ciudad de Panamá -Revista Geofísica, IPGH, Nº 54, 2001.
• Datos meteorológicos en la Cuenca del Canal de Panamá durante El siglo XIX y su Aplicabilidad a la Variabilidad Climática y al Cambio Climático, Revista Tecnociencia, Vol. 3, Nº 2, 2001.
• Estudio Climatológico de los Niveles de Radiación UV-B, Columna de Ozono Total y Cobertura Nubosa

en Panamá, Revista Scientia, Vol. 17, N° 1, 2002.

La Universidad Tecnológica cuenta con una gran cantidad de investigaciones realizadas por profesores, investigadores y estudiantes, orientados hacia la prevención de desastres, que reposan en las bibliotecas especializadas de las facultades.

 Entre las investigaciones podemos mencionar:

> Identificación de Zonas Vulnerables a Deslizamiento De Tierra en la Provincia de Chiriquí
> Evaluación del Riesgo por Deslizamiento de Tierra en el Distrito de San Miguelito.
> Zonificación de Íreas Vulnerables a los Deslizamientos de Tierra en la Península de Azuero.
> Determinación de la Amenaza a Deslizamiento de Tierra en las Provincias de Coclé y Veraguas.
> Zonas Vulnerables a los Deslizamientos y Plan de Vigilancia a las Laderas en los Corregimientos de Bethania, Bella Vista, Pueblo nuevo y San Francisco.
> Evaluación de los Resultados del Sismo en Changuinola, Provincia de Bocas Del Toro.
> Programa de Monitoreo de los Deslizamientos de Tierra en el Área de la Cresta.
> Determinación de las Íreas Propensas a Deslizamiento en la Provincia de Bocas del Toro.
> Evaluación de la Falla de Algunos Taludes en el Distrito de San Miguelito.
> Evaluación de Amenaza a Deslizamiento e Implementación de un Sistema De Vigilancia en el Distrito de Chorrera.
> Plan de Vigilancia de Laderas Inestables en la Localidad de Ato Pintado y Pueblo Nuevo.
> Atlas Digital de Amenazas a Deslizamiento de la República de Panamá.
> Plan de Vigilancia de Laderas Inestables en el Sector de Villa Esperanza los andes N-2 San Miguelito.
> Cartografía de Amenazas a Deslizamiento en Las Ciudades de Aguadulce, El Valle, Penonomé, Boquete, Chitré y las Tablas.
> Modificaciones de la Vulnerabilidad Sísmica de la Ciudad de Santiago.

Context & Constraints:
Todo lo existente es de utilidad debemos integrarlo para poder ponerlo en un sistema de divulgación y consulta sencillo.

• Se mantiene la necesidad de que la mayoría de todos los documentos estén en términos claros para la comunidad.

• Se necesita incentivar más a los estudiantes para que se motiven a realizar trabajos finales (tesis) sobre temas que puedan servir como insumo en el proceso de la reducción de gestión de riesgos y a su vez se debe promover la preparación de profesionales en estos temas.

• Todas estas acciones deben integrar a los medios de comunicación como estrategia de avance. Ellos pueden orientarnos en como "vender" los conceptos de seguridad y autoprotección para la "audiencia".

Necesitamos hacer la documentación existente atractiva a la comunidad con un lenguaje claro, sencillo y eficaz; esto nos facilitará no solo la publicación en los

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Peru   (in Spanish)

Level of Progress achieved:
3 - Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:
Nivel de Progreso 3:

• Se viene difundiendo permanentemente información relativa a RRD.
• Existen sistemas de información (a nivel de instituciones y otros), los cuales están en proceso de integración.
• Se ha fortalecido el SINPAD (Sistema de Información Nacional de Prevención y Atención de Desastres) y la información que se muestra en la página web institucional es accesible a todo nivel. .
• Existencia del Centro Nacional de Información en PAD – CENIPAD (Biblioteca Física y Virtual). Como biblioteca virtual funciona desde el año 2007

Context & Constraints:
• El CENIPAD, requiere una mayor difusión para el logro de sus objetivos.
• Escasa oferta de publicaciones sobre el tema en nuestro país.
• Debilidad en la oferta de comunicación radial, por la insuficiente cobertura y la no utilización de idiomas originarios, que permita llegar especialmente a la poblaciones alto andina

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Saint Lucia   (in English)

Level of Progress achieved:
3 - Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:
Information is generally available and accessible as all forms of media is used to reach the target audiences. This includes TV, posters, newspapers, radio, internet, text messaging, libraries, town criers, loud hailers, fliers, etc. However being sensitized informed does not guarantee any change in attitudes and behavior.

Context & Constraints:
In order to effectively realize behavioral change education needs to take place and the information used to that end. Thus the formal education system needs to be tapped into, the current media programs need to take be designed to influence behavioral change rather than information sharing and available technology such as Geographic Information Systems (GIS) needs to be harnessed to promote that learning. Additionally, residents need to be made aware of the availability of the information, further they need to be enlightened on how to use the information to good effect and finally they need to be motivated to use the information.

United States of America   (in English)

Level of Progress achieved:
4 - Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
The United States has made significant investments in improving public awareness of relevant hazards before disaster strikes as well as providing information on disasters where and when it is needed. Efforts exist at all levels of government. Two of the Grand Challenges for Disaster Reduction identified by the National Science and Technology Council's Subcommittee on Disaster Reduction specifically address the need for making relevant information available and accessible at all levels, one being to provide hazard and disaster information where and when it is needed, and the other being to promote risk-wise behavior.

Context & Constraints:
See above.

Venezuela, Bolivarian Rep of   (in Spanish)

Level of Progress achieved:
3 - Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:
La Dirección Nacional de Protección Civil y Administración de Desastres ha creado y distribuido a nivel nacional, material impreso sobre diversos temas en materia de Desastres (qué son, cómo actuar y dónde acudir en caso de ocurrencia), autoprotección, primeros auxilios y diseños de planes locales de emergencia. Aunado a ello, con el apoyo de la Dirección de Educación y la Gerencia de Proyectos de la DNPCAD, estudiante de la Universidad Nacional Experimental de las Fuerzas Armadas (UNEFA) se realiza un software educativo en materia de prevención de desastres, dirigido a niños, niñas y adolescentes que será difundido a través de la página web de la Organización.

La Organización Nacional de Protección Civil y Administración de Desastres esta llevando a cabo el programa DESINVENTAR, como parte de las labores regionales del CAPRADE. Así mismo, se avanza en la creación del Centro Nacional de Prevención y Atención de Desastres (CENAPRAD), espacio que permitirá la articulación de todos los entes que conforman la Organización Nacional y la difusión de información a todos los niveles.

A través de los Organismos de Desarrollo Regional se están efectuando proyectos relacionados con el flujo oportuno de información, a fin de recopilar, organizar, sistematizar y facilitar el acceso de la información pertinente para la toma de decisiones, a través del Sistema de Información Geográfica y del Sistema Integrado de Indicadores Sociales para Venezuela.

En relación a eventos sísmicos, hay información disponible para los ciudadanos y las autoridades, que incluye los riesgos y las políticas de autoprotección, con el fin de permitirles tomar acciones ante la ocurrencia de un terremoto.

Context & Constraints:
Definir e Implementar una política de información sobre desastres de origen natural.

Realizar una evaluación y el seguimiento de los procesos y métodos de difusión de la información en todos los niveles, para determinar su efectividad y alcance dentro de las comunidades.

Incrementar el presupuesto de las instituciones para la difusión de información escrita y audiovisual en materia de RRD.

Asia

Bahrain   (in English)

Level of Progress achieved:
2 - Some progress, but without systematic policy and/ or institutional commitment

Description:
• Some information is provided through community participation programmes.
• However this tends to be compartmentalised, with no National System.
• Access to information is possible, through Central Informatics Organisation which also provides a very comprehensive system of GIS covering the whole of the Kingdom.
• A website (currently being designed under the guidance of the NCDM) will do much to ease communication and information flow.
• When completed it will provide comprehensive information on DRR for access by all stakeholders.
• NCDM will coordinate improvements through requesting sufficient resources and ensuring cooperation.
• The new legislation will ease this process.

Context & Constraints:
• Currently, a lack of resources and expertise is holding up progress on the website. As a result general Public Awareness is almost non existent.
• In addition, insufficient institutional support and priority, causes lack of financial resources for producing and wide spread distribution of basic publication materials for awareness.
• Although single agency data bases exist, further work is required to ensure greater public awareness.

Bangladesh   (in English)

Level of Progress achieved:
3 - Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:
The country has a culture of sharing of disaster related knowledge and lessons through various means, including media and public discussion. There have been functional networks and forums exist on DRR at various levels that include civil society, NGOs, CBOs and other development partners. Increased use of information technology further strengthens that process. For example, key government ministries, research institutions and civil society organisations have established websites. Recently established Disaster Management Information Centre (DMIC) providing information services, which has established network with 64 district head quarters and 232 upazilas. The early warning information, particularly flood information is available through email and websites, reaching across agencies and stakeholders. Bangladesh Metrological Department (BMD), Cyclone Preparedness Programme (CPP) and Flood Forecasting and Warning Center (FFWC) of Water Development Board have been contributing significantly in dissemination of early warning and disaster messages. Revised Early Warning System approved by the Advisory Council in mid 2008 included decision to introduce disaster message with early warning. Following cyclone Sidr, decision also taken to encourage and support Community Radio throughout the coastal belt. Mobile Network has been contributing to share the disaster messages and like in early warning and preparedness information in the community and country and abroad throughout.

Context & Constraints:
Though DMIC is established some years back, it was tested and found effective in cyclone and flood in 2007. Use of internet has been very useful in enhancing access to information. Accessibility and availability still constrained for the professionals and agencies outside Dhaka by physical location and infrastructural facilities such as access to internet. There is also lack of effective coordination in created reliable

information at various levels. The major area of challenge remains with availability of Earthquake related information.

There is prerequisite to develop regional cooperation in terms of information dissemination regarding the weather forecast within SAARC and other forum . At the same time, local level awareness and warning mechanism need to be enhanced at a optimum level.

Cambodia (in English)

Level of Progress achieved:
2 - Some progress, but without systematic policy and/ or institutional commitment

Description:
There are establishment and implementation of network and partnership at the national level to serve as a Disaster Risk Reduction Forum (DRR Forum) through organization of regular events relating to disaster risk reduction practices, including consultative workshops or forums to share and exchange experiences, lesson learnt, good practices and innovative approaches etc. This initiative has been sponsored by DIPECHO partners, who are the disaster risk reduction actors and active involve from wider partners, lead by National Committee for Disaster Management (NCDM). At sub-national levels the networks have not been in place yet, except where NGOs are working there

Context & Constraints:
• The establishment and implementation of the network and partnership on disaster risk reduction is the great opportunity to share and exchange experiences, lesson learnt, good practices and innovative approaches, however, this mechanism has not become national institution mechanism yet and the mechanism has not widely outreached to sub-national levels yet
• National and sub-national systems and mechanisms of statistical and database management and sharing are not in place.
• No national mechanism for information access.
• Expand recommendation to build on mechanism itself: reassuring, training, collecting of data.

Recommendations to Overcome:

• Institutionalization of DRR forum into national and sub-national mechanism is needed
• There is the need to provide technical support to National Committee for Disaster Management to set up the national and sub-national systems and mechanisms of statistical and database management on disasters in the country

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India (in English)

Level of Progress achieved:
4 - Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
Significant efforts have been made to make relevant informations on hazard risks and disasters available at all levels. National Disaster Management Authority has developed specific guidelines on mitigation of various natural hazard risks like earthquake, flood, cyclone and landslide. In addition to this a comprehensive resource kit has been developed by the Disaster Management Division, Ministry Of Home Affairs which comprises of different toolkits on safe construction, disaster education and communication, preparation of Disaster Management Plans etc. Acknowledging the need for a disaster knowledge networking platform to facilitate interaction and dialogue among the experts and practitioners involved in the field of disaster management, NIDM has been entrusted to design India Disaster Knowledge Network

(IDKN). IDKN portal will connect all government departments, statutory agencies, research organizations /institutions to share collectively and individually their expert know-how's .IDKN will act as a tool to store, retrieve, disseminate and manage informations. National Institute of Disaster Management also plays a catalytic role to reach out to various stakeholders through consultation meetings, workshops and training programmes. The institute develops educational materials and promotes awareness .NIDM at present is supporting 29 Disaster Management Cells established in the State Administration Training Institutes across the country .Government of India has also identified nodal agencies responsible for maintaining key hazard data like Geological Survey Of India (GSI),Indian Meteorological Department, (IMD) and Central Water Commission (CWC) etc. The satellite data which can be widely used for decision making in disaster management is managed by National Remote Sensing Centre.

Context & Constraints:
Although data has been made available in the public domain its accessibility and actual usage are the two key issues which need to be addressed. There is a need to strengthen the mechanisms in place to reach out to the grassroot level with informations on hazard risks and disaster preparedness. Improving the coordination among various agencies handling with disaster database will help in increasing the accessibility of key hazard and disaster database at all levels. Efforts are being continuously made to strengthen the existing mechanisms for information sharing and exchange.

Indonesia   (in English)

Level of Progress achieved:
4 - Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
Various government and non-government organizations/institutions have developed disaster information system, such as the National Disaster Management Agency, Ministry of Health, Ministry of Social Affairs, Indonesian Armed Forces (TNI), Indonesian National Police (Polri), Indonesian Red Cross (PMI), Agency for Meteorology, Climatology and Geophysics (BMKG), Coordinating Body for Survey and National Mapping (Bakorsurtanal), Ministry of the Environment (environmental and climactic change), UNESCO (Jakarta Tsunami Information Center), DSM websites, The Curriculum Center of Ministry of National Education (learning model and school-based curricula in the hazard-prone areas), LIPI (National Institute of Science), Geology Division of the Department of Mineral Energy Resources, Consortium for Disaster Education. Since the disaster data and information is collected, analyzed and developed by the different sectors, they are not integrated and the information availability is limited because they are very sectoral and the benefits are still limited to the planning of the disaster risk reduction programs.

Although the system developed is relatively better than that of the previous year, the existing information management systems are not yet all user-friendly and hence are difficult to access and download. Sometimes the data does not contain updated information. The types of available data and information are limited; for example, they only refer to the types of data and structure and the limited number of data specifically related with disasters and vulnerabilities.

The accuracy of disaster data still needs to be assessed critically due to different perception or understanding on disaster. For example, in the event of flood in a certain region, it is not clear whether the difference is made between the areas flooded as high as the knee and those flooded as high as the hip of adults. Sometimes this information is not distinguished and considered as one piece of information on flood hazard of a certain area, without considering the different impact the flood has caused the two regions. Thus, it is necessary to call for agreed-upon standardization, limitation and terminologies to mainstream different perceptions.

Context & Constraints:

One of the outstanding obstacles or challenges in this field is the conflict of interest (sectoral sentiment) by each institution or organization which creates or develops the disaster database and information system. Since they have their own interest and they adjust their database and information system to match with the main tasks and functions of each institution and organization, the efforts to mainstream the information system are therefore hindered. In addition, the lack of incentive or low commitment to put the policies into effect, and the lack of awareness on the importance of information and data sharing with other organizations, lead to the wasting of the data and information because the data and information are merely kept and not utilized. Other obstacles and challenges are the limited availability of resources, in terms of both human resources (manpower and information technology experts in the local level), and financial and physical resources badly needed to develop the information system itself.

To overcome such challenges, a network of information system for disaster risk reduction must be developed and run by BNPB by strengthening coordination among the information providing centres (including universities) and Planas PRB (National Platform for Disaster risk reduction) must play its important role. The National Disaster Management Agency can also identify the needs for data on disasters, vulnerabilities and risks to support the initiatives of disaster risk reduction and to encourage the relevant sectors to provide the data.

To raise the awareness of the importance of integrated and accurate information, a strong commitment between relevant disaster risk reduction stakeholders must be established to share information, data collection and data analysis, budgeting and other resources. In order to develop an incentive system for the institution or organization which owns and analyzes databases and information on disasters, effort must be made to integrate information sharing to become a part of the system and to increase the ownership of the information by the relevant organizations or institutions. If the organizations are aware of their integral part of the existing information management system, it is expected that they will be more motivated to share their information in an integrated and coordinated means.

The existence of substantive policies on the domain of public databases of disaster (considered as confidential and open data) is needed to clarify the types of available, accessible and usable data.

There is also a need to accelerate the development of national guidelines for the establishment of Emergency Operation Center that can function as center of information, maximize communication forum of DIBI, as well as to enhance the institutional capacity in translating data and information from relevant institutions into the process of policy making that will bring positive consequences in strengthening DRR at local level.

Iran, Islamic Rep of   (in English)

Level of Progress achieved:
5 - Comprehensive achievement with sustained commitment and capacities at all levels

Description:
• Application of space-based Remote Sensing Technologies for city monitoring
• Development of models to assess seismic vulnerabilities (Human, Structural and Road Networks) for one part of Tehran
• Development of user-friendly local and national inventories and easy-to-use disaster risk reduction technologies

• School Safety: Development and implementation of a comprehensive program addressing all groups of the society for School Safety.
• Increasing public awareness and preparedness using all types of media.
• Educating children and youngsters about earthquake preparedness at all school levels by including

materials in textbooks, films, conducting drills, exhibitions, drawing and writing competitions, posters, etc.
• Organizing annual art, painting and training exhibition.
• Conducting annual national drill in schools on November 8th.
• Strengthening the key role of women in hazard mitigation programs and promotion of seismic safety culture.
• Posting street posters teaching a-seismic construction.
• In this regard attention has been paid to 7 IT skills at community level.
•Establishment of disaster national portal and knowledge network.
Page 13
•Organizing seminars and training workshops on the above topic.
• Use knowledge, innovation and education to build a culture of safety and resilience at all levels
• Application of space-based Remote Sensing Technologies for city monitoring
• Development of models to assess seismic vulnerabilities (Human, Structural and Road Networks) for one part of Tehran
• Development of user-friendly local and national inventories and easy-to-use disaster risk reduction technologies

Public Education Achievements
• School Safety: Development and implementation of a comprehensive program addressing all groups of society for School Safety.
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• Organizing annual art, painting and training exhibitions
• Conducting annual national drills in schools on November 8th.
• Strengthening the key role of women in hazard mitigation programs and promotion of a culture of seismic safety
• Posting street posters teaching a-seismic construction

Context & Constraints:
- Non-existence of suitable infrastructures for provision of the existing knowledge to the public.

- The Culture of utilizing knowledge networks has not been promoted.

- Insufficient in holistic participation of national media improvising existing knowledge.

- Existing poor culture of studding among the people.

Japan (in English)

Level of Progress achieved:
5 - Comprehensive achievement with sustained commitment and capacities at all levels

Description:
White Paper on Disaster Prevention (Annual Governmental Report on Disaster Prevention) has been prepared based on the provision of the Basic Act on Disaster Control Measures and submitted to National Diet. The Report includes information on recent disaster situation in Japan, current progress of countermeasures for disasters, and future plan for improving disaster management system which is collected from all the relevant ministries and agencies. The Report is open to the public on the Internet and also available as publication. Further, as mentioned in the section of priority action 2, Disaster Information Sharing Platform, a common information sharing system with a standardized information format for various disaster information provided by various stakeholders has been developing to be posted and freely

accessed by all.

Local governments, especially the prefectures, cities and towns located in disaster prone areas, provide information on disaster risks in the areas and tips to how to protect themselves from the risks by various medium including internet and publications as well as conducting workshops targeting residents.

Information for kids is also provided by many of local governments to be learned with pleasure. In addition, museums or learning centers where residents including students and kids can interactively learn disasters and disaster risk management have been set up by some local governments.

Further, the utilization of the broadcasting system is effective for conveying disaster information to the public. Accordingly, the national and local governments have made agreements with the Japan Broadcasting Corporation and private broadcasters to cover relevant information on disaster risk by replacing the regular program or running on a telop at the time of looming or occurrence of disaster.

Recently, in the light of the situation that the disasters caused by wind gust including tornado has frequently occurred, a review committee was established among relevant organizations. The committee published the result of the review of countermeasures in June 2007, and developed the brochure to introduce the characteristics of wind gust disasters and how to protect oneself in case of encountering tornado at a time.

Context & Constraints:
N.A.

Kazakhstan (in English)

Level of Progress achieved:
3 - Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:
Under the assignment of the Head of State the work on education in ES is carried out as follows:
- implementation of educational programs for ES in institutions;
- realization of measures of enhancement of personnel training in ES prevention and liquidation.

Context & Constraints:
n/a

Korea, Rep of (in English)

Level of Progress achieved:
4 - Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
The National Disaster Management Institute was established in March 2006 to provide various education opportunities and disaster information for citizens and officials in class and virtual learning.

Also, disaster simulation facilities were constructed so that people can experience the power of natural disasters.

Context & Constraints:
It is recognized that culture of safety should be promoted much actively.

Efforts not only from the government but also from private sector are required.

Kyrgyzstan (in English)

Level of Progress achieved:

3 - Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:

Risk maps on the main endangering processes are developed. The information on all settlements located in the zones of possible activation of endangering processes is available. Settlements are classified according to the endangering processes: dangerous, very dangerous, potentially dangerous, presumptively dangerous and non-dangerous. This information is kept in hard and partially electronic copies in the organizations responsible for monitoring of the endangering processes, and their regional departments.

The information sharing between the Ministry of Emergency Situations and relevant ministries and institutions on the issues related to natural and man-made disasters is available.

The information sharing between Agency on Hydrometeorology and the key governmental and non-governmental organizations (according to the list) is implemented within the framework of local agreements.

There is also the information sharing between various organizations on the official request.

By the moment the following activities were implemented:
• Local network on the information sharing between subdivisions of the Central executive office of MoES of the Kyrgyz Republic is established.
• The communication system between three regions and the Crisis Center is partially installed
• E-mail communication between the Center and two regions of the country is established
• The web-site of MoES of Kyrgyz Republic is created.

Context & Constraints:

Constraints:

1. Lack of
• a unified methodology on disaster risk and vulnerability assessment
• a well installed electronic communication for information sharing
• developed and introduced systems of the information management and analysis
• a system or a network of threats comprising relevant organizations on the territory of the Kyrgyz Republic
2. Poor coordination of activities of organizations involved in the main threats monitoring
3. Poorly developed system of the information sharing on threats-related issues between partner ministries and authorities
4. Negligence of the heads of organizations towards the issues on the population and territory protection against man-made and natural disasters.

Lao People's Democratic Republic   (in English)

Level of Progress achieved:

3 - Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:

As mentioned earlier, different stakeholders do possess relevant information on disasters, and they do share and exchange information willingly.   However, there is no one comprehensive information management system where all the available information is gathered and maintained together with easy access by all interested parties.

Context & Constraints:

Due to financial constraints, the NDMO lacks fuman and informtion management capacities to meet the requirements to develop information management and sharing systems.

Maldives   (in English)

Level of Progress achieved:

2 - Some progress, but without systematic policy and/ or institutional commitment

Description:

A country level assessment that was carried out by the Government of Maldives with the assistance from international partners to develop the disaster risk profile for the Maldives. In 2005, Disaster Risk Profile of the Maldives was published which is the first risk profile published by the country. Adequate Literature has been provided by International partners and the government has also published a few.

Information management system related to disasters is inadequate at the present moment and there are serious considerations by the government to develop one with the help of international partners.

Context & Constraints:

While adequate print material is available there is a lack of a dedicated online system regarding relevant information on disasters. Lack of adequate funding has been a major constraint

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Nepal   (in English)

Level of Progress achieved:

2 - Some progress, but without systematic policy and/ or institutional commitment

Description:

Relevant and update information on disasters in the country are scattered and scanty. As of now, through the support of UNDP, historical information on disaster occurrences called "desinventar" has been collecting disaster related information for last 36 years (1971-2007) and updated regularly. Similarly, the Department of Water Induced Disaster Prevention, Nepal Red Cross Society and few other I/NGOs have been collecting and disseminating the national level information on disasters annually or occasionally. However, as of now there is no any designated and fully functional central and district level data clearance house. Similarly, there is no any established mechanism to share such available information. Likewise, in many instances, the available information are not utilized for new programmes/ activities design and implementation.

Context & Constraints:

First and foremost, there is no any designated authority of the government to collect, collate, analyze and disseminate information regularly on disasters. Similarly, despite of several support from non-government sector, the available/ collected information has not been maintained well for further analysis and use. The regular transfer of senior government officials at the concerned Ministry(ies) is another challenge which has jeopardized the proper information collection, analysis and dissemination process in the country. Recently, AusAID has funded UNDP to support Government of Nepal to establish National Emergency Operations Center for collecting, collating, analyzing and disseminating information regularly on disasters and coordination.

Pakistan   (in English)

Level of Progress achieved:

3 - Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:

Pakistan can be ranked as level three. NDMA is fully committed to make information on disaster risks and risk management available to all stakeholders. A National Data Center is being established at the NDMA with a range of data and information encompassing all aspects of disasters. The data centre will be connected with National Emergency Operations (NEOC), the Provincial Emergency Operations Centre (PEOC), District Emergency Operations Centres, National and International Research Institutions on Disaster Management to ensure national and trans national flow of information on disasters.

Apart from the above, the NDMA maintains a website where all information related to National DRM Framework, National Disaster Management Ordinance, Training Manuals, Damage and Loss Assessment Reports, Guidelines on preparation of provincial and district level disaster risk management plans and other important documents/information are accessible.

Context & Constraints:
Effective dissemination of information requires supportive IT infrastructure at all levels. The development of country wide IT infrastructure encompassing the rural areas, where majority of the most vulnerable population lives, requires huge allocation of resources. The existing resource crunch and lack of accessibility of the most vulnerable to the internet facility impedes the usage of IT as the most effective tool of information dissemination.

Philippines   (in English)

Level of Progress achieved:
3 - Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:
There are existing information systems in different offices, but linkages have not been systematized to be of use for the wider disaster community.

The Philippines is a pilot country using a common code of hazard events, i.e., the web-based Global Unique Disaster Identifier (GLIDE) number established by the Asian Disaster Reduction Center (ADRC) in Japan. The OCD partnered with ADRC to maintain CALAMIDAT.PH, a Philippine database of natural and human-induced disaster events that uses the code. On the other hand, the Department of Social Welfare and Development (DSWD) maintains the Disaster Response Operations Monitoring and Information Center (DROMIC) which serves as a "focal point for carrying out activities for generation of data from the local levels and other sources towards decisions for timely and appropriate response." Updates on the disaster situation called "Quick Facts" are sent to the Office of the President, NDCC, government officials, NGOs, media and other concerned organizations and individuals. With DIPECHO funds, access to CBDRM good practices has also been made possible as Oxfam Great Britain cooperated with local and international partners to document and disseminate case studies through the print and DVD media.

The annual Tropical Cyclone Disaster Review (TCDR) is a comprehensive information about the cyclone passage, damage incurred, and post evaluation survey of the Special Tropical Weather Disturbance Reconnaissance, Information Dissemination and Damage Evaluation (STRIDE). The report is available at the National Disaster Reduction Branch of the PAGASA.

Context & Constraints:
Some technical information requires a social marketing strategy to be able to reach the ordinary citizen, the ultimate end-user. Computer access is poor in many parts of the country; therefore alternate ways to communicate information and data are needed to reach the right audience. How or where to obtain information on disasters have not been also disseminated. What, how and when this information is obtained, and how it can be used may also not be clear to the general public. An information management system which addresses particular users needs to be designed. There is a need for NDCC to oversee relevant disaster information systems. NDCC could use the synergy from sources and consolidate as necessary. Towards this end, networks of institutions and organizations may be tapped.

Though significant amount of useful data and tools to prepare, plan and cope against disasters were generated over the last 3-4 years, these are largely underutilized. For example, the Metro Manila Earthquake Impact Reduction Study (MMEIRS), completed in 2004, has proposed forty-one (41) specific recommendations based on earthquake scenarios generated from risk and vulnerability assessment of

Metro Manila. However, most of these recommendations have not been acted upon.

Often, generators and analysts from different agencies and academe who have collated and studied disaster data are not aware of state-of-the-art. This shows that professionals and researchers concerned about disasters do not have a proper forum that shall help consolidate a national information management system for DRR.

Singapore   (in English)

Level of Progress achieved:
5 - Comprehensive achievement with sustained commitment and capacities at all levels

Description:
SCDF has invested heavily in training programmes and facilities. Specialist and command-related courses arm the staff with the necessary skills to perform their duties. Two purpose-built training facilities: the Civil Defence Academy and the Basic Rescue Training Centre, provide some of the most advanced training facilities available in the region.

Context & Constraints:
Nil

Sri Lanka   (in English)

Level of Progress achieved:
3 - Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:
The updated news, information and other DRR initiatives taken place in   Sri Lanka is available in DMC web.(www.dmc.gov.lk)

 On completion of Hazard maps and risk profiles for identified hazards, DMC will place these maps in a separate web site for the use of any stakeholder. Basic infrastructure has been installed to launch a GIS data base on disaster risk at village levels.

 A separate division in the DMC has been identified to manage the disaster risk information.

 A Database on disaster events and impacts since 1974 have been developed and available on the website.(www.desinventar.lk). Database validated with data obtained from districts, divisions, village and central government agencies. These data is accessible to all the stakeholders.

 Resource center was established at DMC to encourage academics and school children to undertake disaster management related research. These information will be available in the DMC web site.

 Training programmes are conducted for districts and divisional officers for the use of data to analyze the disaster risk of the districts/divisions and develop projects for reducing the disaster risk.

 Officials are trained to include disasters in development plans based on disaster data available at district and divisional level.

 At present the projects and programmes are not developed or updated based on Hazard, Risk and Vulnerable information. Discussions are in progress to consider such information in future programmes and projects.

GIS data based developed in one of the division Badulla district . Landslide data included and varified in the field. Dvelopment proposals are prepared based on this information.

Context & Constraints:
Informations available at district level are limited and some times information related to disaster losses are not available. Government Agencies keep information with them only for about last 5 years and hence the validation of data base has been done with limited amount of data. However arrangement has been made now to enter data after each and every disaster in future.

Formats for collection of data have been standardized by DMC with the assistance of Ministry of Public Administration and in future collection data on disaster will be streamlined. However these officers have to be trained to use these formats and monitor the data collected to ensure that they represent correct information in the field.

Personnel engaged in preparation of development plans lack the knowledge on disaster risk and vulnerability assessment methodologies.

Some organizations have legal authority to share data and only process data publish could be accessed. Data is not available freely and need to be paid to acquire. Due to security concerns digital maps are not shared freely. Policy on sharing data between public agencies needs to be developed and agreed. DMC promote university students to undertake research project to develop simulation model floods. Training of district officials on the use of GIS information need to be conducted.

Syrian Arab Republic   (in English)

Level of Progress achieved:
2 - Some progress, but without systematic policy and/ or institutional commitment

Description:
This issue hasn't been considered during the last decade, the collapse of Zeyzoun Dam in 2002 highlighted the importance of knowledge in reducing disaster risks, although 18 persons collapsed during the disaster but the knowledge of one of the residents who warned the people from a high place to escape after he assessed the imminent collapse of the dam because of the leakage of water from its sides, has helped many residents of the village to survive.
This in turn emphasized the importance of spreading knowledge on disaster reasons and the way of dealing with it in order to reduce the risks and save lives.

Context & Constraints:
The constraints are the availability of comprehensive vision on the definitions of risks and how to deal with it in all institutions and the continuation to introduce awareness culture against different risks and the certainty of the importance of this culture to all society members beside shortage of experience in the field of raising awareness.

Tajikistan   (in English)

Level of Progress achieved:
3 - Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:
The maps of major hazardous processes were created. Information is available on all settlements in the zones of possible activation of hazardous processes. The settlements are categorized by degree of the hazards: dangerous, especially dangerous, potentially dangerous, possibly dangerous and non-dangerous. The information is stored in hard copies and partly in electronic format at organizations responsible for the

monitoring of hazards and their structures.

Agreement of May 2006 between CoES and relevant ministries and organizations establishes exchange of information in the area of emergency situations of natural and technological origin.

Within the local agreements, exchange of information takes place between the Agency for hydrometeorology and the major governmental and non-governmental organizations.

Exchange of information exists among a variety of organizations, on the basis of official requests.

In September of 2005, the special Resolution of the Government of RT established the Information Management and Analysis Center (IMAC) at CoES.

At present:

• The local network was installed, for exchange of information between the structures of the central apparatus of the CoES (network of 62 computers)

• The system of communication between the Center and seven regions, based on the Codan modems.

• The Center has electronic mail communication with all four regions of the country

• The web-site of CoES was created.

• The Agreement was signed with the key government agencies in the sphere of exchange of information, with the purpose of their integration in the information exchange with IMAC.

• In accordance with the agreement on exchange of information, the relevant ministries and organizations receive information on the emergency situations in the territory of the Republic of Tajikistan.

• The preliminary analysis of geological information was carried out, on the basis of the 30 years data of the unit for monitoring of dangerous geological processes of the Chief Directorate of Geology.

Context & Constraints:

Difficulties and problems:

1. Lack of

• Common methodology in assessment of threat, vulnerability and risk of natural disasters

• Internal and external electronic communication for exchange of information

• Functioning modern systems of management and analysis of information

• Common system or network of monitoring of threatening processes in the territory of the republic of Tajikistan among the relevant organizations

2. Weak coordination in activities of organizations monitoring the major threatening processes

3. Inefficient system of exchange of information on threatening processes among ministries and organizations - partners in this work

4. Neglectful attitudes of heads of organizations towards the common problems of protection of population and territories from natural and technological disasters

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Uzbekistan   (in English)

Level of Progress achieved:

4 - Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:

The scientific and technical council was formed and functions, that provides expertise of scientific and technical research for protection of the population and territories in emergency situations of natural and technological character. The results of the applied research works of scientific organizations are introduced in the practice of the relevant organizations. The legislation stipulates that information in the field of protection of population and territories in emergency situations is open, and the organs of state power and administration, the self-governance structures, administration of enterprises and organizations are responsible for the timely and accurate informing the population through the means of mass media and other channels.

Context & Constraints:

Viet Nam   (in English)

Level of Progress achieved:
4 - Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
The Standing Office for the CCFSC is the focal point of DRR in Viet Nam. The Office has been collected, and archived relevant disaster databases in different formats. The main database is the disaster-related damage information. There are two different formal systems. One is the data collection system of CCFSC for the purposes of emergency response and another is the system of General Statistics Office (GSO) used for long-term statistical purposes. Additionally, some NGOs and international organizations have the damage and need assessment data of some specific disasters. Most of disaster-related databases are not archived in a standardized format and mainly the data related to damage caused by natural disaster at provincial level by the disaster event.
Another system to monitor, archive and disseminate data on key hazards and vulnerabilities is the webpage and the monthly newsletter of NDMP. The information in this system is available in both Vietnamese and English and free access for all stakeholders.

Context & Constraints:
The disaster information database includes many other sectors. The Vietnamese government has gradually improved this database. Due to the budget limitation, current database management mechanisms need to be paid more attention. The limitations of resources such as human, finance and technique are the biggest challenges.
Proposed solutions:
To ensure the information easily accessible, besides the disaster information sharing system it is needed a specialized team to update the information at last at national level. Disaster related information should be shared via mass medias, newspapers, CCFSC webpage, and PCFSC webpage. The NDMP webpage should act as a hub to share the information between governments and other NGOs, International organizations.
Current system and mechanisms of Viet Nam to monitor, archive and disseminate data on key hazards and vulnerabilities is seen as useful and effective. Therefore, its existing role and performance of DDMFSC should be enhanced and improved. However, in order to sustain the functions, it needs to be integrated into the government system and its autonomy should be strengthened.
Need more investment on facility, modern science and technology, particularly the specialized staffs to effectively link the data and information from Governemt to CCFSC and other ministries, and sectors.
Develop standardized database and strengthen the awareness raising on information sharing

Yemen   (in English)

Level of Progress achieved:
1 - Minor progress with few signs of forward action in plans or policy

Description:
Developing the Network and Information sharing system has a limited sources within the components of the Project (Strengthen the National system of Disaster and Climate Change Risk Reduction and Recovery.2008-2011) which will secure the some basic needs of hazards (risk) management system. The planned information system should include development of a National website, information management system which and virtual network connect all members of the national platform agencies . the main inputs are; the outcomes of the national risk assessment and mapping, risk reduction safety standers and

guidelines, the legal documents, the national strategies, warning messages … and all relevant information. This system will be linked to the majority of relvant national and international organizations.

Yemen has received the DRR field library from UN/ISDR in 2008. A promotion program for utilizing this valuable library has been designed. The main elements for this program include translation of some selected publication to Arabic language, distribute the list of the publication among universities and research institutions with enabling the references by the EEGD.

Context & Constraints:
Main challenges in this part are:
• The available resources are very limited hence it will take sometime to start the activities.
• The language barrier where most of the publication and information in DRR are only available in foreign languages which main the needs to a large translation process to Arabic.
• The lacking of experience and trained staff .
• The limited capacity of the governmental agencies.

Europe

Armenia   (in English)

Level of Progress achieved:
3 - Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:
Armenia experienced the 1988 Spitak devastating earthquake is profoundly aware of importance of disaster related information to be reached to those who need it most. Three principal institutions within newly organized Ministry of Emergency Situations namely Armenian National Survey for Seismic Protection, Armenian Rescue Service and Armenian State Hydrometeorological and Monitoring Agency are responsible for timely and accessible information concerning the natural hazards. Weekly Emergency Newspaper provides the information on all types of hazard. Information on seismic hazard is provided through the Erevan TV channel once a week during the view of flashback news. Current seismic situation in Armenia and worldwide is provided to the leading information agencies for dissemination. Territorial departments of the Armenian NSSP are engaged in providing information about disaster risk and safety actions.

Context & Constraints:
There are gaps in turning data into knowledge and wisdom through exchanging and analyzing the information.
To improve the communication means and human interaction to have ensured the usefulness of information
Using Internet and mobile phones will be an advantage to deliver timely early warning information and could save the lives at least.

Bulgaria   (in English)

Level of Progress achieved:
4 - Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
MES organizes regular information campaigns for awareness of the populations about the main rules for reaction and protection in case of disaster:

„Survival alphabet"- printed materials and 5 video clips with the main rules for reaction in the most typical disasters - floods, earthquakes, storms and heavy winds, fires and electric storms. Clips were broadcast on the Bulgarian national television.
„Close to you" – campaign for education of disabled or chronically ill people for disasters protection. Information materials were issues for disabled people, their personal assistants, parents, relatives and employers. Four training courses were hold in specialized centers for disabled people.
„Open doors days" – hold in the whole territory of the country. Experts and rescuers fro MES demonstrate to the population the equipment and engineering technology, needed in case of disasters.
In 2008 two additional web sites were launched as part of the official web site of MES – for kids (http://zadeca.mes.bg) and for disabled people (http://blizodoteb.mes.bg). The web site for disabled people is accessible in Bulgarian, English, French and Russian.

Context & Constraints:
Developing the cooperation between institutions related to the disaster protection.

Croatia   (in English)

Level of Progress achieved:

3 - Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:

The data on natural and technological risks are public and available at all levels, and are exchanged with other countries through competent authorities.

The said procedure enables making a quality threat assessment at all levels.

In some specific types of risk, especially in the environment and flood and fire protection, a progress has been made at request of local authorities.

Context & Constraints:
Building of a single system which would merge all data on natural and technological disasters and make them available on the internet.

Czech Republic   (in English)

Level of Progress achieved:

4 - Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:

Relevant information is available through a special emergency dissemination system, media, Internet and also via SMS messages.

Context & Constraints:

Financial constraints occur. media are relatively experience how to sisseminate warnings and information. Single voice principle for warnings is recognized even though is not precisely defined in the law system.

France   (in French)

Level of Progress achieved:

4 - Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
- Il revient à l'Etat de s'assurer que l'information sur les risques est non seulement accessible mais effective. Il existe différents systèmes de gestion de l'information sur les risques de catastrophe en fonction des objectifs visés. En particulier, on distinguera :
-> la dimension technique qui s'exprime à travers un ensemble de bases de données généralement à l'usage des spécialistes et d'experts et à partir desquelles se construit l'information. Ces bases sont multiples (néopal, sisfrance, RAP….) et tenues à jour par des organismes publics ou privés selon leur nature (MEEDDAT, BRGM, Caisse Centrale de Réassurance,….)
-> la dimension administrative qui porte sur les procédures (couverture géographique des PPR, DDRM, GASPAR, …)
-> la dimension « sensibilisation - information - éducation » qui vise le grand public à travers une information traitée, des supports cartographiques d'aléas et de vulnérabilité et en utilisant les outils informatiques. Elle a été renforcée par l'instauration depuis juin 2006 de la nécessaire et préalable information des acquéreurs et des locataires d'un bien immobilier.

- Le site portail www.prim.net du Ministère de l'Ecologie , de l'Energie, du Développement Durable et de l'Aménagement du Territoire (MEEDDAT) permet d'accéder aux différents champs de la prévention des risques et à tous les publics. D'autres sites existent également notamment à l'initiative de la mission « risques naturels » des compagnies d'assurances et enfin, à l'initiative de la société civile et du secteur privé.

- C'est, en définitive, un ensemble d'acteurs et de partenaires qui concourent, chacun dans son domaine spécifique, à la mise à disposition et à la diffusion de l'ensemble des éléments constitutifs de l'information sur les risques.

Context & Constraints:
- Parmi les voies possibles de développement actuellement, on retiendra l'incitation à l'émergence de pôles locaux de recherche. Par ailleurs, une harmonisation des initiatives de niveau européen est recherchée. Il en est ainsi pour ce qui touche aux techniques de satellisations qui appellent des démarches à des niveaux supra nationaux et dont les retombées contribuent à la gestion des risques.

Germany   (in English)

Level of Progress achieved:
4 - Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
The "Federal Office for Civil Protection and Disaster Assistance" (BBK: see the links below) provides in its "German Emergency Planning Information System" (deNIS and deNIS II) an extensive collection of Internet links for all relevant information, including actors and institutions in disaster reduction, prevention, management and potential. The BBK has chosen this means of distributing information to the public because it does not entail data creation, rather the compilation, organisation, and centralisation of exhaustive, official, pre-existing information in a manner that can be navigated more readily. For additional information on climate change, the "Federal Environment Agency" (UBA: see link) and other public authorities cooperate extensively to provide information to all stakeholders.

On the Federal States level, the "Crisis Management and Disaster Relief Centre" of the BBK operates the "German Joint Information and Situation Centre of the Federal Government and Laender" (GMLZ: see link), which provides information for the Federal States (Laender) and Government as well as organisations in large-area damage situations or other circumstances of national importance. By order of the Ministry of the Interior, the GMLZ is also involved in the EU collective procedure on intensified cooperation in international disaster control (see Priority 2).

The "German Meteorological Service" (DWD: see link) provides meteorological services, short and long-term recording, monitoring, and evaluation of meteorological processes in the atmosphere as well as its structure and composition, the recording of interactions between the atmosphere and other environmental spheres, the forecasting of meteorological processes, the operation of the necessary measuring and observation systems and the provision, storage, and documentation of meteorological data and products. It circulates this information through the media, its own homepage or others such as unwetter.de (see link).

The "Helmholtz Research Network" provides scientific experts with information and data on natural disasters through its network in its "Natural Disasters Networking Platform" (NaDiNe: see link) for the press and the public. The website "metapage" (see link) makes comprehensive data about flood protection/management available and the insurance industry has the systems and publications such as the

yearly review of the Munich Re Group and its NatCat Service (see link). The "German Committee for Disaster Reduction" (DKKV) provides extensive information about all kinds of disasters in its publications and on its website (see link).

The county and community/municipality authorities as well as the emergency services and fire brigades have institutionalised a network of preparedness on the local level, which exchanges information but not in a systematic or centralised manner. The flood forecasting, management centres and different national authorities (see overview in the link "Hochwasserzentralen") offer information on water levels and flood risk (see the example).

In the case of international cooperation by German actors, providing advice and assistance in circulating relevant information about disasters at all levels has been implemented, for example, through country profiles with information about disaster risks (see link). It contributes to an international exchange of experiences through publications, events, conferences and dialogue boards.

Context & Constraints:
The DKKV attempts to tighten the links and networks of its members (from all areas of disaster reduction and management) through its daily work, activities and events. The BBK and the "Permanent Conference on Disaster Preparedness and Civil Protection" (SKK: see link) also pursue the goal of distributing information to all levels of actors and the public. But altogether there is an urgent need for an exhaustive database on all types of disasters.

In the opinion of most German actors in disaster reduction/management, there is not a lack in the range of available information but challenges of common understanding, awareness of responsibility/probabilities/possibilities by (potential) actors and not enough sophisticated networking, which must be improved at all levels through sensitisation and education (see the next Core Indicator). Additionally, a central database for all disasters is simply not yet available.

The German development cooperation plans to implement a "Round Table" for all DRR organisations to simplify communication and exchange of information.

Italy   (in English)

Level of Progress achieved:
4 - Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
Information concerning disasters is gathered, treated and disseminated by the competent institutions and agencies as well as by the National Civil Protection Department which has the responsibility to assess the performance of the whole system and of its different tiers, to identify mistakes made and lessons learnt and to translate them into guidelines addressed to the various actors of the National Civil Protection Service or concerning specific aspects. Internet news, monographs, DVDs, press releases and technical reports are then prepared and circulated both to the public and to the Civil Protection community in order to make information to flow countrywide and abroad.

Context & Constraints:
An intensive effort has been made in the last years to improve information-sharing capabilities among all the tiers of the National Civil Protection Service. All natural and man-made disasters requiring a National support have been managed according to a policy aiming at the maximum transparency and availability of information. Information availability is lower in relation to smaller events managed by municipalities, provinces and/or regions. While some regions have issued strong information policies, developed the necessary capabilities and effectively involved the lower-level administrations, some others still experience

some difficulties related to information gathering, treatment and/or dissemination.

Macedonia, The former Yugoslav Rep of   (in English)

Level of Progress achieved:
4 - Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
Certain achievements have been attained and a legal and institutional framework exists.

CMC fosters the risk assessment availability by setting networks that deal with specific risks and hazards. CMC is presently working on the implementation of a national GIS network that would enable spatial positioning and predicting possible hazard scenarios. Moreover, starting from 2009/2010, GIS will be available online.

Also, CMC is launching an NLN that incorporates laboratories from universities, healthcare and other public and private institutions that will address diseases and epidemics related risks and hazards.

Also, there is progress on the implementation of E-112 by CMC which is expected to be fully operational in 2010.

Furthermore, there is a project on the introduction of an regional USWRN. The network will amplify the E-112 system and the EWS alarming system. It will also improve the coordination with all USW Radio systems in the country, used by CMS stakeholders.

The network of inspectorates will provide a coordinated and more efficient approach towards risk and disaster related issues.

Context & Constraints:
The information is partly available on the websites of the appropriate institutions. However, the hazard data is still not united and accessible from a united network.

Although many public and private institutions have the basic GIS software, they are not yet connected into a national GIS network that would enable rapid share and availability of date nationwide. Therefore, CMC is starting an initiative to link all CMS stakeholders in possession of GIS system into a national network.

Supportive to E-112 is the concept of using media (TV and radio) and mobile phone operators by sending pre-fabricated messages providing pre-disaster warning, post-disaster announcement and messages containing information and guidelines for the citizens in the affected areas.

Finally, CMC is launching an IT network that will enhance the cooperation and coordination of all crisis management stakeholders.

Montenegro   (in English)

Level of Progress achieved:
3 - Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:
Information on hazards for which monitoring is performed, is available and accessible at all levels, to all stakeholders.

Context & Constraints:
Stakeholders, especially at the local level, should be aware of the importance of these information.So far the level of awareness is inadequate.

Norway   (in English)

Level of Progress achieved:
4 - Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
Through different networks and other information sharing systems information on disaster risks and protection options for local authorities in high risk areas is easily available and understandable to enable for them to take actions to reduce risk, and build resilience. The national Emergency Planning College has the last couple of years developed new courses to teach citizens and local administration different aspects of disaster risk reduction. The college is organisedorganized under The Directorate for Civil Protection and Emergency Planning (DSB).
A new website for climate change adaptation will be launched by December 2008.

Context & Constraints:
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Serbia   (in English)

Level of Progress achieved:
2 - Some progress, but without systematic policy and/ or institutional commitment

Description:
Nothing reported within this timeframe.

Context & Constraints:
The coordination among all participants in disaster management is not on satisfying level.

It is necessary to form and constantly update data bases.

The information should be accessible for public.

Slovenia   (in English)

Level of Progress achieved:
5 - Comprehensive achievement with sustained commitment and capacities at all levels

Description:
In recent years the Internet has proven to be very useful tool for warning and alerting the population. Therefore the website of the Administration for Civil Protection and Disaster Relief provides comprehensive information on how to take care of oneself in case of disasters, and on preventive and preparedness measures, as well as including information about warnings, alarm signals and other important data. Additionally, basic weather reports and information on previous accidents can also be found. Comprehensive meteorological information with warnings is accessible on the website of the Environmental Agency.

However, other means of communication are also used. The national emergency notification centre daily

publishes a bulletin in which information on accidents in the last 24 hours is provided; in case of need, warning information is inserted. The bulletin is distributed (by fax and e-mail) to all ministries, government agencies, local communities, television and radio stations, and other relevant institutions. The same information is provided daily on teletext on national television.

An improved website of national meteorological service was introduced with additional information, especially on early meteorological warnings. However there still exists a lot of possibilities for improvement of operational warnings dissemination with other means of communication.

Context & Constraints:
Improve coordination in the flow of information on warnings related to natural and other disasters among various ministers and government offices.

Establish fixed procedures for various means of communication to report the "single official voice" meteorological and hydrological warnings of ongoing events via decision-makers to the end -users. Ensuring human resources and financial means for these projects.

Sweden   (in English)

Level of Progress achieved:
4 - Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
The Swedish Emergency Management Agency (SEMA) has developed a national, Internet-based information system, called WIS. The system is created to facilitate information sharing between players in the national emergency management system before, during and after emergencies.

The Swedish Rescue Services Agency (SRSA) was a couple of years ago commissioned, in collaboration with other concerned authorities, to create a database of statistics that provide an overall picture of natural disasters in Sweden. The database was put in operation in October 2007 and contains information of different types of natural disasters in Sweden, such as landslide, avalanche, storm, erosion, flooding, extreme precipitation and forest fires.

During recent years a number of web-based portals, related to planning and climate change, have been developed. The Swedish Emergency Management Agency has, in collaborated with other authorities and actors responsible for emergency management, set up a national internet portal for emergency information, directed at the general public and the media.

Information is also shared at local, regional and national level through projects, specific activities and seminars.

Context & Constraints:
Data collection is resource consuming.
Participation in information sharing activities is mainly on a voluntary basis. To achieve attention for natural hazards and disaster risk reduction in competition with many other urgent and important tasks is a great challenge.

Switzerland   (in English)

Level of Progress achieved:
4 - Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:

A large amount of information is available through websites and publications (e.g. www.planat.ch; www.bafu.admin.ch). Online tools and data bases have been created to keep record of past events and hazard and risk assessments and are being used at all levels (national through municipal). Events are analyzed in detail and the results are used for adapting priorities for action.

Context & Constraints:

The 2005 floods have shown the need to make not only hazard maps available, but also intensity maps, as these are useful for interventions.

Turkey   (in English)

Level of Progress achieved:

4 - Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:

Information dissemination is a crucial factor among all disaster related stakeholders. In order to maintain this target a comprehensive archive systems must be established. In Turkey governmental units, academic units and research institutes have their own data storage systems with different formats and different systems. Some of those data, like seismic data, are available through web sources and can easily be accessed from internet. On the other hand most of the disaster related data are stored in institutions' own data storage systems.

In order to collect all disaster data in one database, GDDA started a new project called "Turkish National Disaster Archive System" within Marmara Earthquake Reconstruction Project (MEER) which is funded by World Bank. Within the scope of this project a center is established in GDDA Earthquake Research Department. Other international disaster databases like EMDAT, CRED were investigated and software was prepared. Data collection process from relevant institutions is continuing. After the conclusion of the integration all disaster data, the information will be accessible for public.

Context & Constraints:

Disaster Archive Systems are used and/or designed mainly for collecting and disseminating data on disasters. Since those environments are useful for researchers when analyzing past occurrences of specific types of hazards, may not appeal to all walks of life including public and more professional users. Archive systems must be supported with geographical information system analysis, web mapping techniques in order to increase the visual quality.

Archive systems may also be used as a good platform for sharing disaster related documents. Those environments could also be used as knowledge portal including full spectrum of educational materials and becomes a one stop shop for users from both academic and private areas. Thus, operators of this system must be well educated on the management of Archive systems and disaster education.

United Kingdom   (in English)

Level of Progress achieved:

4 - Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:

Under the Civil Contingencies Act local responders have a duty to share information. This information will take

many forms, for instance describing capabilities, resources, processes, contact details for key personnel. In sharing information the Act states that the initial presumption should be that all information should be shared, although these are some exceptions to this. It is important that these are set out clearly as uncertainty about roles, rights and responsibilities in this regard
has been found to be corrosive of attempts to foster information sharing for co-operative
working. Organisations and government departments aim to make the public aware of the risks of emergencies and how the organisation is prepared to deal with them if they occur. Organisations have considered whether publication will assist in dealing with an emergency, particularly by creating a more-informed public. It has made sense for organisations to group together in publishing information. It may not be necessary to publish whole risk assessments or plans. There may be sensitive information which needs to be edited out. And organisations should aim to help the public be alert but not alarmed - excessive information may alarm the public unnecessarily.

The simplest and most cost-effective way of publishing information is on the web. But paper copies should also be available where people do not have access to the web (for instance, in public libraries). Particular care is taken to reach vulnerable people or those who may not understand the message (such as the elderly or children in schools). A good example of this is the UK Met Office who offer relevant information to emergency responders through a web portal, and to the public through a wide range of media outlets.

Context & Constraints:

The sharing of information is a resource intensive and sometimes hindering aspect for emergency responders who wish to ensure a full and targeted response during an emergency or at times of recovery. The UK government is developing an extranet facility for all emergency responders. This will enable the sharing of relevant information before, during and after an emergency. The extranet will also have a simple mapping system and other useful tools to enable the fast transfer of information around the responder community. It will enable calls for mutual aid to be made as well as greater opportunity to share resources.

Oceania

Australia (in English)

Level of Progress achieved:
4 - Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
Australasian Libraries in the Emergency Sector (ALIES) is a cooperative information network which aims to serve the common interests of emergency management agencies.
ALIES supports the information requirements of the emergency sector by promoting and facilitating the sharing of knowledge and resources within Australia and New Zealand. Their aim is to:
• Promote and support the professional status of emergency management agency libraries and information services, and the use of information resources, facilities and professional networks.
• Provide opportunities for the exchange of knowledge, experience, skills and resources throughout the network
• Provide a mechanism for contributing to wider policy issues affecting emergency management practices.
AusDIN Is the Australian Disaster Information Network. The AusDIN Portal is designed to be a one-stop-shop for emergency management information for communities, schools, media, researchers and emergency management practitioners.
It will provide access to a wide range of information including local emergency management networks, spatial information, reports, warning, alerts and general information and disasters data.
It is a multi-agency initiative to establish a national knowledge and information network of people and systems to serve the emergency management community in the Australian region. It also supports the development of governance arrangements for general emergency management data, information and knowledge through development of best practice, guidelines, sponsoring of workshops and consideration of national issues.

Context & Constraints:
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Marshall Islands (in English)

Level of Progress achieved:
1 - Minor progress with few signs of forward action in plans or policy

Description:
1. Development of an up-dated high resolution and geographic information system (GIS) for support of hazard and risk management applications.
2. Regional information database (Pacific Disaster Net www.pacificdisaster.net) developed to assist member countries in the implementation of the Regional Framework for Action
3. MapServer setup as resource information centre http://maps.mimra.com/

Context & Constraints:
1. Data still resides with primary agencies. Plans for consolidation slow. Addressed in DRM NAP
2. Online web servers are expensive to access and maintain due to costs related to internet connectivity and maintenance.

New Zealand (in English)

Level of Progress achieved:
4 - Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
Civil defence emergency management legislation has as part of its purpose encouraging and enabling communities to achieve acceptable levels of risks through:
• identifying and managing risks
• consulting and communicating about risks
• identifying and implementing cost-effective risk reduction
• monitoring and reviewing the process.

Relevant government agencies, local authorities, emergency services and lifeline utilities have a legislative responsibility to participate in emergency planning at the national and local level. Statutory national and local plans are open to public submission during preparation, are approved and managed by political representatives of communities, and are made publicly available while in force (most easily accessible through the relevant agencies' websites). These arrangements facilitate open information-sharing and accountability. Similar processes exist for environmental planning.

Plans are based on risk assessments to identify priority concerns, and may include hazard risk mapping or zoning. Hazard and risk information from research institutions and government agencies is widely available, often used in targeted outreach programmes, and otherwise is generally available from websites with access aidied by common search engines.

Information on hazards associated with a particular parcel of land or property may be attached to its legal title of ownership, and this information is available on request from any party.

Public information campaigns (leaflets, media) are based on the steps that citizens should take to help protect themselves from nationally generic and locally specific hazards and risks (see Indicator Three for more information).

Context & Constraints:
Raising people's awareness of hazards and risks needs to be linked to means for them to reduce their risks. In particular getting community involvement in, and hence support for, land-use policy development and planning aimed at hazard reduction is an ongoing challenge.

Hazard and risk information is widely available, principally as a result of ongoing central and local government research programmes. However, a key constraint on the use of the information has been a 'user-pays' funding model for the research organisations that collect and maintain the information. The constraint has been recognised and is being addressed by the principal government funder, the Foundation of Research, Science, and Technology.

Vanuatu   (in English)

Level of Progress achieved:
3 - Institutional commitment attained, but achievements are neither comprehensive nor substantial

Description:
A recent achievement is the availability of the Pacific Disaster Net, a web portal for disaster risk management in the Pacific Region to support Pacific Island Countries to develop and implement their national action plans. The information system is designed to be the largest collection and comprehensive resource to facilitate informed decisions on matters related to DRM and sustainable development. It hosts material and real time information on alerts notification, events, reports, documents and publications, data

inventories, audio-visual files on any of the countries in the region including relevant information on disasters for Vanuatu. The PDN is a living collection and growing DRM information resource that supports national action planning, decision making and provides in-country information. PDN is available for use by Pacific Countries and is available in a format for much wider reach into the communities.

Context & Constraints:

While this information system is available for access by everyone in the region, its usability within Vanuatu has already been applauded by the Vanuatu National Disaster Risk Management Office. However its early days to see its effectiveness within communities. While the Vanuatu NAP obligates 'a' information system, it does not single out the PDN as the information system for such.