Armenia

National progress report on the implementation of the Hyogo Framework for Action

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Strategic goals 1

Area 1

The more effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction.

Strategic Goal Statement:

Disaster risk management outlines are incorporated into development plans and programs of the Government of the Republic of Armenia such as poverty program and anticorruption program as well as millennium challenges grant programs on sustainable development of the infrastructure in rural areas.

Area 2

The development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to building resilience to hazards.

Strategic Goal Statement:

Strengthened capacities at marz (administrative region) and community level for planning activities and actions within common strategic policy of development.

Respond to hazards and induced risks timely and in appropriate ways.

Mobilized community resources for overcoming emerged obstacles and difficulties.

Area 3

The systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programmes in the reconstruction of affected communities.

Strategic Goal Statement:

Mechanisms and tools are being developed and adopted for environment management and recovery and rehabilitation programs at national, marz and community levels. Mobilized resources and capabilities for municipal services to cope with disasters.

Priority for action 1

Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.

Core indicator 1

National policy and legal framework for disaster risk reduction exists with decentralised responsibilities and capacities at all levels.

Level of Progress achieved:

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

Description:

Armenia constitution readopted in 2005, the Laws adopted by the National Assembly, Government program and decisions are covering the framework of legal system in DRR and ensure the relevant institutional arrangements for measures and actions in the frame of DRR.

The Ministry on Emergency Situations is established in 2008 for elaborating the policy and coordinating the activities aiming at natural and man-made disaster risk reduction.

Context & Constraints:

National policy and legal framework are in place to enhance the efforts for disaster risk reduction. However, still efforts to be made to ensure the decentralized capacities and capabilities to sustain disaster at local level.

Core indicator 2

Dedicated and adequate resources are available to implement disaster risk reduction plans and activities at all administrative levels

Level of Progress achieved:

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

Description:

The Government has the reserve fund from which the dedicated resources for elimination disaster consequences are allocated. Some institutions dealing with the DRR matters including the Armenian NSSP and Armenian Rescue Service are funded from the State budget. Progress would be expected for efficient resource spending due to the establishment of the new Ministry for Emergency Situations.

Context & Constraints:

Allocate resources for the implementation of disaster risk management programmes, laws and projects in all the relevant sectors of national and marz administrative budgets.

Set definite criteria for measuring the use and effectiveness of the dedicated resources, improve understanding of the costs and benefits of risk reduction measures and their assessment. Ensure hazard risk is taken into account while preparing national and marz assistance programmes and poverty reduction strategy.

Develop alternative and creative financial approaches for managing risk reduction.

Reset the intention towards the short-term expenditure for emergency relief support following the disaster, in favor of medium and long term investment in development measures to reduce the human and property vulnerability to disaster.

Ensure funding to support the steady approach to disaster reduction capacity building.

Core indicator 3

Community Participation and decentralisation is ensured through the delegation of authority and resources to local levels

Level of Progress achieved:

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

Description:

The Armenian National Survey for Seismic Protection has its territorial divisions dealing with seismic hazard and risk problems at regional level. The Armenian Rescue Service has its marz branches for immediate emergency response in case of possible natural and man-made disaster.

Municipal services has the contingency and action plans aimed to minimize the negative consequences of disaster.

Context & Constraints:

Ensure the decentralized local governance DRR systems at marz level would be integrated into national initiatives and adequately resourced, and the responsibilities would be clearly identified and shared. Empower community-level organizations, volunteer groups and other active community members to participate in disaster reduction decision-making, planning and implementation.

Recognize the role and contribution of voluntary action to capacity building at marz and community level and provide the appropriate environment.

Core indicator 4

A national multi sectoral platform for disaster risk reduction is functioning.

Level of Progress achieved:

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

Description:

A multisectoral platform for disaster risk reduction as the efficient and capable mechanism for interaction of the key players is now developing due to establishment of the Ministry of Emergency Situations of the Republic of Armenia

The ministry incorporated the key actors of disaster risk reduction in Armenia namely Armenian National Survey for Seismic Protection, Armenian Rescue Service and Armenian Hydrometerological Bureau. Each institution has its programs and regulations and now it is possible to facilitate the interaction of their activities into the synergy efforts and advocate policy for disaster risk reduction.

Context & Constraints:

Encourage the dialogue among the relevant sectors to focus their efforts on planning and co-ordination at national and marz levels.

Strengthen partnership and alliance building across sectors and disciplines at all levels.

Stimulate multi-sectoral and inter sectoral partnership and networks for information exchange.

Establish multi-sectoral and adequately resourced national platform for disaster reduction.

Improve access to information on disaster risk assessment and reduction measures.

Encourage the private sector to practice and contribute to risk reduction and strengthen public-private sector partnership.

Ensure all sides of partnership are based on local interests and participation.

Incorporate vulnerability and risk assessment methods fully into formal development planning.

Priority for action 2

Identify, assess and monitor disaster risks and enhance early warning

Core indicator 1

National and local risk assessments based on hazard data and vulnerability information are available and include risk assessments for key sectors.

Level of Progress achieved:

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

Description:

There are some achievements in development and compiling the digital GIS based hazard and risk maps for the territory of Armenia and specific areas and settlements. The seismic hazard map for the territory of Armenia has once been developed is now under re-evaluation due to emerging new

concepts and approaches as well as the rising level of seismic activity in the region. Mapping of secondary hazards such as landslides, rock avalanches and mudflows are carried out by the relevant organizations with foreign support. Current seismic hazard assessments or short term earthquake predictions are regularly provided by the Armenian National Survey for Seismic Protection (Armenian NSSP), the agency functioning within the newly established Ministry of Emergency Situations. The Armenian NSSP has accumulated the valuable experience in the seismic hazard and risk assessment. Two landmark nationwide comprehensive programs adopted by the Government of the Republic of Armenia namely Seismic Risk Reduction in the territory of Armenia and Seismic Risk Reduction in Yerevan-city have been developed and put in action with special emphasis on hazard and risk assessment.

Context & Constraints:

In order to improve risk assessment in Armenia the following measures are needed: Analysis and interlinking of existing structures and capacities which could be reached by the coordinating efforts of the Ministry of Emergency Situations which is incorporating such key DRR actors like the Armenian NSSP, Armenian Rescue Service and Hydrometeorology and Environment Monitoring Agency.

Development of appropriate methodology and common approaches for multi-hazard risk assessment. Mobilization of additional finance, manpower and technology.

Improvement of institutional structures to ensure efficient risk assessment.

Core indicator 2

Systems are in place to monitor, archive and disseminate data on key hazards and vulnerabilities

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 Armenian NSSP is monitoring about forty geophysical, geochemical, hydrochemical, electromagnetic etc. parameters through National Observation Network incorporating about 150 stations. The monitoring systems involve in the global IRIS, READINESS, GPS and CTBTO and COSMOS networks which enable to change and disseminate data on seismic hazard. The same principle is laid in the activities of Armenian State Hydrometeorological and Monitoring Service which responsible for atmospheric and water resource monitoring. It has numerous countrywide monitoring sites controlling the level, quantity and quality of water resources.

Inspections, visual screening and vulnerability assessment of critical facilities and public buildings have been carried out by the specialists of the Armenian NSSP resulting in retrofitting and upgrading the structures. Seismic design for projected new Nuclear Power Station is of high importance and to be tendered in 2008.

Common annual natural hazards are as follows: spring deluges, windstorms, and hail.

In 2007 the 329 comminities were suffered and the property and crop losses due to those hazards are evaluated as 41 mln. USD. The anti-hail devices are used to prevent the damage and losses. The demand in such devices exceeds the available quantity about 30 times.

Context & Constraints:

"Processes for data collection and dissemination are in place for all hazards and most vulnerability factors, but the poor state of technical means of monitoring as well as shortcomings in data dissemination and analysis shoud be addressed.

There is urgent need to improve amount, quality and accessibility of data as well as vulnerability evaluation techniques.

Core indicator 3

Early warning systems are in place for all major hazards, with outreach to communities.

Level of Progress achieved:

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

Description:

Earthquake early warning non-automatic system (so called "early notification") is in place with distinctive hierarchical subordination and responsibilities. The core element of the system is expert evaluation of the seismic situation based on brainstorming method of decision-making.

The automatic or technical early warning system for Yerevan-city which main principles had been developed in 1998 is still not operable due to lack of funding.

Context & Constraints:

It is necessary to include the early warning system development in national poverty reduction plan. Request the ISDR platform for the promotion of Early Warning to facilitate the decision on funding the Project "Towrads the Implementation of Earthquake Early Warning for Megacities (Capital of Yerevan) Ref.17 presented to the Third International Conference on Early Warning in March 2006 (Bonn, Germany).

Implementation of the International Early Warning Programme as called for at the EWCIII.

Core indicator 4

National and local risk assessments take account of regional / trans boundary risks, with a view to regional cooperation on risk reduction.

Level of Progress achieved:

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

Description:

Reginal cooperation is essential for risk assessment and reduction.

Armenia signed the Inter-governmental Agreements on seismic risk reduction with the Islamic Republic of Iran, the Republic of Tajikistan. The international Armenian-Russian Project "Earthquake source investigation and seismic hazard prediction in Caucasus" between the Armenian NSSP and Geophysical Survey of Russian Federation has recently been renewed.

The Armenian NSSP is a member of Euro-Mediterranean seismological center and exchange valuable earthquake information with partner countries in the region.

The Project "Prevention of emergencies in the Southern Caucasus" funded by the German Government and to be implemented by GTZ. In Lori and Tavush marzes of Armenia and Sheki-Zakatala region of Azerbaijan with the population of around 150 thousand people..

The Important objective of the Project: capacity building of the Southern Caucasus communities which are most suffered from negative consequences of natural disasters

Context & Constraints:

Some political reasons are still considered as obstacles to manage successful cooperation though as is often admitted: the disaster has no boundaries, and the neighboring countries ought to jointly do the best to prevent the forthcoming catastrophes.

Priority for action 3

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 Prectices 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 strenghtened.

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 Concortium 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.

Priority for action 4

Reduce the underlying risk factors

Core indicator 1

Disaster risk reduction is an integral objective of environment related policies and plans, including for land use natural resource management and adaptation to climate change.

Level of Progress achieved:

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

Description:

Many programs and initiatives developed in Armenia with the assistance of international organizations in environment and natural resources sphere are incorporating the disaster risk management as integral part.

Two of them are worth to mention.

Energy Sector development Strategy in Context of Economic Development in Armenia. National Program on Energy Saving and Renewable Energy of Republic of Armenia. Armenian NPP (ANPP) is a unique energetic facility in the Southern Caucasus located in seismically active region and its safety has been and being insured under the provisions of those documents. When the decision to recommission the ANPP was made, specialized Armenian organizations together with international experts carried out additional studies to assess the earthquake hazard. Upon completion of the studies, activities targeted at seismic strengthening of equipment, systems, buildings and construction were implemented in priority order. The main building housing the reactor, main circulating pumps, principle and other safety systems, now meets standards for an 0.4 g ground acceleration corresponding to MMI X.

Context & Constraints:

Countries, like Armenia, which lack energy resources, should plan their energy development based on energy independence and energy safety parameters and should use their own energy sources, including

nuclear energy. Armenia has developed a nuclear energy infrastructure, such as specialists for nuclear energy unit operation, scientific-research institutes, calibration and construction companies and educational institutions, where future nuclear system specialists are educated and prepared. In addition, regional environmental issues regarding the future protection of the Lake Sevan are important. If the ANPP were replaced with thermal generation, serious environmental problems would arise.

Recent studies show that a new nuclear unit in Armenia must be of smaller capacity than the 1000MW units being built elsewhere. in order to match up with the capacity of the Armenian electric system.

Core indicator 2

Social development policies and plans are being implemented to reduce the vulnerability of populations most at risk.

Level of Progress achieved:

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

Description:

The Planning of Agriculture and Social

Development in Rural Areas Department of the Ministry carries out activities aimed at the assessment and analysis of the general state and trends for change in the the Armenian food and agriculture sector, participates in the preparation of forecasts, programs, concept notes and other program portfolios on agriculture and food system as part of the development of agrarian policy and the methodological, professional and organizational coordination of these activities, participates in the improvement of the activity of social infrastructures in rural areas, addressing Armenia's food security issues, defining ways of improving the overall situation and making program-related proposals.

The present strategy for sustainable agricultural development stems from the state policy for the agricultural sector.

The level of participation of the Government in the agricultural sector was greatly reduced by the liberalization of the economy, privatization of land and other productive means, servicing infrastructures, sales and processing organizations. Based on the peculiarities of the country and taking into consideration the problems of food security an important role is given to the state assistance to the agricultural sector during the transition period. The implementation of the strategy will be supported by the Government in the following areas: formation of the regulatory framework in agro-food sector, provision of agricultural entities with favorable conditions for smooth operation and investments, development of infrastructures and promotion of food safety, etc.

The directions of that policy and related implementation programs are provided in this strategy document. At the same time the priorities of the agricultural sector are defined, which may serve as guidance for the targeted activities and cooperation for the state governance, local self-governing authorities, donors and entities.

The strategy is consistent with the Government "Poverty Reduction Strategy" program and ensures continuation of the agrarian reforms in the Republic.

Context & Constraints:

The following programs aiming at reducing risk factors in health care and food security are developing for the period of 2007-2012.

Development and Implementation of mandatory and voluntary medical insurance in Armenia and new approaches to ensuring the quality medical aid for most vulnerable sections of population.

Retrofitting and strengthening of medical facilities and personnel training in marzes and communities. Meeting the criteria of WHO through upgrading maternity and child care service.

Core indicator 3

Economic and productive sectorial policies and plans have been implemented to reduce the vulnerability of economic activities

Level of Progress achieved:

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

Description:

The chief aim of the economic policy of the Republic of Armenia was an efficient distribution of resources within the lifespan of one generation while the progress of contemporary civilization is conditioned by ensuring a steady development, in the event of which the opportunities to meet demands of present-day and future generations will be much more guaranteed. In this sense, the economic policy, in parallel with quantitative growth, is currently directed towards the provision of a qualitative economic development. In other words, the supremacy is the maintenance of an economic evolution based on a more intensive use of human resources i.e. intellectual and creative abilities, with the tendency to reduce the strategic role of natural resources.

As a result of economic liberalization, increasing investment and business activity, maintaining a free economic regime and the steady and consistent implementation of integration policy in the world economy the degree of predictability of the Armenian economy has raised and the level of risk has decreased which has evidently won authority for our country.

Context & Constraints:

Currently, the main strategic task for Armenia i.e. the creation of an economy based on knowledge is grounded on the maximum realization of available prerequisites of scientific and technical progress. The emphasis is on human development through revealing and enhancing one's abilities, spurring up the practice of scientific thought and, finally, rapid scientific and technical progress.

The following priorities in economic development are addressed :

Formation of Competitive Advantages

Development of Innovatory Processes

Continuous Improvement of Business Environment

Export promotion

Regional Development

Core indicator 4

Planning and management of human settlements incorporate disaster risk reduction elements, including enforcement of building codes.

Level of Progress achieved:

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

Description:

The building codes have been twice enforced (1994 and 2006 editions) aiming to meet the safety criteria for construction designated for seismically active regions worldwide

The vulnerability assessment of settlements especially the critical facilities and lifelines is of special attention of Armenian specialists.

The Armenian NSSP team comprising of experts in Earthquake Engineering has performed the visual inspection of 10 public schools located in Kapan, Goris, Sisian and Kajaran cities of the Syunik marz and collected the extensive data for schools. The schools survey form (school ID card) has been elaborated including the following data: city, status of the school, date of construction, number of pupils, number of buildings, planning decisions, structural solutions, type of building etc.

Extensive database in digital mode using GIS technology has been acquired relating to lifelines, water and gas and power supply as well as building stock which are served as the basis for compiling the seismic hazard map for Syunik prefecture and the cities of Kapan and Goris. Initial data concerning the lifelines infrastructure and residential and public facilities have been acquired by town-watching groups comprising of the specialists of the Armenian NSSP and the high-school students led by the teachers and principals

Context & Constraints:

The seismic risk for urban settlements in Armenia is on the high level. More than 40% of building stock in the capital city of Yerevan needed the retrofitting and strengthening according to new edition (2006) of building codes.

The cost of such urgent activities is about \$4 bil and due to recent .

Core indicator 5

Disaster risk reduction measures are integrated into post disaster recovery and rehabilitation processes

Level of Progress achieved:

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

Description:

Armenia had encountered the problems of disaster recovery and rehabilitation aftermath the huge earthquake disaster of 1988. World entity to extend a great deal of aid to reconstruct the disaster area. Unfortunetely till now up to 6000 people in Gyumri city are still displaced living in cabins short of satisfactory sanitation and utilities.

Context & Constraints:

It is an urgent need to develop the relevant measures supported by appropriate funding to ensure the fulfillment of recovery and rehabilitation procedures and activities according to international post emergency standards and norms. The main problem is unsound management at local level and lack of funding.

Core indicator 6

Procedures are in place to assess the disaster risk impacts of major development projects, especially infrastructure.

Level of Progress achieved:

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

Description:

Disaster risk reduction concepts and vision are integrated into the National Program of Sustainable Development and Poverty Reduction Program and Millenium Goals.

During 1999 -2006 strong economic groath and a targeted social policy have almost halved poverty from 56.1 in 1999 to 26,5% in 2006. Inequality was also reduced considerably. The Gini coefficient of income concentration in 2006 accounted for 0.369 compared to 0.597 in 1999.

Context & Constraints:

Nonetheless the Government is not satisfied with the 26.5% poverty level and its significant reduction is considered a key objective of the Government activity to reduce the poverty level to 13.6 by 2010. To achieve this goal with the collaboration of all stakeholders the Government will continue the PRSP revision as the most important component of economic development and approve in 2008 the 2008-2021 Poverty Reduction Strategy Paper which it considered an essential component of the nation sustainable

Priority for action 5

Strengthen disaster preparedness for effective response at all levels

Core indicator 1

Strong policy, technical and institutional capacities and mechanisms for disaster risk management, with a disaster risk reduction perspective are in place.

Level of Progress achieved:

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

Description:

Two principal institutions namely Armenian National Survey for Seismic Protection (Armenian NSSP) and Armenian Rescue Service (ARS) have been involved in creating effective preparedness system with pre-disaster activities that are geared to helping at risk communities safe guard their lives and assets by being alert to hazards and taking the appropriate actions in the face of actual onset of disaster. The Armenian NSSP has multi-targeted network to ensure preparedness to earthquake disaster mainly in urban settlements.

Context & Constraints:

The shift could be done towards the preparedness activity in remote mountain regions where is lack the appropriate technical and human potential and communication means to provide relevant preparedness actions. The Cooperative Project supported by the Asian Disaster Reduction Center, Kobe, Japan entitled "Towards the Safer Communities Through Education and Training in Disaster-Prone Mountain Areas (one lesson on high level can save one hundred lives).

Preliminary survey of hazard and disaster awareness level revealed that there is considerable difference between the knowledge of community leaders, students and teachers and those lived in the capital city of Yerevan and one of the main endeavors of the Project is the bridging the existing gap

Core indicator 2

Disaster preparedness plans and contingency plans are in place at all administrative levels, and regular training drills and rehearsals are held to test and develop disaster response programmes.

Level of Progress achieved:

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

Description:

Contingency plans for actions in emergency are in place. The responsibility for the contingency plans at the National Level lays on the newly established Ministry of Emergency Situations.

The Armenian NSSP has developed and implemented the methodology of contingency plans for community and municipal services in case of devastating earthquake. The methodology is included the following stages:

- 1. Compiling the seismic risk map of the settlement
- 2. Compiling the earthquake source map
- 3. Compiling of forecasting map of earthquake consequences
- 4. Models and main requirements to the actions of municipal services
- 5. Recommendations on search & rescue management and elimination of disaster consequences. .

Training earthquake drills and command headquarter rehearsals have been regularly provided by the specialized teams of Armenian NSSP and ARS at the marzes and community level.

Context & Constraints:

The main obstacle for pertinent and perpetual implementation of contingency action plans is a lack of technical and financial resources.

Core indicator 3

Financial reserves and contingency mechanisms are in place to support effective response and recovery when required.

Level of Progress achieved:

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

Description:

The relevant laws on seismic protection and protection population in emergency stipulate the creation of sufficient funds for immediate response in aftermath of disaster and there is the storage of elementary items of first necessity. On the other hand the Poverty Reduction Program is incorporating the means and resources which could be used in case of emergency either..

Context & Constraints:

Armenia is still unable to create the sufficient amount of necessary items for proper response in case of major disaster due to transition period of development resulting in the lack of targeted funding.

Core indicator 4

Procedures are in place to exchange relevant information during hazard events and disasters, and to undertake post-event reviews

Level of Progress achieved:

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

Description:

Armenia experienced one of the devastating earthquake disasters in modern era was well aware of and learned a great deal from the emergency. The unique structure for multi-specialized activities in the field of seismic safety named Armenian National Survey for Seismic Protection had been established in 1991 aimed at complex investigation, education, training and awareness raising of population. The term "seismic protection" is know-how of Armenia for world wide accepted term "seismic risk reduction". Information on seismic hazards in Armenia, region and worldwide reach the different sections of population and authorities through special procedures and mass media.

Maximum benefit from rapid technological advances and information on disasters acquired by the satellite could be delivered more quickly via the Internet.as easy-to-interpret disaster related information. Armenia through Armenian NSSP with the support of the ADRC is involved in the Sentinel Asia System (SAS) to share disaster information and somewhat contribute to disaster risk reduction and prevention when the disaster happens.

Context & Constraints:

It is necessary to have the regional disaster information system as the disasters as the most disasters are trans-boundary catastrophes usually affected the neighboring countries in the region. Unfortunately due to complicated political situation in Caucasus and Middle East the sound interstate disaster related safe guard system of rapid and timely information and interaction is still beyond reach of

Drivers of Progress

a) Multi-hazard integrated approach to disaster risk reduction and development Levels of Reliance:

Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not achieved from key stakeholders.

Do studies/ reports/ atlases on multi-hazard analyses exist in the country/ for the sub region?: No

Description (Please provide evidence of where, how and who):

Multi-hazard integrated approach for effective and tangible disaster management is still remaining unreachable but there is a distinctive opportunity to pool the actions of different actors under the roof of the newly established Ministry of emergency situations.

b) Gender perspectives on risk reduction and recovery adopted and institutionalized Levels of Reliance:

Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not achieved from key stakeholders.

Description (Please provide evidence of where, how and who):

The disaster risk reduction in such man dominated country like Armenia (one woman minister out of 18 and 4 member of Parliament out of 131) is predominantly man-centered but there are quite a large scope of gender-inclusive activities e.g. education and training in kindergartens, pre-schools and schools where actual participation

of women are acceptable and beneficial.

Armenian NSSP training staff primarily comprised of woman instructors and trainers is successfully engaged in development of educational and instructive materials and communication with mass media as well as collecting and disseminating information.

c) Capacities for risk reduction and recovery identified and strengthened

Levels of Reliance:

Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not achieved from key stakeholders.

Description (Please provide evidence of where, how and who):

Capacity development is a core issue of disaster risk management in Armenia. The National Programs on Seismic Risk reduction and population protection in emergency are targeted first of all at building stable and on going capacities and empower the community members with skills to cope with disasters. Unfortunately, the somewhat unfavorable livelihoods especially in small towns and remote villages push aside the capabilities of residents to learn to withstand on-set calamities. The general improvement of life standards would encourage the intention of people to learn and cope with natural grave phenomena.

d) Human security and social equity approaches integrated into disaster risk reduction

and recovery activities

Levels of Reliance:

Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not achieved from key stakeholders.

Description (Please provide evidence of where, how and who):

Armenian NSSP developed the special guide manual to learn and cope with earthquake disaster including rules of behavior during and after disaster for disabled people and orphans. The blue print of the instruction is disseminating in the orphanages of the country.

e) Engagement and partnerships with non-governmental actors; civil society, private sector, amongst others, have been fostered at all levels

Levels of Reliance:

Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not achieved from key stakeholders.

Description (Please provide evidence of where, how and who):

Traditional knowledge and experience is sometimes the basic educational tool for avoiding the grave consequences of disaster. Our investigations in rural communities revealed the genuine lessons learned from the lifelong and generation experience. The community members were well aware of hazards encountered and sometimes provided the reasonable solutions for disaster risk reduction at the community level. Many people accumulated the common sense experience in case of dam collapse due to sudden-onset disaster like earthquake and induced landslides, passed to them from ancestors. They are capable to identify the safe shelter places in case of flooding.

f) Contextual Drivers of Progress

Levels of Reliance:

Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not achieved from key stakeholders.

Description (Please provide evidence of where, how and who):

Two types of contextual drivers could be placed in the focus of disaster risk reduction namely: Structural and non-structural safety of schools, hospitals and critical facilities.

Training and awareness raising of public entities.

Consolidated synergetic efforts could be performed under the auspices of sound institutional coverage provided by the newly established Ministry of Emergency Situations which proclaimed the disaster risk reduction among its priorities.

Future outlook

Area 1

The more effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction.

Overall Challenges:

The main challenge is lack of comprehensive approach for integration of DRR into the sustainable development programs at national and community level.

Future Outlook Statement:

The Government will attach the high importance to the development of comprehensive disaster prevention policy as the essential component of sustainable development programs. The special section entitled "Prevention of Emergency Situations" is included in the Government Development Program for 2008-2012.

The Government priority objectives are as follows:

Forecast and prevent natural and man-made disasters and catastrophes

Ensure best practice for protection of the population in emergency situations

Elimination of disaster consequences and implementation of primary recovery works.

Area 2

The development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to building resilience to hazards.

Overall Challenges:

Capacity building at all levels is still the major priority for successful implementation of DRR .

Future Outlook Statement:

The newly established Ministry of Emergency Situations involves as structural institutions the following disaster dealing organizations previously working separately : Rescue Service Hydrometeorological service Survey for Seismic Protection Technical safety agency State reserves agency The ideology of the Ministry is people-centered policy with the motto: Everything for the safety of people and People safety is the highest priority.

Area 3

The systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programmes in the reconstruction of affected communities.

Overall Challenges:

Overlooking of disaster risk reduction tools and procedures is badly affecting the response, recovery and rehabilitation activities.

Future Outlook Statement:

The following activities will be performed for implementation the effective system of preparedness and response:

Special rescue, fire, fire-rescue and water rescue forces will be re-equipped with most advanced special machinery, equipment and outfit through development of international cooperation

Establishment of the country-wide hot line emergency service (similar to the European 211 and American 911).

Formation of a public recovery works system aimed at the primary recovery of infrastructure damaged by disasters

Official involvement in recovery works of the population (trained volunteers) from affected communities Quick responsiveness in primary elimination of disaster consequences and introduction of relevant insurance systems

Expansion of state reserves of primary items, improvement of warehouse infrastructure, modernization of the system

Establishment of the clearing house center to attend the prevention of emergency situations, carrying out research on aftermath addressing mechanisms, creating relevant disaster related data bases and providing expertise.