

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

Priority 3:

Use knowledge, innovation and education to build a culture of safety and resilience at all levels.

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, and includes original reporting in English, French and Spanish.

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/progress/reports/>

An HFA Monitor update published by PreventionWeb

Africa

Algeria (in French)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

Au plan de la formation, et pour ce qui est du risque sismique, outre les modules des sciences de la terre qui sont enseignés dans cinq universités du pays, il y a lieu de signaler l'introduction de modules d'enseignement de « Dynamique des structures » et de « Calcul parasismique des structures » depuis 1984 dans les Instituts de Génie Civil des différentes universités algériennes.

De même, il a été procédé en 2004 à l'élaboration de programmes d'enseignement portant sur l' « environnement et les risques naturels » au niveau des cycles primaires, moyens et secondaires. Ces programmes sont en cours de généralisation dans les établissements primaires et secondaires sur tout le territoire national après avoir été testés dans plusieurs wilayas.

Par ailleurs, dans le cadre d'une convention signée entre le MICL et le MEN, une sensibilisation au risque sismique a touché les établissements scolaires de neuf wilayas considérées comme pilote.

En collaboration entre le Ministère de l'Education Nationale et le Croissant-Rouge Algérien, une élaboration d'un cours sur les catastrophes et le seisme (guide de l'Enseignant, livre de l'élève, CD...) pour les niveaux scolaires primaire et moyen est en cours

Context & Constraints:

Le défi essentiel réside dans la mise en œuvre des dispositions et des prescriptions de la loi 04-20

concernant les aspects « formation », l'organisation et les systèmes y afférents restent, en fait, entièrement à construire. Dans ce cadre, il y a lieu de signaler que le Ministère de l'Enseignement Supérieur et la Recherche Scientifique (MESRS) vient de créer un réseau (RISK-NAT-TEC) de tous les laboratoires, centres et organismes de recherche concernés par la réduction des risques de catastrophes pour une meilleure coordination des travaux réalisés et aussi pour la dissémination des résultats

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

L'évaluation environnementale est prévue par les dispositions de la loi 03-10 sur la protection de l'environnement dans le cadre du développement durable

Concernant les analyses de coûts, il n'y a pas d'instruments dédiés à ces activités (pas de réglementation, ni de procédures...). Cependant, les assureurs nationaux, en coopération avec les réassureurs développent des initiatives en vue de préparer un système de tarification et d'estimation des dommages.

Cependant, en ce qui concerne les établissements classés, des instruments ont été prévus pour prendre en charge l'évaluation des coûts des plans de gestion environnementale.

Context & Constraints:

La principale contrainte réside dans la faiblesse des échanges d'informations et des données entre les acteurs nationaux concernés et l'insuffisance du partage des connaissances, notamment avec le secteur industriel.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Un début prometteur pour la sensibilisation et l'éducation du public est constaté depuis quelques années. Dans ce cadre, il est à remarquer que la plupart des secteurs concernés par la prévention des catastrophes disposent de programmes d'éducation et de sensibilisation du public.

Néanmoins leur efficacité est variable selon les secteurs et les domaines ciblés. Plusieurs secteurs (Intérieur, Education, Energie et Mines, Agriculture, Environnement, et Assurances) mènent des actions concrètes auprès des populations et notamment scolaires.. En outre, certaines activités de sensibilisation et d'information sont organisées par la Protection Civile et le mouvement associatif, en particulier par le Croissant Rouge Algérien dans les domaines liés à la réduction des catastrophes.

Les moyens utilisés pour la diffusion de l'information sont en général :

- Prospectus, dépliants et affiches
- Conférences et expositions au niveau des écoles
- Quelques spots publicitaires à la télévision et à la radio.
- Des caravanes de sensibilisation au risque sismique

Context & Constraints:

Un système d'évaluation est nécessaire pour pouvoir apprécier la pertinence des programmes

Dans ce cadre, l'absence d'une structure de coordination chargée du suivi et du contrôle des programmes d'actions sectoriels, ne permet pas d'évaluer l'efficacité et l'impact des activités sur les populations et les groupes cibles et l'efficacité des actions.

Le défi essentiel réside dans la mise en œuvre des dispositions et des prescriptions de la loi 04-20 concernant les aspects « information ». L'organisation et les systèmes et réseaux y afférents restent, en fait, entièrement à construire.

Les actions vont certainement recevoir une nouvelle impulsion avec la mise en place d'une « Commission Nationale de Communication liée aux risques majeurs » (créée par le décret 04-181 du 24 juin 2004), et la parution prochaine de textes d'application de la loi 04-20 en matière d'information, d'éducation et de communication..

Angola (in English)

Core indicator 1

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

Level of Progress achieved:

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

Description:

Existe informação disponível via órgão 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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

O país está levar a cabo acções no sentido de se materializar a orientação da introdução nos currículos escolares de matérias ligadas a gestão de desastres. Em colaboração com o Ministério da Educação e UNICEF estão em preparação de workshops com vista a formação de formadores destinados aos professores de ensino de base. Espera-se que este processo decorra no período de 12 meses findos os quais poderá estabelecer-se o sistema piloto a nível nacional.

Context & Constraints:

O Ministério da Educação encontra-se numa fase de reforma do sistema educativa e todo o território, cujo acção permitirá a inclusão das matérias ligadas a gestão de desastres nos currículos escolares.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

Foram feitos estudos sobre riscos múltiplos nas províncias de Luanda, Benguela, Cunene e Kuando Kubango e identificados estratégias de mitigação a serem implementados pelos respectivos governos provinciais.

Context & Constraints:

O estado actual de contaminação com minas impede o desenvolvimento de estudos de forma pormenorizada em várias localidades.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Existe programas de sensibilização para os perigos de desastres quer do ponto de vista construção de habitações nas áreas de risco, quanto a prevenção de doenças, centros de acolhimento e reassentamento em áreas de segurança.

Context & Constraints:

Não tem sido fácil para o governo reasentar nos centros urbanos muitas populações que antes deslocadas de guerra construíram em áreas de riscos.

Burkina Faso (in French)

Core indicator 1

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

Level of Progress achieved:

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

Description:

Des systèmes d'information sectoriel existent mais l'accessibilité 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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

Au niveau de l'enseignement de base, une politique d'éducation environnementale est mise en oeuvre au profit des enfants scolarisés en vue de développer leur prise de conscience sur la nécessité d'une gestion durable de l'environnement par l'adoption de nouveaux comportements.

Egalement au niveau de l'enseignement supérieur et dans certaines écoles professionnelles, les concepts

liés à la réduction des catastrophes sont enseignés.

Context & Constraints:

- Il s'agit de politiques pour le moment limitées.
- L'analphabétisme de la grande majorité de la population.
- L'insuffisance de ressources financières.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

1 - Minor progress with few signs of forward action in plans or policy

Description:

Quelques instruments sectoriels existent notamment au niveau de l'Agriculture, de la Santé, de la Météorologie, de l'Hydrologie, de l'Environnement et de certains Instituts de recherche (INERA, IRSAT...).

Context & Constraints:

- L'insuffisance de ressources financières pour la mise en place de ces méthodes de recherche et des instruments d'analyse qui sont coûteuses.
- L'insuffisance de personnels qualifiés pour la gestion de ces méthodes et instruments d'évaluation.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Des campagnes d'information et de sensibilisation sont menées chaque année. On peut citer entre autres:

- Les formations, l'information et la sensibilisation des membres des structures décentralisées du CONASUR pour la prévention et la gestion des catastrophes.
- La célébration des journées nationales de prévention de catastrophes;
- Les rencontres d'information et d'échange avec les leaders et les élus locaux;
- Les campagnes d'information et d'échange sur les épidémies et pandémies (méningite, VIH/Sida, choléra...);
- Les campagnes d'information sur les épizooties (grippe aviaire, la maladie de New Castle, le charbon bactérien...)

Context & Constraints:

- L'analphabétisme de la majorité de la population;
 - Les pesanteurs socioculturelles
 - L'insuffisance de ressources pour mener de vastes campagnes de sensibilisation,
 - La faible accessibilité des populations aux moyens de communication (Radio, Télévision et autres média).
 - La couverture insuffisante du territoire en matière de système d'information géographique (SIG).
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Burundi (in French)

Core indicator 1

Relevant information on disasters is available and accessible at all levels, to all stakeholders (through

networks, development of information sharing systems etc)

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

1 - Minor progress with few signs of forward action in plans or policy

Description:

Des contacts sont en cours entre le Ministère de l' Education Nationale et l' UNICEF pour le financement d' un projet d' éducation aux risques de catastrophes

Context & Constraints:

Le Gouvernement ne s' est pas encore approprié de cette initiative.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

1 - Minor progress with few signs of forward action in plans or policy

Description:

Ni Les méthodes de recherche , ni les instruments pour évaluer les risques ne sont pas encore mis en place.

Context & Constraints:

Besoins des ressources humaines qualifiées ainsi que les instruments nécessaires.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Des campagnes de sensibilisation et d'information sont organisées à travers des ateliers et descentes sur terrain par les responsables de la Protection Civile en collaboration avec le PNUD et les membres de la PFN.

Context & Constraints:

Les structures à la base ne sont pas encore mises en place (communes et collines)

Cote d'Ivoire (in French)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

1 - Minor progress with few signs of forward action in plans or policy

Description:

La notion de risque relativement aux aléas naturels est relativement nouvelles, tant les communautés n'ont pas pris conscience de la vulnérabilité de leur environnement. Conséquemment, les questions de réduction de risque sont très peu prises en compte dans les programmes scolaires. Les activités de formation sur ces questions sont encore bien timides et si elles existent, elles sont axées sur des secteurs tels que l'hygiène publique.

Context & Constraints:

Le principal défi à relever est d'intégrer la notion de réduction de risque des catastrophes dans les programmes scolaires pour emmener les enfants qui sont les décideurs de demain à se l'approprier. De plus, des politiques de formation, d'éducation et de sensibilisation relatives aux aléas subis et susceptibles d'être subis doivent être urgemment mises en œuvre afin que des mesures soient prises pour les réduire les risques et pour atténuer les effets des catastrophes.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

Bien que peu financées, des recherches et des études sont néanmoins faites dans les institutions de recherche et opérationnelles dans le domaine de l'environnement pour la compréhension des phénomènes. Les thématiques sont peu orientées vers les impacts de ces phénomènes sur d'autres secteurs d'activités, cela en raison du fait que la notion de réduction des risques de catastrophes est relativement nouvelle, mais aussi en raison du non financement de la recherche et du peu de moyens disponibles pour les études.

Context & Constraints:

La solution à ce niveau reste fondamentalement le financement de la recherche et des études dans le domaine de la réduction des risques de catastrophes qui nécessitent des équipes pluridisciplinaires. Cela résoudra à terme le problème de la diversité et de la disponibilité de l'information et permettra aux décideurs d'orienter les politiques d'adaptation aux aléas.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

1 - Minor progress with few signs of forward action in plans or policy

Description:

Pour l'instant, il n'existe pas de campagne d'information au niveau national pour créer une véritable culture de prévention à l'endroit des communautés urbaines et rurale.

Context & Constraints:

La mise en place de plateforme RRC offrira l'opportunité d'élaborer un plan d'action à long terme pour informer, sensibiliser et éduquer la population sur les risques de catastrophe et comment elle peut agir pour réduire son exposition aux aléas.

Egypt (in English)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

Incorporation of DRR elements in basic curricula will be considered by the Ministry of Education to ensure continuous learning and reinforce knowledge for disaster risk reduction. The Ministry was requested to develop and incorporate DRR in the school curricula. Presently, schools received, on ad hoc bases, pamphlets and simple informal educational materials including information on risk, hazards, disasters and related issues.

Training is developed in this domain, where training programmes for professionals and technicians are conducted and promoted by institutions at some levels or in some areas

However, criteria have not yet been set to monitor the benefit of the society from training, awareness and education and signs of cultural changes.

Context & Constraints:

There is an increasing awareness of the need to incorporate disaster risk into school curricula due to the efforts made by the NCCMDRR and CMDRS. The response and implementation of the required action will depend on the change of attitude, acceptance of the principle and availability of resources.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

Research methods for risk assessment were developed in some sectors. Yet, the integrated concept of developing research methods and tools for multi-risk assessments and Cost Benefit Analysis (CBA) is not achieved.

The first significant step towards achieving this concept was the establishment of the SAB. Amongst the mandates of this Board is to strengthen, through cooperation with scientific research institutions and centers of the concerned ministries and agencies, and the academia, the technical and scientific capacities to develop, and apply methodologies, studies and models to assess vulnerabilities and impacts of hazards, including the improvement of regional monitoring capacities and assessments.

Context & Constraints:

Plans, studies and models will be developed to assess vulnerabilities and impacts of hazards, including the improvement of the national monitoring capacities and assessments. Appropriate funding mechanism is to be mobilized and dedicated in sustainable manner. Capacity building for national specialists and experts, mutual cooperation in regional and international bases is to be considered.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Presently, the CMDRS and NCCMDRR are developing a national strategy for the public awareness to

stimulate a culture of disaster resilience, with outreach to urban and rural communities. This strategy will be a long-term plan of action with specific goals. Meanwhile, the CMDRS has developed a national training and capacity building program including:

- > Multi-agency trainings.
- > Local-national joint exercises.
- > Training on risk assessment.

Context & Constraints:

The NCCMDRR and CMDRS have considered developing a countrywide public awareness national strategy. Implementable strategy will require mechanisms supported by trained personnel to ensure its efficiency. Local authorities and community should be empowered to reduce risks by allowing a proper access to the “Awareness Materials” to enable the development of a prevention culture. Training and capacity building will be required.

Ghana (in English)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

1 - Minor progress with few signs of forward action in plans or policy

Description:

The schools' curricula, educational materials contain some aspects of disaster management. However, as special topics, disaster risk reduction and especially recovery have not been inculcated in the school

curricula and educational materials. Education and trainings are without elements of recovery during emergencies. In view of this short coming pupils/students lack the skills and knowledge for protection in times of emergencies such as fire, earthquake and flooding.

Context & Constraints:

Disaster/risk reduction and recovery as a policy or plan do not exist in the curricula of teacher training colleges, therefore teachers cannot impart such knowledge and skills to pupils/students. Inculcation of disaster risk reduction and recovery could be long in coming since authorities complain of already full curricula that cannot accommodate disaster management as separate subjects/topics.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

1 - Minor progress with few signs of forward action in plans or policy

Description:

The country cannot boast of any scientific system or research methods for multi-risk assessments, nor have cost-benefit analysis been developed for disaster risk reduction. So far, risk identification and mapping of only four hazards/risks have been undertaken, with research and cost-benefit analysis to be pursued for any of the major risks/hazards.

Context & Constraints:

There is inadequate researches to conduct scientific enquiries into disaster risk reduction. The interpretation of scientific research in this direction will be difficult for use at the local or community level where the risks persist.

Funding for research into disaster risk reduction and cost-benefit analysis does not exist.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Countrywide public awareness strategy exist at the national, regional, district and community levels. Public awareness strategy involves the use of both public and private electronic and print media, publication including books, handouts, brochures and house journal on various disaster types, outreaches, durbars to vulnerable communities. Education is in both English and local Languages .

Other methods include the celebration of World Disaster Risk Reduction Day and International Civil Defence Organisation Day under various themes are used to highten awareness.

Context & Constraints:

Messages do not sufficently get to targeted audience due to proliferation of radio and television stations even though this appears to be an asset.

The Public does not exhibit the deisred interest in public education because of the perception that Ghana rarely experiences any major disaster which will attract public attention.

Kenya (in English)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

1 - Minor progress with few signs of forward action in plans or policy

Description:

So far this has not been achieved.

Context & Constraints:

The major constrain being that the school curricula is presently congested.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

1 - Minor progress with few signs of forward action in plans or policy

Description:

Actualization of the programme has not started.

Context & Constraints:

So far no funds to actualize the operations.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

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 is need to involve the local communities.

Context & Constraints:

Lack of funds to reach the local communities.

Madagascar (in French)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

En collaboration avec le Ministère de l'Education Nationale et les Nations Unies, le BNGRC a élaboré un manuel scolaire pour les élèves et un guide pour les maîtres sur la GRC. Ces manuels sont disponibles dans toutes les circonscriptions scolaires du pays. De plus, les enseignants du second cycle de l'enseignement primaire reçoivent une formation pédagogique sur la RRC.

Context & Constraints:

La RRC gagne à être inscrite dans le programme scolaire. Le processus est en cours.

Les manuels scolaires, prévus pour les élèves du second cycle de l'enseignement primaire gagneront aussi à être élargis aux autres cycles primaires et secondaires.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

Le pays commence aujourd'hui à développer des outils et des instruments pour évaluer les risques multiples auxquels le pays fait face avec l'appui de nombreux partenaires. Le BNGRC travaille avec des institutions spécialisées en la matière (Météorologie, Institut d'Observation de Géophysique d'Antananarivo, Institut Pasteur,...) pour étudier la fréquence, l'intensité des risques (cyclones, inondations, tsunamis, risques épidémiologiques,...).

Context & Constraints:

Le pays manque de ressources financières et humaines pour mener des recherches d'évaluation des risques. Nous dépendons encore très largement de l'appui de nos partenaires financiers et techniques internationaux pour ce faire. Le transfert de compétences n'est pas toujours chose acquise.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

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 pays mène depuis longtemps une campagne d'information pour créer une culture de prévention. Un programme de sensibilisation sur la RRC est diffusé hebdomadairement à la radio nationale qui touche la totalité du territoire malagasy.

D'autre part, un concours national sur la GRC a été lancé pour évaluer le niveau de compréhension de la GRC par les communautés malagasy et pour les sensibiliser à prendre conscience des risques et de la possibilité de réduire leurs impacts.

Madagascar organise également de nombreuses activités dans le cadre de la Journée Internationale consacrée à la RRC.

De plus, le BNGRC travaille très étroitement avec les médias malagasy dans un objectif d'information et de changement de comportement.

Le pays, avec l'appui de nombreux partenaires, élabore, teste et diffuse des outils d'informations des communautés sur les attitudes et comportements à adopter avant, pendant et après le passage d'une catastrophe (affiches, dépliants, films, petit livret,...).

Context & Constraints:

La diffusion des campagnes d'information fait aussi face aux problèmes de développement du pays (absence d'infrastructures électriques, routes, analphabétisme,...). Du fait de la fréquence et de la gravité des conséquences des cyclones et inondations dans le pays, les campagnes d'information pour ces désastres naturels priment sur tous les autres risques. Il faut développer, élaborer aussi des campagnes d'information pour les autres risques (incendies, invasions acridiennes, tsunامي, .risques épidémiologiques...). Il manque aussi une coordination des campagnes d'information. Plusieurs départements, institutions mènent des campagnes de leur côté. Il y a un besoin urgent de coordonner ces activités. Dans ce cadre, la BNGRC est actuellement en train de créer un réseau d'IEC pour harmoniser, coordonner les activités d'IEC dans le domaine de la RRC.

Malawi (in English)**Core indicator 1**

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

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 allow for queries 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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

As a country, there are no DRR education materials that have been developed and DRR is not intergrated in school curricula(primary, secondary). Plans, however, are underway to introduce DRR courses at the unversity level. Plans are also underway to engage the Ministry of Education to incorporate DRR during the next school curriculum review in eight years time. There are no training and capacity building initiatives at nationa level in DRR at a professional level

Context & Constraints:

Education institutions have not been engaged to explore the introduction of DRR into their courses and curricula. There is, therefore, need for this engagement to be done.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strenghtened.

Level of Progress achieved:

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

Description:

Not much research on tools for multi-risk assessments has been done. But recently some studies have been done on the economic impact of disasters. One of the studies was on economic and finacisl decision making in DRR which was funded by UNDP. Another one currently being undertaken (2009) is on Economic Vulnerability and Disaster Risk Assessment funded by the World Bank.

Context & Constraints:

Lack of funding has been the major constraint to undertake the research. Expertise is available in country to undertake the research onmethods and tools for risk assessments once funding is available.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

While there is no public awareness strategy in place, DoDMA undertake public awareness meetings with communities in flood prone areas every year to sensitise them on the need to be prepared for coming rainy season and where necessary on the need to relocate upland before the rains. This has resulted in some communities in Nsanje and Chikwawa districts, which are very prone to floods in the southern part of the

Malawi, relocating permanently upland from low lying flood prone areas. This, in the end, has resulted in reducing the number of households affected by floods. There is, however, need for other stakeholders, such as government, NGOs and UN agencies to also take on this responsibility of sensitising communities as they implement their activities.

Context & Constraints:

1. Lack of adequate funds for the activity.
 2. The media are yet to be fully involved. They only participate when invited but there is need for them to take a proactive approach.
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Mauritius (in English)

Core indicator 1

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

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 disaster 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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

A whole chapter on tropical cyclone and the warning system in force in Mauritius is taught at primary and secondary level. Some basic knowledge on, volcanoes, and earthquake is also there. More efforts are required regarding landslide, flash flood and tsunami.

Recently some endeavours are being made to introduce climate change at both the primary and secondary level. Research studies are being done at tertiary level.

Context & Constraints:

Further training materials need to be developed for torrential rains, land slide and tsunami.

Efforts are being made at this moment, in collaboration with the Mauritius Institute of Education and the Education department of the Ministry of Environment to develop curricula for tsunami. A climate change booklet for children has been developed at the Meteorological Services.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

Mauritius does not have a particular institution who is looking at multi-risk assessment. The university people have just began to think in this direction.

However, some research on tropical cyclone has been done at the Meteorological Services but not much on the community response to the impacts of cyclone or on methods to reduce risks apart from the existing warning system.

Context & Constraints:

Institutional framework has still to be developed. There is a lack of resources, both human and financial. Necessary incentive need to be created to apply science to practice.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

The citizens of Mauritius are well aware and well-educated regarding tropical cyclone. Some knowledge and understanding do exist for torrential rain, landslide and tsunami.

Public awareness campaign include brochures, posters in public places and talks in communities centres

Context & Constraints:

Though awareness of hazards is increasing, there is a tendency of the general public to overlook or simply ignore some of the basics of risk reduction.

One of the major challenge in Mauritius in the change in behavior of individuals and even some organizations.

Mozambique (in English)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

FEWS-NET in cooperation with The INGC and University Eduardo Mondlane have produced a Atlas for Disaster Preparedness and Response in Limpopo Basin in 2002. Pilot projects have been carried out in primary schools in the Buzi River, Province of Sofala on training school pupils and their teachers in the way to live with disaster, especially in flooded areas using a training guideline book entitled "Como podemos reduzir os riscos de calamidades" (How can we reduce the disasters risk). This guideline is under revision by INGC with Inwent ang GTZ support in order to integrate the other functions that where also committed to Local Committees for Risk Management. Training booklets and brochures have been prepared with funding by the German agency GTZ in 2006-2007.

In 2007, MICOA in cooperation with UN Habitat produced a set of training material for local communities living along river basins, specially the transboundary ones, using the Limpopo river as a pilot. This set of material is called "O jogo do rio" (The river game) and contains a set for ones to play the game, a guideline book and posters. These materials are used to train the local communities through Local Committees for Risk Management on how they can live following the rivers nature, especially where to build houses and make agriculture. The game was used for sensitization in Limpopo and Zambezi River. Initial printed documents were in a very limited number and have been totally distributed. Another print is required to cover all river basin communities.

Mozambique Red Cross has also developed a training guideline book for Community based response to disasters, which is broadly for CVM and local community's volunteers.

The Technical University of Mozambique (UDM) and the University Eduardo Mondlane (UEM) in cooperation with INGC have jointly produced one brochure, and several posters for teaching DRR to teachers in secondary schools with support by InWent, a German agency supporting the INGC in Mozambique, in 2008. The Technical University of Mozambique has carried out 2 short courses in the use of GIS/GPS technologies in disaster management in cooperation with MapAction a Charity from UK where more than 25 people coming from government and universities where trained. UDM will establish in 2008 a BSc degree in Disaster Management with support from the PERI-PERI network of universities, in cooperation with the University of Cape Town (UCT) under USAID sponsorship. It i planned the starring of a Master degree in DRR for the year 2011 at UDM. UDM is also active in development of improved systems of sanitation in emergency situations, especially useful for wet and swampy areas. The Department of

Geography at University Eduardo Mondlane is carrying out a project on Application fo RadarSat-1 SAR Data for flood Mapping in cooperation with the Canadian Space Agency and IUCN. The Department of Physics at UEM is active in the research of Adaptation to Climate Change in Mozambique in cooperation with INGC.

Context & Constraints:

Very few teaching materials are available in Portuguese language in the area of DRR. Very few teaching staff is experienced in those areas like water and sanitation, engineering for emergency, logistics, humanitarian aid, disaster management and development issues. Major sponsorships and scholarships are needed to train teachers and researchers abroad to enroll in the future, training activities in DRR. Nevertheless the international community is active in producing teaching and practical materials for Humanitarian actions and DRR under local conditions. Those materials need to be converted to Portuguese language in order to be of general use specially under disaster situations.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strenghtened.

Level of Progress achieved:

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

Description:

So far few tools for multi-risk assessments are systematically used in Mozambique. It is worth to mention that FEWS-NET has delivered a very well equipped GIS laboratory to University Eduardo Mondlane. UNDP has provided training to university scholars and provincial INGC delegates on the use of risk management tools specially the GRIP system. In case of cost benefit analysis methods a few evidence has been found on the use of those tools, although the World Bank as released a book on Recovery of Mozambique which is accessible at the provention consortium web page.

Context & Constraints:

High-ranking scholars or technicians in DRR are found in the areas of GIS mapping, early warning systems especially in the areas of water administration and not in other areas. A holistic approach is needed in training economists and socio-anthropologists to allow a joint research effort in the whole area of DRR

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Public awareness campaigns are carried out in more vulnerable areas especially in flood prone areas. In case of cyclones awareness is almost not existent since it is understood that very few measures can be carried out to prevent their occurrences. Pronounced weakness are existent in the area of making people aware of the consequences of droughts and specially in finding ways of bringing out measures to increase resilience in the area of food security. No combination is know in relation to better planning and combination of production cycles for grains of different maturation cycles to contravene the effects of floods or droughts. In case of earthquakes, no systematic approach is being taken in disaster prone areas to raise awareness and increase resilience although a booklet on seismic awareness was produced by the INGC. In the case of urban communities a national campaign of improving sanitation and hygiene was launched in March 2008 by the President of Mozambique. This is considered a good initiative in order to minimize urban risks. One positive aspect is also the work of the Mozambican Red Cross at distrital level in the area of improving health conditions and sanitation. The Training activities at community level have also

increased the number of members for the local risks committee.

Context & Constraints:

Awareness campaigns would need massive financial and psycho-social support since their should be carried out in several local languages. The effectiveness of those campaigns in urban areas are difficult to measure due to the level of poverty in periphery urban areas. For example the proposed sanitation improvement campaign did not change significantly the sanitation conditions in local markets and slums at the Mozambican capital, Maputo

Senegal (in French)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

Des réflexions sont en cours pour introduire la RRC dans les curricula de l'enseignement.

Context & Constraints:

Dans le cadre de ses activités, le projet d'appui a prévu des séances de travail avec le Ministère de l'Education nationale dans le but de développer la culture de la prévention et de RRC.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strenghtened.

Level of Progress achieved:

1 - Minor progress with few signs of forward action in plans or policy

Description:

Des réflexions sont menées pour mettre en place des méthodes de recherche et des instruments apte à l'évaluation des risques multiples ainsi que l'analyse de leur coût.

Context & Constraints:

Le fonctionnement de la plateforme devrait faciliter la mise en place de ces méthodes et instruments.

Toutefois, les séminaires annuels ou semestriels qui seront organisés dorénavant dans le cadre de la mise à jour du plan de contingence constituent un cadre approprié pour l'évaluation des risques multiples et l'analyse de leur coût.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

1 - Minor progress with few signs of forward action in plans or policy

Description:

Le projet d'appui mis en place a inscrit dans ses activités l'organisation de campagnes d'information au niveau national pour créer une culture de prévention avec une large diffusion dans les communautés urbaines et rurales, mais les progrès réalisés dans ce cadre sont encore timides.

Context & Constraints:

Le programme de RRC qui se trouve être un des résultats du projet d'appui et qui censé démarré en 2009 devrait mettre l'accent sur ces campagnes d'information, de communication et de sensibilisation en matière de RRC.

Sierra Leone (in English)

Core indicator 1

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

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.

Core indicator 2

School curricula, education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

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 level is FOUR. As part of our efforts to promote DRR, we continue our schools programme "DRR begins at school. Selected schools in the capital and district headquarters have disaster risk reduction as part of their school curricula, education material and relevant trainings. This program started two years ago with just 4 pilot schools. This year, we extended the programme to 6 more schools and since then, demand for inclusion by schools continues to grow. At the end of every school year, quiz competitions are held and prizes given to encourage students. It is hope that this will soon grow to become a national school's competition in the near future. The objective here is to enhance positive behavioural change towards the environment through students. The national disaster management programme is lobbying with authorities to Incorporate disaster risk-related issues into the existing education curricula so that the outreach programme is extended in order to foster and reinforce positive attitudinal change and knowledge as most of the disasters that are common in the country are due to man's negative activities. It is believed that children can serve as vehicles of change and carriers of the message of risk reduction to their communities.

Context & Constraints:

The schools' outreach programme is yet to cover all the schools in the country and yet to be part of the national education syllabus as given to schools by the Ministry of Education, Youths and Sports. The national disaster management programme is lobbying with the Ministry of Education, Youths and Sports to include risk reduction into the national education syllabus as the roles pupils play in risk reduction cannot be over-emphasised.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

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 level is FOUR. The vulnerability and capacity assessments is done using scientific methodologies with models to assess the impact of hazards and capacities at individual and community levels and that future monitoring. However, the resource limitation for such venture limits the focus groups that participate during the assessments and the enumerators are not capacitated on the phenomenon of disaster management.

Context & Constraints:

The level is FOUR. The vulnerability and capacity assessments is done using scientific methodologies with models to assess the impact of hazards and capacities at individual and community levels and that future monitoring. However, the resource limitation for such venture limits the focus groups that participate during the assessments and the enumerators are not capacitated on the phenomenon of disaster management

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

5 - Comprehensive achievement with sustained commitment and capacities at all levels

Description:

Financial resources and capacity training must be set aside to equip the national disaster management programme to sustain such programme as disaster management is an evolving concept and needs to be reviewed to incorporate novel issues.

Context & Constraints:

The level is FIVE. The National Disaster Management programme with help from the United Nations have put in place strategy for a community radio sensitisation nationwide. The national programme was undertaking a weekly radio programme in a station that covers the whole country, however, in partnership with the UN, some (though not all) community radios can now be use in disseminating messages of DRR. This venture is to create a positive culture wherein disaster resilience is part of the activities of communities. The public awareness campaign is part of the sensitisation campaign to inform the general public on the options on disaster prevention, mitigation and the chanel in disaster reporting.

Swaziland (in English)**Core indicator 1**

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

1 - Minor progress with few signs of forward action in plans or policy

Description:

Education curriculum does not mainstream DRR issues and concepts.

Context & Constraints:

Challenges include advocacy and lobbying education policy makers including linking general messages in national curricular to local awareness of involvement in local hazard and risk reduction processes and emergency planning.

The programme aimed at strengthening national and local/community resilience to disasters in Swaziland seeks to advocate for the incorporation of DRR in the education curriculum through piloting DRR materials in the formal and informal education systems starting with a pilot of one school.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

1 - Minor progress with few signs of forward action in plans or policy

Description:

The strengthening national and local/community resilience to disasters in Swaziland programme is advocating for a multi sector approach to DRR issues. To date a multi sectoral drought early recovery needs assessment is underway. Methods used in this assessment provide the basis for future assessments of major hazards in the country. Two main outcomes are envisaged from this intervention namely the multi sector drought early recovery (DER) needs assessment and drought early recovery strategic plan. A draft DER strategic plan was developed. It follows a sector discussion approach of the issues.

Context & Constraints:

Capacity to develop multi-sector assessment including cost benefit analysis tools is the major constraints for the country. Constraints include lack of capacity to effectively apply science to practice and policy development.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

1 - Minor progress with few signs of forward action in plans or policy

Description:

There is no formal national coordinated programme/strategy aimed at public awareness for building or promoting resilience to disasters with outreach to urban and rural communities. Some NGOs such as World Vision, Lutheran Development Services are assisting some communities to develop and implement community based disaster preparedness emergency plans. Coverage is limited to some rural communities.

Context & Constraints:

There is no research to establish a baseline about the awareness and knowledge base of both rural and urban communities about the culture of resilience to disasters. It is difficult to gauge the levels of preparedness and or resilience of the communities. Awareness is in many cases generated in the aftermath of a disaster through stories covered by the media.

Tanzania, United Rep of (in English)

Core indicator 1

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

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 Framework 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

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

Disaster Management Department (DMD) of the Prime Ministers Office in collaboration with Tanzania Institute of Education (TIE) and University College of Land and Architectural Studies (UCLUS) developed disaster management curriculum and the training and reference manual. The Disaster Management modules contained there include:
 Introduction to disaster management;
 National Disaster Management Structure and Systems;
 Response Coordination and incident Command
 Rapid damage and needs assessment

Manual was particularly targeted for use as reference by trainee's awareness course on Disaster management in Tanzania. However, the manual is useful for reference to other target group such as administrators, journalists, NGOs, parastatals and personnel from line ministries. These categories of people are important for developing and increasing capacity in managing disasters in Tanzania.

Context & Constraints:

A proactive approach to reconciling indigenous and scientific sources of knowledge on hazards and risks, in ways that make sense to local communities is on going challenge.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

University College of Land and Architectural Studies (UCLUS) Emphasizes the importance of research in the field of disaster risk management. A wide range of basic and applied research is undertaken in Tanzania Universities (Dar es salaam University and Sokoine University of Agriculture) for the purpose of improving our understanding of hazards, assessing vulnerabilities, understanding community preparedness and response behaviors.

Context & Constraints:

Tanzanian economy limits the total available investment in hazard and disaster research. There is lack of reward and incentives for researchers to engage in disaster risk issues.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

A long term national public awareness strategy known as “National Avian Influenza: Emergency Preparedness and Response strategic Plan 2007-2009” was launched in 2008; aimed at increasing Individual and community preparedness for disasters. Disaster Management Committees had indicated that, despite high levels of awareness of the potential for disasters in their respective areas, many individuals and communities are not as prepared as they need to be. Disaster management department and other agencies are advocating preparedness, resilience, self responsibility and public responsibility. They participate in public exhibitions(e.g. farmers day) to promote a shared understanding of roles and responsibilities of PMO-DMD, Local government Authorities, NGOs, Private sector and other Institutions in preparing for, and recovering from natural and man made disasters that are beyond the community to cope with

Since 2007 Leadership Initiative for Public Health (LIPHEA) was awarded funds by USAID to spearhead public health emergency management training using School of Public Health as a training hub. The overall goal of the project is to build health emergency preparedness and response capacity especially at regional and district levels using an all hazard approach which will include the emerging threats of pandemic Avian Influenza (AI) and other specific conditions. Initial training involved 10 regions and 30 Districts. The curriculum involves different topics such as: Concepts of disaster risks, hazards and vulnerability assessment; disaster identification; Major disasters in the districts, country and regions; rapid needs assessment and complex emergencies; mass casualty and risk communication; policy frame work for disaster management and coordination; principles of Disaster planning; the sphere standards for disaster response; district disaster management matrix and activity for the district plan and writing plan.

Context & Constraints:

Public awareness of disasters risks is increasing with multi sectoral participation at all levels, from local to national, public and private. The challenge is changing behavior of individuals (learning is an individual

process) and organizations, and progressing intention into action.

Togo (in French)

Core indicator 1

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

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 potentiels et avérés et leurs localisations

Context & Constraints:

identifications des zones à risques et les types de risques

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

1 - Minor progress with few signs of forward action in plans or policy

Description:

un projet de documentaire intitulé "la prévention des catastrophes commence à l'école "en cours de réalisation avec l'appui des partenaires en développement. des initiatives en cours avec l'ONG PLAN TOGO en vue de développer la culture de prévention des catastrophes au niveau scolaire.

Context & Constraints:

le financement

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

1 - Minor progress with few signs of forward action in plans or policy

Description:

il existe des recherches épartés notamment les mémoires en matière risque et catastrophe naturels mais aucune action dans ce sens

Context & Constraints:

le renforcement des capacités de la plate forme nationale et des chercheurs dans la définition des méthodologies et à l'usages des instruments adéquats

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

1 - Minor progress with few signs of forward action in plans or policy

Description:

le documentaire avec une large diffusion dans les chaînes de télévisions et radios nationales et dans radios locales en langues nationales.

Context & Constraints:

les moyens financiers pour mener un grand campagne de sensibilisation.

Zambia (in English)**Core indicator 1**

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

The country has conducted a regional disaster management course where Disaster Risk Reduction (DRR) and disaster management formed the main modules. Participants from various institutions and countries have in the past attended this course. At tertiary level, the Mulungushi University and the University of Zambia have introduced courses relating to disaster management in their curricula.

Context & Constraints:

The major challenge remains to take the subject to the lower levels of school curricula such as Primary and Secondary.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

1 - Minor progress with few signs of forward action in plans or policy

Description:

The Comprehensive Vulnerability Assessment has not been done. There are efforts at the sector level to conduct multi-risk assessments but these are not very well coordinated.

Context & Constraints:

Level of awareness of the importance of this aspect remains low. Funding for strengthening this aspect is limited or not there.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Currently the Disaster Management and Mitigation Unit have been conducting awareness campaigns on the national television and radio utilizing English and major local languages. There are plans to utilize local radio stations with messages transcribed in the local language. Furthermore, capacity is being built in the District Disaster Management Committees to conduct awareness campaigns in their respective districts.

Context & Constraints:

Lack of funds for comprehensive country wide public awareness to be mounted and also capacity building for all the districts and Satellite Disaster Management Committees.

Americas

Anguilla (in English)

Core indicator 1

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

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

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

DRR Begins in School Campaign
Riskland Games
Whistles and pencils

Context & Constraints:

staff time and budget
Lack of interest to modify school ciriculum

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strenghtened.

Level of Progress achieved:

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

Description:

Pilot of one village completed
working to add in climate change and adopt the assessment from a community based level

Context & Constraints:

project in process
need better base data

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Drafted in 2008 and in implementation phase in 2009

Context & Constraints:

Funding and staffing have been an issue

Argentina (in Spanish)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

De la Plataforma Nacional ha participado el Viceministro de Educación de la Nación y el Vicerrector de la Universidad de Buenos Aires, entre otras altas autoridades (más universidades públicas como la de Gral. Sarmiento y la de Jujuy, y otras privadas como la Univ del Salvador), pero lo cierto es que ha sido inestable la concurrencia, y aún no se ha plasmado ello en incorporación de la temática en currículos de carreras tradicionales o en la escuela primaria.

Sí se desarrollan cursos de post grado de alto nivel, pero más allá de su prestigio son en verdad casos aislados

Context & Constraints:

Las autoridades educativas se muestran recargadas de exigencias (“todo pasa por la educación”) y los

currículos no todas las veces pueden adaptarse fácilmente recargándolos con nueva información. Esta limitación será la que deberá sobreponerse.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

El algunas especialidades el nivel de evaluación e investigación es realmente alto. Pero no es parejo ello. Hay temáticas, como la del Desarrollo Territorial, que exigen niveles de evaluación importantes y en base a las investigaciones se ha diseñado un Plan de Inversiones y Desarrollo Territorial por parte del gobierno nacional Pero aún no ha alcanzado el mismo nivel en los niveles provinciales y locales.

Context & Constraints:

Extender el mismo nivel a todas las áreas y espacios, será el reto.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Tanto desde la Dirección de Protección Civil como de la Comisión Cascos Blancos, se desarrollan en forma permanente planes y programas para mejorar la resiliencia de las comunidades a través de una estimulación de su cultura en la temática. Ello alcanza niveles urbanos y rurales, niveles nacionales, provinciales y locales, y son desarrollados -en el caso de Cascos Blancos- en fuerte alianza con organizaciones no gubernamentales y líderes comunitarios locales.

Las limitaciones presupuestarias, a veces impiden ampliar los programas de la manera que resultaría de interés.

Context & Constraints:

Superar las limitaciones presupuestarias para continuar y extender la programación, será el reto.

Bolivia (in Spanish)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

Compromiso del Ministerio de Educación y Culturas (MECs) de incorporación del Temas de Gestión de Riesgos en la elaboración del nuevo Currículo Base del Sistema Educativo Plurinacional (SEP), Documento final en revisión sobre los lineamientos del “Eje Articulador” Medio ambiente, Ecología y Gestión de Riesgos en el nuevo currículo del SEP con el apoyo técnico de PREDECAN.

Compromiso de los actores relacionados con la educación en zonas afectadas por el impacto de fenómenos físicos.

Consolidación de la Mesa de Educación

Context & Constraints:

Implementación y desarrollo del nuevo currículo con enfoque de Gestión de riesgo en el SEP.

Promover la Red de educadores para la gestión de riesgos con profesores del SEP

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strenghtened.

Level of Progress achieved:

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

Description:

Existen investigaciones aisladas por parte de instituciones no/y gubernamentales.

Context & Constraints:

Promover e incentivar la investigación en gestión de riesgos respetando la propiedad intelectual, profesional e institucional.

Generar mecanismos de apoyo económico para la investigación en gestión de riesgos.

Promover y sensibilizar a las Universidades Públicas y Privadas para la investigación en gestión de riesgos.

Las universidades no han asumido procesos de investigación en el tema de gestión de riesgos.

Los resultados de las investigaciones no son difundidas por celo institucional.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Existe una estrategia de sensibilización a nivel nacional, en proceso de implementación y desarrollo. A nivel local y regional existen procesos de sensibilización y capacitación por iniciativa de ONGs. Existe el plan nacional de prevención y un plan nacional de rehabilitación y reconstrucción que incluyen una Red / Sistema de información como eje transversal, en el marco de la gestión de riesgo. Se ha iniciado un proceso de sensibilización a medios de comunicación (Pando, Cochabamba, La Paz)

Context & Constraints:

El Estado a través de sus Instituciones involucradas en el área de la gestión del riesgo debe implementar estrategias de difusión e información para lograr un cambio de actitud en la población.

Planificar la gestión del conocimiento en el área de la gestión del riesgo, para garantizar la continuidad y sostenibilidad en el tiempo

Se requiere mejorar la coordinación de las acciones institucionales a nivel local y mejorar la coordinación entre los sectores en el contexto del Plan Nacional de Prevención.

Se requiere avanzar en la incorporación de los medios de comunicación como canales para mejorar la sensibilización en relación al tema, a través de la conformación de la Red de Comunicadores para la Gestión del Riesgo.

British Virgin Islands (in English)

Core indicator 1

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

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 responsibilities 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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

Our focus throughout 2008 was on improving Disaster Preparedness within schools by assisting daycare centres / pre-schools with their Disaster Plans and training them in basic First Aid and CPR. These works will continue into 2009, but will be expanded to incorporate Primary and Secondary institutions.

A joint venture between the VI Fire and Rescue Services, the DDM, and the private sector, was initiated with a view to have all schools throughout the VI outfitted with the requisite Fire Extinguishers and First Aid Kits, and staff trained in their use. Thus far, the DDM invited and provided training to all Public and Private Schools in the VI in the areas of Fire Suppression and Basic First Aid. This year the programme was extended to include all known day-care facilities in the VI. Fire suppression and basic First Aid training was offered to these facilities.

The DDM hosted a Summer Exploration Programme July 28th-August 29. The students were exposed to various aspects of disaster management and activities included geological field trips to the Sister Islands.

Geological Hazards Handbook for Secondary Schools – This publication was designed to provide detailed information about geological hazards. The book has a Caribbean perspective and details past occurrences in the region. It is the hope of the DDM that educational material of this nature will be utilized by the schools to effectively teach and instill disaster preparedness qualities in children thereby contributing to a community that is well informed about disaster preparedness.

Several activity/workbooks have been developed for schools; discussions are ongoing with the Education Department to incorporate DM formally into all levels of the educational sector. The Associate Degree at the HLSCC Community College continues to be advanced and other informal programmes have been established to cover safer building and design.

Context & Constraints:

Financial resources to support the necessary training.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

The DDM's focus has changed considerably from that of preparedness to comprehensive disaster management planning. A number of studies and projects have been undertaken including:

Seismic studies (1996) that determined the ground shaking hazard to which the VI (UK) is exposed. This study also included a micro-zonation analysis and an assessment of the liquefaction potential of reclaimed land sites throughout the VI (UK). In addition, the impact of tsunamis on the VI (UK) coastline was also assessed. These studies are currently being used in the planning and development process.

The Hazard and Risk Assessment Project (HRAP) (1997) identified and assessed the hazards to which the VI (UK) is exposed and recommended hazard mitigation strategies for implementation. This project produced high quality digital data that is now incorporated into the National GIS system used by both public and private sectors.

The Quantitative Risk Assessment Project (QRAP) (2006) highlighted economic losses due to various natural hazards and illustrates what impact short and long term mitigation efforts would yield. This project involved converting hazard related maps into a suitable GIS format and the provision of maps for

landslides, alluvial soils, reclaimed land and also provision of a revised engineering geology map using the ortho-photography data produced by the Survey Department. The outputs of the QRAP will help to quantify financial losses that could be expected from a given hazard scenario. The QRAP is the first of its kind in the region.

Context & Constraints:

The cost benefit analysis for disaster reduction project has been proposed within several strategy frameworks, as well as a risk reduction incentive scheme for the insurance and banking sectors. Additional resources and policy measures are necessary for implementation.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

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 DDM enables a highly effective public information and education programme that has allowed for the establishment of sound relations with the mass media in various forms. The Department produces regular television; radio and newspaper programmes/articles that seek to educate and inform the public. The Department's user friendly website also supports the work of this programme. The DDM pays special attention to providing accurate, timely, useful and instructional information to people at risk during an emergency period. This has allowed for a high level of credibility to be bestowed upon the organization.

Context & Constraints:

From recent exercises in the Territory, it was obvious that emphasis on knowledge pertains to hurricanes within the public sector and not to other known hazard that may affect the Territory. Additional measures are being taken to provide additional educational outreach programmes on the Earthquake and Tsunami Hazards.

Cayman Islands (in English)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

This program is just starting. Discussions are now underway to get risk reduction and recovery incorporated into the education system.

Context & Constraints:

The key contextual challenge is that prior to January 2008 there was no full time office dedicated to risk reduction.

Public Awareness efforts focused mainly on hurricanes.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

Started with the storm surge mapping and will include other hazards over time.
The multi-risk approach is now being incorporated.

Context & Constraints:

Some of the research that is needed is unlikely to be conducted locally because a certain amount of reliance will be placed on regional research institutions and expertise.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

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 agencies are involved in disseminating information about hazards and vulnerabilities:

Hazard Management Cayman Islands employs a full time Communications Officer with responsibilities that

include public awareness.

Annual hurricane handbooks are produced and widely distributed.

HMCI establishes information booths at many public events and answers questions and distributes informational material.

The Agency has a regularly updated website, www.caymanprepared.gov.ky which has useful data on the full range of potential disasters and includes mitigation strategies and ways of preparing for a possible disaster.

Public outreach is part of HMCI's strategy and involves speaking to volunteer organizations, schools, civic groups, churches, business organizations and service clubs etc.

Government Information Services (GIS) also plays an active role in disseminating hazard specific information.

During times of an approaching or actual threat from a disaster the Joint Communications Service becomes operational and has responsibility for disseminating information to the public, as well as specific sectors such as visiting tourists, the financial services, airports authority etc.

HMCI and GIS have established relationships with Print and Electronic media in the Cayman Islands and systems are in place to distribute information broadly and rapidly when the need arises.

Text messaging software is used to send mass messages before, during and after a threat.

Senior staff at HMCI and various representatives from partner agencies make frequent contributions in the form of interviews etc to local television, radio and newspapers.

Context & Constraints:

HMCI is developing its communication strategy into a more planned and strategic model covering the range of disasters that could potentially affect the Cayman Islands.

Colombia (in Spanish)

Core indicator 1

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

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 consolidada en la Dirección de Prevención y Atención de Desastres, DPAD. Para acceder 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

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

.Si bien hay un reconocimiento de experiencias significativas en la gestión del riesgo en el currículo escolar, estas desafortunadamente son casos aislados. Es de destacar los avances en la inserción del tema ambiental en la educación, complementada esta con la temática de la Gestión del Riesgo en el Plan Decenal de Educación. De igual forma se resaltan avances en educación formal y no formal, liderados por universidades en especial a nivel de posgrado el tema de la Gestión del Riesgo, a su vez entre la oferta no formal se encuentra una gran gama ofrecida por las entidades operativas (Defensa Civil, Bomberos, ARPs, etc) las cuales tienen un gran sesgo a la atención. Frente a la temática educativa, El Ministerio de Educación Nacional a través del Programa de Educación Ambiental, Subdirección de Articulación Educativa e Intersectorial - Dirección de Calidad para la Educación desarrolla en 12 departamentos el proyecto "Incorporación de la dimensión ambiental en la educación básica y media, en zonas rurales y urbanas del país", con acciones relacionadas en formación a docentes y demás agentes educativos en el marco del reconocimiento de situaciones y problemas ambientales locales y regionales, como lo orienta la Política Nacional de Educación Ambiental (2002) y el Decreto 1743 (1994), entre los que se destacan las temáticas relacionadas con la prevención de desastres, que promueve el SNPAD: "educación para la gestión del riesgo"- Se debe tener en cuenta los objetivos de la ley general de educación (ley 115 de 1994, la directiva ministerial 013 del 92 y el decreto 7550). La problemática de la prevención y atención de desastres, ha sido una preocupación, que se ha venido instalando en los escenarios de la educación ambiental en los niveles locales, regionales y nacionales, especialmente a partir de la nueva Constitución Política de Colombia (1991) muy particularmente con la promulgación de la Política Nacional de Educación Ambiental (2002), y de la promulgación de normatividades como son la Ley General de Educación 115 de

1994 y el Decreto 1743 del mismo año.

En este contexto, en el sector educativo (MEN) se han desarrollado estrategias de capacitación y formación con docentes, profesionales, técnicos y líderes comunitarios del propio sector y de otros, que tienen responsabilidad en el tema, para la incorporación del tema en el currículo escolar de la educación básica, desde una visión educativa integradora. Igualmente para trabajar el “Plan Escolar para la Gestión de Riesgos”, como herramienta integrada a los procesos educativos y no atomizada, como generalmente se trabaja. Lo anterior desde una visión sistémica del ambiente e integral de la educación. Por otra parte, se han tenido experiencias interesantes frente al diseño e implementación de materiales didácticos a nivel de planteles educativos e institucionalmente a nivel municipal, complementando así el abordaje de dicha temática. Finalmente, es importante destacar que la DPAD, a través del Proyecto de Asistencia Técnica en Gestión del Riesgo a nivel Municipal y Departamental, está liderando la construcción y divulgación de una guía metodología para apoyar la formulación de Planes Escolares con énfasis en Gestión del Riesgo.

Context & Constraints:

.En la actualidad, falta más liderazgo por parte del Ministerio de Educación y por las demás entidades del sistema para una articulación interinstitucional mucho más efectiva que trascienda hasta los planes educativos a nivel nacional, regional y municipal. Consecuencia de lo anterior, es el bajo abordaje del tema de la Gestión del Riesgo como parte transversal al currículo escolar, con las obvias debilidades de explicitar la relación entre las problemáticas ambientales y las de los riesgos (naturales y antrópicos). Igualmente se ha presentado una descontextualización de las acciones realizadas en materia de reducción de riesgos y atención de desastres (por ejemplo el manejo del “Plan Escolar para la Gestión de Riesgos”) y los proyectos educativos ambientales, desde una mirada de las realidades ambientales locales y regionales (ausencia de contextualización de diagnósticos ambientales), en donde los estados de riesgos y los desastres sean entendidos como problemáticas de gestión social, productos de desequilibrios en las relaciones entre ambiente natural y sociocultural, como se especifica en la Política Nacional de Educación ambiental (página 23).

Complementando lo anterior y como una de las limitaciones más estratégicas se encuentra la baja cualificación de profesionales en el campo educativo que manejen, entiendan y transmitan de forma integral la gestión del riesgo, con lo cual, los procesos de formación a nivel escolar se ven sesgados más por iniciativas individuales que por un proceso académico formal.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

Existe responsabilidad por parte de diversas entidades Técnicas del Sistema Nacionales de desarrollar investigaciones en torno al tema de su competencia generando herramientas metodológicas para orientar a los demás niveles territoriales para realizar evaluaciones de amenazas y vulnerabilidades. Dichas Investigaciones giran en torno a amenazas principales geológicas, geofísicas, hidrológicas e hidrometeorológicas - las cuales han desarrollado protocolos a nivel nacional. En la actualidad el DNP está liderando un proceso de evaluación de las inversiones realizadas a nivel nacional, regional y municipal en gestión del riesgo, para analizar el costo efectividad de las mismas, y para evaluar como se ha reducido la vulnerabilidad del Estado ante desastres naturales. El Gobierno Nacional otorga mediante el presupuesto nacional disponibilidad de recursos económicos para estas entidades técnico científicas para investigación, seguimiento y monitoreo de amenazas, así mismo para establecer líneas de investigación en Gestión del Riesgo.

Context & Constraints:

No existe un proceso de descentralización para que entidades a nivel local y regional desarrollen investigaciones de calidad (responsabilidad de generar términos de referencia, disponibilidad presupuestal

para estudios e investigación). Se presentan debilidades en cuanto a recursos económicos y capital humano, para desarrollar métodos, herramientas e investigaciones sobre la Gestión del Riesgo. Lo anterior, se complementa con las diversas corrientes de pensamiento, que han obstaculizado desde una visión técnica de los parámetros básicos para realizar el abordaje técnico de las investigaciones. De igual forma, no se han incorporado los análisis de costo beneficio en torno al riesgo para articularlo a los procesos de planificación (investigaciones en proceso de formulación), con las obvias consecuencias de la falta de articulación entre los resultados técnicos de las investigaciones y la toma de decisiones en lo político. Entre las limitaciones importantes para realizar investigaciones sobre el tema, es la escasa información socio económico, ambiental, geológico, hidrometeorológica, etc, a nivel municipal para la elaboración de estudios de vulnerabilidad y riesgo.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Existe una estrategia nacional para campañas de sensibilización en el tema de riesgo. En el Plan Nacional de Prevención y Atención de desastres PAD se incorpora una estrategia de sensibilización (información pública e incorporación de conceptos de desastres en la educación). Se reconocen procesos en términos de la preparación para desastres, más no en términos de prevención del riesgo. En algunas ciudades capitales se han desarrollado interesantes campañas de sensibilización pública que generan capacidades de reacción ante los fenómenos naturales más frecuentes. Casos concretos la campaña de Bogotá “con los pies en la tierra” y puntuales como la amenaza de erupción del volcán Nevado del Huila.

Context & Constraints:

Se realizan campañas y procesos de sensibilización pero no como proceso continuo en el tiempo (debe ser permanente y estar articulado), pero aún están fraccionadas. El Papel de los medios de comunicación y los profesionales del medio en cuanto al tratamiento del tema del riesgo (articulado al tema de la educación) es más de protagonismo cuando existen afectaciones tanto en vidas humanas como en bienes y servicios. referidos a las grandes ciudades . Los registros de las afectaciones que se dan periódicamente muestran que la estrategia nacional no alcanza lo rural cada vez más se muestra por ejemplo que las regiones afectadas anualmente por las inundaciones son las mismas y la misma población, luego se debe fortalecer o considerar otra estrategia por parte del Gobierno Nacional definida para la difusión de campañas orientadas a la reducción del riesgo

Costa Rica (in Spanish)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

“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.”

Nivel alcanzado: 3

El sector Educación cuenta con el Plan Nacional y Estrategia del Sector Educación, o “Plan Nacional de Educación para la Reducción del Riesgo de Desastres”. Con la ejecución de este plan se ha incorporado el tema de Riesgos a los currícula escolares, como parte de los programas de educación ambiental; permitiendo internalizar el concepto de que los riesgos de desastres y su correlación con condiciones de deterioro ambiental. Adicionalmente, se dictan las líneas de acción para el trabajo con grupos no organizados y el trabajo con comunidades. Las universidades públicas, en diversos cursos de carreras relacionadas con las ciencias ambientales, ciencias de la salud, geografía, geología, psicología incorporan capítulos destinados a la formación sobre desastres. Suma que la Comisión Nacional de Rectores (CONARE), que reúne a las cinco universidades estatales, ha generado una Comisión integrada por representantes de las cinco universidades que da seguimiento a las acciones que desarrollan en materia de riesgo a desastres, en tres ejes: programas de extensión a las comunidades, investigación y docencia. Cada una de las cuatro universidades, a la vez, articula sus propias comisiones internas a efecto de dar seguimiento de su “Programa de Gestión del Riesgo”. En ellas se integran todos los funcionarios que tienen a cargo proyectos. Existe una maestría de gestión del riesgo, a cargo de la Universidad de Costa Rica.

Context & Constraints:

El énfasis de la educación en el tema de desastres fue durante muchos años el ámbito de la respuesta a las emergencias, por lo que el avance en el campo de la prevención es reciente. El abordaje de este se ha presentado como antagónico respecto a la forma en que el Estado lo ha asumido y genera la impresión de que la gestión preventiva es exclusiva de la población, como alternativa ante lo que el Estado hace o deja de hacer. Esto impone el reto de avanzar a la formulación o al modelaje de alternativas de gestión que involucran al Estado. En tal sentido, surge la prioridad de mejorar la formación y capacitación de los funcionarios públicos para que aborden con mejor claridad este tema. Esto conlleva la necesidad de

propuestas educativas que vinculen comunidad e instituciones y propuestas específicas de educación comunitaria en desastres.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

Se desarrollan y fortalecen los métodos y las herramientas de investigación para las evaluaciones de amenazas múltiples y los análisis de costo-beneficio.”

Nivel alcanzado: 4

Históricamente el país ha desarrollado investigación en el ámbito de las ciencias físicas por lo que hay una amplia documentación de amenazas. Ministerios y universidades cuentan con institutos de investigación. Se han desarrollado sistema de información geográfica y una serie de convenios orientados a compartir información. Los investigadores se mantienen actualizados en la generación y uso de herramientas así como en el desarrollo metodológico.

Context & Constraints:

Existe una demanda de los investigadores por el acceso a nuevas tecnologías cuyo costo supera las posibilidades propias de inversión. Se desea contar con la posibilidad de acceder a pasantías y becas para estudios de posgrado en países desarrollados para mejorar el nivel de formación.

Se están iniciando esfuerzos en la determinación y análisis de la relación costo beneficio, en campos como la inversión pública y el aseguramiento de bienes, para lo cual entre otros aspectos se están diseñando los indicadores de vulnerabilidad, pero falta desarrollo metodológico y mayor participación de investigadores.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

“Existe una estrategia nacional de sensibilización pública para estimular una cultura de resiliencia ante los desastres, con un elemento de alcance comunitario en las zonas rurales y urbanas”

Nivel alcanzado: 4

Además de los esfuerzos que se hacen en el campo de la educación formal, año a año se desarrolla una campaña en los medios de comunicación pública que tiene por propósito sensibilizar a la población en la adopción de conductas preventivas y en la organización ante emergencias. Los comités de emergencia participan en proyectos específicos a nivel de las comunidades a cargo, con propuestas que van desde la capacitación, hasta la generación de obras de mitigación, como forma de desarrollar conciencia y cambios de percepción.

Context & Constraints:

Es necesario vincular la problemática de desastres con los temas de ambiente y desarrollo. Desde el

punto de vista cultural la población asume los desastres como aspectos fortuitos y los disocian de la dinámica económica del país. En el campo de la educación formal, en especial el nivel primario, ha necesidad de reforzar los contenidos que permiten reconocer causas a los desastres. De tal modo, hay necesidad de avanzar a en cambios curriculares y en directrices de educación.

Dominican Republic (in Spanish)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

1 - Minor progress with few signs of forward action in plans or policy

Description:

Existe material disponible en las instituciones de emergencia sobre la fase de respuesta. Hace falta producir material sobre la reducción de riesgos a desastres.

Hay materiales didácticos informales para algunos talleres y cursos. La institución responsable de elaborar manuales didácticos, están trabajando para que se incluyan conceptos sobre reducción de riesgo

Context & Constraints:

Introducir la Gestión de Riesgo como eje transversal dentro de la educación. Hacer cambios en la currícula de las universidades para introducir la reducción de riesgo

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strenghtened.

Level of Progress achieved:

1 - Minor progress with few signs of forward action in plans or policy

Description:

La Universidad Autonoma de Santo Domingo, tiene una unidad de Gestion de Riesgo y planifican hacer trabajo de investigación. Tambien están participando en ejercicios regionales de identificación de un sistema de indicadores para la gestión del riesgo. No existe todavía un consenso sobre los indicadores a

usar ni un uso sistemático de indicadores por parte de entidades estatales

Context & Constraints:

Es necesario promover la investigación de las evaluaciones de amenazas múltiples y los análisis de costo-beneficio.

Hace falta desarrollar un sistema único de indicadores sencillos, aprovechando los ejercicios y experiencias que ya tuvieron lugar en el país.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

1 - Minor progress with few signs of forward action in plans or policy

Description:

Recientemente se ha establecido un Equipo Consultivo de Información Pública adscrito a la CNE, elaborando estrategias.

Los esfuerzos de comunicación quedan fragmentados

Context & Constraints:

Compromiso de todos apoyar programas de sensibilización pública a nivel nacional.

Hace falta apoyo al desarrollo de una estrategia de comunicación de la CNE con actividades a lo largo del año

Ecuador (in Spanish)

Core indicator 1

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

Level of Progress achieved:

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

Description:

• AVANCE POLÍTICA 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

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

AVANCE

POLITICA 1. Contar con una cultura de prevención y preparación frente a riesgos y desastres.

POLITICA 3. Contar con capacidades comunitarias para participar en las actividades de gestión de riesgo en su territorio.

Context & Constraints:

Recomendación:

- Crear una cultura de Gestión de Riesgos a nivel nacional a través de la inserción real del tema en la currícula desde el Ministerio de Educación de manera trasversal
- Asignar recursos para la implementación de los estudios que están a nivel de factibilidad para este trabajo.
- Diseñar una gran campaña de comunicación y poner en ejecución la inserción de variable riesgo en educación.
- Fortalecer el plan de capacitación a los educadores

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

- AVANCE POLÍTICA 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:

- A nivel de la comunidad científica se recomienda incluir los análisis costo beneficio en sus investigaciones (cuánto cuesta hacer o no hacer la Gestión de Riesgos en ámbitos específicos)
- La inclusión de una línea de financiamiento específica para la Gestión de Riesgos en el seno de la SENACYT esta en proceso.
- La investigación en escala y (resolución) adecuada

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

• AVANCE

POLITICA 1. Contar con una cultura de prevención y preparación frente a riesgos y desastres.

POLITICA 3. Contar con capacidades comunitarias para participar en las actividades de gestión de riesgo en su territorio.

Context & Constraints:

Recomendación:

- Se recomienda el diseño y la implementación de la Estrategia Nacional de Sensibilización Pública en materia de Gestión de Riesgos.
 - Se requiere financiar la publicación y la difusión de los materiales que existen (informativos y de sensibilización), y aumentar así su cobertura y alcances (esta gestión puede incorporar a los canales y medios privados de comunicación)
 - Crear mecanismos para una adecuada sensibilización pública tomando en cuenta el incremento de vulnerabilidades como parte de los retos aún no resueltos en materia de Gestión de Riesgos.
-

El Salvador (in Spanish)**Core indicator 1**

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

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 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.

Core indicator 2

School curricula, education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

Se han realizado avances en la educación formal, como son: la elaboración del Plan Nacional 2021 ha incorporado como una línea estratégica la reducción del riesgo, actualizando para ello los Planes de Estudio Oficiales. Actualización de los planes de protección escolar como herramientas que permiten impulsar o promover una cultura de la prevención. Material bibliográfico de apoyo para docentes. Entrega técnica de materiales educativos a los asesores pedagógicos del país y su multiplicación a los directores de los centros educativos. Se han realizado avances en la educación formal, como son: la elaboración del

Plan Nacional 2021 ha incorporado como una línea estratégica la reducción del riesgo, actualizando para ello los Planes de Estudio Oficiales. Actualización de los planes de protección escolar como herramientas que permiten impulsar o promover una cultura de la prevención. Material bibliográfico de apoyo para docentes. Entrega técnica de materiales educativos a los asesores pedagógicos del país y su multiplicación a los directores de los centros educativos. Paralelamente, otras instancias elaboran y desarrollan procesos de capacitación que permiten generar procesos de educación en la prevención del riesgo a desastres.

Context & Constraints:

Aún existen limitantes en ampliar la cobertura de los planes de protección escolar y la ausencia de una cultura de prevención. La ausencia de la cultura de prevención no permite una continuidad a los programas y proyectos encaminados a la reducción del riesgo. Los programas de estudios superiores deberían de contener en sus currícula la reducción del riesgo a desastre. Se deben de fortalecer los procesos de socialización de la información en diferentes ámbitos.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

Se han realizado diversos esfuerzos (en instancias públicas y privadas) en los métodos e investigaciones sobre las amenazas múltiples, que implica un progreso lento con pocos indicios de incidir en planes y políticas.

Context & Constraints:

Existe la limitante en la aplicación de la legislación vigente. No hay una verdadera consideración de los resultados de estudios e investigaciones. Aún persiste una visión de corto plazo, lo cual limita los procesos de desarrollo sostenible.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

No se cuenta con una Estrategia de Sensibilización Nacional, pero se han realizado esfuerzos por generar procesos de sensibilización que permitan iniciar el camino hacia una cultura de resiliencia ante los desastres a través de diversos programas y proyectos de sectores gubernamental y No Gubernamental. Los resultados aún son mínimos. Sin embargo, en algunos sectores donde se ha tenido mayor incidencia, la población ha comenzado a identificar sus carencias y potencialidades ante diferentes eventos naturales y antrópicos y ha actuado, en algunos casos, con autonomía.

Context & Constraints:

La elaboración y ejecución de una estrategia de sensibilización Nacional debe pasar por incorporar a la mayor cantidad de actores, lo cual permitirá tener una mayor cobertura e incidencia en las zonas urbanas y rurales.

La incorporación de los diversos actores sociales debe establecer una ruta común en la gestión del riesgo y apostar a sumar esfuerzos sin desplazar de las áreas de acción a las instancias que ya cuentan con

cierta trayectoria de trabajo en determinadas áreas geográficas.

Aún no se ha planteado un esfuerzo por coincidir a instancias de gobierno en sus diferentes niveles, ONG, empresa privada, entre otros, para elaborar una estrategia de país que permita contar con líneas estratégicas comunes y específicas en cuanto a procesos de sensibilización pública.

Jamaica (in English)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

Substantial achievement has been attained in the area of dissemination of Disaster Preparedness information to a wide cross section of the Jamaican population. Numerous programmes have either been undertaken or are currently on stream to sensitize the nation to disaster preparedness. The School's curricula at the Early Childhood, Primary and Secondary levels have embraced the concept of Disaster Preparedness as an important topic area. There has been a significant increase in the number of learning institutions that are provided with training in Disaster Preparedness annually. A number of tertiary and secondary and primary school institutions have begun to include the disaster management information into the annual school programs. Official inclusion into the school curriculum has been advanced and is being contemplated by the Ministry of Education.

Major stakeholders such as the Ministry of Education and school administration have been actively involved in promulgating the message thus increasing awareness. A recently concluded UNICEF project has seen more than three hundred principals(300), Teachers and caregivers from approximately one hundred (100) schools and child care Institutions trained in building schools' resilience to disasters. Arising from this, disaster plans have been developed by these participating institutions and a channel of communication established between the National Disaster Organisation, the local authority and the respective schools.

Context & Constraints:

Challenges

- A major challenge that Jamaica as a nation and the ODPEM as an organization face with regards to maximum reach of the message of Disaster Preparedness is a lack of financial resources. Considerably more could be realized if funds were available. Several of our educational facilities do not have the capacity to effect the necessary activities to make their institutions more resistant to the likely impact of disasters.
- Mainstreaming is slow in many instances simply because it is dependent on personalities and not legislation.

Recommendations

- Greater emphasis and budgetary allocation at the local level as well as greater partnership with donor agencies would significantly improve the spread of information and would subsequently raise the level of preparedness.
- Special population forms a part of the organization's clientele. Provision of adequate resource and greater involvement of these special interest groups would aid the process.
- Continued Partnership Building especially with the private sector
- Push for the inclusion of Disaster Risk Reduction within the School Curriculum at all levels.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

Agencies with authority have been identified at the national level with the necessary expertise to carry out multi-risk assessments. Accepted scientific methodologies have been used to carry out these assessments with the aid of GIS technology. GIS also facilitates project assessments. At present data is shared between key agencies such as the Meteorological Service, Earthquake Unit, Mines and Geology, Water Resources

Authority and the National Disaster Organisation, ODPEM.

ECLAC and USAID/OFDA methodologies have been used to assess the impact of hazards. Vulnerability assessment methodologies have also been established and models developed for hazard impact analysis. CDERA, as the regional response agency has developed reporting strategies and bench-marking tools for participating states. These tools are used for evaluation and monitoring at the regional level.

Cost benefit analysis, though used in some project analysis, has not been used on a wide-scale.

Context & Constraints:

Challenges

- There is a need for strengthening the capacity of human resources at the National Disaster Organisation to do meaningful work in this area. The additional human resources on implementation would also act as a national coordinator for harnessing the necessary information from the agencies who have done research to bring a more holistic approach to research conducted.
- No effort made to integrate Cost Benefit Analysis as compared to Latin American counterparts.
- Absence of the data formulated at the national level translated to the community based level to effect action.

Recommendations

- Advocate for a comprehensive Hazard Mapping Programme.
- Greater human resource capacity required in conducting hazard and vulnerability assessments at a larger scale nationally.
- Hazard Management Plans developed for high risk communities
- Integrate cost benefit analysis in the hazard mitigation decision making process.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Through the National Disaster Management Structure, state agencies, Non Government Organization's and Community Based Organization the National Disaster Office has been able to effectively reach urban and rural communities. Information and knowledge is shared and capacity built. Vulnerable communities and institutions are identified regularly and training sessions scheduled to equip persons with the requisite knowledge and skills to build community resilience.

Community -based programmes are encouraged and promoted at the local level as a means of gaining participation of grass-roots populations. The concept of participatory action and monitoring is also adopted. Joint programmes are conducted with the assistance of major partner agencies such as the Jamaica Fire Brigade and First Aid Service providers with a view to improving skills sets for community-based response until external assistance can be provided.

Context & Constraints:

Challenges

- A general lack of resources to address capacity building in all vulnerable communities that exists.

- Sustaining Community Disaster Management groups.
 - Establishing ownership of community disaster management programs at the municipal authorities so as to enhance the government and democratic process in relation to Disaster Risk Reduction.
- Recommendations

- Strengthening of the resource allocation to the National Disaster Office, to bolster its outreach programmes.
 - Build additional partnerships with Community Based Organizations and Private Sector Organizations in support of awareness building programs.
 - Design and develop new information portals and enhance existing ones.
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Panama (in Spanish)

Core indicator 1

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

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, N° 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, N° 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 Áreas 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 Áreas 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

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

Existe en el proceso educativo de Panamá la integración de los temas de reducción de riesgos en la educación. Ejemplo: Elaboración de Conceptos y Contenidos Básicos sobre Gestión de Riesgo para su inserción en el Curriculum de la Educación Media y la revisión y ajustes de la Educación Básica General.

Ministerio de Educación MEDUCA mantiene su Ley 34 de junio de 1995.(Ley 44 de 1941):

- Crea la Dirección Nacional de Educación Ambiental.
- Se Introduce el eje transversal de Educación Ambiental y el Voluntariado en área de Gestión de Riesgo.
- Se mantiene sensibilizada, capacitada y revisado el programa curricular de la escuela Normal de Santiago de Veraguas, permitiendo así formar docentes.

Ejemplos:

TRANSFORMACIÓN CURRICULAR DE LA ENJDA Y DEL INSTITUTO PEDAGÓGICO SUPERIOR ENJDA. 2000 - 2007.

- Seminarios obligatorios de Administración del Riesgo, con 48 horas presénciales y 32 horas de prácticas en escuelas primarias.
- Capacitación en 30 escuelas primarias de la provincia de Veraguas para docentes y estudiantes.
- Seminarios y simulacros.
- Instructores certificados en Gestión del Riesgo (6). CUSE.15 docentes.
- Se han graduado 3,094 representados por 9 provincias y las comarcas indígenas del 2000 al 2006. Para el 2007 se prevé 565 egresados.
- Financiado y apoyado por OFDA por B/.25.000.00
- Patronato Nacional del SSE, apoya el curso de seguridad en 10 centros educativos por región educativa a ejecutarse este año por un monto de B/. 7.000.
- Plan Nacional para el Desarrollo Humano Sostenible en Gestión del Riesgo, Lineamientos generales, con la participación de aproximadamente de 8 instituciones MEDUCA, SINAPROC, UTP, ETESA, UDELAS, Escuela Normal, UP (Facultad de Educación y Geociencias), Asamblea Nacional (área de educación.)
- Manual de Gestión del Riesgo para Docentes de Educación Básica General.
- Jornadas de sensibilización con los enlaces regionales del MEDUCA y SINAPROC.
- Firma del Convenio entre MEDUCA y SINAPROC.
- Plan Nacional de Educación.
- Guías de normas de construcción (análisis de vulnerabilidad) para los centros educativos.
- Campaña Mundial "La Reducción de desastres empieza en las escuelas. EIRD con la participación de niños de primaria. Aproximadamente 30 centros educativos.
- Curso de seguridad escolar (CUSE). UNICEF.

Capacitación a docentes del cordón fronterizo de Bocas del Toro,
10 centros educativos en áreas vulnerables,
30 centros en áreas de las comarcas indígenas,
20 centros en el área de Changuinola centro.
Docentes capacitados 200.

Capacitación de primeros auxilios básicos en Bocas del Toro, Chiriquí Grande, Changuinola con 90 docentes de todos los niveles. Renovando censo seguimiento y evaluación.

Coordinaciones Interinstitucionales para el fortalecimiento y desarrollo de la Gestión del Riesgo en el área Educativa.

- Aporte en actividades de organización comunitaria con capacitaciones, conferencias y exposiciones en el Programa de Gestión del Riesgo y Desarrollo Sostenible en Bocas del Toro. Dictado a autoridades locales y personal de toma de decisiones de Changuinola, Chiriquí Grande e Isla Colón. (UDELAS-SINAPROC)
- Actividades de intercambio de experiencias en el Proyecto de Organización Comunitaria que se realizó en la Comunidad de Chiguirí Arriba, provincia de Coclé. (UDELAS-SINAPROC).
- Organización y desarrollo del taller sobre el tema Impacto Emocional a personal que participo de los eventos de inundación del 17 de septiembre 2004.
- Atención psicológica individual a funcionarios del departamento de comunicaciones de la institución.
- Asesoría técnica en la elaboración del Manual de Primeros Auxilios Emocionales o Psicológicos en casos de Desastres
- Participación como expositora en diversas conferencias sobre Salud Mental y Estrés relacionado a desastres, para funcionarios y voluntarios de la institución, foros y otras instituciones vinculadas al equipo de rescate.
- Elaboración del Programa de Salud Mental para funcionarios del sistema.
- Talleres de capacitación sobre riesgos ambientales relacionados con afectaciones físicas y psíquicas. (IDEN).

Context & Constraints:

Es difícil el cambio de cultura de la noche a la mañana, pero se está avanzando en el proceso teniendo en cuenta que se deberán fortalecer renglones muy particulares.

Ejemplo de Limitaciones:

- Necesitamos trabajar el poco interés de los Directores de los centros educativos en el tema de reducción del riesgo de desastres.
- Limitaciones en la coordinación interinstitucional, interdisciplinaria e interdepartamental.
- Buscar mecanismos de incentivo y de concienciación que hagan más atractivos el proceso de formación, participación y evaluación de la comunidad educativa.
- Se sobrecarga la labor académica de los docentes en los centros educativos al no contar con suficiente personal que se dedican a enseñar el tema.
- Hay que mejorar el horario educativo para insertarle horas del tema y que no sea solo una tarea sino una asignatura.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

Se está implementando en algunas instituciones el análisis de riesgos económicos al preparar proyectos.

Nuestro país cuenta con investigaciones que permiten mejorar el desempeño y fortalecen las capacidades técnicas y científicas.

Ejemplo de impacto de la amenaza pero en el ser humano:

- Estudio del Impacto Psicológico en situaciones de Desastres, con una población de 50 rescatistas que participaron en Inundaciones ocurridas en el año 2004.
- En el segundo taller Fortalecimiento de capacidades e investigación en el tema las universidades estatales organizadas en el CSUCA, consideran a UDELAS para que coordine a nivel regional en investigación en el área Ciencias Sociales (Salud Mental en desastres), lo que se ratificó en el taller nacional y posteriormente en el tercer taller realizado en Costa Rica.

Ejemplos amenazas físicas:

Modelos de predicción indican que el calentamiento global impactará los sistemas costeros.

(GEOCIENCIAS)

Los impactos pueden incluir un incremento en la erosión costera así como un aumento en la frecuencia y la intensidad de las inundaciones que ocurren en el área.

Modelo de simulación MAGICC para el nivel medio del mar, comparando dos escenarios de emisiones SRES P50 y SRES WRE550. Ejemplo: El rango de valores posibles del nivel medio del mar es de 7 cm a 27 cm para el año 2050 y de 14 cm a 66 cm para el año 2100.

Instituto de Estudios Nacionales (IDEN) Universidad de Panamá:

Realiza investigación sociológica y antropológica del riesgo y sus implicaciones sociales ante los desastres, a través de metodología y técnicas de investigación cualitativa (diseños, sistematización, análisis).

A través de la Unión Europea, el Sistema de la Integración centroamericana, ANAM, SINAPROC, ETESA: se realiza el PREVDA, este programa fortalece la capacidad técnica local a su vez es un programa regional que busca la reducción de la vulnerabilidad y degradación ambiental y que beneficiara a la comunidad a través no solo de la evaluación de la amenaza para la cuenca, sino que buscará protegerla, restablecerla y preparar a la comunidad.

En Chiriquí el instituto de GEOCIENCIAS, mantiene un sistema de estudios y evaluación científicas sobre el Volcán Barú lo cual permite el fortalecimiento de la capacidad local y a su vez permitió desarrollar y aplicar metodologías, estudios y modelos para evaluar las vulnerabilidades y el impacto de las amenazas, lo cual también incluye la percepción que tiene la comunidad ante el riesgo. Esto permitió conocer no solo el nivel de formación en el tema, a su vez ayudo a plantear como ven la realidad lo cual permite orientar y optimizar el uso de los recursos al enfocarlos en las necesidades reales de la comunidad, esto también reduce costos.

Context & Constraints:

Se necesitan más acciones para desempeñar en el fortalecimiento de las capacidades técnicas y científicas de forma que se desarrollen y apliquen las metodologías, estudios y modelos para evaluar las vulnerabilidades y el impacto de las amenazas, lo que incluye el mejoramiento de las capacidades de seguimiento regional y las evaluaciones afines; pero necesitamos más que nada que entre las instituciones se informen sobre que hacen y cual es el resultado para la comunidad.

Algunas limitaciones:

- Se requiere compilación y divulgación de esas investigaciones, en ocasiones las instituciones desconocen de la existencia de tan importantes elementos de avance.
- Hay que motivar a los graduandos universitarios ha realizar trabajos enfocados en estos temas con lo cual son parte del desarrollo y que se despierte el interés de los mismos por integrarse al proceso, donde cada día se requiere mayor personal.
- Hay que integrar a los medios de comunicación para que utilicen estos estudios para informar a la comunidad.

Esta limitante de falta de divulgación quizás se podrá eliminar estableciendo un mecanismo u herramienta en la que todos coloquen sus estudios y avances. Podría ser a través de una pagina Web que permita el acceso a la mayoría de las instituciones y que les de la ventaja de actualizarla directamente desde sus instituciones. El objetivo es divulgar lo que se hace.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Existe el contacto interinstitucional con los medios de comunicación, y la participación de los mismos en los procesos de formación, promoción y divulgación pero aún no se mantiene como Plan Nacional que se utilice como estrategia de sensibilización pública, ni como plan de acción a largo plazo, con objetivos específicos que organice la manera en que se informa a la población en general sobre el riesgo de desastres.

Ya los medios conocen y divulgan las formas en que el público puede tomar acciones para reducir su grado de exposición a las amenazas. Existen guías e instructivos de la manera en que el público puede tomar acciones para reducir su grado de exposición a las amenazas. Las mismas han sido suministradas (SINAPROC, MINSA, ANAM son algunos ejemplos) en diferentes formatos a los medios de comunicación.

Las instituciones en este renglón de sensibilización pública utilizan herramientas individuales e importantes para ayudar a integrar la reducción del riesgo de desastres en la vida cotidiana, pero no es un trabajo permanente o continuo, se da principalmente al requerir utilizar los medios de comunicación como un puente para salvaguardar a la comunidad de alguna situación de riesgo específico.

Hay canales de televisión locales específicos que se toman el trabajo de pasar documentales o programas formativos en el tema como es el caso de Canal 5 FTV, que es el canal local que más toca el tema.

Context & Constraints:

Limitantes Existentes:

- Son pocos los medios de comunicación locales que forman u orientan a la comunidad en cuanto al tema de reducción de riesgos de desastres, incluyendo medios que son del estado, su participación en la temática es superficial.
- Estamos trabajando el tema puntual, sin mantener un plan, ni estrategia nacional de sensibilización pública lo cual a largo plazo genera mayores costos y un mal aprovechamiento del recurso. Si solamente usamos los medios de comunicación para divulgar las alertas y en ocasiones las medidas de prevención y autoprotección (justo en el momento crítico); no aprovechamos el recurso (tiempo al aire en televisión y radio) para la promoción del tema de forma constante

Podemos mejorar a través de:

- Organizar este tema de forma que la población general se informe sobre los riesgos de desastres previamente.
- Las acciones de sensibilización pública son herramientas importantes para ayudar a integrar la reducción del riesgo de desastres en la vida cotidiana.
- Hay que integrar los medios de comunicación estatales y utilizarlos en este proceso, no solo como herramienta de divulgación de alertas sino también como base para crear la cultura de gestión de riesgos.
- Se puede trabajar en la creación de un proyecto para divulgar la información sobre reducción de riesgos de desastres a nivel nacional y que a su vez permita la participación de las instituciones involucradas, ya sea un programa de televisión o de radio, donde exista el espacio para promover y educar a la población.

Core indicator 1

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

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

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

Nivel de Progreso 4:

- Emisión de la Resolución Ministerial N° 078-2007/ED, (febrero 2007): se reconoce la inclusión de la Gestión del Riesgo de desastres en los programas curriculares en los diferentes niveles y modalidades de educación.
- Emisión de la Resolución Directoral DINECA (Dirección Nacional de Educación Comunitaria y Ambiental) N° 015-2007 (2007): regula la aplicación de la RM 078-2007; y señala la metodología de trabajo. Asimismo se señalan plazos y responsables para la implementación y operativización de la “Comisión Permanente de Defensa Civil de la Institución Educativa.
- Resolución Jefatural INDECI-2007: Reconocimiento del Programa Aprendiendo a Prevenir. (Publicada en el diario oficial del Perú). Se ha creado la Red Nacional de Docentes en “Aprendiendo a Prevenir” desarrollada en 15 Direcciones Regionales de Educación; contenidos considerados en los proyectos Educativos Regionales.
- La Red Nacional de Docentes cuenta actualmente con más de 2000 integrantes.
- Existe convenio vigente entre el INDECI e Instituciones educativas de nivel Básico Regular y Superior, para el desarrollo de programas curriculares en gestión del riesgo. (activo el convenio con 16 universidades, de las cuales 2 universidades desarrollan Maestría y el resto estudios de Post Titulo).
- Programa “Servicio Escolar Solidario en PAD”: aproximadamente 500 alumnos con certificado de “Brigadistas” en 5 regiones; actualmente entre 8 y 10 regiones trabajan este programa (aproximadamente 5000 alumnos)

- Programa “Escuelas seguras, limpias y saludables”: concurso con 3 categorías a nivel nacional.
- El Ministerio de Educación ha programado para este año 5 simulacros nacionales, considerando que para los niños la acción visible sobre la Gestión de Riesgo de Desastres, son los simulacros de evacuación

Context & Constraints:

- Respecto al Ministerio de Educación, existe insuficiente apoyo, comunicación y participación en el desarrollo del Programa “Aprendiendo a Prevenir”.
- Existe una cultura de prevención en formación, por lo que los docentes para los cursos de Post Grado y Post Titulo son escasos.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

Nivel de Progreso 3:

- Existen instituciones que están involucradas en la investigación de amenazas múltiples.
- Los métodos y herramientas de investigación responden a las características del fenómeno recurrente, los que son desarrollados por instituciones especializadas.
- El Perú es un país proclive a la ocurrencia de una gama de fenómenos naturales que genera desastres, cuya frecuencia facilita su identificación y los impactos facilita su evaluación.
- El compromiso institucional se encuentra reflejado en el marco legal de los documentos de gestión.
- Se cuenta con un Manual sobre la Estimación del Riesgo y un Reglamento de Inspecciones Técnicas de Seguridad en Defensa Civil, así como normas técnicas y legales de algunos sectores públicos

Context & Constraints:

- Limitada disponibilidad de recursos financieros para la renovación de equipos e implementación de nuevas tecnologías de análisis.
- Limitada disponibilidad de recursos humanos altamente especializado para el desarrollo de nuevas tecnologías de investigación y de análisis.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Nivel de Progreso 4:

Existe el Plan Nacional de Comunicación Social en PAD que orienta el tratamiento de la información y Campañas de Sensibilización a Nivel Nacional, cuyo público objetivo son las Autoridades que integran las Comisiones de Comunicación de los Comités de Defensa, Comunicadores Sociales y de manera especial a los líderes comunales con quienes se viene trabajando la comunicación participativa en el PAD. La estrategia 5 “Fomentar la participación comunitaria en la Prevención de Desastres del Plan Nacional de Prevención y Atención de Desastres considera entre otros programas de sensibilización a nivel comunitario

En la fecha se viene propalando diariamente un micro programa por una emisora televisiva de nivel nacional y en algunas regiones se cuenta con programas radiales.

Context & Constraints:

Esfuerzo insuficiente por parte de los Comités de Defensa Civil para el desarrollo de programas de sensibilización pública.

Limitado compromiso de los medios de comunicación en los programas de difusión masiva.

Los esfuerzos de comunicación no alcanzan a las poblaciones rurales quechua hablantes.

La percepción sobre la importancia de la RRD no se ha generalizado al interior de las organizaciones de la sociedad civil

Saint Lucia (in English)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

A Safer Buildings Program was introduced at a tertiary level institution and efforts are ongoing in an attempt to make it an elective on the school curriculum. With the support of USAID-Office of Foreign Disaster Assistance (OFDA) a 'Safer Schools Program' is being introduced into the Saint Lucia Education System.

Context & Constraints:

There is a need to incorporate DRR concepts and ideas into the primary, secondary and tertiary level schools beyond what has been achieved so far. These concepts may be made part of the Social Studies syllabus and DRR examples may be used to build content for subjects such as English Language and Mathematics.

Further, undergraduate and graduate studies need to be encourage to undertake research in DRR topics

relevant to Saint Lucia.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

The Disaster Risk Management Benchmarking Tool (B-Tool) was developed by the OECS as a Disaster Risk Management assessment tool; it is also a methodology for identifying and prioritizing Countries' risk reduction actions and for quantifying reductions in risk profiles. Its assessments may also be used to benchmark DRR strategies and activities of one Country against another. Saint Lucia was involved in the development of the B-Tool and utilizes it.

The Enhanced Comprehensive Disaster Management (CDM) Strategy was embraced and adopted by the CDERA Participating States in 2005. The implementation of this strategy is being monitored, evaluated and reported on using the Results Based Management (RBM) framework which is being promoted by many international donor agencies including CIDA and UNDP. Saint Lucia has been involved in the reviews and refinements of both the CDM strategy and the RBM framework (relative to its adaptation for CDM use). Periodic assessments are conducted by CDERA sometimes targeting specific activities or capabilities (e.g. Emergency Operations Centers (EOC) preparedness). The results of these help inform future actions pursued by NEMO.

Context & Constraints:

More funding and staffing support is required to facilitate more research aimed at improving DRR activities here.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

NEMO has provided Public Service Announcements (PSA's), both audio and video for all major hazards to all major media houses for public sensitization. These were received under a regional project coordinated by CDERA. Additionally, NEMO developed ten (10) video and audio productions in English and Creole on response planning for the key hazards. Ad-hoc expert presentations are done for specific hazards via radio and TV; and NEMO staff and volunteers also engage in presentations to communities, public and private sector agencies and town hall meetings sensitizing citizens to DRR.

Context & Constraints:

Availability of information and products does not necessarily redound to use their use for the sensitization of people. There is a need for greater use of the information and products by the media houses. Also, relative to engaging in sensitization of persons there is a need to engage in more educational activities where a change in people's behavior is the goal; and further these educational activities need to be organized and conducted in a structured and systematic way, with clear objectives, targets and goals. Thus, the development and execution of a DRR Public Awareness and Education program need to be pursued, with greater use being made of experts in the relevant fields.

United States of America (in English)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

Materials have been developed for use in school curricula, but the devolved nature of public education in the United States, which is implemented at the local government level, makes it difficult to measure progress on this core indicator.

Context & Constraints:

See above.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

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 the National Science Foundation, the United States supports research and development in a number of social science fields to improve understanding and assessment of disaster risk reduction. Other federal agencies support cost-benefit analyses for individual hazards. For example, the Federal Emergency Management Agency sponsored a study of the costs and benefits of mitigation grants, finding that the benefits outweighed the costs even without accounting for avoided loss of life.

Context & Constraints:

See above.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

The United States has made substantial investments in national public awareness campaigns to stimulate a culture of disaster resilience, with outreach to both urban and rural communities. Much work remains to be done, however, in this core indicator. Development of public preparedness exercises and commemorations of major disasters with significant outreach activities as done for the centennial of the 1906 San Francisco earthquake are one tool being effectively used. Efforts primarily focus at the local level.

Context & Constraints:

See above.

Venezuela, Bolivarian Rep of (in Spanish)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

Existen avances en educación superior, con respecto a la inclusión del tema de reducción de riesgos, a través de la implementación de la unidad curricular Protección Civil y Administración de Desastres, dentro de las materias a cursar en la Misión Sucre, en la cual funcionarios de la Organización de Protección Civil y Administración de Desastres llevan la responsabilidad de facilitar las clases. Asimismo, se evidencian dichos avances en la conformación de la Red de Brigadas Universitarias de Prevención y Manejo de Emergencias, que lleva a cabo la Dirección Nacional de Protección Civil y Administración de Desastres en las escuelas e institutos de educación superior. Se estima extender este programa manteniendo el esfuerzo y trabajo conjunto con el Ministerio del Poder Popular para la Educación Superior (MPPES).

Es importante destacar, que en la actualidad también se está avanzando con respecto al diseño de la Escuela Nacional Experimental de Protección Civil y Administración de Desastres, que formará parte de la Universidad Experimental de la Seguridad, lo cual al materializarse arrojaría un evidente progreso en la inclusión de conceptos y prácticas con respecto al tema de reducción de desastres.

Sumado a lo anterior, la DNPCAD, a través de la implementación del Proyecto CAPCOME a nivel nacional, fomenta el desarrollo de la cultura preventiva, preparando a las comunidades e instituciones en materia de autoprotección, primeros auxilios y planes locales.

Dentro del sector infraestructura existe un consenso general en la implementación de planes educativos para el personal a nivel de las áreas de prevención y atención de emergencias y desastres, realizando la capacitación y el adiestramiento necesario para la prevención de situaciones de riesgo en las instalaciones del Ministerio del Poder Popular para Obras Públicas y Vivienda.

FUNVISIS ha tomado como bandera integrar el conocimiento sísmico a través del Aula Sísmica, Madeleilys Guzman. A través de este espacio se imparte información relevante a cualquier tipo de público en relación a sismos.

También con la denominada Misión Ciencia se trasladan los conocimientos derivados de la microzonificación sísmica a la labor netamente educativa a las comunidades involucradas.

Context & Constraints:

Incluir en todo el sistema educativo formal el tema de reducción del riesgo de desastres.

Consolidar la plataforma de información en materia de los procesos de prevención y atención de desastres, en todos los sectores educativos.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

Las nuevas instituciones de educación superior, como: la Universidad Nacional Experimental de la Seguridad y la Universidad Nacional Experimental de la Fuerza Armada, así como el Instituto Universitario de Tecnología de Ejido y el proyecto del Programa Nacional de Formación en Gestión del Riesgo tienen como objetivo desarrollar las líneas de investigación en riesgos múltiples, elementos socioeconómicos y su aplicación en el entorno ambiental y social.

La realización de seminarios sobre la gestión integral del riesgo con la participación de los países de Cuba, Bolivia, Ecuador, Haití y Nicaragua, en el marco del ALBA, ha contribuido en el intercambio de experiencias y conocimientos de los métodos y herramientas de la investigación.

Context & Constraints:

Fortalecer las capacidades técnicas y científicas nacionales orientadas desarrollar métodos y herramientas de investigación para las evaluaciones de amenazas múltiples y los análisis de costo - beneficio.

Reforzar los conocimientos referentes a la RRD en las diferentes áreas y niveles, fundamentalmente en las comunidades de zonas rurales y urbanas.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

La Organización Nacional de Protección Civil y Administración de Desastres con el Proyecto CAPCOMEIA, y su implementación en comunidades en la mayoría de los municipios del país, ha promovido la sensibilización en materia de riesgo y desastres, y ha brindado, entre otras cosas, conocimientos que las personas pueden usar para enfrentar eventos con efectos adversos.

Además, la ONPCAD ha desarrollado jornadas anuales para la capacitación a los comunicadores sociales a través del talento humano responsable de la difusión de información.

En la actualidad la ONPCAD está desarrollando un proyecto de Diagnóstico de Vulnerabilidad Sísmica (DVS), cuyo propósito será determinar los niveles de vulnerabilidad no estructural y social ante sismos.

Por otra parte, se está diseñando, junto con UNICEF, un Plan Integral BIANUAL de Prevención y Atención de Desastres con énfasis en el área psicosocial, el cual persigue entre sus objetivos la preparación de funcionarios y docentes a nivel nacional para brindar ayuda en dicha área y aumentar el nivel de resiliencia en niños, niñas y adolescentes ante los desastres.

FUNVISIS ha impulsado el programa educativo de la Aula Sísmica Madeleilis Guzmán, dirigido a las comunidades, grupos estudiantiles e instituciones, en el cual se conjugan la experiencia profesional y los recursos didácticos para transmitir, de manera pedagógica, diversos conocimientos e información técnica relacionada con la autoprotección ciudadana ante la ocurrencia de un sismo. El programa está basado en el desarrollo de Talleres de Prevención Sísmica, cuyos contenidos y estrategias son adaptados de acuerdo con los diferentes niveles de comprensión del público.

Context & Constraints:

Generar una política nacional sistemática de sensibilización entre todas las instituciones orientada a aumentar la resiliencia de los individuos y comunidades de todo el país.

Aumentar el recurso humano capacitado, para lograr cubrir las necesidades derivadas de los programas y políticas de sensibilización a nivel nacional.

Asia

Bahrain (in English)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

- Because of programs for community participation, some awareness exists on the importance of this subject.
- Visits by school children and visits by fire officers to universities and schools to brief and conduct evacuation exercises; lecture graduate engineers on National Codes and other public safety and fire prevention measures. However, this is mainly in the field of fire prevention and impinges only slightly on DRR.
- A number of initiatives by the Ministry of Education are in place with programs introduced to enhance safety consciousness of students both at school and at home. However, these initiatives are ad hoc and do not follow a National Strategy.
- Additionally, safety booklets on various hazards and substantial information on safety issues is on the Ministry of Education's website.
- This can only be properly coordinated following the update of the National Risk Assessment later in 2008.
- The inclusion of the Ministry of Education in the National Framework will also ensure constant dialogue, cooperation and coordination with all other agencies.

Context & Constraints:

- Much work needs to be carried out to further improve the safety awareness and risk reduction measures in the curricula of schools and colleges.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

1 - Minor progress with few signs of forward action in plans or policy

Description:

- While a government Institute for research exists, its impact on various sectors of society is not visible in the field of DRR.
- Similarly, the work of other Academic Institutes such as Universities, are not fully utilised.
- However, individual agencies with Key DRR responsibilities do internal studies and liaise internationally.
- Nevertheless considerably more should be done to strengthen technical and scientific capacities and utilise studies and models to assess vulnerabilities and impacts.
- All should be encouraged to contribute more with academic research and ideas.

Context & Constraints:

- The Research Institute needs to greatly increase its multi-dimensional expertise and be used as an effective tool for DRR. It is planned that it should be part of the National Platform.
- Similarly the Universities will become important members of the National Platform.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

- There is Individual Stakeholder Awareness - but this is not institutionalised or coordinated between stakeholders.
- Similarly due to safety and awareness programmes, the community is alert to certain risks (mainly fire).
- However, there is no overall Public Awareness Strategy.
- It is planned that the NCDM will coordinate this strategy.
- However, there is no overall Public Awareness Strategy.
- It is planned that the NCDM will coordinate this strategy.

Context & Constraints:

- While some awareness exists - much remains to be done to coordinate the effort on a National basis.
- Again this is best done once the Risks have been updated and prioritised.

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Bangladesh (in English)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

Disaster Management as a content has been introduced in primary, secondary and higher secondary education curriculum. Number of initiatives underway to revisit the existing curriculum on disaster management. Disaster Management has been included as curriculum by some Public and Private Universities. Following GoB decision in 1997, initiative taken to introduction of DRR in various training institutions, universities, research institutions and public services training centres. The draft act also included a plan to establish an independent institute for DM training and research. Pilot initiatives were ongoing throughout the reporting period by a number of NGOs to make schooling safer. Also IEC materials developed for the planners in education to continue education during and after disaster. MoPME and MoE of GoB decided to make number of school-cum-flood shelter in the flood-prone areas including the climate change related training and IEC materials. Based on climate and hazards variation school building are being redesigned and new building are being constructed using GIS mapping under the MoE.

Context & Constraints:

While disaster is introduced in the school curriculum, limitations exist in availability of material on DRR for training of the teachers. Sharing of indigenous and local survival coping mechanism need to be institutionalize in education system both formal and non formal ways to address the disaster risks and hazards. Adolescents and early married women and people with disability who never entered in formal

education system or dropped out early from schooling should be reached through different forms of IEC system, to be given specialized education on disaster risks reduction, survival and safety measures.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

Community Risk Assessment methods and tools have been developed and practised in Bangladesh before the reporting period. Risk Assessment Mechanism is also being practised by different development organisations in their respective working areas based on their own research methodology. During the reporting period, similar research methodology and tools are under developed for earthquake and tsunami risk assessment. A awareness raising orientation and training program is going on for the teachers and students in the selected schools of Dhaka, Sylhet and Chittagong city (through MoE). Under the MoPME, DRR issues has been incorporated in the sub cluster training modules of Primary teachers.

Context & Constraints:

While the country has generated substantial knowledge on disaster management by promoting diversity in use of research methods and tools, there is not central location to preserve the findings. The continuity of research initiatives is also a big challenge because most of them are done under various projects. There has been increasing recognition to have uniform methodology in assessing common risks. Proposed institute on disaster management is expected to address some of these challenges. Research methods and tools that have been developed in assessing risks need to be applied in a coordinated way and comprehensive training is needed for conducting action research on risks. A central data Bank needs to be developed for sharing the present available information for DRR inclusive sustainable development mechanism in all sector.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Draft National disaster management plan 2005-15, included an element of public awareness on different hazards. Media has been identified as key driver in public awareness. GoB has established annual Media Award provision to encourage media in disaster related reporting. Considering high earthquake risk, substantial investment made on public awareness through developing IEC materials by GoB and NGOs. Annual calendar of DMB included disaster messages that continued throughout the reporting period. National debate on disaster issues has been organised each year in the television channels. Following cyclone in 2007, media has been producing significant number of discussion in climate change and DRR issues. Bangladesh Television has introduced a regular program since April 2008 on Disaster Risk Reduction. Observation of National Disaster Preparedness Day and IDDR by the GoB and NGOs continued in the reporting period. (Sectoral initiatives by the different GoB departments such Department of Agriculture Extension, Department of Environment, Directorate of Health, Directorate of Fisheries)

Context & Constraints:

Often awareness raising initiatives assume their audience as homogeneous group, thus do not lead to action by the users. Wide acknowledgement exists to place more systematic knowledge investment in

developing and updating key disaster messages for various agro-ecological and settlement context. There is no systematic process to understand impact of and need for public awareness on various risks. Many community led initiatives introduced by the NGO are in limited in scale. A national public awareness strategy (does not exist currently) is seen as a potential means to create synergy and accelerate dynamic public awareness activities which should consider social groups such as in terms of class, gender, age, sex, caste, religion, ethnic minority, old age population, people with disability and hard core poor so that heterogeneous groups can able to grasp the knowledge and severity of risks.

Cambodia (in English)

Core indicator 1

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

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

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

There are increasingly consideration on mainstreaming disaster risk reduction measures into education sector in recently years through integration of disaster risk reduction into school curriculum, building

capacity of school teachers and education officers on disaster risk reduction and organization of public awareness activities on disaster risk reduction to school children and institutionalization of school disaster safety programmes etc. This initiative is implemented by partner agencies in Cambodia, including ADPC, Action Aid, ZoA, Plan International, UNICEF and Save the Children etc.

This initiative is strongly recognized, supported and commitment from the national government, especially the Ministry of Education Youth and Sports.

Context & Constraints:

Even there much effort to initiate on mainstreaming disaster risk reduction into education sector, however, it has not overcome the substantial and comprehensive achievements yet, due to:

- It does not have a standard curriculum on disaster risk reduction to be suitable to different grades
- Capacities of human resources in education sector have been widely built up
- A disaster risk reduction concept in education section is too new.

Recommendations to Overcome:

- > There is a need to continue mainstreaming DRR into formal educational system including health awareness and preparedness, and transport-related hazards.
- > There is a need to mainstreaming DRR into development plans of other key ministries in the country.
- > DRR training should be provided to provincial, city and district line department officials
- > Enhance NCDM coordination and monitoring of disaster management training provided by different organizations including development of standard training courses.
- > DRR forum to form a working group to standardize DRR information to be mainstreamed into curriculum

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

There are some developments of practical, simple and applicable methods and tools for multi-risk assessments and widely utilized in the country such as Hazard, Vulnerability and Capacity Assessment (HVCA), Vulnerability and Capacity Assessment (VCA), developed by the Cambodian Red Cross, and MRC is developing the serial of methods and tools on flood risk management, including Risk assessment tools and flood risk analysis (C1), medium and long term model of flood forecast (C1), flood probability maps for land use management and user's guide (C5), guideline for the development and design of structural and flood proofing measures, guideline for integration flood risk management planning and impact evaluation, and guideline for flood risk assessment (C2 & C3).

The methods and tools have been used to train the practitioner and researchers on how to apply the methods and tools to conduct the disaster risk assessment and analysis the information and formulate action plans for disaster risk reduction activities.

Context & Constraints:

There are many new developments of tools, methods, guidelines and manuals; however, there are a lot of challenges of using these new products, due to many factors, including:

- The new products are looking comprehensive, but they have never been tested with specific related projects and planned for periodic review, especially the new products produced under Flood Management and Mitigation Programme of MRC.

- Capacities of users of new products are limited. In generally, during the processes of development, there were some training courses provided by external experts to only a few national experts and/or users. Then, they were expected to continue and transfer knowledge to others, but the expectations have never been taken place.
- There are less participation of national experts, users and especially community and authorities during the processes of development methods, tools, guidelines, manuals. They have a slim chance to learn and absorb knowledge, experience, competencies and expertise from the external experts

Recommendations to Overcome:

- > There are needs to test and plan to periodically review to ensure that methods, tools, guidelines and manuals are contextual and applicable
- > There are needs to strengthen capacities of users, including government agencies, authorities, communities, and national experts and needs to involve them in the processes of development of the tools, methods, guidelines, and manuals, enable them to have opportunities to learn and absorb knowledge, experiences, expertise from national and external experts.
- > Coordinate/standardize the article made by government and NGOs
- > Share/map data being collected (researches)
- > Link new information produced and integrated with other issues

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Under implementations of various projects of local, international and regional organizations in the country, they have their own public awareness strategies to raise public awareness to urban and rural communities to simulate a cultural of disaster resilience, for example, ADPC, LWF, CWS, Action Aid, CRC, World Vision, Plan International etc developed Information Educational Communicational materials (IEC materials) and public awareness materials, such as posters, booklets, leaflets, brochures, and billboards, films on “Living with Flood”, film on “Mekong River Rise” and Radio Spots etc . In addition to IEC materials and public awareness materials, raising public awareness activities on disaster risk reduction measures and activities have been implementing by those partner agencies at community level, for example, cultural performances, folk songs and shadow dramas etc.

Context & Constraints:

Even though, there are many types of IEC and public awareness materials have been developed and utilized for conducting public awareness activities, however, those materials have been distributed and disseminated widely in only coverage areas of those partner agencies are working, while other prone communities out of the coverage areas are not available and raising public awareness activities are in not in place.

Capacity of national government agencies at all levels are challenging in term of human resources, funding, and taking into account in taking over the implementation of activities by themselves, for instance, there are still limited participations of media and private sectors in raising public awareness on DRR.

Recommendations to Overcome:

- > In order to ensure the sustainability, long term running and wider outreaching to disaster prone communities in the country, the government agencies at all levels should take into account in taking the

lead role in development and implementation of extensive disaster awareness campaign and promote the formulation and implementation at all levels, especially disaster-prone communities in the country.

- > There are some more advocacy works to be considered including, encourage and convince the mass media and private sectors to undertake in implementing the initiatives, enable the message would be widely coverage to all disaster prone communities
 - > Centralized/standardize IEC material production
 - > Coordinated IEC, dissemination strategy
-

India (in English)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

Government of India in its 10th Five Year Plan emphasized the need for inclusion of disaster education in the existing education system in India. Central Board of Secondary Education (CBSE) one of the widely recognized boards of school education in India as well 13 other State Education Boards have included Disaster Management as a subject in Social Sciences in the curriculum of secondary education since 2004. Supplementary text books have been also introduced in the higher secondary curriculum under CBSE in class XI under two subjects viz. geography and sociology in 2006. For effective curriculum transaction, Central Board has taken up extensive training programmes for their teachers. Under the Disaster Risk Management Programme of Government of India and UNDP extensive training programmes have been undertaken for school teachers and students on disaster risk management and school safety. For disaster management practitioners National Institute of Disaster Management, has introduced a web based Online Training Programme on Comprehensive Disaster Risk Management Framework in collaboration with the World Bank Institute, Washington. NIDM also conducts regular training programmes for government functionaries on disaster management and supports 29 disaster management cells across the country to conduct similar training programmes at state and district level. Few of the universities and autonomous institutes in the country like Sikkim Manipal University, Indra Prashtha University, New Delhi, Disaster Management Institute, Bhopal (DMI) are also running formal courses on disaster management. DMI Bhopal has also been identified as the regional training institute for imparting training on Incident Command System by Ministry Of Home Affairs, Government of India. Civil society organizations are also involved in disaster management education and community based education programmes are being implemented by them.

Context & Constraints:

Introduction of disaster management education in school curriculum, graduate and post graduate programmes is only the first step towards knowledge building and mainstreaming disaster management into education system. To build in a pool of trained human resources who can be the future domain experts in the country appropriate opportunities need to be created so that the skills developed can be harnessed and a demand is created in the market for disaster management professionals. The academic and research organizations in the country also need to be encouraged to introduce disaster management education programmes. There is also a need to develop a strategy to target those sections of the society who never attended formal schooling and are differentially abled. Specific learning and teaching aids need to be developed for them.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

No standardized research methodology or tool exists in the country for multi hazard risk assessments and cost benefit analysis. However Department of Science and Technology, Government of India has developed a model for seismic microzonation with Indian perspective and piloted it in selected cities of India. The model was designed to assess earthquake hazard risks and evolve suitable mitigation strategies. Geological Survey of India is also conducting a study on landslide risk assessment which includes landslide hazard zonation mapping, site specific study to understand the causative factors and suggest ameliorative measures to prevent further sliding. Few state governments have also taken up initiatives to design methodologies/tools for hazard risk and vulnerability assessment like Gujarat and Uttarakhand. In Uttarakhand Indian Institute of technology at Roorkee and Indian Institute of Remote Sensing, Dehradun, together have developed a methodology for seismic hazard risk assessment and at present is doing an assessment of the important hill towns in the state. For assessing drought risk National Agricultural Drought Assessment and Monitoring system has been developed for in-season assessment

and monitoring of drought through application of satellite imageries and geo spatial technologies. Large number nongovernmental organizations have carried out community level hazard risks and vulnerability assessments in different parts of the country.

Context & Constraints:

There is a strong need for basic and applied research to understand various hazard risks and associated vulnerabilities. This issue has been acknowledged by Government of India and efforts are being made to build human resource capacity and strengthen research institutions/organizations in the country. A core group of experts from scientific and technical institutions has already been set up by NDMA to identify the broad research needs and establish linkages and effective collaborations between various knowledge/resource Institutes. The real challenge lies in applying the scientific knowledge and research findings into policy planning and practice.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

A Steering Committee has been constituted at the national level by Government of India with allocation of dedicated resources for public disaster awareness programmes. Detailed plans have been drawn up for creating awareness on flood, cyclone and earthquake preparedness through All India Radio, Television and print media. Funds have been provided to State Disaster Management Authorities/State Department of Disaster Management for conducting specific awareness programmes on disaster prevention, response and mitigation. The Disaster Risk Management Programme implemented by Government of India in partnership with United Nations Development Programme (UNDP) has also played a catalytic role in creating mass awareness. Awareness programmes have been carried out in large scale under the programme at all levels (state, district, block and village).The academic institutions and the civil society organizations in the country are also conducting awareness programmes on disaster risk reduction among various stakeholders.

Context & Constraints:

The national strategy for enhancing public awareness on disaster risk reduction requires a multi sectoral and a multi partner approach. Efforts are underway to identify the potential stakeholders in various sectors and create awareness at different levels.The major challenge that exists is to bring in behavioral changes among people. There is a need for sustained awareness campaigns, long term education programmes followed by refresher courses.

Indonesia (in English)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

In Indonesia, the Presidential Decree was issued to the Ministry of National Education and Ministry of Home Affairs to integrate disaster risk reduction into the school curricula, both intra and extracurricular programs. However, this decree has not been implemented because the policy implementation instrument has not been devised in the national level. Currently, a step to formulate a national policy in the form of strategies to mainstream the disaster risk reduction into the national education system is prepared. As the initial process, a governmental working group and civil society working group, in this case Consortium for Disaster Education has been set up.

In the local level, many regions, in particular those affected by catastrophic disasters or high risk communities, have owned Regional Government Regulation or the Mayor's Decree to integrate disaster risk reduction in the school curricula. However, it is difficult to be implemented by the schools in the regions since the existing curriculum is considered burdensome enough for the students in each level (elementary, junior and senior high schools). In certain regencies, a guideline to integrate emergency awareness into the school-based curriculum (KTSP) is initiated. Despite the fact that the integration of Disaster risk reduction in the school curricula is not yet implemented, some government institutions and local NGOs, national and international organizations have implemented disaster education program in schools and outside schools and in formal and informal institutions. These institutions are included in the Consortium for Disaster Education.

Some government institutions have also prepared some guidelines related to educational materials and disaster-related trainings, but most of the trainings are focused on emergency preparedness, emergency response or emergency management. The disaster risk reduction-related material and training are still limited. Post-graduate programs and elective courses on disasters are set up in institutions of higher education.

Context & Constraints:

Unavailability of policies and guidelines on how to mainstream Disaster risk reduction in the school curricula, the learning materials as well as the relevant trainings (extracurricular or local content) makes it difficult for the schools to implement the strategy of mainstreaming disaster risk reduction. In addition, the curriculum is too burdensome for the students, thus making it difficult for the schools and teachers to mainstream the disaster risk reduction into the students' education materials.

Based on the challenges mentioned, efforts to realize the national policy in mainstreaming disaster risk reduction into education system and efforts to encourage the regions and schools to support the initiative to mainstream disaster risk reduction in their education materials must be made.

To initiate the try-out and the real implementation of disaster risk reduction mainstreaming into school

curricula and education material, the academia or schools must have human resources with adequate capacity. Currently, the human resources available are still limited. Efforts to develop and improve the human resource capacity (educators, educating staff, public and professional officers) must be carried out to implement the mainstreaming of disaster risk reduction into school curricula, education material, and relevant trainings. The availability of sufficient human resources is expected to encourage the regions and schools to be more creative and innovative in mainstreaming disaster risk reduction.

In addition, national-level guidelines to mainstream disaster risk reduction into school education must be formulated. For example, it must be clear whether it is going to be mainstreamed in the extracurricular and intra-curricular activities, local content, or as a part of the existing school subjects, or into the school programs such as UKS (school health unit), disaster prepared school, Scouts, Youth Red Cross, etc. If the national guidelines are available, the local government and schools will be able to use the guidelines as the reference to mainstream disaster risk reduction according to the situation and condition of each region. To support the implementation of disaster risk reduction mainstreaming, materials and reading texts on disaster risk reduction are needed (both for students and teachers in all school levels).

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

In the past two years, the disaster research centres have developed rapidly in the institutions of Higher Education. The disaster studies outside the university settings, such as NGOs, Donor organization, government and business institutions have increased in number. Some institutions have gone as far as integrating the disaster research as one of the priorities of the research topics, for example Directorate General of Higher Education Indonesia (Dikti), Disaster Response Network (DRN), Indonesian Science Institute (LIPI) and the State Ministry of Research and Technology (Ristek). However, the program and government funding allocated to develop the methodology and tools to analyze the risks are limited.

In relevance with the methods and tools for multi-risk assessments, many stakeholders, in particular academicians/institutions of higher education have developed them. Nevertheless, the tools are still limited and focused simply on the disaster assessment aspects.

Currently, a team consisting of experts in the relevant fields from various institutions commissioned by Disaster Management National Agency and Research and Technology Ministry is preparing to formulate the guidelines for disaster multi-risk assessment.

A research tool to assess risks has been developed and used by private sectors. However, the tool and the analysis result are not for public because it is considered as the knowledge asset by the relevant private company. Cost benefit analysis for disaster risk reduction has not been developed yet so far.

Context & Constraints:

The first challenge is on how to develop a multi-risks analysis assessment which also integrates the environmental impact analysis (AMDAL).

Secondly, sometimes the research tools and methods developed by some research institutions and universities are not utilized by the local government to plan the development which considers the disaster risk reduction elements. Therefore, the efforts to encourage the local government to utilize the research methods and tools must be promoted.

The third challenge is on how to motivate the stakeholders including the research institutions, universities, business institutions and other actors to conduct risk assessment and to share information on the result of the risk analysis previously done.

The fourth challenge is on how to build and use the capacity properly to develop the methods and tools for multi-risk assessments.

To meet the challenges, one of the most important things is to increase the human resource capacity to establish and strengthen the research methods and tools for multi-risk assessment. The role of research institutions or institutions of higher education is significant in this field, therefore the establishment of disaster study centres in particular in the hazard-prone areas must be encouraged. The Government can play its most vital role namely by allocating sufficient research grant to be used by the research institutions and disaster study centres in universities. To optimize the use or application of the research results of the multi-risk assessment, programs to arouse interests in conducting applied research in disaster risk reduction must be set up. One of the ways is by raising awareness among the relevant stakeholders on the importance of disaster risk analysis. In addition, publication and accessibility of the information related to disaster research results must be promoted.

To increase the use of disaster research results including multi-risks assessment, a working mechanism must be established among the researchers and practitioners (government, NGO, private sectors, media) so that the research results can be used in practical terms. In view of the cultural diversity in Indonesia, the research related to indigenous research must be encouraged as one of the initiatives of Disaster risk reduction mainstreaming.

To increase the motivation of relevant stakeholders and to optimize the utilization of research, it is necessary to adopt incentive approach or mechanism for local government as well as for research institutes. Furthermore, there must be means to ensure that research on disasters also accommodates indigenous knowledge so that it can be understood and supported by relevant communities.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Stakeholders, including the government and non-government organizations, institutions of higher education and media have strengthened efforts to increase countrywide public awareness on the disaster risk reduction and on the importance of a strategy to stimulate a disaster resilience culture in the face of disasters. On the other hand, business institutions have not been involved in the disaster risk reduction program that outreaches the community at all levels, even though some companies in particular those related to natural resources; have started developing an awareness program to strengthen the disaster-preparedness in a limited scope.

Up to this point, the previously-mentioned activities are sporadic in nature, having no continuity and strategies related to these issues in the national level. The materials prepared or produced to increase countrywide public awareness and the dissemination of the products, such as leaflets and booklets, are still limited in number, content, coverage, as well as distribution.

The data and good practices as well as access to obtain information/materials are available but still very limited. In the local level, data sharing and good practices are done in several community forums, in particular in the disaster-affected areas or high-risk areas. Media has played its part in increasing public

awareness, with the signing of the Memorandum of Understanding between Indonesian Red Cross and Media Indonesia to allocate an information column on disaster risk reduction/disasters. However, the media knowledge on disasters, including disaster risk reduction, techniques and ethics of media coverage on disasters needs to be improved.

The disaster risk reduction day is observed nationally every year but the participation of the multi-sectoral partners is very low. The observance coordinated by Disaster Management National Agency is always supported by the civil society organizations/institutions, international communities, institutions of higher education and the media. In the local level, the disaster risk reduction day is only observed by the people in the areas with thorough understanding and awareness of disaster risk reduction. The government involvement in the regional and international forums is very high but the effectiveness of the activities is in question because there are no meaningful follow-up measures.

Furthermore, it is necessary to synchronize the enhancement of public awareness and institutional capacity development programme so that these two programmes can be aligned and become sustainable.

Context & Constraints:

One of the existing challenges is the unavailability of national strategies for this purpose. As a consequence, the activities carried out by the stakeholders are sporadic and unsystematic in nature, so that there is no continuity to ensure the optimal results or impacts. In addition, the level of success in the implementation of community awareness-raising initiatives cannot be measured objectively because there are no indicators developed for such purpose.

In terms of content, most of the community awareness-raising initiatives are focused more on preparedness for emergency response, which actually is only one of the many components in disaster risk reduction. This is caused by, among others, the lack of or limited understanding of disaster risk reduction among the people who designed and developed the community awareness-raising initiatives.

The adequate human resource capacity is very important in the contexts where culturally Indonesian people still believe that disasters happen because they are destined by God and it is an inevitable fate. Therefore, the strategies in the implementation of community awareness-raising initiatives must be approached in a certain way.

To overcome such challenges, a national strategy to increase community awareness of the disaster risk reduction and the institutionalization of the community awareness-raising initiatives are called for. In addition, evaluation method and substantive indicators to measure the success of the community awareness-raising initiatives of disaster risk reduction must be formulated so that the success of the initiatives can be optimized among the urban and rural communities. The capacity of human resource to design and implement the initiatives or disaster risk reduction programs must be enhanced.

In view of Indonesian distinctive culture and diverse local cultures, special efforts must be carried out to increase the communication with the local community so that the local community will accept and understand the education and knowledge of the importance of disaster risk reduction.

Iran, Islamic Rep of (in English)

Core indicator 1

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

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.

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- 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.
- 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 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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

5 - Comprehensive achievement with sustained commitment and capacities at all levels

Description:

> 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.

1. Increasing public awareness of earthquake hazards and preparedness by communicating with the general public through all types of media;

2. Educating children and youngsters about earthquake preparedness at both elementary and high school levels by including materials in textbooks, showing films, conducting drill, painting and writing competitions and exhibitions;

3. Organizing the annual national "Earthquake and Safety" drill in more than 110,000 primary, secondary and high schools with participation of more than 16 million students on 28th November since 1998;

4. Organizing bi-annual Asian painting as well as annual arts and craft exhibition on seismic safety in second week of October;

5. Strengthening the key role of women in hazard mitigation program and promotion of seismic safety culture;

6. Designing and posting street posters that teaches the basic point of seismically safe buildings;

7. Organizing Earthquake Safety Exercise in kindergartens in Tehran annually in May since 2000.

Context & Constraints:

- Limitation in amendment of training school books in short term

- Frequent structural and management changes in the training and education system in recent years

- Inadequate comprehensive research on identification of shortcomings and finding solutions for this problems

- Non satisfactory intersect oral commitment for implementing HFA

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

5 - Comprehensive achievement with sustained commitment and capacities at all levels

Description:

Hazards are an unavoidable part of The hazards we face are very diverse. They arise from our society (for example, conflict, terrorism, civil strife) and technology (industrial and transport accidents), as well as natural hazards and threats to public health. Risk, and how we manage it, has become a subject of increasing research and debate in recent years. At the close of the twentieth century, natural hazards and consequence disasters are one of the most common forms of disasters around the world. They continue to be destructive and, if anything, they are more prevalent and harmful than centuries ago, despite some outstanding achievements. The application of science and technology has undoubtedly improved humankind's ability to predict, alleviate and survive disasters, but over time population growth and social, economic and political processes have massively increased human exposure and vulnerability to these hazards.

At the dawn of the third millennium a world without hazards and disasters is, unfortunately, unthinkable and unachievable, but it is possible to reduce them. Much has been achieved, and there is no excuse for not pursuing the ultimate causes of these problems and finding imaginative ways of containing and lessening their impacts. Many successful ways of reducing hazards and disasters are regularly being found and implemented. There is no rationale for not seeking to avoid the death and destruction that is likely to occur during the next centuries, and to alleviate the suffering of those in many regions of the world. Careful hazard assessment and planning, and a range of social, economic and political measures, can significantly contain these threats. Our hopes for containing and lessening the death and destruction that disasters cause are most likely to be achieved through a more balanced understanding of their nature. Such an understanding is likely to emphasize the importance of societal conditions in producing hazards and disasters, while not ignoring the environmental processes which generate and the effects of human actions upon these processes.

The Islamic Republic of Iran, is a highly disaster-prone country, suffering from droughts, floods, earthquakes, rising sea level, landslides, as well as man-made and technological disasters. The hazards in the country can be classified into three major types as follows:

Type 1: NATURAL HAZARDS

Natural processes or phenomena occurring in the biosphere that may constitute a damaging event. Natural hazards can be classified by origin in: Climatic and Weather, Geological and Biological.

1.1 Climate and Weather hazards

Natural processes or phenomena of atmospheric, hydrological or oceanographic nature are as follows:

- Floods, debris and mud flows;
- Tropical cyclones, storm surges, thunder/ hailstorms, rain and wind storms, blizzards and other severe storms; localized strong wind, frost, heavy, rainfall;
- Drought, desertification, wildland fires, heat waves, sand or dust storms;
- Permafrost, snow avalanches.

1.2. Geological hazards

Natural earth processes or phenomena in the biosphere, which include geological, geotectonic, geophysical, geomorphologic, geotechnical and hydro geological nature are as follows:

- Earthquakes;
- Emissions;
- Landslides, Rockslides, Rock falls, liquefaction, Submarine slides;

- Subsidence, Surface Collapse, Geological fault activity.

1.3. Biological hazards

Processes of organic origin or those conveyed by biological vectors, including exposure to pathogenic micro-organisms, toxins and bioactive substances.

Outbreaks of epidemic diseases, plant or animal contagion, and extensive infestations.

Type 2: TECHNOLOGICAL HAZARDS

Danger originating from technological or industrial accidents, dangerous procedures, infrastructure failures or certain human activities, which may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation. These are sometimes referred to as anthropogenic hazards. Some examples: industrial pollution, nuclear activities and radioactivity, toxic wastes, dam failures; transport, industrial or technological accidents (explosions, fires, spills).

Type 3: ENVIRONMENTAL DEGRADATION

Processes induced by human behavior and activities (sometimes combined with natural hazards), that damage the natural resource base or adversely alter natural processes or ecosystems. Potential effects are varied and may contribute to an increase in vulnerability and the frequency and intensity of natural hazards.

Some examples are: land degradation, deforestation, desertification, wild land fires, loss of biodiversity, land, water and air pollution, climate change, sea level rise, ozone depletion.

Context & Constraints:

Various organizations and institutions have been motivated by HFA secretariat to developed plans and projects against challenges posed by disasters therefore:

Based on the initiative and support of ISDR office in Tehran, the HFA Executive Secretariat and the National Platform of Iran on Disaster Risk Reduction, have prepared this biennial working plan for implementation of HFA at national level for 2008 and 2009.

The objective of this working plan is to support HFA Secretariat of Iran in implementation of five HFA priorities which are as follows:

1. Governance: ensure that disaster risk reduction is a national and local priority with strong institutional basis for implementation
2. Risk identification: identify, assess and monitor disaster risks and enhance early warning
3. Knowledge: use knowledge, innovation and education to build a culture of safety and resilience at all levels
4. Reducing the underlying risk factors
5. Strengthen disaster preparedness for effective response

3- Biennial working plan

No. HFA priority Project Time frame

(Year- Month) Estimated budget (USD)

1 1 Developing a module for evaluating existing national capacity at different levels on disaster risk reduction 12 months 50.000

2 1 Developing a national strategy on disaster risk reduction 14 months 96.000

3 1 Developing a master plan for NP on the situation of disaster risk reduction in the country 12 months

50.000

4 1 Defining urban development system considering seismic risks 18 150.000

5 1 Developing criteria for re-construction of the earthquake affected areas in line with social-economic and cultural characteristics 18 180.000

6 1 Supporting Iran-UNDP project on developing national capacity on disaster risk management 24 months 300.000

7 1 Developing a national data bank for disaster management including a bank of experts, academic specialist related to DRR, managers and etc (Building on the existing initiatives) 12 110.000

8 1 Developing/defining standards disaster risk management system 12 60.000

9 1 Developing/defining standards for disaster management system (with emphasis on post-disaster phase) 12 40.000

10 1 Developing methods for evaluation of capacity of the national agencies, ministries and institution 12 38.000

11 1 Developing a matrix for follow-up and monitoring of working plan during the two years 24 months 28.000

12 1 Publishing a newsletter for NP on a seasonal basis (12000 volumes) 24 months 30.000

13 1 Preparing annual report for the Occurred Natural Disaster 12 30.000

14 1 Promoting Secretariat for HFA and NP in Iran 2008-2009 200.000

15 1 Establishing a working group to prepare necessary materials for reporting to ISDR and the global risk assessment, 2009 2008-2009 30.000

16 2 Developing a plan for enhancing disaster national early warning system 2008-2009 50.000

17 2 Developing early warning indicators at different levels 2008 45.000

18 2 Developing comprehensive disaster risk assessment models 2008 45.000

19 2 Incorporating and integrating disaster risk maps of the country 2008-2009 85.000

20 2 Physical vulnerability analysis into earthquake hazard in old urban texture (Case Study: BABOL City) 12 months 55.000

21 2 Supporting Asian Seismic Risk Reduction Center (ASRC) and APIDM 2008-2009 100.000

22 3 Developing/ defining a new training modules for teaching trainers on Disaster Risk Management in all provinces (30 course) 18 months 150.000

23 3 Development and dissemination of innovative training, awareness raising and cultural building texts 2008-2009 67.000

24 3 Inclusion of DRR elements in school curriculums, universities and professional curriculums 2009 50.000

25 3 Development and dissemination of community based disaster management manual 2008-2009 35.000

26 3 Establishing a national community-based disaster risk reduction NGO portal 2009 100.000

27 3 Developing new training and awareness methods for most vulnerable groups, women and children 2009 50.000

28 3 Documentation of good practices and lessons learnt from recent disaster in Iran 2008-2009 50.000

29 3 Developing a module for disaster documentation 2009 65.000

30 3 Holding 2 national workshops on legal frameworks of disaster risk reduction 2008-2009 100.000

31 3 Organizing training workshops for disaster managers 10 2008-2009 50.000

32 4 Developing a national strategy plan for safety promotion of important buildings in rural and urban areas 2009 75.000

33 4 Developing a national plan for school safety building on existing initiatives 2009 75.000

34 4 Developing national plan for hospital safety including designing a plan for evaluation of non-structural risk elements in hospitals, defining a suitable national module and defining standards for a safe hospital, building on existing initiatives 2008-2009 75.000

35 4 Defining national standards for non-structural element 2009 100.000

36 4 Defining national criteria for assisting vulnerable people during a disaster 2008 50.000

37 4 Defining a comprehensive plan for developing the capacity of relevant disaster management bodies, NGOs and research institutions, 2009 50.000

38 4 Support applied researches using new methods in retrofitting the buildings 2009 100.000
 39 4 Holding 2 workshops on training retrofitting the buildings 2008-2009 100.000
 40 4 Developing a strategy for flood early warning in flood prone rivers 2008 50.000
 41 4 Developing a strategy for local flood early warning system in flood high risk areas, building on existing initiatives 2008 50.000
 42 4 Developing/defining a national integrated flood management system 2008 100.000
 43 4 Developing/defining a flood management system for rivers passing through big cities 2008 50.000
 44 4 Developing module for rapid assessment of earthquake damages utilizing seismometer network and satellite images 24 months 320.000
 45 4 Developing mechanisms for promotion of insurance and culture of insurance against disasters throughout the country 2009 65.000
 46 4 Establishing a national early warning network for responding to vegetation infestation, vegetation diseases, and cold 2008 430.000
 47 5 Developing plans for safety promotion against climate related hazards 2009 76.000
 48 5 Enabling local communities for disaster resilience 2008 64.000
 49 5 Establishing a national disaster management room for coordinating national response activities at the time of disaster 2009 30.000
 50 5 Establishing roads relief and rescue centers 2008 57.000
 51 5 Developing local comprehensive relief and rescue plans 2008 100.000
 52 5 Natural Disaster Carton Competition & exhibition (subject: Identification and risk reduction) 12 months 35.000
 53 5 Natural Disaster Mobile exhibition (Implementing a pilot) 9 months 100.000
 54 5 Site section for temporary housing sites for damaged population from earthquake hazard in urban areas (a case study of zone 6 in Tehran city) 12 months 60.000
 Total 4641000

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Development guidelines and standards for sustainable development in earthquake prone areas considering land-use planning and proper allocation of facilities and infrastructures.

- Evaluation of the seismic resistance of critical public facilities and physical infrastructure, such as fire fighting stations, hospitals and water networks.

- Strengthening some of the hospitals and schools in Tehran and other cities.

> Ministry of Education & IIEES

> 2002: Strengthening of 150 Schools was begun in 2002.

> 2006: School Safety Act passed by Iran's Parliament for reconstruction and strengthening of 257,945 vulnerable classrooms

> (39% of total) within next 4 years, with budget of \$4 Billion

- Development criteria for land readjustment in old urban areas at the earthquake prone zones.
- Planning for allocation of disaster risk management infrastructure (such as evacuation sites, emergency response centers, etc.)

Earthquake Preparedness Planning in Schools

Context & Constraints:

We have recently started to developed strategy for public awareness from national to local levels.

In the past there have been some activities for public awareness

1. Preparing television and radio programmes during the second week of October every year as the Iranian National Day for Natural Disaster Reduction in order to introduce IDNDR initiative and 9 sub-committees of NDR Committee of Iran on central and local television channels. These programmes include interviews with related ministers and their deputies, the national authorities, provincial authorities, scientists, scholars, specialists, policy-makers, disaster management directors and general governors;
 2. Producing various materials about the theme of each year's campaign;
 3. Presentation of television and radio programmes on various types of disasters in the country and providing necessary information to the public on ways of disaster reduction;
 4. Presentation of short messages about NDR by television and radio as well as newspapers and magazines for public use;
 5. Contribution of the country's media and press in reflecting the different aspects of NDs during the second week of October each year as Iranian National Day for NDR to enhance Public Awareness.
-

Japan (in English)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

With a view to improving disaster risk reduction education at school, the Ministry of Education, Culture, Sports, Science and Technology is implementing policies such as providing teachers with reference material to be used in safety guidance and planning evacuation drills, developing and distributing disaster risk reduction training materials focusing on how to prepare for and behave in the event of an earthquake or other natural disaster, and holding disaster risk reduction education training sessions. Cabinet Office and Ministry of Land, Infrastructure and Transport also has been making efforts to enhance disaster reduction education such as operating the websites dedicated to disaster reduction education, distributing educational materials, and conducting lectures on demand which the staff of the ministries directly visit and have talks with residents and students. Fire and Disaster Management Agency has been introducing the “disaster prevention & crisis management e-college” designed to provide people with opportunities to learn about disaster prevention and crisis management. It offers courses for general public, local government officials, fire brigade members, volunteer fire fighters, and kids. Further, systematic training on disaster risk management for officials responsible for disaster management in local governments has been regularly provided by the Disaster Reduction and Human Renovation Institution To share and promote good practices and useful tools for disaster reduction education, a collaborative effort for providing subsidy to the selected educational plans which are designed and proposed as new initiatives by practitioners for enhancing disaster reduction education has been supported by various relevant organizations including Cabinet Office and Fire and Disaster Management Agency. The information of the activities conducted under the plans is also available on the internet for the reference to other practitioners.

In addition, the Ministry of Education, Culture, Sports, Science and Technology has recently made study on measures to support the efforts for disaster reduction education with the effective use of the result of the study of science and technology for disaster reduction. The Ministry has initiated a new program for supporting and promoting disaster reduction education since fiscal year 2008, and given assistance to the undertaking for enhancing disaster reduction education in the model areas.

Context & Constraints:

Currently effective disaster reduction education at schools is mainly provided limited numbers of teachers with enthusiasm. It is required to develop more systematized programs as appropriate according to ages

and areas as well as applicable to current official curriculum guidelines.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

Scientific Technology Research in Disaster Reduction has been steadily addressed based on the Basic Plan for Research and Development in Disaster Reduction (revised in December 2003). On 6 March 2009, the 10-year policy for earthquake research "Towards Promotion of Innovative Research Study - the Comprehensive and Basic Policy on Promotion of Observation, Monitoring, Survey and Research on Earthquake-" was compiled by the Headquarters of Promotion of Earthquake Research.

The Fire and Disaster Management Agency has drawn up a procedure enabling local public bodies to make an objective assessment of their own disaster risk reduction and crisis-management systems. National Research Institute for Earth Science and Disaster Prevention has studied the methods for multi-risk assessments in conjunction with the development of disaster information sharing system among various stakeholders in collaboration with local communities.

Context & Constraints:

In the meanwhile, efforts for development of research methods and tools for multi-risk assessments which reflect social and environmental change and cost benefit analysis are currently on going by several actors including governments and academia.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

5 - Comprehensive achievement with sustained commitment and capacities at all levels

Description:

The national government has designated September 1st of each year as Disaster Reduction Day, and the period from August 30th to September 5th as Disaster Reduction Week. A variety of events such as the Disaster Reduction Fair, various seminars, disaster reduction drills and exercises, and disaster reduction poster contests are held throughout the country to disseminate disaster knowledge. These events are held by the central government, local government bodies, and other organizations (jointly, in some cases). In addition to publicity on TV, radio, in newspapers and leaflets, special features are presented by various press organizations. Schools participate by creating slogans and participating in disaster management poster contests and voluntary activities, among other things.

Further, as mentioned in the section of priority for action 1, the Central Disaster Management Council published the "Basic Framework for Promoting a Nationwide Movement for Disaster Reduction - Actions with Added Value to Security and Safety." to promote a nationwide movement where individuals, families, communities, corporations and other various groups and entities participate in continuous activities and investments for mitigating disaster damage in 2006.

As mentioned in the above section, the Cabinet Office and the relevant organizations have regularly organized the events to encourage the community participation, such as Disaster Reduction and Volunteer Meeting, Review Meeting for Volunteer Activities for Disaster Reduction, Disaster Reduction Fair, and "Community Development Forum. More than 10 such events have been conducted since 2007.

Context & Constraints:

N.A.

Kazakhstan (in English)

Core indicator 1

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

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

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

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 study programs as “Safety Fundamentals for Life Supporting Activity” in high schools, and “Vital Activity Safety” in universities and technical schools.

Study in institutions at all levels to be held after the Governmental Decree No 50, issued by 17 January 2003 as “Establishment of the Rules of information, public relations, study of population and specialists in a field of emergency situations”.

The local Ministry Departments prepare materials as prospects, journals, TV and radio broadcasting for education of people.

Training, exercises in regions and cities involve territorial and enterprises units of Civil Defense.

Context & Constraints:

At present it is necessary to define a target financing for training and education of population and personnel in questions of Civil Defense and ES, enhancement of material educational base

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

There is the Interdepartmental Scientific and Technical Council on problems of ES and Civil Defense (CD) which includes research institutes of Kazakhstan.

Institute of Geography together with MES have initiated at the national level the Project of “Fundamental and applied approaches for safety in zones of natural and man-made ES in Kazakhstan” which is being realized at present. The Project objectives are creation of scientific base for safety provision, risk assessment, development of digital maps and data base to control of risk using GIS-technologies.

The question of a space monitoring of the Kazakhstan territory is going into the issue, corresponded programs have been developed.

Context & Constraints:

There is a lack of integrated theoretical and practical basis for population protection, facilities and territories from disasters and accidents.

Underdeveloped system of national monitoring for ES makes problems for early control and warning. Engineering measures for disaster prevention are performing partly because of much financial requirements.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Further enhancement of the educational system is introduced into the Strategic Plan of MES for 2009-2011 and approved by the National Budget Commission.

In Astana and Almaty the national command-post exercises are holding annually with involving central and local executive bodies.

Preparedness of people communities for earthquake in organizations follows the rules approved by the Governmental Decree No 50 from 17 January of 2003 "Establishment of the Rules of information, public relations, study of population and specialists in a field of emergency situations".

Only in Almaty 570 exercises and 900 seismic trainings were organized in organizations and institutes from the beginning of 2009.

In a current year about 14422 people had an advanced training in CD and ES at the competent department of MES and 29484 people in regional training centers. 115 officers have graduated The Technical Institute of MES in Kokchetau in 2008.

Context & Constraints:

A public relations system for ES and CD is not effective enough since does not cover all interested recipients as officials, industrial managers, population.

Korea, Rep of (in English)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

To promote and strengthen disaster risk reduction concept, various school contents are under development covering subjects such as fire science and disaster management science.

The number of undergraduate department in college and university level is increasing. Also graduate programs covering disaster management subject are more common compared to previous years.

However, the infrastructure and backup system for sophisticated school curricula are rather weak. It is necessary for the central government help and lead in developing standard disaster education textbooks setting up the identification of fire science and disaster management science.

Context & Constraints:

Even though the National Disaster Management Institute is focusing on the education for disaster managers and officials, the number of other education institutes and experts is somewhat limited.

Customer-oriented education programs need to be developed, since uniform programs are adopted for most of the education practice.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

The National Institute for Disaster Prevention under the National Emergency Management Agency is the leading research institution promoting disaster risk reduction technologies and policies.

More than ten specific research projects are executed annually with the pure research fund about US\$ 6 million.

To outreach and promote other institutions' involvement in disaster risk reduction technology and policy, extra research funds exceeding US\$ 15 million are distributed annually.

The topics of the research are broad including socio-economic impact of various disasters, automatic assessment system for tropical cyclone impact, etc.

Context & Constraints:

NEMA (the National Emergency Management Agency) has been developing a system for diagnosis of local safety level including database development and standard protocol.

The system needs to be improved reflecting practical, but hard to estimate criteria such as finance independency, population, local disaster characteristics.

More research funds are required covering emerging disaster types.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

To promote public awareness and simulate a culture of safety, the Safety Management Charter has been declared in 2004. It declares that the safety is one of the most important issues in the modern society and several key factors that the government and the people should emphasize for disaster risk reduction.

Also, every 4th day of each month is designated as the Safety Checking Day and public campaigns are done for various seasonal disaster types.

Korea Disaster Safety Network has been formulated involving thirteen key players in voluntary organizations and NGOs such as the Korea Red Cross in Dec. 2004.

Context & Constraints:

To encourage more active participation of not only the central government but also local governments and NGOs, it is necessary to have institutional support such as establishment of "the Safety Cultural movement Support Act".

Kyrgyzstan (in English)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

Introduction of disaster risk reduction issues into the system of the official and informal education, use of knowledge and experience in order to form proper safety culture and the ability of communities to resist disasters at all levels – these are the important aspect of disaster risk reduction.

In this context the Government of the Kyrgyz Republic and MoES of the Kyrgyz Republic and the international organizations involved in this field of activity develop and introduce the system of measures on providing the population with easily perceptible information on possible risks and disasters and prevention measures

National systems of information and manuals for the information sharing on successful practice, cost-effective and accessible technologies on disaster risk reduction and on the learned lessons regarding the policy, measures and plans on disaster risk reduction in the system of the national authority.

Within the framework of the training course on civil defense there was developed the system of trainings and programs on disaster management for decision-makers in the system of the state authority, local self-governing bodies, MoES subdivisions, and vulnerable local communities, economy subjects, and the population with the purpose to provide them with general knowledge on disaster prevention and mitigation.

At the moment the modernization and equipment of the program classes with up-to-date technical equipment is implemented under SDC support; within the UNDP programme the education programs and materials for this course are significantly amended and updated with the subjects on disaster preparedness, prevention and response.

International donor organizations played and are playing the important role in disaster management both in Kyrgyzstan and Central Asia as a whole. Thus we would like to emphasize the Programme of international and non-governmental organizations aimed at raising of awareness and strengthening of capacity of the non-governmental structures, communities, disaster prevention and mitigation along with provision of sustainable development, poverty reduction along with disaster reduction.

ECHO implements the programme on disaster preparedness in Central Asia since 2003 (DIPECHO). Over 9 million EURO was spent by various international organizations in Central Asia for implementation of projects. The significant contribution was made by UNDP, NRCS, ACTED, IOM, etc., almost in all regions of the country. At the moment the work under DIPECHO 5 is launched; this Programme provides for trainings on the population preparation and awareness raising, training of the voluntary rescue teams, etc. This allows significantly increase the population awareness, strengthen the capacity for disaster risk

management, disaster prevention and mitigation, promote strengthening of cooperation among the institutions involved in emergency situations issues, and include the aspects of disaster reduction into development plans at the local and national levels.

Based of the implemented joint works with the international organizations and the Ministry of Education of the Kyrgyz Republic there is being considered the issue on inclusion of disaster-related subjects into the relevant sections of curricula in the system of pre-school, school and higher education.

Context & Constraints:

1. Lack of school programs for special disciplines related to disaster risk reduction
2. Lack of special literature related to man-made and natural disasters
3. Lack of the unified science-technical advice on development of methodical manuals and brochures
4. Poor distribution of the booklets, brochures and other informative materials developed by various organizations on the issues related to disasters and disaster preparedness
5. Doubling of activities on public awareness raising in one region
6. Lack of close relationships between the local population and specialists of scientific institutions, organizations implementing projects of public awareness raising and disaster preparedness
7. Shortage of highly qualified specialists
8. Poor capacity of the state organizations
9. Shortage of funding

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

No methodologies on the vulnerability and disaster risk assessment are developed at the national and local levels in the country.

There are some insignificant results achieved by international organizations that implemented such assessments at the community level.

No economic analysis based on the vulnerability and disaster risk assessment was conducted.

The methodology on assessment of the damage caused by disasters at the level of districts, provinces and the country as a whole is developed in the Department on monitoring.

At the moment there is being conducted disaster risk assessment at the community level in the South region within the framework of UNDP and MoES joint project with participation of the Department on monitoring. The most vulnerable settlements, where the activities on disaster prevention and mitigation will be implemented, should be selected basing on this assessment.

Context & Constraints:

Constraints:

1. No unified methodology on the vulnerability and disaster risk assessment and the analysis of possible economic damage
2. Poor staff and technical capacity of the state institutions
3. Insufficient funding

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

The state system and the programmes on awareness raising of the senior staff of organizations and institutions, pupils and students, and various strata of the population are developed. At the moment these programmes are being revised within the framework of the joint projects of MoES of the Kyrgyz Republic and international organizations with participation of international experts

We can state that the activity on awareness raising of the senior staff of organizations and institutions, pupils and students is conducted in accordance with the developed programmes, but the activity of the relevant state organizations (e.g., MoES of the Kyrgyz Republic, Ministry of Education, etc.) on promotion of the culture on disaster sustainability among the rural and urban population is implemented improperly. Almost all governmental and non-governmental international organizations implementing their activity in our country work fruitfully and effectively in this direction together with MoES of the Kyrgyz Republic. For instance these are the following organizations: IOM, ACTED, NRCS, UNDP, and the supporting donor organizations: ECHO, SCO, GTZ, USAID and UNISDR.

From among the NGOs fruitfully working in Kyrgyzstan in this field we can point out National Red Crescent Society of Kyrgyzstan, PF "Alternative", PF "Mehr-Shavkat" whose activity is more or less supported by international organizations.

These organizations developed and disseminated a lot of brochures, illustrations and other informative materials among the population.

Context & Constraints:

Constraints:

1. Insufficient attention is paid by the relevant state organizations to the awareness raising of the rural and urban population on the issues of getting them prepared to possible disasters
 2. Improper coordination of actions during the implementation of activities by various organizations
 3. Doubling of activities implementation in the same settlements
 4. Inconsistency of the used informative manuals and materials
 5. Shortage of disaster-related popular scientific literature
 6. Low level of the living standards of the local population
-

Lao People's Democratic Republic (in English)

Core indicator 1

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

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 human and information management capacities to meet the requirements to develop information management and sharing systems.

Core indicator 2

School curricula, education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

In 2007, a UNDP Regional Project funded by ECHO was initiated in order to mainstream disaster risk reduction into the education sector. The project was implemented by the NDMO with ADPC with an aim to integrate disaster risk reduction into the secondary school curriculum. The project should provide valuable national mainstreaming examples to build support for further mainstreaming of disaster risk reduction into development policy and planning.

The project has two complimentary objectives; i) Mainstreaming disaster risk reduction into Secondary school curriculum: through pilot projects, and ii) Research on the physical and socio-economic impact of disasters on the education sector for use in advocacy and consensus building on the benefits of disaster resilient schools.

Another project started in cooperation with the NDMO and the Ministry of Education, the Sayaboury District Education Department and ADPC to reduce vulnerability of children, young people and communities in Xieng Hone District to natural hazards. The project which is scheduled to be implemented from July 2008-June 2009 supports 2 primary and 2 lower secondary schools in Xieng Hone to deliver disaster risk education and equip children with the knowledge and skills to contribute to building disaster resilient communities.

Context & Constraints:

Information is not available

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

1 - Minor progress with few signs of forward action in plans or policy

Description:

Information is not available

Context & Constraints:

Information is not available

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Disaster management and awareness campaign are regularly conducted both at the national and local levels. Every year, in October the NDMO organizes activities to celebrate the International Day on Disaster Reduction. Activities include walking, meetings, exhibitions, sports, news and drama in television, radio and newspaper, etc.

Context & Constraints:

Due to financial constraints, the NDMO lacks the human and logistical capacity to meet the requirements for countrywide public awareness programme.

Maldives (in English)

Core indicator 1

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

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

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

The Ministry of Education is also in the process of incorporating Disaster Risk Reduction in the school curriculum for all grades. National and International training were provided to teachers to include the above mentioned concepts and practices. International agencies and national NGOs have developed education material to help in understanding the subject more effectively. To promote the national school safety programme a coordination committee has been set up with relevant members from Ministry of Education who are finalizing on the School Safety and Disaster Preparedness Plans. Reconvening the “Every Child Swims” program has been a priority and steps are being formulated in this direction. Care Society of the Maldives a national NGO has embarked on a programme on disaster preparedness. The key activities of the programme include strong advocacy for addressing disaster preparedness in national legislation; integration of disaster management in the school system; training of trainers at community based organisations on disaster preparedness; planning a disaster preparedness programme with CBOs and contingency plan for 2 model islands with capacity building training and provision of necessary equipment. Care Society is also involved in an international campaign with Action Aid on disaster preparedness. Curriculum Developers have been oriented in Disaster Management and a plan is being drawn up to include the subject in appropriate sections of the syllabi. Fire Drills are conducted in all the primary schools of Male’

Context & Constraints:

Severe constraint has been the overburden of teachers with the regular school curricula activities. Many national initiatives try to find their way into school activities namely initiatives in environment, health etc. One of the possible solutions would be to include more practical work related activities thereby strengthening a more result based approach. This could be also carried out beyond class hours or through the Scout Association of the Country who are closely related to the education sector.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

Research in any form has been very few in the country hence methods or tools for multi-risk assessments do not exist. Cost Benefit Analysis is consideration a pilot basis by one of the international partners and has just been initiated.

Context & Constraints:

Lack of Higher Education institutions and Universities in the country has led to any emphasis on research in the country .A few that is available is done by students for their thesis work.

A separate wing needs to be established in the government with adequate support from international partners

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

A guide to community preparedness plans is developed and exercised which shares ways to enhance community preparedness and planning. It has been carefully emphasized that the plans are developed keeping in mind the uniqueness of the Islands. Community preparedness plans have been developed in 30 islands and disaster management tasks forces instituted with training on basic emergency response as part of the Community Based Disaster Programme

Context & Constraints:

Outreach activities are a very tedious process due to the wide dispersion of the islands. Culture of disaster resilience can be put into place with strong political commitment. Outreach activities needs to be prioritized depending on the ongoing scenario of the country than focus on project deadlines for execution and completion.

Nepal (in English)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

The current school curricula has limited amount of information on disaster management, however they are scattered and does not match the need of the country. In 2008, the secondary level of education curricula has recently incorporated disaster management component with the support of WWF and other institutions. In addition, so many extra curricula activities related to DRR have been incorporated in the existing secondary level curricula. The Ministry of Education (MoE) is reviewing the existing school curricula from grade 6 to 8 and willing to include DRR as a separate chapter. MoE is planning to integrate the DRR component into the teacher training curricula as well.

Since the recent past, several I/NGOs have been supporting the MoE to incorporate DRR in to School curricula, teachers training on DRR, awareness building classes, publication of various IEC materials on DRR and distribution to schools.

Similarly, the Administrative Staff College of the Government has incorporated DRR in most of their training programme for government officials

Context & Constraints:

Challenges:

- Inadequate Institutional and professional capacities in designing and developing the country context curricula on DRR and resource materials to the students and teachers.
- No or inadequate trained school teachers in the field of DRR.
- Inadequate enabling environment or opportunity for cross learning for school and college teachers in the field of DRR.
- Lack of support mechanism and networking in the implementation of DRR curricula.
- Synergy problems among the stakeholders.
- Inadequate linkages between formal and non-formal education sectors.

Recommendations:

- Assist MoE to review existing school curricula and include DRR along with developing resource materials for students and teachers.
- In close collaboration with the MoE, train teachers both at school and college levels in the field DRR.
- Design and organize exposure trips, modular training and internship for concerned government officials on neighboring country where school and college curricula contain DRR and learn from them.

- Establish support mechanism at the central and district levels.
- Establish information management mechanisms and network to share good practices on DRR related curricula and teaching materials.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

Science based disaster risk reduction/ management is a new phenomenon in Nepal. In the recent past, very few government and academic institutions have initiated empirical research on cost benefit analysis and mitigation practices in Nepal. However, with the support from UNISDR, Nepal is undertaking a national levels study on the relationship between poverty and disaster and Nepal is practicing some internationally accepted and practices tools for retrofitting of buildings and vulnerability assessment.

Context & Constraints:

The major hindrances for initiating empirical researches and developing tools are inadequate technical capacity and awareness at all levels, political and bureaucratic commitment and resources.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Nepal has been commemorating the IDNDR/UNISDR Day since the beginning of the IDNDR and the Earthquake Safety Day for lasts several years. Some efforts have been carried out through school children by the use of IEC materials, quiz context, debate and discussions at the community level. Similarly, several agencies have been posting/ erecting hording boards on DRR in different locations, organizing songs competitions and street drams; public announcements through radio and TV, etc. Likewise, few academic institutions have bee involved in pursuing researches on fire resistant thatch materials, etc. However, these awareness raising activities are inadequate to reach to the real mass or the potentially disaster prone communities of the country.

Context & Constraints:

Major challenges includes; lack of systemic institutional mechanism and commitments from central to community levels; inadequate coordination and support mechanisms both at central and district levels along with government and non-government sectors, no focused programme to empower the community level institutions in DRR, etc.

Recommendations:

Establish systemic institutional mechanisms at the district level and assigned responsibility to identified organizations to design and initiate various district and community levels public awareness activities, provide technical and financial support to these lead agencies, etc. Plan capacity building program at the district and community levels.

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

For this Core Indicator, Pakistan can be ranked at level three. The Government is committed to integrate DRR education in the school, college and university curriculum. The NDMA in close coordination with the Ministry of Education is developing a comprehensive strategy to integrate DRR into education by year 2009. NDMA expects the process of curriculum development completed by end 2010.

The NDMA is working on integration of DRR education into the training academies of the civil servants of Pakistan; e.g. the National School of Public Policy (NSPP), the lead civil services training institution where majority of government servants entering into various sectors are trained at the entrance level as well as at mid-career stage. The integration of DRR education into the training modules of NSPP is expected to be completed by end 2009.

To raise awareness and train the civil servants, the NDMA has undertaken different programmes, some of which are mentioned as under:-

- A training program in DRR for in-service government officers at federal, provincial and district levels is under implementation.
- Training curriculum for training of district officials and communities have been prepared.
- Over 150 officers and civil society reps have been trained in the 09 districts affected by the 2005 earthquake. About 80 officials from federal level and from about 4 districts have been trained in basic concepts of DRM.

- A simulation on disaster response management conducted for the entrance level officers at the Civil Services Academy (CSA) of Pakistan. Training sessions on disaster risk management conducted for about 200 entrance levels officers at the CSA.

Context & Constraints:

DRR in its modern form is relatively a new concept in Pakistan. Therefore, lack of awareness, being the major challenge, exists in Government Departments including the ones dealing with education. The lack of awareness coupled with lack of expertise in the relevant government departments impede implementation of National Plan and Strategy for integrating DRR into education curricula within the defined timelines as envisaged in the Framework. To overcome this problem, the NDMA intends to extend technical assistance to the Ministry of Education for development of required curricula.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

In this area, Pakistan can be ranked at level two. Pakistan has yet to go a long way to develop its own tools and research methods for multi-risk assessments and for cost benefit analysis. In terms of provisions of the Ordinance, the National Institute of Disaster Management (NIDM) is to be established as the national centre of excellence in the field of Disaster Management. The NIDM will provide state of the art facilities for planning and promoting training and research and developing core competencies in the area of disaster management. It will also be responsible for documentation and development of national level information base relating to disaster management policies, prevention mechanisms and mitigation measures.

The Government has shown its commitment for the establishment of NIDM through allocation of land and funds. Basic infrastructure design and funds utilization plan have been finalized. The infrastructural development is planned to be undertaken with donors support for which commitment has been secured from JICA. Subject to the availability of funds the NIDM is expected to be fully established by year 2011. In addition University of Peshawar is developing a Masters Program on Disaster Risk Management. This would include training about risk assessment and research in this field.

Context & Constraints:

As discussed earlier, the DRR, being relatively a new concept in Pakistan, is yet to be institutionalized as a core subject in public as well as private research institutions. These institutions lack the knowledge, expert human resources and technical and scientific facilities to carry out objective research, aimed at developing and applying methodologies, studies and models to assess vulnerabilities and impacts of hazards, including the improvement of regional monitoring capacities and assessments.

Institutional commitment is due on the part of the public as well as private research institutions to treat DRR as one of the core research subjects through allocation of substantial resources and provision of research facilities. The Federal and Provincial Governments are also required to ensure adoption of DRR research as integral part of the institutional competencies in the research and educational institutions under their respective control.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Pakistan could be ranked at level three. NDMA is committed to organize systematic awareness country wide. It is currently working on a number of initiatives to develop a national awareness raising strategy. 8th October has been declared as the National Disaster Awareness Day by the Government, in commemoration of the October 2005 earthquake, which killed over 73,000 people. NDMA commemorates the 8th October as awareness day with a view to raise awareness of people and stakeholders. NDMA is planning to develop a range of media products for awareness raising, including talk shows, special supplementaries etc. Besides, in collaboration with the private sector, an annual Disaster Exhibition is held on rotation basis in cities and towns to stimulate public private partnerships in the field of DRR as well enhance public awareness.

Realizing the potential of radio as the most effective medium of mass communication, the NDMA is planning to engage FM Channels for raising mass awareness about DRR. For this purpose, a variety of programmes are currently receiving attention by the NDMA in collaboration with electronic media. The NDMA also plans to organize orientation sessions for media personnel to engage them in awareness raising activities.

Context & Constraints:

Public Awareness plans and strategies are to be implemented by the public institutions. However, most of the institutions themselves suffer from lack of awareness about DRR. Thus the NDMA is facing a two staged challenge. At the first stage it has to overcome the challenge of lack of awareness amongst the implementing partners through a comprehensive awareness raising programme for Government Institutions who will then be able to complement the efforts of the NDMA for implementing awareness raising programmes in the general public.

Philippines (in English)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

For the past two years, the DepEd has been engaged with donor-assisted collaborative projects, e.g. a study of the impact of disasters to the sector, and instructional materials on preparedness for natural and human-induced hazards for the youth, parents and community. The underlying strategy of DepEd is providing DRR training to teachers and promoting the construction of schools that are disaster resilient. There is institutional commitment from the DepEd to mainstream DRR into the education sector. However, only the Division of Secondary Schools in the Department handles relevant programs that DRR efforts run the risk of losing continuity.

Concepts on disasters have been part of values integration, social studies, and science curricula in the primary and secondary public school. College and masteral subjects that deal with certain aspects of disasters and disaster management are offered in a few universities such as the tertiary degree course in disaster risk management in Camarines State Agricultural College and as an area of concentration for a masteral degree in Public Management in Bicol University.

The NDCC, through the OCD, Department of Health (DOH) and other partners, has been organizing training programs for LGUs such as the Hospital Preparedness for Emergencies (HOPE) Course under the Program for Enhancement of Emergency Response (PEER) supported by NSET and USAID. DRM-relevant courses are also available at the Crisis Management Institute (CMI), which is under the National Defense College of the Philippines (NDCP). A web-based, distance learning course originally developed by World Bank Institute is being hosted by Earthquakes and Megacities Initiative (EMI) and OCD. Technological and scientific institutions like PAGASA and PHIVOLCS provide knowledge building opportunities for LGUs, students, teachers, and the general public to include the journalists. Media With

support from international NGOs, DIPECHO and NDCC, the Center for Community Journalism and Communication (CCJC) organized round table discussions on DRR reporting. A survey conducted revealed the needs of media in DRR reporting.

NGOs and professional organizations also provide trainings on DRR focusing on mitigation and preparedness. The Philippine National Red Cross (PNRC) conducts trainings on disaster preparedness, safety service, health service, and social services (psychosocial first aid). The Center for Disaster Preparedness (CDP), a local NGO, is promoting the CBDRM Training and Learning Circle (TLC) that aims to strengthen and facilitate the crucial interface between community-based organizations, training institutions and universities across the country. Trainings initiated by local stakeholders and volunteer groups have been noted, however such practice is yet to be seen in most vulnerable communities.

More training resources for LGUs were produced during the period. The DILG, with support from CDP, OCD, and Philippine-Canada Local Government Support Program, launched a handbook for LGUs on a Sourcebook for Barangay DRM Training Workshop.

Context & Constraints:

Training courses, seminars, and workshops on DRR should be progressively conducted for specific target groups from among the stakeholders. Some NGOs have activities focused on children. However, the needs of pre-school children need further attention by government. It is recommended that target groups be prioritized and a training needs assessment for prioritized groups be conducted. Relevant stakeholders conducting training should be tapped in accordance with their capacities and resources. Any national or regional plan on training should start with an inventory of training and capacity building programs.

Capacity building for PDCC, MDCC and BDCC members is high priority however, before any training activity it is instructive to analyze the DCC. LGUs whose LDCCs needs capacity building assistance should be prioritized. Also, a more systematic way to utilize students through the National Service Training Program (NSTP) pool of volunteers in disaster preparedness and response needs to be explored. For this reason, a DRM module for the NSTP should be developed.

Targeting journalists alone is not as effective as originally thought. A strategy that considers the corporate culture of broadcasting and print media companies is necessary. Media organizations clearly expressed their need for readily available information on DRM and DRR, possibly through the internet.

No regular training needs assessment to cover various aspects of DRR has been conducted. In the absence of a strategic plan, the role of organizations conducting training is not properly appreciated in terms of a broader national and local DRM framework. Moreover, tracer studies of those who were trained have not been systematically done. In terms of future professionalization and human resource management issues, DRM training course organizers should consider conducting tracer studies to find out how their participants have done after receiving training.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

The potential of institutes to contribute to the national research agenda is high. However, although numerous disaster studies including assessment of vulnerabilities and hazard impacts have been made, the body of knowledge over the years has not been systematically packaged to advance DRM in a significant way. Many results are unutilized and knowledge is not transmitted.

Some attention was given to DRM in the National Science and Technology Plan for 2002-2020 prepared by Department of Science and Technology (DOST). The plan includes natural disaster mitigation as an area thrust under Environment in the National Program for Basic for Research. Science outreach work is extensively done by PAGASA and PHIVOLCS, DOST service institutes that competently deal with hydro-metrological and geological hazards, respectively. The MGB's major program, National Geohazard Mapping, is producing geohazard maps showing areas prone to landslides, flashfloods, and subsidence and conducting information, education and communication (IEC) campaigns as the maps are disseminated to the LGUs. On the other hand, PHIVOLCS continues its program on multi-hazard mapping related to earthquakes, volcanic eruptions, and tsunamis which have produced national to provincial and to some extent local scale maps. One problem is that government technical and science institutions are losing technical staff to the private sector.

Some assessment tools have been developed or used by DOST and the Department of Environment and Natural Resources (DENR). For risk and vulnerability assessment, users have not agreed on a common method. There is also a need to adopt a suitable damage and needs assessment methodology from among several, including the tool developed by the United Nations Economic Commission for Latin America and the Caribbean (UNECLAC).

A study of the vulnerability of critical sectors to climate change has just been initiated using the Millennium Development Goals Achievement Fund of the Spanish government. Seven (7) UN agencies signed the Joint Programme Document with their implementing partners to include Albay Province and concerned national agencies.

Context & Constraints:

It will be useful to identify the role that can be played by non-government and academic institutions in different regions of the Philippines in future disaster research agenda. Research is not limited to academic and scientific institutions. It shall, however, be noted that the Albay Province also invests in scientific and experience-based research. Both government and private institutions or services will further enrich knowledge in the natural and social sciences.

A study of disaster-related science and technology policy should be made in order to understand the state of disaster loss reduction efforts and the role of research and development within them. This should include contributions from natural and social sciences.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

The national strategy to increase DRR public awareness contained in NDCC's Four-Point Plan of Action on Disaster Preparedness is centered on NDCC-organized activities and fails to marshal non-governmental and private resources effectively. To what degree awareness or knowledge enhancement has increased every year is not measured.

Notable is designation of July as the National Disaster Consciousness Month in order to heighten public awareness on the importance of disaster prevention, mitigation and preparedness through simultaneous nationwide earthquake drills, search and rescue exercises, disaster preparedness seminars, and tri-media advocacy campaign. Although posters are produced and distributed every year, budgetary constraints limit the development, production and distribution of other IEC materials using various media.

In the READY Project, IEC campaigns are conducted as hazard mapping results are disseminated and community-based early warning systems are established. Community watching exercises are done by PHIVOLCS in order for local officials and residents to be aware of the risks and vulnerabilities and find ways to deal with them. While PAGASA teaches the educators how to track tropical cyclones and the persistence methods for them to understand disaster scenario better.

Science and technology institutions have organized public information activities. A DOST institute, the Science and Technology Information Institute (STII) produces articles and press releases to media. Film and media are also utilized by PHIVOLCS and PAGASA extensively. On the other hand, PAGASA also conducts annual seminars on themes like climate change and El Nino Southern Oscillation (ENSO) to have an effective understanding of the terminologies and formats of weather forecast and climate outlooks and warnings. Evaluation of information materials used and performance of resource persons including knowledge gained by participants is regularly conducted by PAGASA.

Current public education programs focus on information dissemination with a “top down” approach, rather than a “bottom-up” approach which involves local communities, NGOs and other civil society organizations’ inputs to promote greater public ownership.

Context & Constraints:

Stakeholders should be enjoined to conduct IEC campaigns within their organizations to instill DRR consciousness among the management and staff. The message of the campaign shall be that managing risks is everybody’s responsibility; they are themselves champions of DRR. As IEC campaigns progresses, it would be useful to assess its effectiveness. Risk communication must seriously be undertaken with a scientific understanding of how Filipinos perceive hazard, warnings, and other related aspects of DRR.

Local officials have an important role to play in raising public awareness about DRR. The level of awareness about DRR among LCEs needs immediate attention. Learning opportunities through seminars and fora organized by the leagues of different levels of LGUS should be utilized. Also, disaster field or exposure trips where LCEs observe good practices and talk with the people involved can be effective in increasing their motivation and equipping them with the knowledge and attitude to move DRM forward in their respective LGUs.

Singapore (in English)

Core indicator 1

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

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

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

5 - Comprehensive achievement with sustained commitment and capacities at all levels

Description:

SCDF works closely with the Ministry of Education (MOE) to incorporate emergency preparedness as a subject within the Civics and Moral Education syllabus for students in the primary and secondary levels. As part of Emergency Preparedness (EP), SCDF introduces short EP modules on essential skills and knowledge in surviving emergencies for schools to conduct during assembly periods.

18 Apart from residents and workers, SCDF recognizes that school students form another important niche group in public education efforts. Since 2005, SCDF has reached out to the youths in secondary schools through the formation of the National Civil Defence Cadet Corps (NCDCC), a uniformed group in which students may participate as a co-curricular activity. In 2007, SCDF started to reach out to primary school students through a Fire Station Engagement Programme. Liaison Officers from fire stations will be deployed to the schools to train the students and prepare them to deal with emergencies and threats posed by the new security environment.

Context & Constraints:

Nil

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

5 - Comprehensive achievement with sustained commitment and capacities at all levels

Description:

SCDF has created a working culture which encourages and supports innovation. This is manifested in an innovation framework that is supported by a mix of physical and virtual infrastructures to create an environment where creativity thrives. SCDF firmly believe in the usage of innovative and cutting-edge technology to boost operational effectiveness. Some of the outstanding projects that were developed include the all-terrain Light Fire Attack Vehicle, the usage of Water Mist technology in fire fighting and the modification of tracked vehicles to combat bush fires. These innovations have enhanced our operational effectiveness.

Context & Constraints:

Nil

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

5 - Comprehensive achievement with sustained commitment and capacities at all levels

Description:

SCDF has introduced a multitude of programmes to equip the population with knowledge and skills to deal with emergencies. SCDF has in place the Community Emergency Preparedness Programme (CEPP), which is a modular-based programme that provides both theory and practical training in First-Aid, Cardio-Pulmonary Resuscitation, Fire Safety and Casualty Evacuation, Emergency Preparedness and Emergency Preparedness for Unconventional Threats. Complementing the CEPP are community exercises with counter terrorism themes that are conducted at residential heartlands to sensitize the public to realities of such threats, and more importantly, to help them pick up essential skills and knowledge to deal with

emergencies.

Context & Constraints:

Nil

Sri Lanka (in English)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

DMC has developed few visuals on DRR which is used to conduct awareness programme.

District level school DRM awareness and training programmes on multi-hazard with special reference to tsunami were conducted along the coastal belt and mock drills were practiced in all schools vulnerable to tsunami as priority activity. Awareness programmes on Multi-hazard are being conducted in other schools also.

Special awareness programme on man made disasters was conducted in all school

Guideline posters and video clips on hazards are developed by DMC and made available to all stakeholders conducting awareness programmes.

RAudio and interNET (RANET) equipment issued to several schools on pilot basis to obtain information on disaster management through internet.

Disaster Risk Reduction component already introduced in grade 6 and 7 of school curriculum as a subject and for grade 8 and 9 as a module in social science subject.

The students in advance level classes are encouraged to undertake projects on disaster management and necessary material guidance provided when ever requested.

DMC has established separate division to manage training/awareness programmes with responsibility to build the capacities of stakeholders in all levels.

Sri Lanka Institute of Development of Administrators(SLIDA) has included a separate Module on Disaster Management in their annual training calendar. Disaster Management module in included as subject in regular programme conducted by SLIDA for senior government Officers.

District /divisional level school disaster management training and capacity building progammes are underway with the coordination and involvement of district disaster management coordinating units established in districts.

The I/NGOs are also take part in school awareness and DRR programmes.

Several state universities have commenced Master degrees and Diploma programmes on DM in order to

develop professionals required in the sector
DMC standardise all training material available with stakeholder agencies .

Context & Constraints:

In the absence of a common training module for awareness programme each organization conducting training has developed its own modules. DMC is in the process of developing training modules for various programmes.

Very few teachers were trained on DRR and conducting TOT programme for teachers is a priority. DMC is implementing a programme to make teacher aware of practical aspects of DRR with field visits so that they could be effective trainers.

Resource personnel available at district level are very limited and those who are conducting training at local level has to depend on resource persons from the DMC. DMC launched a programme to identify potential trainers at local level, conduct TOT and develop a data base of trained personnel make it available to any organization involved in training programmes.

Training material available in local languages is very limited.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

National science council provides grants to undertake DRR activities as action projects.

Minister of disaster management and human rights had issued instructions to meteorological department and national building research organization to undertake research on weather forecast for drought mitigation and landslide forecasting.

Symposium in place to promote the practical application of academic research in risk reduction, Identify research gaps in the area of disaster risk reduction and possible knowledge management and sharing mechanisms. symposium is planned to be held on 7th and 8th of July 2009. Department of Agriculture has done many research to develop paddy varieties resistant to drought condition. DMC is assisting the Dept. to demonstrate the practical application to farmers and field officers in selected locations in drought prone areas.

Context & Constraints:

Research on disaster risk, damage assessment and social & economic impacts are not covered in any research undertaken at present.

Professionals and academic are reluctant to undertake research work on disaster management field as there are limited data and material specially in risk profiles. DMC is in the process of developing risk profiles for tsunami, flood, landslides, droughts and cyclone.

It was noted that some of the research work have no practical application in the field.

Research on DRR undertaken by various institutions with donor funding does not get coordinated.

Gaps identified at a symposium could be forwarded to research organizations to include in their research programmes. DMC will have to facilitate the research work and identify areas where DRR is weak. Promote

and assist agencies undertaking these works.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Information on hazards is publishing in DMC website regularly.

Early warning system established to disseminate hazard risk and warning to general public on available media(TV, Radio, Mobile, etc)

Resource center with assistance of Oxfam America is been set up in DMC to facilitate information sharing and usage.

At present weather information is disseminated through three early warning towers erected in Northern, Eastern and southern regions of the country.

Most of the awareness programmes are conducted in three languages, Singhala, Tamil and English and reading materials are made available in English and some cases in two local languages.

DMC has organized public forums to share information and good practices on DRR and adaptation to climate change especially on drought and flood hazards.

Regular press briefings are arranged during disaster time to educate public.

December 26th declared as "National safety day" and observed annually since 2006. First safety day was held on 26 Dec 2006 at Galle and the 2nd at Rathnapura 3rd in Kandy. Safety day in 2009 will be held in Kurunegala.

Frequent visits to countries in south Asian region are taking place and DMC and other stakeholders have close relationship with the DM organizations in the region sharing good practices. Information are regularly Shared on tsunami, earthquake and weather related hazards by the DM organizations in the region.

International workshops on CBDRM and Disaster Free Asia was held in Sri Lanka and discussed possibilities of sharing experience and information

A series of programme open to public named 'Sanhinda" initiated by DMC with the assistance of UNDP is in progress to promote scientific knowledge, create awareness and influence policy makers on current issues leading to disasters. It is a forum for interaction with public affected by various disasters, stakeholders involve in DRR activities and focal point in public sector.

Context & Constraints:

Media is more prefer to cover post disaster activities which have more news value. Disaster risk reduction programme does not get covered sufficiently. A suitable DRM awareness programme for journalist to understand their role in DRM is a requirement. Development of reporting format and establishing strong links with media at District level is essential to publish speedy and accurate information.

Awareness programme for jornalist in Anuradapura district was conducted.

Application of regional experience and knowledge at local level is limited. Mechanism to exchange

resource personnel regionally is required to share regional experience at local level through the implementation suitable DRM projects and activities.

The public forums organized to express their views on existing disaster related issues are not focused to remedy the problem or the community responsibility on mitigation. The outcome of these dialogs to be made available for the public as well as the authorities concerned to act responsibly.

Syrian Arab Republic (in English)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

The Ministry of Education is currently modernizing the curriculums for all levels, this has created a good opportunity to incorporate disaster risk related issues into curricula in an easy way which suits the age and levels of students. The method of teaching disaster risk reduction include three stages: preparation, dealing, and recovery.

Context & Constraints:

The constraints are in transferring the proper knowledge effectively and sufficiently, and to qualify instructors to teach disaster risks related issues theoretically and practically.

All these require qualified humanitarian teams to implement training courses to instructors in this field.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

Context & Constraints:

The constraints are the non existence of specialized institutions for research and tools for multi risk assessment and cost benefit analysis, whereby some academic institutions play a modest role in this field.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

There is no national public awareness strategy to stimulate a culture of disaster resilience which includes urban and rural communities and the only field that is currently undergoing is incorporating disaster risk related issues into curricula in order to guarantee publicizing awareness culture against disaster for all generations.

Context & Constraints:

Tajikistan (in English)

Core indicator 1

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

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

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

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

Inclusion of risk reduction in the systems of official and informal education, use of the knowledge and experience in forming the culture of safety and the ability of communities and general population to withstand disasters at all levels are important aspects in reduction of risk of natural disasters.

In this connection the Government of the republic of Tajikistan, the Committee for ES and CD and the international organizations active in this sphere work out and introduce the system of measures for provision of the population with understandable information on threats and disasters and the ways of their prevention and protection.

The system of the local organs of state power develop the local, regional and national systems of information, reference books for exchange of information on successful practices, inexpensive and accessible technologies in reduction of risk, and the lessons learned in regard of policies, plans and actions for reduction of loss from disasters.

The Training and Methodological Center of CoES had worked out the system of trainings and educational programs for management of natural disasters for executive official persons making decisions in the system of state power, local self-governance, units of CoES, members of vulnerable communities, subjects of economy, and general population in basic knowledge of prevention and recovery after emergency situations. In 2006-2007, with the support of the Swiss Office for Cooperation and Development (SDC), UNDP Disaster Risk Management Program and international consultants the programs and materials of the Center were significantly amended and updated, for inclusion, instead of themes and materials of civil defense oriented to civil defense in military situations, the themes on preparedness for natural disasters, their prevention and response.

International and donor organizations continue to play significant role in management of natural disasters, in Tajikistan and in the entire Central Asia. In this connection, the program of SDC for 2004-2008 should be

noted, which is implemented in Tajikistan and in the other countries of Central Asia, aimed at improvement of awareness and the potential of the government structures and communities, prevention and mitigation of natural disasters, at the same time ensuring sustainable development, reduction of poverty through resolving the issue of reduction of disasters.

The European Commission Humanitarian Office implements the program for preparedness for natural disasters in Central Asia (DIPECHO) for since 2003. A number of international organizations had implemented projects in Central Asia in amount of more than 9 million Euro; most of the projects were implemented in Tajikistan. The Red Crescent Society of Tajikistan, German AgroAction, UNDP DRMP, ISDR, Mission East, Oxfam, Caritas and others made significant contribution in this work in almost every region of the country. GTZ is beginning a large project in the Zarafshon valley, which includes educational activities and training in preparedness and enhancement of awareness of the population, training of rescuers, etc.

That would allow increasing awareness of the population, improve the potential in risk management, in prevention of disasters and recovery, facilitate cooperation among organizations working in the field of emergency situations, and incorporate the aspects of reduction of risk of disasters in development plans at local and national levels.

On the basis of the joint work and research of UNDP DRMP, UNISDR and Ministry of Education of the Republic of Tajikistan, the inclusion of special disciplines (subjects) in the program of official education is considered, in the field of reduction of risk of disasters, in the relevant sectors of curricula of pre-school, secondary and highest education.

Context & Constraints:

Difficulties and problems:

1. Shortage of time allocated in the school curricula for the special disciplines in reduction of risk of disasters
2. Lack of literature in the field of natural disasters
3. Lack of correlation between brochures, booklets, and other teaching and information materials for increasing awareness of groups of population developed by various organizations in the area of natural disasters and preparedness
4. Duplication of activities in increasing awareness of various groups and categories of population in the same region
5. Lack of connections among specialists of research institutions, organizations implementing projects in increasing awareness and preparedness for natural disasters, and the local population
6. Shortage of qualified specialists
7. Low potential of state institutions
8. Shortage of financial support

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

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

The methodology for assessment of vulnerability and risk were not worked out in the country for the national or local levels.

A number of international organizations achieved some progress in conducting such assessment at the community level (Mission East, Oxfam, Caritas, UNDP DRMP, CCDR) and at larger scale (Focus Humanitarian Assistance). The work of two organizations should be specially noted: Focus Humanitarian

Assistance conducted assessment of hazard and disaster risk in over 200 settlements in MBAR and Mission East worked at the level of communities.

Economic analysis based on assessment of vulnerability and disaster risk has not been developed. The Information management and analysis center (IMAC) had worked out the methodology for estimation of loss from disasters at the level of districts, regions and the whole country.

The Committee for ES and CD and the German Technical Center within a joint project for reduction of risk of disasters in Tajikistan, with participation of IMAC of CoES and CD, Mission East, Research Center of the Agency for geodesy and Cartography, Directorate of Geology of the Government of RT carry out assessment of hazards and risk of natural disasters on the level of communities in the Zarafshon Valley. The results of this work will serve the basis for selection of most vulnerable settlements, for organizing works for prevention and mitigation of natural disasters.

Context & Constraints:

Main difficulties:

1. There is no unified methodology for assessment of vulnerability and risk of disasters, as well as analysis of possible economic loss
2. Lack of willingness of some international organizations to share the methodology for assessment of vulnerability and risk of natural disasters
3. Weak human and technical potential of state institutions
4. Insufficient financing

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

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

The state system and the programs for increasing awareness of the top personnel of organizations and institutions and for students of schools and universities and various groups of population were developed. At present these programs are being reviewed in accordance with the projects of CoES and international organizations, with participation of international experts.

While the work on increasing awareness of the executive personnel of organizations, students of schools and universities is carried out within the accordingly designed programs, the work of the relevant state organizations (e.g. Committee for ES and CD, Ministry of Education, etc. on stimulation of the culture of resilience to disasters, with inclusion of urban and rural population is far from satisfactory.

In this direction, almost all governmental and non-governmental international organizations active in the country fruitfully and productively cooperate with the Committee for ES and CD. The examples of such work are FOCUS Humanitarian Assistance, German AgroAction, Oxfam, Mission East, Caritas, UNDP DRMP and the donor organizations - ECHO, SCO, GTZ, USAID, and UN ISDR.

Among the local NGOs the most fruitful activities belong to the National red Crescent Society, CAMP Kuhiston, CCDR, Man and Nature, PMP International - which to the varying degree are supported by international organizations.

These organizations had developed and disseminated among the population large numbers of brochures, illustrations and other information and promotion materials.

Context & Constraints:

Difficulties:

1. Insufficient attention on behalf of the relevant state institutions to the issues of increasing awareness of the urban and rural population in terms of preparedness for possible natural disasters
2. Insufficient coordination in activities of various organizations

3. Duplication of activities in the same settlements
 4. Non-systemic use of information and promotional materials
 5. Shortage of scientific-popular literature in the field of natural disasters
 6. Low living standards of the population
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Uzbekistan (in English)

Core indicator 1

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

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:

n/a

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

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 training programs for all categories of population are aimed at ensuring safety of life activities. The specially designed educational programs, approved by Ministry of People's Education and Ministry of High Education, embrace the pre-school institutions, secondary schools, colleges and universities, and the Institutes for Upgrading of Teachers. The training of the senior personnel of the local executive authorities, enterprises and organizations is provided on the basis of the Institute of Civil Protection of the Ministry of Emergency Situations. In the regions training is provided by the Centers for preparedness of population and executive staff of local structures of MES. The annual training program is approved by the head of the civil protection – Prime Minister of the Republic of Uzbekistan.

Training of population is carried out at institutions, enterprises and organizations in accordance with the specially developed program, as well as through the mass media – printed press, radio, and TV.

Context & Constraints:

n/a

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and

strengthened.

Level of Progress achieved:

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

Description:

Vulnerability assessment of assets and capacities is carried out continuously by the operational and territorial subsystems of the SSPR. In case of emergency situations on republican level, the governmental commission comprised of stakeholder ministries and agencies conducts analysis of the socio economic and ecological consequences and losses. The results of the analysis are shared with stakeholder structures by way of recommendations for making decisions and taking urgent measures.

Context & Constraints:

n/a

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

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 law of the Republic of Uzbekistan "On civil defense" (adopted on 26 May 2000, Tashkent) sets out public policy priorities in protection of population and territories, material and cultural values against the possible hazards. The key operational procedures prescribed by the law make it possible to prepare people at large to protect themselves from hazards. A "State Programme on Forecasting Emergency Situations of Natural and Technological Character" was approved by the resolution of the Cabinet of Ministers as from 03 April 2007 under #71.

MoES accepted a number of international projects for implementation:

The first phase of a joint MoES / UNICEF project "Risk reduction among vulnerable groups of population particularly children and women in six oblasts of Uzbekistan mostly exposed to natural disasters" has been finalized (for the period from 01 April 2007 to 30 June 2008). The primary goals of the project are:

To train population on action planning skills before natural disasters, as well as to response during and after natural disasters in order to reduce the damages from their consequences

To strengthen the capacity of the Population and Administrative Bodies Training Centres (MBTC) under the regional Departments of Emergency Situations (DoES) to coordinate and carry out measures for natural disaster preparedness of mahallas (communities), schools, nursery schools and medical facilities. The training programs for all categories of population are aimed at ensuring safety of life activities.

The specially designed educational programs, approved by Ministry of People's Education and Ministry of High Education, embrace the pre-school institutions, secondary schools, colleges and universities, and the Institutes for Upgrading of Teachers.

The strategy for prevention and recovery from emergency situations was upgraded, by strengthening the involvement of the mahallas (lowest administrative unit) in the activities in preparedness and mitigation of natural disasters.

Context & Constraints:

n/a

Viet Nam (in English)

Core indicator 1

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

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 least 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 Government to CCFSC and other ministries, and sectors. Develop standardized database and strengthen the awareness raising on information sharing

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

Integration DRR concepts and practices into school curricula, education material and relevant training is clearly indicated in the National Strategy. However, the current level of integration is still limited, only some pilot projects in the high-risk areas have introduced disaster knowledge into schools. For example, there are some good practices of integrating disaster risk reduction concepts into primary schools in Mekong delta and Central provinces such as Dong Thap, Tien Giang, An Giang, and Thua Thien Hue, etc. In addition, International Red Cross and Viet Nam Red Cross developed a set of disaster prevention guidebooks for grade 4 and 5 at primary schools. Over 15,000 primary school teachers and over 600,000

primary school children were trained in the material: “An introduction to disaster preparedness for primary school children” in 27 disaster prone provinces

Provincial government also organized educations and trainings on disaster preparedness for communities frequently affected by natural disasters through CBDRM projects/programs implemented in their provinces. These training specifically focus on the disaster risk reduction concept and practices, the preventive measures. The simulation exercises with local communities are also organized before the disaster seasons.

Recently, MARD has developed a proposal for CBDRM program to 2020, which will be implemented national wide, in which the integration of DRR into school curriculum, and materials is strongly emphasized.

Context & Constraints:

The absence of guidelines from Ministry of Education and Training on how to integrate DRR into school curriculum, education materials, as well as relevant trainings (through both, extracurricular and local content), has caused difficulties for schools to implement their efforts on DRR integration. Furthermore, the load of current school curriculum for students have been perceived as “burdensome”, as such schools and teachers are also facing challenges in finding ways to integrate DRR into their existing school subjects. The limited capacities and human resources at schools are also another challenge.

Proposed solutions:

It is necessary to develop and enhance the capacity of human resources and concrete guidelines for DRR integration that would enable the implementation of DRR integration into school curriculum and education materials, as well as relevant trainings. With the availability of capable human resources, it is expected that schools and education system at local level could become more creative and innovative in their efforts for DRR integration.

In addition, it is also necessary to develop guidelines at the national level for integrating DRR into school curriculum, such as through extra and intra curricular and local content as part of the current existing school subjects, including schools. When such guidelines is made available at the national level, schools and education system at the local level can utilize that guidelines as their basis in developing DRR integration that is according to the context, situation and condition of each local area. To support the implementation of DRR integration, it is also necessary to provide and make available material or readings related to DRR.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strenghtened.

Level of Progress achieved:

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

Description:

Various stakeholders have developed some tools for multi-risks assessment and analysis. However, in Viet Nam there are two tools: Hazard Vulnerability Capacity Assessment (HCVA), and Vulnerability Capacity Assessment (VCA) that are commonly practiced among NGOs.

Several organizations have applied GIS technologies to develop disaster risk maps with the participation of communities. Multi-risk assessment and cost-benefit analysis of flood risk mitigation have been carried out in several major river basins, such as Huong river basin and Mekong delta. Guidelines on flood risk assessment and, and on integration flood risk mitigation into damage assessment has been applied in several provinces.

Particularly, Damage Assessment And Needs Assessment (DANA) has been developed with the intention to be a national system on assessing disaster damage and aid needs. It includes a system of indicators on summarizing damage caused by natural disasters, emergency relief needs, the needs for recovery during the temporary period after disasters and the needs for post-disaster reconstruction; DANA guided the implementation of indicators collecting, the system to export quick and comprehensive reports on damage and needs assessment. In addition to the information form, DANA also comprises software for the analysis

and storage of natural disasters statistics.

This system was jointly established by the Standing Office of CCFSC, GSO with the participation of some local and active international social organizations in the field of prevention and mitigation of natural disasters in Viet Nam such as the Red Cross family, Oxfam Hong Kong. UNDP provides financial support for the development of the system. This system is currently tested in some provinces and it is estimated to be trained and used widespread throughout the country. It is notified that once approved by the government, the system will be commonly used between the GSO and the CCFSC.

Context & Constraints:

Numerous tools, methodologies, and guidelines for multi-risk assessment are available in Viet Nam. There are several challenges in applying these tools and guidelines because each stakeholder has developed different tool and method for risk assessment as a result the risk assessment varies from stakeholder to stakeholder. Hence, the usage and sharing of risk assessment information is very limited.

Another challenge is the limited capacity and competency of tool users. For example, during the development process of risk assessment tools, only several trainings were organized for the users with the expectation that these users will become trainers for these tools. This is facing difficulties. Furthermore, some tools have been developed without the real participation of communities and therefore they are impractical and not applicable.

Proposed solutions:

- > Need to review, develop and approve a standardized and applicable methodology and tool for risk assessment.
- > Need to enhance the capacities of tool users including relevant staffs at local levels, communities, national experts, etc.
- > Need to collaborate, coordinate, and standardize the available methods and tools developed by stakeholders.
- > Need to develop a risk assessment information sharing system and integrate risk assessment information into the development planning of other sectors.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

National Strategy emphasizes the responsibilities to enhance the disaster prevention awareness of communities in its specific objectives till 2020. However, to the results of these objectives will only be achieved after a long enough period with continuous and regular efforts of all stakeholders. MARD in collaboration with other ministries and local governments develop a proposal for CBDRM that will be approved and implemented from 2009 to 2020.

Capacity building and training for staffs who directly works in DRR sector have been implemented widely and achieved substantial results. MARD has also developed a proposal on education, and training in order to standardize the training and education materials and strengthen the coordination among ministries, provinces in their capacity building for DRR activities.

In 2008, MARD has directed relevant agencies to prepare and edit DRR materials and issued guidelines to provincial people's committee and district people's committee to implement DRR activities. Moreover, the "disaster mitigation" newsletter has been issued monthly to disseminate the disaster-related news, guidelines and policies of CCFSC.

Context & Constraints:

In the past few years, disaster risk management has significantly reduced the damage caused by natural disasters. However, the loss of lives is still high. According to the statistical information, the number of

deaths and injuries due to storm are far fewer than due to flooding and landslide. One of the reasons is the lack of regular awareness raising programs on disaster prevention and mitigation. Current disaster awareness raising is mainly through mass media and not integrated into annual action plan of communities. Moreover, there is no specialized agencies or staffs at local levels for the CBDRM activities and, therefore, the CBDRM at local levels is insufficient and limited.

The materials for enhancing community awareness are inconsistent. Many stakeholders have developed CBDRM training materials and organized training on CBDRM. However, it is needed to review, revise these materials to be applied national wide.

The poor conditions of infrastructures, which are vulnerable to disasters, coupled with the isolated and remote geographical and socio-economic conditions lead to many challenges in implementing CBDRM programs.

Proposed solutions:

The national project proposal on CBDRM needs to be approved and implemented as soon as possible in order to accomplish the objectives of the National Strategy: Ensure 100% of local staffs who directly work in the field of disaster prevention, response and mitigation at all levels to be trained and strengthened of capacities for disaster prevention, response and mitigation by 2020; and ensure more than 70% of population living in disaster prone areas to be disseminated of knowledge on disaster mitigation.

Yemen (in English)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery

concepts and practices.

Level of Progress achieved:

1 - Minor progress with few signs of forward action in plans or policy

Description:

- An awareness Campaign has been designed by EEGD in Disaster and Climate Change risk reduction targeting the official and public with special consideration for the schools and universities.
- Several campaigns in disaster response have achieved by the Civil Defense Authority considering the fire preventions safety, search and rescue, disaster response procedures targeted several schools in Sana'a City and few governorates.
- Several campaigns in health rescue providers in health emergencies have been developed by the Ministry of health and Yemen Red Crescent Society.

Context & Constraints:

- The available resources are very limited.
- 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.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

1 - Minor progress with few signs of forward action in plans or policy

Description:

The is an initiative between MWE and Research Associate (Disaster Vulnerability and emergency management, Asia) Northumbria UK) University, to establish a master degree program in Yemen in cooperation with the Water and Environment Center, Sana'a University)

Context & Constraints:

The main constraints are:

- Almost the absent of the research initiations in disaster risk reduction.
- Lacking to academic expertise.
- Lacking to resources.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

The institutional commitments attained via several awareness departments that already part of the organizational chart of the following agencies with specific mandates and can be utilized in building the DRR resilience :

- Environmental Awareness Dep. Within the Environment Protection Authority specified on building the public awareness related to the environmental hazards and other environmental aspects.
- Agricultural Information Dep. within the Ministry of Agriculture and Irrigation specified on building the public awareness related to the agriculture, flash flood and veteran hazards.
- Relations and Information Dep. Within the Ministry of Interior, specified of building the public resilience

related to the crime, traffic, terrorist, and other related hazards

- The Nation Center of Health Information and Culture within the Ministry of Health and Population specified on building the public health culture and awareness and reducing the related hazards .

The EEGD mandated to build the resilience on reducing the environmental (natural and manmade) risks at the public and official levels.

An awareness campaign on Disasters and Climate Change Risk Reduction is already planned as one component of the MWE-GFDRR program that is already started this year (2008)

Context & Constraints:

The main constraints are

- The available resources are very limited .
 - 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)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

Initiative jointly performed with and supported by Asian Disaster Reduction Center aimed to promote the integration of earthquake disaster risk reduction into school curricula, empower students and teachers, and help build greater disaster awareness in communities. Initiative time-frame is 9 month.

It cover community level

The new PRSP now is covering disaster risk reduction activities as well. A National Programme on Seismic Risk Reduction in the territory of the Republic of Armenia that had voiced earthquake disaster risk reduction agenda is in place.

Tangible and concrete results have been achieved so far : 250 certified educated and trained high-school students and teachers, and it was decided to extend the initiative and scope of audience involving new schools and communities as well as increased awareness and preparedness on the positive impacts of earthquake disaster risk reduction in school.

Armenian has been actively participating in World Disaster Reduction Campaign "Disaster Risk Reduction Begins at School" in raising awareness within school community. Armenia's contribution has been

incorporated in the UN/ISDR publication entitled "Towards a Culture of Prevention: Disaster Risk Reduction Begins at School. Good Practices and Lessons Learned - 2007, and could be used as source material for disaster reduction and school education.

Indicators for the initiative are under development. The first indicator is expected to be: Local government investment in mainstreaming of earthquake disaster risk reduction into regional school curricula.

Context & Constraints:

The programme requires a high level of awareness and advocacy on earthquake disaster risk reduction on community level. The teachers and students are not adequately protected from the grave consequences of major earthquake and so, the undertaking of necessary measures to secure their normal lifestyle should become a priority in earthquake-prone Armenia.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

Good results have been achieved in determination of earthquake hazard and vulnerability assessment of school facilities in the southern most earthquake prone region of Armenia. Elaborated and provided technical guidelines to improve performance of school facilities and insure the safety of physical environment have been implemented in 10 public schools, and it was decided to enhance the scope of investigation covering new settlements and dwellings.

Indicators for the initiative are under development, as part of a holistic approach to earthquake disaster risk reduction national platform. The first indicator is expected to be: The inclusion school retrofitting and strengthening measures in regional development programmes and plans.

Context & Constraints:

The initiative demonstrated an urgency and importance of undertaking relevant measures in retrofitting and strengthening the school buildings and facilities. A high level of awareness and advocacy on disaster risk reduction in community level still to be required. It has taken a lot of effort to change mentality of local authorities.

Major challenges were the lack of sufficient initial data on school safety and discrepancy between actual level of seismic hazard and seismic resistance of existing school facilities.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Project aimed to mainstream disaster risk reduction into land-use policies at the community level. Project timeframe was 9 month. It covered local level. Archive and stored data on rural dams with the height less 15m have been collected. Data have been systemized and classified. Geophysical investigations have been provided on some hazardous dams. The investigation involved measurement of resistance and Self Potential (SP) together with visual inspection. Assessment of flood risk in case of dam critical damage had been assessed.

Good results have been achieved so far and it was decided to extend the programme into the next year

with the intention of strengthening the mainstreaming of disaster risk into various sectors and training of key personnel and actors, and achieving better linkages with World Bank and ProVention Consortium international assistance.

The first indicator was assumed to be: The inundation map compiled as a visual didactic poster revealing the importance of dam break risk reduction.

Context & Constraints:

The project revealed a lack of appropriate awareness and advocacy on dam risk reduction among owners and local population. It has taken a lot of effort to communicate to and influence the main sector authorities, as they often do not have a focus for risk reduction. In near future we are going to have dam owners get familiar with the problems regarding their dams and provide our assistance in dam monitoring and panel operators' dam maintenance training. and establish a Non Governmental Organization (NGO), which will be dealing with the issues relating to the awareness raising of the maintenance specialists and local population in-situ.

Bulgaria (in English)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

1. As part of the project “Disaster and accidents prevention in the system of high-school education in Bulgaria”, realized by Ministry of Emergency Situations, Ministry of Education and Science and UNDP, was issued the first Teacher’s book containing the methodology for effective modern methods for education on the disaster protection. The methodology includes 3 Teacher’s books for every stage of education – elementary, secondary and high school.

2. MES organizes also out-of-school training activities for disasters protection:

- Republican school competition “Disaster and accidents protection”, aiming at verifying the knowledge and skills acquired in the basic course, as well as encouraging the participants to continue their preparation for emergency reaction.

- National competition for children’s drawings MISSION RESCUER, held together with the Ministry of Education and Science, National Palace of Children and the International competition MISSION RESCUER, hold under the aegis of EUR-OPA Major Hazards Agreement to the CoE.

3. MES issues number of educational materials:

- for children in the kindergartens MES issues a coloring book “ About the disasters – main rules for kids”, containing 10 rules for reaction in case of different disasters as well as boards and maps with educational aim.

- for children for secondary school educational boards and posters are created.

Context & Constraints:

Achievement of a fundamentally new level of planning, organising and conducting of trainings through use of new modern methods and forms, including the media

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

MES is looking for opportunities for using the scientific potential. Currently MES works together with universities, Bulgarian Academy of Science, National Institute of Metereology and Hydrology.

Context & Constraints:

Better cooperation is needed.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Ministry of Emergency Situations made a Strategy for training activities for the population in the area of disaster protection. Training programs for number of target groups are drawn. At national level voluntary teams are established. MES creates and fills the list of the voluntary teams for disaster protection and list of the instructors of the volunteers.

Context & Constraints:

Information campaigns are being realised.

Croatia (in English)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

Hazards and risks form part of school curricula but in our opinion it is insufficient. We are now preparing a project on disaster reduction in schools.

Areas such as fire protection, civil protection and crisis management may be studied as university majors.

Context & Constraints:

Initiatives for more involvement of disaster risk reduction in school curricula have often failed with pedagogic excuses that children are already overloaded with school material, making for difficult entrance of new material into existing curricula.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

For specific segments a good cooperation between the state administration bodies and scientific institutions is already in place, and the goal is to make the cooperation even better and more specific precisely through the National Platform.

Context & Constraints:

The process of adopting the National Platform is slow because of large numbers of actors involved, as well as because of substantial financial means required for its implementation.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

There are differences in risks specific to different parts of the country, but the people in rural areas are well aware of the risks. The efforts are being made to implement preventive measures at national level (floods in the continental part of the country, forest fires in the coastal area and earthquake hazard in the whole country).

Context & Constraints:

A continuing process calling for constant upgrading making it necessary to work through electronic and other media to raise public awareness, which in turn calls for substantial financial means.

Czech Republic (in English)

Core indicator 1

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

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 disseminate warnings and information. Single voice principle for warnings is recognized even though is not precisely defined in the law system.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

Disasters, hazards etc., are included in materials for schools. However, education is not systematic enough. Very popular are various videos and movies shown on TV with disaster and response tematics.

Context & Constraints:

Coordination is not on an adequate level as well as financial support. usually, during and after disaster situation people and institutions are more willing to educate themselves.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

4 - Substantial achievement attained but with recognized limitations in key aspects, such as financial

resources and/ or operational capacities

Description:

Research is devoted to improvement of forecasting and warning systems, modern types of dissemination as well as to improvement of flood protection. Similarly has been solved problems with other types of disasters. Cost benefit analysis has been used in some cases.

Context & Constraints:

Development and application of risk assessment and cost benefit analysis needs strengthening and better financing and capacities.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Strategy has been continuously introduced through all parts of the state emergency system at state, regional and community levels. Exercises are organized each year. Sirens are checked once a month in the whole country. Projects for improvement of flood protection have been often submitted for cofinancing by EU.

Context & Constraints:

Lack of money and capacities.

France (in French)

Core indicator 1

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

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, GASPARD, ...)

-> 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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

5 - Comprehensive achievement with sustained commitment and capacities at all levels

Description:

- Il existe également différents outils de diffusion de la culture de la prévention :

-> le Plan de Prévention et de Mise en Sécurité (PPMS), démarche placée sous la responsabilité des chefs d'établissements scolaires et concernant les personnels enseignants, les gestionnaires et les élèves,

-> le réseau de formateurs Risques Majeurs Education, destiné à former des volontaires en vue de la sensibilisation aux risques des élèves,

-> un ensemble de documents à titre de support pédagogique à destination des enseignants et des élèves (revue « Aléas et Enjeux », par exemple).

- Différents programmes de formation ont été menés au cours de ces dernières années, cette action se poursuit à l'initiative de différents partenaires. Ces programmes ont visé, en particulier, des acteurs de la filière « bâtiment » aux Antilles (architectes, artisans,...), des journalistes spécialisés, des agents des différents services publics à l'occasion de la mise en œuvre des nouveaux textes réglementaires, des architectes, des ingénieurs et techniciens... La formation aux risques est une action constante, elle s'inscrit dans le long terme ; elle est une composante indispensable de la politique de gestion des risques. Bien qu'il soit délicat d'évaluer les bénéfices de cette formation, on peut néanmoins constater une attention grandissante aux risques et reconnaître que, de fait, la conscience du risque a évolué de façon positive au cours de ces dernières années

Context & Constraints:

- Ce sujet a été renforcé par la loi de 2004 sur la modernisation de la sécurité civile : les programmes d'éducation sur les risques en France remontent à 1977. La loi de modernisation de la sécurité civile et le programme de formation à l'environnement ont renforcé le volet de la réduction des risques. Environ douze millions d'élèves sont concernés par cette formation qui concerne également la formation des enseignants et des personnels d'éducation et de santé. L'éducation aux risques est abordée dans le cadre d'une approche globale concernant les domaines de la sécurité, de la santé et de l'éducation au développement durable. Elle fait partie du socle commun et de la refondation des programmes et s'inscrit dans le cadre de projets d'écoles ou d'établissements.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

- Un groupe de travail pluri acteurs sur l'analyse des coûts / bénéfiques a été créé. Le MEEDDAT a engagé en 2006 un programme de recherche « Risque Décision Territoire » sur les risques naturels et technologiques avec l'objectif de créer des liens entre les acteurs locaux de la gestion des risques et les chercheurs. Il s'agit en particulier de

-> mobiliser sur un territoire les équipes de recherche existantes, recenser les connaissances nécessaires et de les capitaliser,

-> répondre aux questions des gestionnaires des risques en leur apportant des éléments d'aide à la décision et en associant mieux la société civile à la gestion des risques,

-> renforcer le réseau d'experts français pour aider aux décisions au niveau national et international.

- En outre, les réseaux scientifiques et techniques relient les différents laboratoires et organismes tels que le Laboratoire Central des Ponts et Chaussées (LCPC), le Centre d'Etude du Machinisme Agricole (CEMAGREF), le Bureau de Recherche Géologique et Minière (BRGM), le Centre National de la Recherche Scientifique (CNRS), le Centre National d'Etude Spatiales (CNES), l'Institut de Physique du Globe (IPGP), les laboratoires des grandes écoles (Polytechnique, Mines...) et des universités. Les travaux de ces organismes, structures pour l'essentiel publiques, alimentent les réflexions et les démarches de prévention promues par l'Etat.

- 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.

Context & Constraints:

...

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

- Un Document d'Information Communale sur les Risques Majeurs (DICRIM) assure la diffusion de l'information : la sensibilisation du public aux risques et à leur réduction a été engagée depuis de nombreuses années. L'engagement progressif des différents acteurs, dont les collectivités territoriales, sur ce champ permet de disposer aujourd'hui d'un ensemble complet permettant de répondre à un besoin qui se manifeste à travers une demande d'information notamment par les visites sur les sites internet.

- Parmi les différents vecteurs de la sensibilisation, peuvent être cités : l'information en direct à travers la presse écrite et parlée, les émissions TV à vocation documentaire sur les phénomènes naturels et les conséquences probables (changement climatique, volcans, séismes...), la semaine nationale du développement durable, la carte bi-quotidienne de vigilance météorologique, la procédure de vigilance des crues présentant cartes, bulletins et graphes, les supports pédagogiques, les conférences et manifestations diverses (ex : « les Irisées » à Aix en Provence).

Context & Constraints:

...

Germany (in English)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

The German scientific and university landscape offers a wide range of relevant study programs (BSc, MSc and PhD) and is at the moment especially developing its number of Master’s Degree programs, such as the Master’s in “Security and Danger Prevention” in Magdeburg, “Rescue Engineering” in Cologne or the old-established “European Master of Humanitarian Assistance” in Bochum as part of the “NOHA International Association of Universities” (see links). The BBK and the University of Bonn established a Master’s program in “Disaster Prevention & Management” in 2006 (see link). The program is designed as an on-the-job correspondence course while the monthly attendance takes place in the “Academy for Crisis Management, Emergency Planning and Civil Protection” (Akademie für Krisenmanagement, Notfallplanung und Zivilschutz (AKNZ): see link) of the BBK. The AKNZ also releases publications and provides learning/study programs in various forms to the public. Altogether there has recently been a strengthening in higher education programs on all levels. The DKKV provides a collection of all relevant study programs in Germany (see link).

Together with Siemens Business Services, the BBK develops the “European Virtual Academy 4 Civil Protection” (EVA4CP: see links) on behalf of the EU. The Virtual Academy aims to implement an Internet-based platform and content management system for target groups, work on areas of common interest and exchange of experience, knowledge and best practice by the schools and training centres for Civil Protection, as well as develop the pedagogical and methodological concept for an e-learning module. There is also a number of appropriate school material from different actors such as the insurance industry, the “Federal Agency for Civic Education” (BpB: see link) and the DKKV (see link).

In addition, with the conscious inclusion and involvement of citizens, especially young citizens, in disaster protection and management (such as in the “Federal Agency for Technical Relief” (THW: see link) or the voluntary fire brigades), the German state is actively working to cultivate an existing partnership between the state, its organs, and its citizens. This partnership continuously demands the awareness of the reasonable and feasible responsibility of citizens for themselves and others.

The German international development cooperation considers the education sector as one of the most important tools for integrated Disaster Risk Reduction. As a result, it supports the integration of DRR in school curricula, education material and training for the employees of development cooperation themselves in various partner countries. In advanced trainings adjusted to the needs of actors in DRR, the concept of disaster risk reduction is elucidated, showing starting points for the integration of DRR into the respective field of work. InWEnt's flagship program in disaster prevention is mainly in the field of education, advanced training and emergency exercises. To provide another example, the German Red Cross has especially had success with training sessions in schools with teachers as multipliers as well as practical drills in disaster response with students, the effect of which raises the level of knowledge, awareness and commitment substantially.

Context & Constraints:

Although there are many relevant study programs, there are challenges in three areas: (1) There is still no exclusive study program for disaster medicine, (2) disaster protection/management is not integrated enough in the studies of spatial and land use planning, (3) there is no systematic approach to incorporate relevant, disaster-related curricula into existing study programs. For example, courses of study such as architecture, engineering, chemistry, economics and many others do not generally discuss the elements of the respective field relevant to disasters. This has been initiated, but by far not yet accomplished. Developments in reforming school education in this regard is slow, likely due to the current lack of necessity and equally slow systemic development. The DKKV acts here as reminder and supporter, for example, with school materials.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

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 is a sophisticated research structure in Germany and many research projects are granted by the different national and European authorities. One example, the "Center for Disaster Management and Risk Reduction Technology" (CEDIM: see link) has dealt for many years with the subject of multi-risk assessments and analysis. These efforts continue and are readily made available to users at all levels with increasing measurement tools. Its "Synopsis of Natural Hazards" involves the development of probability or scenario-based deterministic methods to compare different types of risks. Currently, the German Free State of Saxony, where flood, storm and earthquake hazards dominate, has been selected as a case study. Additionally, the "CEDIM RiskExplorer Germany" is a web-based map viewer that interactively presents the results of the CEDIM project "Riskmap Germany" and allows the user to retrieve maps of datasets including natural and man-made hazards, vulnerability and risk, as well as assets (elements at risk) (see links). This attempt has kicked off the establishment of a multi-risk-disaster-management-system at the local level (ORTIS).

Together with the UBA (its "Competence Centre on Global Warming and Adaptation" (KomPass) and its professional information system (see links)) the BBK centrally generates data of federal agencies/departments, countries, institutes and international institutions, providing them in a revised form to users of deNIS II. Contents of this data include not only information about personnel, material and infrastructural assistance potential, but also information on the locations of risk-afflicted facilities. In its LUEKEX (Länderübergreifendes Krisenmanagement Exercise) the BBK trains different actors at all levels in various situations of disaster management, in particular the crisis squads of the upper administration levels. The concluded research and development of the "German Research Network on Natural Disasters" (2004) included cluster analyses for floods, storms, earthquakes and wildfires as well as decision-making

support for early warning, monitoring, information management and simulation hazards (see link).

The German insurance industry has sophisticated methods such as the databases of the Munich Re Group, e.g., the MRNatCat or MRNathan (see link). MRNathan is an Internet-based tool that helps to develop risk profiles as a basis for risk assessments and rating of natural hazards. Even the direct insurers in Germany use local risk assessments such as ZÜRS to rate the risk for insured facilities.

The German development cooperation aims to enhance its approaches for multi-risk analyses through the promotion of research at all levels. The GTZ accomplishes these mainly in South America and combines this research with cost-benefit analyses. At the World Conference on Disaster Reduction in Kobe 2005 the GTZ presented a concept for “Cost-Benefit Analysis for Disaster Risk Management” (see page 16 in the annex).

Context & Constraints:

Germany has sophisticated research tools for multi-risk assessments, however, there still remain some basic deficits, such as a lack of quality control/oversight mechanisms as well as publicly accessible disaster databases. Generally, with the exception of the insurance industry, cost-benefit analyses are not integrated in the assessments and parts of the research are frequently just research without enough practical application or implementation.

While automatic fire detection systems have been installed in the most fire-prone Federal States (Laender) and a fire-danger rating system with 1-day forecast capability has been implemented nationwide, an advanced fire spread modelling system as well as training/capacity building for utilizing this information is not yet in place. Starting in 2008, a joint initiative of the “Global Fire Monitoring Centre” (GFMC: see link), a professional fire service and forestry school, is building a model for capacity building (wildland fire training academy), inter-agency cooperation, and integrated fire management in the State of Hesse, to serve as model for the other 15 Federal States (Laender).

Taken together, Germany has the right components for a centralised national multi-risk assessment program, which must be addressed in the next years by properly utilising the extensive resources that exist.

The German development cooperation aims to integrate climate change risks into its risk analyses and sees challenges in terms of a global necessity of scientific research.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Many parts of this question have been addressed in the last three Core Indicators. Additionally, however, the DKKV has the official mandate to inform the public and build awareness for disaster reduction through campaigns, educational programs, events, informational brochures and much more (see extensive information in the link below). Through its members from all areas of disaster reduction, management and education, the DKKV multiplies its approaches at all levels. The BBK, the UBA, other national authorities, as well as the German insurers work in a similar way by distributing information to the public through publications. All of these actors, especially the DKKV, circulate flyers about natural hazards and possible disasters to inform and sensitise the public. The continuous activities of the DKKV, such as its yearly forum for disaster reduction, aim to inform the broader public.

Most of the research facilities have their own division for the press, public and even for educational campaigns, conferences or school visits. The German press landscape (even the mass media) has had a larger focus on natural disasters and the impacts of climate change, at the latest since the Elbe Flood in 2002 and the Tsunami in 2004.

The THW and other actors in disaster management such as the German Red Cross regularly participate in a variety of different activities to increase citizens' awareness of their focus and profile through exhibitions, dialogue with citizens, and outdoor activities in public places, among others.

The "Federal Foreign Office" (AA: see link) regularly finances practical international training courses, e.g., for seismologists from states particularly affected by earthquakes carried out by the GFZ Research Centre Potsdam (see link) and so-called „training for the trainer" courses for staff of UN organisations.

The German development cooperation supports the improvement of public awareness in partner countries through campaigns and participative risk analyses at all levels. Through this work it also contributes to increased awareness in Germany. The improvement of resilience to disasters is one of the main approaches of the development cooperation agencies.

The German Red Cross and national Red Cross and Red Crescent Societies with a high profile in Disaster Reduction, Prevention and Management (such as those in Indonesia or Bangladesh) engage in national awareness campaigns and programs.

Context & Constraints:

Nonetheless, public awareness for DRR is developing slowly, likely because of the current lack of urgency. With the exception of the aforementioned incidents, such as the Elbe Flood in 2002 or Hurricane Kyrill in January 2008, the German public is seldom confronted with major natural hazards with far-reaching effects, therefore making permanent awareness more difficult. There is, however, disaster resilience, especially in rural communities, although this is more of a result of tradition than current strategies.

Italy (in English)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

Disaster Risk reduction matters are currently not included into school curricula. However, a number of university courses and postgraduate specializations in Civil Protection, covering DRR as well as recovery and other related topics, have been introduced during the last years. This has been one of the outcomes of an intensive campaign set up in order to raise the disaster awareness. All mentioned topics are also integrated into a number of training courses provided to a wide range of subjects including DRR professionals as well as practitioners of other subjects, volunteers, mayors, etc.

Context & Constraints:

In the past, school curricula have never directly foreseen elements of disaster reduction or other topics related to Disaster Risk Reduction, even if elements of self-protection were included into civics. Civics is going to be reintroduced into school curricula in the context of a general school reform, but its contents still need to be defined.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

Both the regional and the National authorities are in charge to identify, develop/acquire and pool resources, capabilities and methods that allow the identification and knowledge of risks. In this framework a particular attention is given to the development of multi-risk assessment tools and capabilities. While different subjects carry out sectoral risk assessment, a structure of multi-risk “functional centres” has been set up in the last years, composed by a Central Functional Centre hosted by the National Civil Protection Department and Regional Functional Centres that are being arranged by regions, in order to improve multi-risk assessment and research capacities. Each centre has to be organized in order to allow risk prevention and early warning by pooling, analyzing, synthesizing and disseminating data and information produced by its own technologies (such as, i.e., remote sensors, etc.) and by systems managed by other subjects. Cost-benefit analysis is an integral part of the procedures of identification, evaluation and acquisition of technologies and tools.

Context & Constraints:

The main limitations to the operative effectiveness of the National system of functional centres are due to delays that some regions have experienced in setting up their centres. According to the principle of subsidiarity, in these cases it is a responsibility of the National authorities to support and to improve the regional capabilities. This goal is accomplished through the Central Functional Centre.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Disaster awareness has been improved among the population during the last years. Extensive campaigns have been set up and carried out by using all available and relevant communication means and tools in order to make the population aware of risks that people may have to face in the whole Country, such as heat waves or severe storms. Besides, tailored communication and information have been brought to communities living in territories affected by specific risks such as earthquakes, volcanoes, tsunamis etc. Public information concerning disasters is a task performed by the Civil Protection Department at the National level, by Regional Administrations at the regional level and by Mayors at the local level. Other actors such as volunteers' associations promote disaster awareness as well, in close coordination with the institutional partners mentioned above.

Context & Constraints:

The main challenge to be faced in the field of risk awareness is that, even if important goals have been reached, difficulties are still experienced in reaching some of the several small communities settled in remote and isolated areas. In some cases this problem can affect the performance of the whole Civil Protection system, since small municipalities often do not have sufficient technical means and capabilities to adequately carry out the activities needed.

Macedonia, The former Yugoslav Rep of (in English)

Core indicator 1

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

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 data 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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

The primary and high school curricula includes topics on risks and disasters, especially through the subject "Peace and tolerance".

There is institutional framework for development of methods, techniques and standards, as well as training of professionals for reducing seismic and flooding risks (both M.A. and PhD) at the Institute of Seismological and Earthquake Engineering, the Seismological Observatory, Faculty of Natural Sciences and Mathematics (both part of the University of Ss. Cyril and Methodius-Skopje.)

Furthermore, as part of their program, CMC and RPD perform special training of teachers and members of the special task forces include DRR and recovery concepts and practices.

CMC is in the process of setting up a national crisis management educational and training network, including universities, vocational schools, and other educational institutions, such as the Military Academy and police training facilities by planning to interpolate crisis management modules in their existing curriculums. CMC is developing a concept for a virtual Crisis Management Academy, employing the existing educational facilities nationwide.

Achievements have been attained through projects for raising public awareness on DRR and recovery issues. CMC is currently working on a special activity for developing the awareness on crisis management issues among the healthcare, educational, social and other institutions on local level.

Also, CMC is planning a public awareness campaign that will introduce and educate the general public on crisis management issues through 44 TV debates (each covering a specific issue) in 2009/2010.

Crucial part of CMC's public awareness strategy is the workshop on the Public Relations(PR) and the CMS thus further improving the coordination with the PR sector and its active involvement in the CMS.

Finally, after launching the annual Disaster Management Review, CMC is setting the ground for a monthly edition, thus enhancing the crisis management and DRR culture.

Context & Constraints:

Currently, the education and training of personnel on crisis management issues is carried out in both CMC and RPD, which leads to certain dualism. Therefore, at the moment, there is no systematic education and training of personnel on prevention and early warning for risks and hazards.

To overcome these issues, CMC initiated national crisis management educational and training network, including universities, vocational schools, and other educational institutions, such as the Military Academy and police training facilities by planning to interpolate crisis management modules in their existing curriculums. CMC is developing a concept for a virtual Crisis Management Academy, employing the existing educational facilities nationwide.

Also, certain financial limitations prevent the implementation of the 44 TV debates on different risks and hazards

Despite the achievements, there is always place for improvement in respect of a systematic approach towards raising the public awareness on DRR related issues. To answer these issues, the CMC is working on a public awareness strategy.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

There is institutional commitment and capacities, and the Law for crisis management authorizes the Government to regulate the Methodology for the risk assessment of the Republic of Macedonia from all hazards.

Although there are certain limitations regarding the development of methodology and tools for crisis management and disaster risk reduction, much has been achieved through the memorandums signed by the CMC and other governmental and non-governmental stakeholders on national and local levels in terms of securing a multisectoral and multi-risk approach.

In order to develop a more coordinated approach to crisis management, the CMC will form and coordinate intersectoral working group, whose aim will be the development of a methodological framework for: (1) reconstruction of hazards; (2) determining the causes and damages of hazards and disasters; (3) complex estimations on the direct, indirect and postponed disaster consequences.

Another intersectoral working group will develop methodologies for: (1) evaluating the risks and hazards; (2) developing of possible risk and disaster scenarios; (3) making plans for dealing with risks and hazards; and, (4) determining the Standard Operational Procedures (SOPs) for all crisis management stakeholders.

Also, different institutions develop appropriate methods and tools for research of different risks, however, their results are not united in a single system.

Finally, in terms of cost benefit analysis, the Crisis Management Center (CMC) has a system for review, implementation, budget regulation and realization. The system is equipped with specialized methods and

tools for cost benefit analysis of the crisis management plans.

Context & Constraints:

There are certain limitations regarding the development of methodology and tools for crisis management and disaster risk reduction, despite the fact that much has been achieved through the memorandums signed by the CMC and other governmental and non-governmental stakeholders on national and local levels in terms of securing a multisectoral and multi-risk approach. Although many institutions develop appropriate methods and tools for research of different risks, there is no unified approach.

In order to resolve the legal gaps and contradicting regulations regarding the methodology and competences of the crisis management institutions, the CMC is starting a process of analysis of the normative acts. Consequently, the CMC will coordinate all relevant stakeholders through a intersectoral working group whose aim will be to define the methodology for (1) evaluating the risks and hazards; (2) developing of possible risk and disaster scenarios; (3) making plans for dealing with risks and hazards; and, (4) determining the Standard Operational Procedures (SOPs) for all crisis management stakeholders.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Achievements have been made on raising awareness, training and education aiming to improve the level of self-protection.

The educational sector is involved by incorporating DRR concepts in the primary and high school curricula, especially in the subject "Peace and tolerance". Also, at university level, there is training of professionals for reducing seismic and flooding risks (on both M.A. And PhD levels) at the Institute of Earthquake Engineering and Engineering Seismology, the Seismological Observatory, Faculty of Natural Sciences and Mathematics (both part of the University of Ss. Cyril and Methodius.) Furthermore, the special training of teachers and members of the special task forces include DRR and recovery concepts and practices.

Achievements have been attained through projects for raising public awareness on DRR and recovery issues. The CMC is currently working on a special activity for developing the awareness on crisis management issues among the healthcare, educational, social and other institutions on local level.

Crucial part of CMC's public awareness strategy is the workshop on the Public Relations (PR) and the crisis management system that will further improve the coordination with the PR sector and its active involvement in the crisis management. PR of the CMC and the Regional CMCs will take part in the workshop.

CMC's long term media strategy also includes the: (1)affirmation of the CMC and its work among the public; (2)affirmation of the CMC emergency number 195 and the E-112 (once it's introduced); (3)introducing and educating the general public on crisis management and DRR issues through forty four TV debates in 2009 / 2010; (4)publishing annual and monthly Disaster Management Review, thus enhancing the crisis management and DRR culture.

CMC's daily media strategy consists of 24 hour announcements for the general public on current risk related issues.

Context & Constraints:

Despite the achievements, there is always place for improvement in respect of a systematic approach towards raising the public awareness on DRR related issues. To answer these issues, the CMC is working on a public awareness strategy.

Montenegro (in English)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

In our education system and materials, disaster risk reduction and recovery concepts and practices are not adequately treated.

Context & Constraints:

Our education programs are outdated and only now do we have an institution which is competent to manage emergency situations and to enhance modernisation of school programs, in an organized manner.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

Certain cost benefit analysis exists for important infrastructure, but we do not perform them in a systematic manner.

Context & Constraints:

Absence of practice of cost-benefit analysis applied to disaster management problems in this region.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

We are currently working on the Strategy for stimulating the culture of disaster resilience. We cooperate together with the Ministry in charge of education, culture, public media etc. on that issue.

Context & Constraints:

We do not have countrywide public awareness strategy yet; only individual attempts of raising public awareness exist; therefore old-fashioned ways should be modernized.

Norway (in English)**Core indicator 1**

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

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 organised/organized 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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Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

There are several initiatives for teaching children about disaster-risk related issues. There is an ongoing work to coordinate and develop this further in a more coherent way.

Context & Constraints:

-

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

Through science programmes on disaster risk, authorities is playing a role in strengthening the technical and scientific capacities to develop and apply methodologies, studies and models to assess vulnerabilities and impacts of hazards, including the improvement of regional monitoring capacities and assessments. The research is conducted in several scientific networks involving all the major universities and research establishments.

The research programme "Societal Security and Risks" - SAMRISK aims at increasing the knowledge about threats, dangers and vulnerability, about how unwanted events can be prevented and crises management be strengthened, whilst respecting basic human rights and privacy. To obtain this the programme will contribute to developing new knowledge, build networks and also qualify the research community to participate in the EU research programme "Security".

Context & Constraints:

-

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

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 several nationwide public awareness programmes with the aim to help integrate disaster risk reduction into every-day life. There is an important ongoing strategy related to adaptation to climate change.

Context & Constraints:

-

Serbia (in English)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

In accordance with the Law on Fire Protection, there is a legal obligation for the training of employees within the companies, but not the rest of population.

Context & Constraints:

It is important to define school curricula on disaster risk reduction and recovery concepts for all levels of educational system and implement them as soon as possible.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

Nothing reported within this timeframe.

Context & Constraints:

It is necessary to develop research methods and tools.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

There is no National Strategy for Public Awareness, but there are single (thematic) instructions on how the public should behave and respond in case of emergency situation (disaster).

Context & Constraints:

It is important to make a National Strategy for Public Awareness.

Slovenia (in English)**Core indicator 1**

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

5 - Comprehensive achievement with sustained commitment and capacities at all levels

Description:

The ACPDR provides basic education for adults (through leaflets, articles, yearly publication of the magazine UJMA, posters, etc.) and children (books, puppet show on natural and other disasters, promotional material that promotes the 112 single European call number, didactic games, etc.). For members of protection, rescue and relief units, services and bodies, comprehensive training programmes (introductory, basic, advanced) are carried out.

Our efforts in the area of education and training were acknowledged also by the European Emergency Number Association (EENA) who in 2008 awarded our Administration for comprehensive achievements in informing population, especially children about the 112 emergency call number.

The curricula at the Faculty of Social Sciences - Department of Political Science (defence studies) and at the Faculty of Chemistry and Chemical Technology - programme on occupational and fire safety include some subjects related to protection against natural and other disasters.

Protection against natural and other disasters is not an obligatory subject in the regular school curriculum. However, the ACPDR prepares an optional informative educational and training programme on personal and mutual protection (evacuation procedure drills, presentation of protection and rescue units, presentation of safety measures in case of fire, earthquake, etc.) for kindergartens and elementary schools.

Some information on the activities in 2007:

- one third of all education and training programmes that are carried out in ACPDR training centre were modernised according to the new needs;
- 16,000 members of the protection and rescue system were trained in those centres in the same year;
- experimentally, distance learning was introduced;
- every year (since 1987) UJMA, a professional magazine on issues related to disaster management, is published; its subscribers are individuals, libraries, schools, universities, institutes and other organisations,

services and associations which are part of the system for civil protection and disaster relief.

In the period 2006-2008 the following activities were carried out for children:

- an award competition for artistic and literary works on natural and other disasters is held yearly for pre-school and school children;
- each year an educational book for children is published; in every book the mascot "Ježek Snežek" faces different disasters or issues related to disasters (2006 - fire; 2007 - drought, 2008 - European emergency call number 112); all publications are also in the English language;
- an educational computer game for children was prepared (it is available on the ACPDR's website).

Context & Constraints:

Include education on disaster risk reduction in the national curriculum. Establish a vocational college for fire-fighting.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

5 - Comprehensive achievement with sustained commitment and capacities at all levels

Description:

Approximately one hundred development and research projects concerning protection against natural and other disasters and twenty projects on protection against fire were prepared in Slovenia from 1992 to 2007. The projects provide practical solutions on how to improve the system of protection against natural and other disasters. The research and development projects on disaster management are financed from the national research programme "Knowledge for Security and Peace 2002-2010", the technological programme "Technology for Security and Peace 2006-2012", fire tax funds, Administration for Civil Protection and Disaster Relief funds, and also funds from other ministries.

In 2006 nine research projects were finished. The themes included video detection in the Karst area, dangerous substance databases and electromagnetic radiation of telecommunications systems. In 2007 the emphasis in preparing projects was put on the following themes: fighting terrorism, and information technology and information support in extinguishing fires in the Karst and mountainous areas. In that year 10 projects were finished.

Context & Constraints:

Continue the work.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Every other year (last time in 2007), "Protection and Rescue Days" take place in a different region in Slovenia. The event is an opportunity to bring disaster management activities closer to the local residents. The purpose of the event is also to bring together responsible national institutions, professional and voluntary members of rescue services, private companies, non-governmental organisations and other experts in the field of protection, rescue and disaster relief to present their activities and/or products to the wider public. Within the event, a national emergency response exercise, conferences and other educational

activities for different populations (children, adults, experts, etc.) are organised.

Every year different prevention and preparedness activities are organised in October - fire safety month. During this period a conference on a topical issue is organised (2006 - fire extinguishers, 2007 - evacuation, 2008 - fire in the natural environment). Additionally, for each theme publications for adults and children are published.

On 1 March (Civil Protection Day) each year on the national and regional levels, individuals and organisations are rewarded for their efforts in protection, rescue and relief activities. Celebrations provide opportunities to raise awareness about civil protection activities through the media.

Context & Constraints:

Public information must become one of the key instruments to raise awareness and a culture of resilience.

Sweden (in English)

Core indicator 1

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

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 collaboration 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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

Educational material covering risk and safety exists for the compulsory school. The material contains some information regarding natural hazards.

Context & Constraints:

The content and scope of the curriculum and school material is on level with the national prerequisites.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

Methods and tools for multi-risk assessments and cost-benefit analysis are available. However, they are not tailored specifically for natural hazards and disaster risk reduction methods.

The ability to utilize existing methods and tools at local and regional level is limited.

Research and development is ongoing (e.g. cause-effect relationships, water front development models).

Context & Constraints:

Additional research and development is required. Identification of areas in need for knowledge is ongoing.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

The knowledge about the environment and sustainable development is high among politicians, authorities, organisations and the public. The knowledge and awareness of climate change is also high. Regarding natural hazards the knowledge and awareness is much lower, especially among the public.

The awareness among the public is mostly related to recent emergencies such as flooding, storm and forest fire.

A large number of conferences and seminars have been arranged on the topic natural hazards. The target group is usually local, regional and national authorities, not the public in general.

Context & Constraints:

An increased dependency of electrical power and electronic communications increases the vulnerability - especially in urban areas. People in rural areas are more prepared to handle black outs and other consequences of emergencies. The major challenge is to reduce vulnerability in urban areas.

Switzerland (in English)**Core indicator 1**

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

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 authorities and organisations responsible for rescue and security have comprehensive training programs at all levels. Regular training courses and events for know-how exchange also take place in other fields of disaster reduction, e.g. flood control.

Context & Constraints:

A more intensive promotion of disaster risk related themes is necessary at the school education level, like for example raising awareness for earthquake hazard with quake simulators in which a whole class can enter.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

5 - Comprehensive achievement with sustained commitment and capacities at all levels

Description:

An important harmonization between risk assessments for different types of natural hazards has taken place in recent years. Tools and guidelines have been developed, like "LearnRisk" and "RiskPlan" to learn about risk management and implement it, "EconoMe" to justify investments in risk reduction. Awareness raising for cost benefit issues is made on the basis of specific research.

Context & Constraints:

The tools can still be improved.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

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 fair public awareness has been achieved in relation with meteorological and hydrological hazards. A campaign has taken place to raise awareness for earthquake risks, but deficits still exist.

Context & Constraints:

Around two out of every three Swiss towns have suffered from floods during the last 30 years. Therefore awareness regarding flood hazards is easy to achieve. That is not the case with very seldom events, like earthquakes, although earthquakes are identified as one of the most serious threats in terms of risk. More awareness raising efforts are needed for seldom events.

Turkey (in English)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery

Level of Progress achieved:

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

Description:

Educational activities in order to achieve disaster resilience and awareness are being executed by several governmental bodies and academic units. GDDA, G.D. of Civil Defense, TEMAD and Local administrative bodies of Istanbul, like Istanbul Governorate and Istanbul Metropolitan Municipality are the main governmental actors organizing public awareness campaigns to ensure disaster risk reduction.

After two big earthquakes in 1999 Ministry of Education has changed school curricula radically with the help of universities. In primary and secondary level (age 6-14) new curricula focuses on preparation and protection for disasters. In high school (age 15-17) they got more detailed knowledge like reasons of disasters, protection of community, mitigation and response activities. Schools invite external specialist speakers for training of both teachers and students and they do evacuation exercises yearly.

Another specialized center is Natural Disasters Education Center (AFEM) under GDDA. AFEM is a specialized center established after EUR-OPA open partial agreement. European Natural Disasters Training Centre (AFEM) is a non-profit organization which delivers training on hazard reduction activities. AFEM was established within the EUR-OPA (European Major Hazard Agreement Council of Europe) framework in 1988 and affiliated to the Ministry of Public Works and Settlement. Its operating rules and establishment principles have been determined by Turkish laws. AFEM aims to reduce the destructive effects of disasters through training. AFEM's target group comprises technicians, administrators several groups who have responsibilities on various disaster management subjects, as of before, during and after disasters and public. Due to extensive target area of training, programs proposed by AFEM should have done in training of trainer's manner. On the other hand, documents of training programs should have disseminated to member countries in order to make the training comprise whole target area. Printing and publishing the information both make the information permanent and give opportunity to maximum number of publication. This will also ensure the activity of the center. Direct training techniques like courses, seminars, working groups and circular desk meeting should be revived by audio-visual training tools and in-situ watching etc. techniques. In addition, besides dissemination of information by printing and publishing, most attractive methods for public like television, video and cinema films should be considered.

In addition to governmental bodies, there are specialized research centers in the field of disaster management within Istanbul Technical University and Middle East Technical University. Amongst them, Istanbul Technical University, Center of Excellence for Disaster Management is established to serve activities e.g. training, consulting and research to the public and to all establishments in our country. The activities in the center are conducted by certified faculty members and experts in disaster management field. The broad aims of the center are to follow up the principles of modern disaster and emergency management, to develop strategies and projects due to developments, to construct a bridge between neighboring countries and developed countries specifically in disaster management. The members in the center are motivated to conduct research and development activities comprising all levels of disaster management e.g. preparedness, mitigation, response and recovery phases ranging from both natural disasters to man-made. The center has a master degree programme on several branches of disaster management. 15 people graduated from this programme and by June 2008, seven people are continuing their studies. Between 2000-2008, 25 training activities organised by the center. The center also published 20 professional educational materials in the field of disaster management.

One of the objectives of Istanbul Seismic Risk Mitigation and Emergency Preparedness Project (ISMEP) is to conduct public awareness campaigns and training in emergency management. Target groups of those educations are individuals, families, disaster volunteers, disabled people, students, officials. Some training topics are; survival under extraordinary situations, first aid, structural awareness, non-structural risk

awareness, retrofitting of public buildings etc.

Japan International Cooperation Agency, organised training activities at different formats like educational activities, publications, visual training sets (in CD and DVD format), video conference trainings in the field of Disaster Management in coordination with different governmental organizations. Target groups of these trainings are governmental officers, emergency managers and technical staff. 253 high level local administrators like governors, deputy governors benefited from this training activity. As the result of this programme, an interactive training set in DVD format was prepared and book of "Basic Principles of Disaster Management" published and both of them were distributed to all governmental units, civil society and universities. JICA also organised video conference training programmes. With this programme, Japanese experiences on disaster risk reduction are transmitted to the Turkish counterparts by creating on line dialogue system.

Context & Constraints:

Increasing the awareness of school children is one of the important factors in creating disaster resilient communities for the future. That's why integration of disaster risk reduction into school curricula is one of the deficiencies at the moment. Number of Msc. programmes in disaster risk reduction must also be increased in universities. Establishment of portals including necessary information on disaster education and easily downloadable training materials could be beneficial for the establishment of disaster resilience of populations at national level.

Despite these efforts the links between disaster education and communities still require upgrading with students as the leading actors.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

In Turkey almost all governmental units like GDDA, MTA, etc. uses geographical information system (GIS) tools in their studies including disaster management and other related topics. There are numerous studies on the integration of all historical disaster data into digital databases and all of them are compatible with GIS. For example, relevant data on previous earthquakes, landslides, rockfalls, snow-avalanches, floods and forest fires are stored by using GIS tools. Most scientific and technological development projects also involve GIS as a tool for spatial analysis and visualization. Some municipalities preparing micro-zonation maps, disaster response and rehabilitation maps also uses GIS and some of them like Istanbul Metropolitan Municipality, Ankara Metropolitan Municipality and many others established specialized GIS laboratories.

In 2001 GDDA has started a pilot project in Northern parts of Turkey called "Multi-hazard mapping of North Western Black Sea Region".

Another technology used in disaster management is the use of satellite imagery and remote sensing. In this respect, GDDA is acting as national focal point to UN-SPIDER and also is the authorized user of International Charter "Space and Major Disasters". The use of satellite data on disaster related studies is increasing by the day with an increase in experienced people in this field. In the field of GIS and remote sensing, JICA has organized two video conference type educations on these two topics. Experts working on GDDA, GD. of Hydraulic Works and G.D. of Meteorology benefited from those courses. There are also academic programmes offering Msc. degrees in GIS and remote sensing technologies.

In this field Istanbul city could be termed as a well-prepared since most of the hazard and vulnerability analysis were completed within the boundaries of Metropolitan Municipality. With JICA supported project, all geological and seismic vulnerabilities were determined. In addition to this study, ISMEP project also contributed to this vulnerability analysis and in detail some studies have been carried out in some parts of the city like Zeytinburnu, Avcilar, etc.

Context & Constraints:

Unfortunately cost-benefit analysis is not common on this subject. So we try to improve our capacity of making this type of analysis.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Public awareness campaigns conducted by GDDA aims to build a culture of disaster resilience at all levels. In this respect first off all education and training activities at schools are given importance. Another pilot project started at GDDA is in Ankara region and aims to train school children on disaster, especially earthquakes.

There have been lots of public awareness campaigns organized by different governmental and academic units. For example Middle East Technical University, Disaster Management Implementation and Research Center (METU-DMC) conducted a local pilot project namely "Strengthening citizen participation in disaster management; Pilot project in Bursa". DMC also started a painting contest for school children on disasters

ISMEP Project is also a good example to public awareness activities in Turkey. Within the aim of the project there are public awareness campaigns and training activities to be conducted in Istanbul.

Istanbul Metropolitan Municipality plans to establish Natural Disasters Training Park in Istanbul in 2009. The aim of this project is defined as to increase the awareness of public. There is planned to be first aid unit, shaking table unit, fire smoke simulation unit, simulation rooms for different types of disasters, etc. Another good example is the publication of disaster training books. One of them is the "I am Learning Safe Life" and 240.000 of this publication is distributed at schools in Istanbul.

In order to improve public awareness, a pilot project is being implemented in a district of Ankara province. "Çubuk District Disaster Education Program" has 5 sub Project and the aim of program is educate nearly 45.000 citizens aged between 6 and 65. 5 different education modules were using and at the end of this program it is expected to change their behavior against disasters.

Context & Constraints:

There is not a country-wide public awareness campaign as a national programme being implemented in a coordinated manner at the moment. The public awareness campaigns are conducted at regional and local levels by different institutes like governmental, academic and non-governmental units. A committee should be established consisted of representatives of the related public institutions, academic units, NGOs, etc. to provide strategic guidance and to oversee the implementation of the campaigns and trainings. Another alternative could be the national platform of any country could co-ordinate those campaigns at national level with Ministry of Education and universities.

Core indicator 1

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

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 there 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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

A schools pilot project, designed to teach children the importance of being prepared for emergencies, was developed by Essex County Council's emergency planning unit. One pilot of this project involved working with a primary school and teaching the children about the dangers of flooding through a week of fun activities spread

across the whole curriculum. The second pilot was conducted in a secondary school and involved a day of learning about the role of different agencies in emergencies and ways of preparing. These pilots were well received and crucially, when tested a year after the events, the children had retained much of the information.

Essex County Council has also been leading a European project to produce a calendar to create

discussion with children about how to cope with, and be a good citizen in, a range of emergency situations, including flooding. The 'What If? Calendar' is a video, called GO IN, STAY IN, TUNE IN, produced for the NSCWIP Public Education Group, has been specifically designed for seven to eleven year-old children who are recognised by educational psychologists as being most impressionable for developing safety lessons for life and who can also take their learning to their homes. Copies of the DVD were sent to local authority emergency planning managers who were asked to promote its use in local schools. The Chemical Industries Association purchased a significant number of copies to assist its member companies in discussions with their local communities. Prior to its launch, the video had been seen by more than 5000 children who had taken part in two Crucial Crew programmes. 'Crucial Crew' programmes is the most widely used name for LASER programmes that allow small groups of nine to eleven year-olds to Learn About Safety by Experiencing Risk. Over 200 LASER programmes led by local authority, emergency service and utility teams operate annually in the UK.

Context & Constraints:

Disaster risk reduction has limited coverage in school curricula and is currently confined mainly to primary and junior curricula. Development work is ongoing to expand this work to a wider audience.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

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 Civil Contingencies Secretariat has developed, in partnership with stakeholders, a Business Continuity Management Toolkit to help the commercial and voluntary sector implement BCM. Business continuity management (BCM) is a process that helps manage risks to the smooth running of an organisation or delivery of a service, ensuring continuity of critical functions in the event of a disruption, and effective recovery afterwards. The Government aims to ensure all organisations have a clear understanding of Business Continuity Management (BCM). Good BCM helps organisations identify their key products and services and the threats to these. Planning and exercising minimises the impact of potential disruption. It also aids in the prompt resumption of service helping to protect market share, reputation and brand. In order to be successful, BCM must be regarded as an integral part of an organisation's normal ongoing management processes. To achieve this top-level buy-in is vital as it disseminates the importance of BCM throughout the organisation. Engaging senior staff is crucial to the success of any major programme because of the influence they have over resource allocation and the culture of an organisation. Before plans can be written an understanding of the organisations BCM needs is required. There are several tools used to inform this process. It is important to first identify the key products and services that the organisation delivers. A Business Impact Analysis (BIA) identifies these critical activities and resources supporting the key products and services and helps identify the impact of a failure of these. Another useful tool is a risk assessment, which helps identify the potential threats to the organisation, and their likelihood. The Civil Contingencies Act requires the publication of all or part of a risk assessment for the local area (undertaken by local category 1 responders). Good BCM requires both incident management plans and business continuity plans. Plans cannot be considered reliable until they are exercised and have proved to be workable. Exercising includes: validating plans; rehearsing key staff; and testing systems which are relied upon to deliver resilience (e.g. uninterrupted power supply). There is a need to train those responsible for implementing BCM, those responsible for acting in the event of disruption and those who will be impacted by the plans. The Emergency Planning College which is part of the Civil Contingencies Secretariat, runs courses on risk assessment and business continuity management.

Context & Constraints:

A range of tools for multi-risk assessment exist in the UK, although there is no overall body who looks at all the resources available nor undertakes any quality control over them. Private industry such as the Insurance industry also have such tools, but all tend to work in isolation of each other.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

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 response to, and recovery from, most major emergencies will generally be more effective if citizens and communities act in support of the 'blue light' services

Not all Communities are ready to help each other but there are enough to make this a concept worth pursuing. The UK follows four basic principles;

- Community resilience must go with the grain of existing citizen engagement initiatives
- Community resilience should be done by people (with support from practitioners), not to people
- The 'communities' involved are small - the strength of the concept e.g. a Village or a Ward
- Activity should be targeted on the risks people perceive as being most likely to affect them, their family & their friends.

The best tasks for community action are the obvious ones:

Immediate action

Resources - shelter; generators; chainsaws; 4 x 4s

Helping others, especially the vulnerable

Central Government should enable & no more, providing:

- Information and Resources

Context & Constraints:

The UK has developed a range of early warning systems to inform the public of imminent danger. These can only be effective if the public change their behaviour as a result of that information. The Met Office undertakes regular research to monitor how its early warnings are received. 87% of the public were aware of it, 90% thought they were a good thing, but only 8% of the public changed their behaviour as a result of this information. CCS has commissioned research to look at how people respond in such situations, and especially in their own communities.

Oceania

Australia (in English)

Core indicator 1

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

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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Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

5 - Comprehensive achievement with sustained commitment and capacities at all levels

Description:

Emergency Management Australia (EMA) has also been prominent in the development of primary and secondary school curriculum-based materials and resource kits. Resources for students, teachers and principals can be accessed via the EMA website. EMA has a dedicated school officer to ensure that the material developed meets the needs of the Australian school community.

In February 2007, EMA commissioned the development of a school education learning object resource. The resource is designed for middle year students (ages 10 - 15). Dingo Creek (a fictitious Australian town) is a learning object available via the internet on the EMA school education webpage, to engage students in

the process of identifying risks from natural disasters to their immediate community and interrogating the emergency risk management process to mitigate the impacts of natural disaster on the Australian environment.

Emergency Management Australia's (EMA) education and training activities are managed from the Institute at Mount Macedon in Victoria. Activities include the identification and development of best practice in emergency management, and development and delivery of accredited education and training programs, many of which are derived from the National Emergency Management Competency Standards.

Geoscience Australia monitors and assesses earth-surface processes which pose a risk to Australia. It gathers data and develops tools for use by governments and other authorities to help them make Australia as safe as possible from natural hazards. This information is available and is an excellent source of information for students and the general community.

Proactive steps against hazards include:

- Recognising which areas have the greatest hazard potential;
- measuring the likelihood of various hazards occurring in these priority areas;
- modelling the impact of hazards;
- estimating the potential loss to communities; and
- collecting data when a hazard occurs to help prepare for future events.

Context & Constraints:

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Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

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 Risk Assessment Framework is designed to improve our collective knowledge about natural hazard risk in Australia to support emergency risk management and natural hazard mitigation. The main goal for the National Risk Assessment Framework is to support the development of an evidence base for effective risk management decisions. Related goals are to:

- improve the value of the risk information produced by improving methods, and employing minimum levels of acceptance;
- develop tools, guidelines and databases that assists all stakeholders to conduct risk assessments;
- foster the development of systems for coordinating, sharing, aggregating, and making available consistent information on risk; and
- to improve emergency management decision making through the development of the above tools and systems.

The 'National Risk Assessment Framework for Sudden Onset Natural Hazards' has been developed by the National Risk Assessment Advisory Group. The aim of the Framework is to establish a nationally consistent approach to the assessment of risk across Australia down to local level. Guidelines which will form the basis for assessments under this Framework are being drafted and will be submitted to the Australian Emergency Management Committee (AEMC) for endorsement later in 2008.

These guidelines will augment the existing minimum standard for the Risk Management Standard AS/NZS 4360 which has been adopted for emergency/disaster management for use in all government sponsored programs.

Development continues on producing tools to enable consistent costing of the impact of disasters on infrastructure (including housing). Nationally consistent costing of disaster impacts provides powerful information that will inform priority decisions on preparedness and mitigation works. An AEMC working group is currently developing National Rapid Impact Assessment Guidelines. A national workshop to further these efforts is to be held with a view to developing nationally consistent practices and procedures to undertake initial assessments of disaster affected areas.

Context & Constraints:

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

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 Australian Government advocates that engaging local communities in emergency management, as well as increasing involvement and awareness at a grass roots level, is a critical step in improving national preparedness for emergencies and disasters of all types.

There are a wide variety of freely available community awareness and education publications from all levels of government. These provide background information as well as practical advice on preparation for, and coping with major hazards including severe storms, floods, cyclones, tsunami and earthquakes. These publications are produced in collaboration with subject matter experts.

All states and territories have public education awareness campaigns.

National review of community education awareness and engagement programs designed to enhance community safety for natural hazards due for completion December 2008. After the completion the National Community Safety Working Group (NCSWG) will identify appropriate means of disseminating principles and creating capacity within jurisdictional emergency services agencies to implement the outcomes.

The Ministerial Council for Police and Emergency Management has tasked the National Community Safety Working Group to investigate a national approach to community education that aims to develop individual and community resilience. This would constitute a paradigm shift from a dependant community to building more resilient communities and individuals.

Emergency Management Australia (EMA) has developed curriculum-based materials and resource kits to support studies in relevant curriculum areas at both primary and secondary school levels. Resources for students, teachers and principals can be accessed via the EMA website. EMA has a dedicated school education officer to ensure that the material developed meets the needs of the Australian school community.

Context & Constraints:

The emergency management sector considers that there is a need for a fundamental shift from a community dependent on government services to a community that more closely participates in emergency planning, preparedness, response and recovery and is, to some degree, self-reliant.

As commissioned by the Ministerial Council, the AEMC is considering the feasibility and implications of a

paradigm shift in governments' messages regarding preparedness in the event of emergencies, including catastrophic disaster. When complete, this research will inform a national policy approach aimed at efficacious and more direct involvement by the community in emergency management.

Marshall Islands (in English)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

1. Training programmes to enhance professional development in DRR and DM includes TAF/OFDA programme
2. Public awareness and education materials
3. Hazard fact sheets produced

Context & Constraints:

1. Securing resources for implementation
2. Sustainability beyond 2008 when the TAF/OFDA programme funding ends.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

1 - Minor progress with few signs of forward action in plans or policy

Description:

Economic Impact of Natural Disasters on Development in the Pacific
Vol 1: Research Report
Vol 2: Economic Assessment Tools

Context & Constraints:

- * Adapt tools for national implementation
- * Training required. Materials need to be developed.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

- o Immunisation coverage rate is now estimated at 80% for 2-year old children (Polio, Diphtheria, Tetanus, TB, Hepatitis, Mumps, Measles),
- o All MOH staff trained in emergency preparedness and drills conducted regularly for plane crash, hospital fire drill, bird flu.
- o Public awareness campaigns in outer islands include traditional authorities

Context & Constraints:

- o Not all kinds of emergencies are covered
 - o Sustainability of training and public awareness programmes once funding ceases
-

New Zealand (in English)**Core indicator 1**

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

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 aided 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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

Learning about hazard and risks, and their management, is also included within different parts of the national school education curricula.

A comprehensive schools resource for teachers and schoolchildren enables civil defence emergency contexts and activity-based learning across all areas of the New Zealand curriculum for students aged 8-12 years

Called What's the Plan Stan , and produced in collaboration with emergency management personnel and teachers, the resource covers what to do before, during and after six types of emergency events: earthquakes, tsunamis, volcanoes, storms, floods and non-natural disasters. A version is to be launched in 2008 in the language of New Zealand's indigenous Maori people.

Context & Constraints:

Ongoing challenges include linking general messages in national curricula to local awareness of, and involvement in, local hazard and risks reduction processes and emergency planning.

A proactive approach to reconciling indigenous and scientific sources of knowledge on hazards and risks, in ways that make sense to local communities, has enabled some to take action.

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

New Zealand's National CDEM Strategy emphasizes the importance of well promoted, coordinated and accessible hazards and disaster research in underpinning national aspirations towards resilience. A wide

range of basic and applied research is undertaken in New Zealand for the purposes of improving our quantitative understanding of our complex hazardscape, assessing community and infrastructural vulnerabilities, understanding community preparedness and response behaviours, and developing models and tools that can be applied to inform hazard, risk and emergency management.

Priorities for central government funding of public good hazards and disaster research emphasises an all-hazards approach with research objectives linked to national outcomes.

Central government (via the Earthquake Commission) funds science capability and technology for a nationwide geological monitoring and reporting network (GeoNet). National research and science capabilities are applied to national models and to specific regional level issues within the constraints of local resources.

Context & Constraints:

Key challenges are:

- New Zealand's relatively small economy which limits the total available investment in hazard and disaster research;
- a highly competitive science funding system with very short funding cycles, which has a heavy administrative burden and tends to limit collaboration between organizations. This issue has been acknowledged by government in a review of the research funding prioritization process and options are being considered for changes to the timeframe and process for funding decisions;
- constraints on effective application of science to practice and policy development;
- lack of reward incentives for researchers to engage in technology transfer.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

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 long-term national public education programme and social marketing campaign, "Get Ready Get Thru", was launched in 2006 aimed at increasing individual and community preparedness for disasters.

Research had indicated that, despite high levels of awareness of the potential for disasters in New Zealand, many individuals and communities are not as prepared as they need to be to deal with and recover from events.

The challenge for emergency management agencies is to sell messages of preparedness, resilience, self-responsibility and community responsibility. Achievement is defined by increase in percentages of people aware of the risks of hazards and taking action to mitigate or prepare.

Research into the effectiveness of the programme, and changes in the level of readiness of individuals, is ongoing.

Specific examples of national public education activities include:

- Get ready, get thru (all hazards, all risks and a focus on everyone; www.getthru.govt.nz);
- The On-farm Adverse Events Recovery Framework promotes a shared understanding of roles and responsibilities of central government, local government and the primary production sector in preparing for, and recovering from, adverse events at the on-farm level; Adverse Events are natural disasters that are beyond the ability of the community to cope with; On-farm means commercial agriculture, horticulture, viticulture and forestry properties (<http://www.maf.govt.nz/mafnet/rural-nz/assistance/>);

- Earthquake preparedness, EQ-IQ (www.eq-iq.govt.nz);
- Fire-safety: “C’mon guys, get fire-wise” (www.fire.org.nz);
- Pandemic health messages are broadcast at times of heightened risk (<http://www.moh.govt.nz/pandemicinfluenza>);
- Biosecurity risks are heavily promoted to travellers and workers at border entry points (<http://www.biosecurity.govt.nz/>).

Context & Constraints:

Awareness of hazards is increasing with inter-agency engagement at all levels, from local to national, public and private, on risk reduction and civil defence emergency management matters. In part, this increase is attributed to increasing knowledge from ongoing research, public education, and to news media portrayal of emergencies and disasters in New Zealand and in other countries.

The major challenge is changing behaviour of individuals and organisations, and progressing intentions into actions.

Behaviour changes do result from sustained long-term education campaigns, for which the maintenance and refreshing of programmes are an ongoing requirement.

Vanuatu (in English)

Core indicator 1

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

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.

Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

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

Description:

There has been some progress with regards to the inclusion of DRR and recovery concepts and practices into the school curricula. With the partnership of UNESCO under the Education for Natural Disaster

Preparedness (ENDP) project, a comprehensive review of the education sector was conducted by the National Disaster Management Office of Vanuatu, on how schools can be made safer, secure and also an environment that promotes a culture of safety and resilience. One of the key activities of the DRR and DM National Action Plan 2006 - 2016 is the integration of DRR & DM principles and concepts into the school curriculum and in training courses offered by other institutions. The overarching plan for the Education Sector is at present, the Vanuatu Education Sector Strategy 2007 - 2016 (VESS). While there has been headway nationally to integrate DRR and DM into the school curricula and that of other training centres, the current VESS fails to address how schools could be made safe, secure and resilient to disasters despite many of the Vanuatu schools being in remote locations and / or some located in high risk areas. In addition, the review discovered that neither of the schools has disaster plans but react on a hazard by hazard basis. While some schools have taken the initiative to develop their own safety within a school guidelines or instructions on how to do so, it is not mandatory for such to be developed. In terms of the curricula, hazards are taught as part of the broader geography course for Grades 5 and 6. There is no specific curriculum to address disaster risk management and teachers are not mandated by their teaching curricula to teach these concepts. However, there is increasing concerns from principals and teachers on the pressing need to address this issue in Vanuatu.

Context & Constraints:

The review of the Education Sector to fulfil the action stipulated in the DRR and DM NAP concluded in July 2008. In the review, the NDMO suggested the Vanuatu Education Sector Strategy 2007 - 2016 needs to reflect the intentions of the NAP. In the review, all aspects of safety and secure schools were looked at from the school buildings and structures, to the inclusion of disaster reduction concepts within the school curricula. The outcome of the review are 17 recommended strategies clustered around 5 themes:

- a. Governance and Policy Context
- b. Mainstreaming of DRR to build safe and secure schools for kids and teachers
- c. Strengthening Disaster Management so that students can respond effectively to any disaster impacts
- d. Information systems and knowledge management as part of curriculum development
- e. Capacity Development

The corresponding strategies to implement these themes are outlined in the document titled "Education on Natural Disaster Preparedness for Sustainable Development: Final Report of the Republic of Vanuatu."

Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

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

Description:

An initial cost benefit analysis of the economic impact of natural disasters on development in Vanuatu was conducted in 2005. Out of this initial study, an economic assessment tool was developed for sectoral (social, economic and infrastructure) assessments of disaster impacts and guidelines on baseline data collection was developed. The Vanuatu DRR and DM National Action Plan stipulates for adaptation and risk reduction measures to be implemented particularly assessments of potential impacts of particular scale of disaster event on at risk communities for input into sector planning for disaster risk reduction and disaster management and the strengthening of systems for the collection of historical / baseline data on hazards and vulnerabilities. In addition, the NAP outlines for government officials are to be trained in the use of such tools to enable them to conduct multi-risk assessments. The Draft NDRM arrangements also recognise the use of tools and techniques from other countries and regions that may be relevant to Vanuatu.

Context & Constraints:

The first initial study has been the only one since. However the findings of the research is currently being

used to highlight at decision-making level of the Finance and Planning Ministry of Vanuatu of the need to incorporate disaster risk reduction and disaster management into national planning and budgetary process.

Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

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

Description:

Various groups and sectors are involved in their own awareness programmes to do with disaster risk reduction and disaster management. Ad hoc public awareness exists across the relevant sectors in Vanuatu, namely with:

- a. National Disaster Risk Management Office
- b. Geo-hazard Unit
- c. Water Unit
- d. Vanuatu Meteorological Services
- e. Agriculture Department
- f. Department of Land
- g. Live Stock Department
- h. Quarantine Department
- i. Department of Public Health
- j. Police Department
- k. Environment Unit
- l. Department of Public Works
- m. Fire Service Section
- n. Department of Cultural Centre

In addition to these initiatives, the World Disaster Risk Reduction Campaign is conducted every October with specific target audiences. In 2007, it was specifically targeted for schools in the Northern region of Vanuatu.

Context & Constraints:

The NDRM arrangements allow for public awareness on disaster risk reduction and disaster management as the individual responsibility of all government departments, provincial and municipal councils and NGOs, in collaboration with the beneficiaries of such and to be supported by the NDRMO and the Training Advisory Working Group for DRR and DM. However a strategy for such an approach has yet to be formulated.
