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Interim 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:

Based on the mid- and long-term national safety frame, human deaths compared to previous years were reduced to 30% during the years from 2004 to 2007.

By 2012 it is targeted that the death toll by natural disasters will be reduced as low as advanced countries.

Disaster Mitigation Pre-Consideration Regulation has being enforced since August 2005 to predict and analyze any disaster potential due to development.

Also, Water- and wind-related disaster mitigation comprehensive plans for each local government have been established reflecting changing outside risks such as climate change.

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:

Overcoming government-lead activities, it is recognized that the partnership between the government and local volunteers is very essential to truly minimize scattered and concentrated natural disasters.

Memoranda of Understanding among local governments, local military forces, and volunteers' organizations are exchanged. Under the new concept of the New National Disaster Prevention System, rapid recovery system is introduced with setting up of pre-designation of disaster-prone areas and evacuation system.

To promote voluntary activities of private sectors, disaster standards and institutional support systems are also introduced.

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:

Since it is not always each to analyze the disaster causes due to the different policies and lack of feedback, concentrated tacking system for large-scale disasters has been development covering from disaster cause to recovery activities.

The targeted disasters include various natural disasters, big fire, collapse, massive traffic accident, and environmental incidents.

The tracking system is composed of various information modules covering registry, damage assessment, emergency and permanent recovery, competent authority, person in charge, etc. to guarantee responsible actions before, during, and after disasters.

The final information is compiled as cases for manuals and future training materials.

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:

Institutional and operational systems have been established including enforcement of the Disaster and Safety Management Basic Act, the Natural Disaster Countermeasures Act, etc., and set up of disaster management organization in central and local governments from 2004 to 2006.

The First National Safety Management Basic Plan covering 2005~2009 has been set up to provide framework for mid- and long-term safety management system.

Field functions have been strengthened with new policies including emergency support system for local disasters, advanced emergency response team, disaster mitigation and countermeasures task force.

Local disaster volunteers and local disaster assistance office play important roles in strengthened field functions and promoting culture of safety.

Context & Constraints:

It is necessary to establish autonomous disaster management and assessment systems reflecting local disaster characteristics, to encourage investment in disaster risk reduction projects, and to propel quality control of national disaster management policy.

More adequate and proper resources are needed for DRR activities and planning in every administration 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:

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

Description:

Total of 63 laws and regulations related to disaster management have been amended and newly established.

For instance, the Water and Wind related Disaster Insurance Act provides legal background for disaster insurance program and amended Natural Disaster Countermeasures Act provides legal base for the Disaster Mitigation Pre-Consideration Regulation.

Also, earthquake disaster prevention comprehensive countermeasures was proposed with other programs such as disaster management system assessment program, safety incident forecast program for citizens, pan-governmental disaster management network, integrated radio communication system, and etc.

Context & Constraints:

US\$ 2.8 billion, which is about 67% of annual recovery costs, is from national budget annually. There is an argument that burden of the national budget is too much and the budget efficiency is not proved.

Budgets for mitigation activities and programs need to be increased. Also, improved recovery programs instead of simple recovery need to be promoted.

Core indicator 3

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

The Korean government focuses on securing the budget for disaster mitigation activities, searching for new budget sources such as disaster fund, and inviting private capital.

Using media disaster education and campaign are broadcasted during typhoon and rainy season. Also, May 26 is designated as Disaster Prevention Day to promote community participation.

Context & Constraints:

There are many disaster-prone areas in local government. Since the budget allocation for the improvement in the local governments is not always top priority, the mitigation activities are somewhat limited.

The Comprehensive Disaster and Safety System Task Force has been formulated in the Ministry of Public Administration and Security to find ways to secure more budget sources through inter-governmental discussions and amendment of related laws and regulations.

Core indicator 4

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

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 2006, the Disaster Mitigation and Countermeasures Task Force has been established inviting private experts to survey and analyze disaster causes and to feedback what went wrong in disaster sites.

The task force organize annual forum inviting local governments' officials and experts in private sector to find better ways to minimize disaster risks in Korea

Context & Constraints:

Since the Disaster Mitigation and Countermeasures Task Force is composed of officials and private experts, citizens in disaster sites are not participating to the task force and their opinions are not usually reflected.

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:

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

Description:

Disaster-prone areas and risky small creeks are checked and assessed regularly to minimize disaster potential and several early warning systems have been adopted against typhoon, heavy rainfall, earthquake, and tsunami using information technology.

Since Aug. 2005, disaster-prone areas are systematically managed categorizing them with types and seriousness. Six categories are adopted as inundation area, washed-away zone, isolation area, collapse area, vulnerable facilities, and storm surge area.

Based on the nationwide survey in 2006, 352 areas are designated as new disaster-prone areas.

Context & Constraints:

Since the designation of disaster-prone areas can affect the real-estate price in the areas and vicinity, the designation processes including vulnerability assessment are sometimes pressurized by political reason.

Public education and persuasion are needed.

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:

Using IT and communication infrastructures, it is possible to disseminate disaster information to the people rapidly and efficiently.

Since May 2005, with the support from the private telecommunication companies, real-time disaster information can be disseminated to more than 30 million citizens, if necessary, by so-called Cell Broadcasting Service.

Also, since August 2007, DMB has been recognized as a new media that can be utilized to deliver disaster information.

To monitor flash flood in mountainous area and give early warning in downstream, automated rainfall warning systems are established in national parks and other attractive gorges.

Context & Constraints:

The Korean government is investing more money to utilize information technology for disaster monitoring and information dissemination.

More integrated system using IT will be necessary to cope with emerging risks in the future.

Core indicator 3

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

In 2005 capacity assessment system regarding early warning has been adopted in 250 local governments. The assessment system covers items on disasters response organization, mitigation activities, response capacity, recovery processes, etc.

Real-time disaster information dissemination system is in operation against tsunami, flood, typhoons, and other common disaster types in Korea.

Context & Constraints:

There are some cases of delayed warning dissemination. On March 3, 2005 a small tsunami generated by an earthquake near Fukuoka, Japan reached southern and eastern coasts of the Korea peninsula and the warning information was delayed.

What went wrong were identified and the system is being improved with more advanced IT and budget support.

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:

Regional Safety Diagnosis System is in operation considering local and regional disaster characteristics. The system includes indices such as population and economic power of the region and diagnosis program and database are also developed.

Context & Constraints:

As indicated in Priority for Action 2, Core Indicator 1, since the result of safety diagnosis can affect the real-estate price in the areas and region, the diagnosis processes are sometimes pressurized by political reason.

Priority for action 3

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

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".

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:

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

Description:

Disaster Mitigation Pre-Consideration Regulation has being enforced since August 2005 to predict and analyze any disaster potential due to changed land use and development.

Also, disaster standards are being revised reflecting climate change in Korea and natural disaster comprehensive plans are being updated accordingly.

Coping with climate change, seven national strategies are proposed as follows;

1. Study on the mechanisms between climate change and disaster occurrence
2. Establishment of national goal and mid- & long-term strategy for disaster mitigation
3. Establishment of holistic disaster response system in national level
4. Establishment of improved recovery system for recurrent disasters
5. Establishment of infrastructure such as disaster industry, education, BCP (Business Continuity Planning), etc. against mega-disasters
6. Strengthening vulnerable disaster management system with climate change
7. Reestablishment of disaster prevention standards with climate change

Context & Constraints:

Regarding sustainable development with changing climate, the Korean government focused on the industry aspect such as carbon dioxide reduction so far.

It is, therefore, necessary to view the climate change as one of factors that can alter the disaster management policies in the near future.

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:

Complex disasters are increasing in Korea due to land use densification and underground space due to urbanization.

Emerging risks also need to be tackled which can arise with changes in living patterns.

Context & Constraints:

The current practice is not sufficient to deal with emerging risks due to lack of experts and expertise.

It is necessary to broaden disaster management areas covering possible future risks.

It will be helpful to strengthen management organization with research and development functions to predict the future trend and to develop mitigation technologies.

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:

Natural disaster damages in small and medium businesses (SMB) are about US\$ 120 million annually in Korea from 2001 to 2006.

To promote autonomous activities and countermeasures for natural disasters by SMB themselves, the Act for Support for Enterprises' Voluntary Disaster Mitigation Activities has been established in 2007.

The Act will provide guidelines for SMB disaster management standard in mitigation, response, and recovery activities.

Context & Constraints:

The Act basically provides institutional background to support passive activities of SMB.

However, SMB's active and leading activities are required protecting their properties from various natural disasters.

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:

To secure disaster-free settlement and enhance building code considering changing disaster factors, following items are currently reviewed and implemented.

1. Establishment of design code for disaster-prevention facilities considering river basin characteristics
2. Strengthening of design code considering abnormal climate
3. Reinforced construction for rainfall infiltration and detention facilities

Context & Constraints:

Since various disaster-prevention facilities such as river, dams, and reservoirs are managed by different authorities, it is not always possible or easy to implement holistic disaster risk reduction.

For a starter, integrated river basin management system is needed for holistic disaster management.

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:

Disaster management is a cycle connecting disaster recovery and disaster mitigation phases. To block fundamental disaster factors and to enhance feedback functions in disaster management cycle, following policies are proposed and enforced.

1. Vitalization of the Disaster Mitigation Pre-Consideration Regulation
2. Strengthening assessment system to promote disaster management capacity of local governments and expansion of relevant authorities and organization.
3. Reflecting local disaster risks and consequences, reduction capacity, and safety factors to recovery planning

Context & Constraints:

Since various authorities and organizations are involved in recovery processes, it is not sometimes easy to assess the recovery effect.

To integrate and assess recovery impact and processes, the New National Disaster Prevention System Tasks are proposed.

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 Mitigation Pre-Consideration Regulation has been enforced since August 2005 to predict and analyze any disaster risk impact due to development.

Also, five-year water and wind related disaster mitigation comprehensive plans for each local government have been established reflecting local risks.

Context & Constraints:

Sometimes, emerging risks are not updated in the regulation and plans accordingly.

Every year, the regulation and plans need to be reviewed and updated considering changing environment.

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:

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

Description:

As already described in Core Indicator 1 of HFA Priority 1, total of 63 laws and regulations related to disaster management have been amended and newly established. For instance, the Water and Wind related Disaster Insurance Act provides legal background for disaster insurance program and amended Natural Disaster Countermeasures Act provides legal base for the Disaster Mitigation Pre-Consideration Regulation.

Also, earthquake disaster prevention comprehensive countermeasures was proposed with other programs such as disaster management system assessment program, safety incident forecast program for citizens, pan-governmental disaster management network, integrated radio communication system, and etc.

Context & Constraints:

It is still necessary to establish autonomous disaster management and assessment systems reflecting local disaster characteristics, to encourage investment in disaster risk reduction projects, and to propel quality control of national disaster management policy.

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:

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

Description:

The Safe Korea Exercise (SKX) is performed every year with support from the civil society, the government, and the military.

Through this exercise the effectiveness of emergency response manuals are reviewed and cooperation systems are checked among 370 disaster authorities to strengthen disaster preparedness.

Two types of exercise are performed.

One is selection and concentration exercise and the other is focusing on localized disaster exercise.

The former one is to select any specific large-scaled disaster such as typhoon, earthquake, and explosion and perform drills against the disaster.

The latter one is to reflect local characteristics based on the previous historical disaster types.

Context & Constraints:

The National Safety Management Plans need to be applied during the exercise to check the applicability in the field.

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:

About US\$ 5.2 billion are invested annually for mitigation activities in Korea.

For the recovery cost, however, about US\$ 6.7 billion are spent every year.

When a disaster happens, reserved funds are allocated based on the recovery guidelines.

It takes about two weeks to transfer the money to the affected people's bank accounts and more time is needed to secure recovery budget for public facility recovery.

Context & Constraints:

Mitigation budget needs to be increased.

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:

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

Description:

There are assessment system for disaster management organization and tasks after major disasters in Korea.

Assessment criteria are developed to maximize assessment processes.

Also, feedback systems are secured through best practice sharing and public notification.

Financial incentives are introduced and practiced for local governments.

Context & Constraints:

Need to compose objective judges and experts for the assessment.

Drivers of Progress

a) Multi-hazard integrated approach to disaster risk reduction and development

Levels of Reliance:

Significant and ongoing reliance: significant ongoing efforts to actualize commitments with coherent strategy in place; identified and engaged stakeholders.

Do studies/ reports/ atlases on multi-hazard analyses exist in the country/ for the sub region?:

Yes

If yes, are these being applied to development planning/ informing policy?:

Yes

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

Korea has experienced with multi-hazards including natural disasters such as typhoon and man-made disasters such as fire.

To cope with emerging multi-hazards, the Korean government actively mobilizes information technologies for integrated disaster management system establishment.

Also, expert fostering education programs and standard textbooks for multi-hazards are developed.

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):

Gender issues are applied to decision-making for risk reduction and recovery activities.

Besides gender issues, disaster-vulnerable populations such as children, aged people, and isolated residents are the top priority to protect from emerging disasters.

c) Capacities for risk reduction and recovery identified and strengthened

Levels of Reliance:

Significant and ongoing reliance: significant ongoing efforts to actualize commitments with coherent strategy in place; identified and engaged stakeholders.

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

To support capacity building in disaster risk reduction, thirteen topics are selected as a research and development program in NEMA in 2008 using about US\$ 4 million.

The topics cover various areas for capacity development such as how to find local disaster characteristics, disaster information exchange, etc.

Practical and applicable technologies and policies for DRR capacities are expected to be developed.

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):

People's demand for safer society is increasing.

The partnership between the government and people become more important factors in modern disaster management system.

The Natural Disaster Support Center is set up in the disaster field to provide prompt support for damage report, administration, psychological service, etc.

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

Levels of Reliance:

Significant and ongoing reliance: significant ongoing efforts to actualize commitments with coherent strategy in place; identified and engaged stakeholders.

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

Various non-governmental actors are formulated including the Civil Monitor Agent, Cyber Disaster and Safety Simulation, and Citizen Disaster Prevention Corps.

The local wisdom and activities are encouraged to be shared and reflected in the laws and regulations.

Various memoranda of understanding are exchanged between government and NGOs.

The Safety Management Charter is established and declared.

The Korea Disaster and Safety Network also has been established.

f) Contextual Drivers of Progress

Levels of Reliance:

No/ little reliance: no acknowledgement of the issue in policy or practice; or, there is some acknowledgement but nothing/ little done to address it

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

N/A

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:

DRR concept needs to be sold more actively in various planning especially for development plans.

Future Outlook Statement:

Regarding sustainable development with changing climate, the Korean government will more focus on disaster aspects in the future, since the demand from the people for safer society keeps increasing.

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:

Public awareness needs to be more emphasized and promoted.

Future Outlook Statement:

In the near future, the vulnerability will be the one to be most emphasized and tackled.

The disaster management will be "with" the community, not "for" the community.

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:

To reduce disaster risks in advance, mitigation budget needs to be increased.

Future Outlook Statement:

Disaster management will be based on the disaster statistics.

Disaster management will be evolved from response management to risk management.

Disaster management activities will be evolved from reactive to proactive approaches.