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ASIAN DISASTER REDUCTION CENTER



COMMUNITY PARTICIPATION IN DISASTER RISK MITIGATION: A COMPARATIVE STUDY OF MONGOLIA AND JAPAN

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**Domo
Arigato
gozaimasu!!!**



I am very thankful to the government of Japan and all the staff members of the ADRC, for being such a cooperative partner to the government of Mongolia, chief of NEMA, director of DRI, and for allowing me to have such a wonderful experience during my stay in Japan. For providing me kind cooperation to conduct the successful research program in Japan.

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INTRODUCTION

- Generally, the disaster risk management process (cycle) is composed of the following main elements conflux **Knowledge management** (information programs and systems, public awareness policy, education and training, research in disaster reduction)
- Currently is not the survey “Community based disaster management”, “Community based disaster risk management” relative to this title in Mongolia . But ph.D. D.Gombosuren, P.Tsedeb the creature to reflect introduction of incipience development also trend, updating, trendy of evolutional of disaster protective management system of Mongolia.
- So I would like to propose to study public awareness and community based disaster management, since I have been conducting the related researches in terms of community role in disaster mitigation. Since the community rescues the people lot more than rescuers do, it is essential to improve the communities Disaster Education and understanding.



Specific Aims

The **main objective** of this study is to analyze some prevailing best practices of community participation in disaster risk reduction in Japan and make recommendations appropriate for Mongolia.

To study practices of community participation in disaster risk reduction in Mongolia and Japan. This will enable communities to better understand their changing risk environment and thus become more resilient through proactive risk reduction efforts

- Gather knowledge and skills from the disaster management system in Japan especially the participation community on disaster risk reduction in Japan
- Strengthening of community institutional mechanisms;
- Empowering community at risk particularly;
- To study the new skill of prevention activity for Mongolian community
- To recommend the appropriate practices of community participation in disaster preparedness planning in Mongolia



Key words

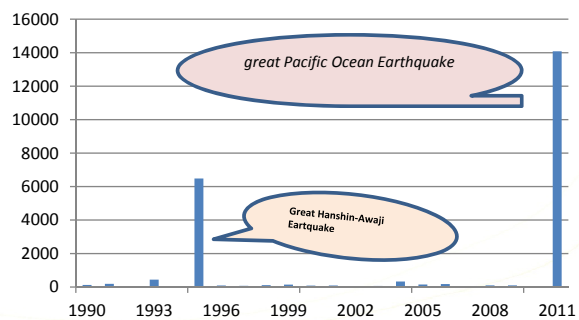
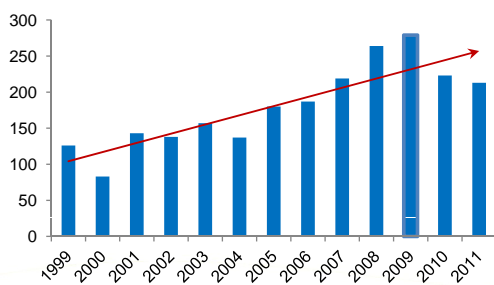
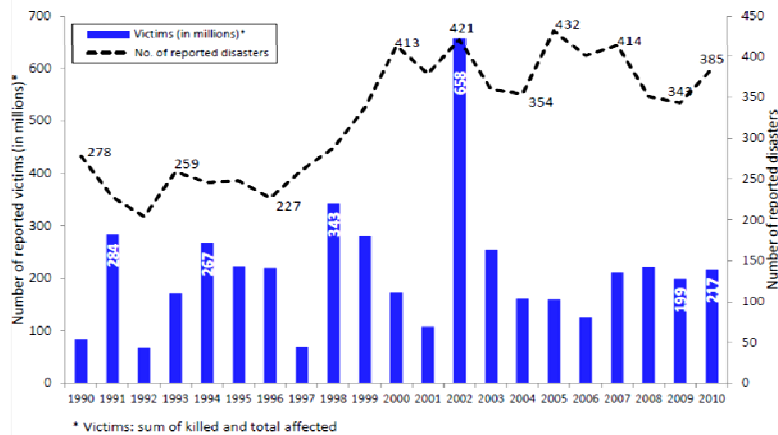
community based disaster management, risk reduction, mitigation, community participation

Required Data and Information and Research method

Among the research methodology is comparison and analyzing.
The main source of secondary data of my research
In Mongolia: published and unpublished data and information available in the National Emergency Management Agency & Published data from other ministries ,departments
In Japan: ADRC Reference materials, JICA's Training materials and published data from different agencies have been used for Research purpose.

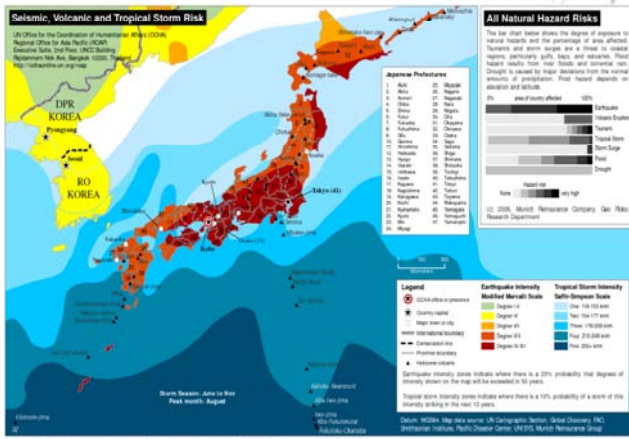


1. OVERVIEW OF DISASTER SITUATION IN THE WORLD, MONGOLIA AND JAPAN



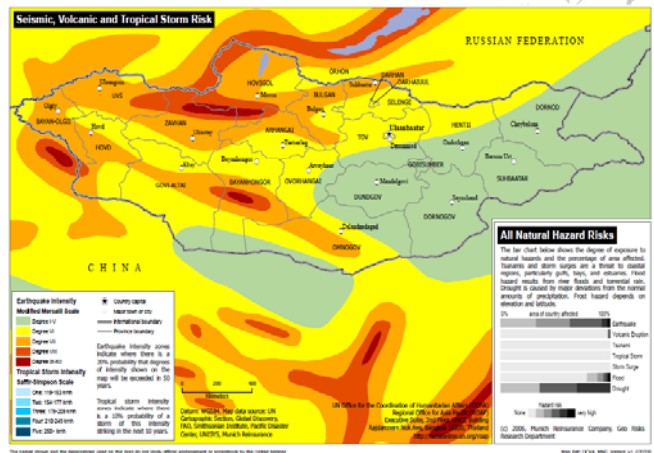
The map is based on data provided by: UN Cartographic Section, Global Discovery, FAO, Smithsonian Institute, Pacific Disaster Center, UNISYS, Munich Reinsurance.

OCHA Regional Office for Asia Pacific
JAPAN: Natural Hazard Risks
Issued: 09 March 2007



Hazard risk:
Earthquake
Flood
Tsunami
Volcanic Eruption
Storm Surge

OCHA Regional Office for Asia Pacific
MONGOLIA: Natural Hazard Risks
Issued: 05 July 2007



Hazard risk:
Drought
Earthquake
Flood
Volcanic Eruption



2. A FRAMEWORK FOR COMMUNITY PARTICIPATION IN DISASTER RISK REDUCTION

- ◆ Parallel efforts in various regions worldwide called for a shift in perspective from the prevailing emergency management framework to disaster risk management to reverse the trend of exponential increase in disaster occurrence of and loss from small- and medium-scale disasters. These highlighted the need for proactive disaster management activities and the significant role of local communities.
- ◆ The community based approach also corrected the defects of the top-down approach in development planning and disaster management which failed to address local needs, ignored the potential of indigenous resources and capacities, and may have even increased people's vulnerabilities. Experiences in developing regions and countries now affirm the gains of community based disaster management.

Evolution of the participatory community paradigm (for capacity building of community)	Evolution of the Disaster paradigm ¹
The approaches developed to be more people centric, and voluntary disaster response groups	Disasters were treated as one-off events responded to by governments and relief agencies
Development of a community approach in planning and decision making,	Improved preparedness (stockpiling of relief goods, better relief management etc.) among governments and relief agencies to "deliver relief". This "contingency planning" approach certainly improved the efficiency of relief agencies but left a lot to be desired in terms of appropriateness and effectiveness of relief.
The approaches developed CBDM, define the overall project purpose, and the aims of the project's communications strategy	A more technocratic paradigm came into existence which believed that the only way to deal with disasters was by public policy application of geophysical and engineering knowledge
Identify communication channels and formulate communications material, participatory pre-testing, implementation, evaluation	From the realization that people's vulnerability is a key factor determining the impact of disasters on them, "vulnerability" emerged as the key theme and more and more emphasis was laid on using "vulnerability analysis" as a tool in disaster management
Institutionalization of CBDRR into the policy, planning and implementation, implementation of innovative programs to explore new dimensions in CBDRR practices, development of frameworks and tools to support the work of decision-makers and practitioners, development of new training tools to enhance the capacity of practitioners, continued support to the regional entities for promoting CBDRR practices.	In recent years, a more comprehensive approach called risk management has emerged. This approach has three distinct but inter-related components: hazard assessment; vulnerability analysis; and enhancement of management capacity.

¹ Dr. Suvit Yodmani, "Paper Presented at The Asia and Pacific Forum on Poverty Organized by the Asian Development Bank".



3.1. Community Participation in Disaster Risk Reduction in Mongolia

In the legal environment reflect community participation in disaster risk reduction:

✓ Law on Disaster Protection:

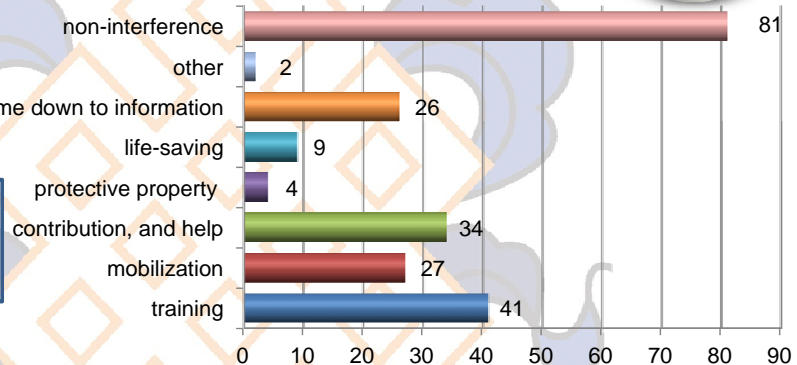
- To regulate matters relating to the principles and full powers of disaster protection organizations and agencies, their organization and activities, as well as the rights and duties of the State, local authorities, enterprises, entities and individuals with relation to disaster protection.
- to communicate activities between the State and Local Governments, enterprises, entities and the state services in the framework of coordinating disaster prevention, rescue, response and recovery.

✓ Environment of NEMA:

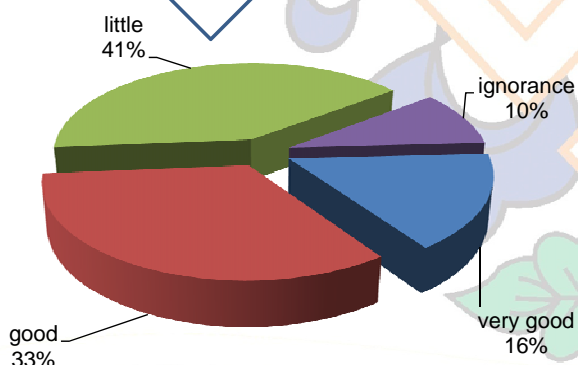
- My country the vision of the NEMA is *"To support in providing national safety through risk and vulnerability reduction, strengthening disaster management and implementing intensively disaster protection measures based on community involvement"* to underscore essential needs of community participatory.



Framework community participatory:



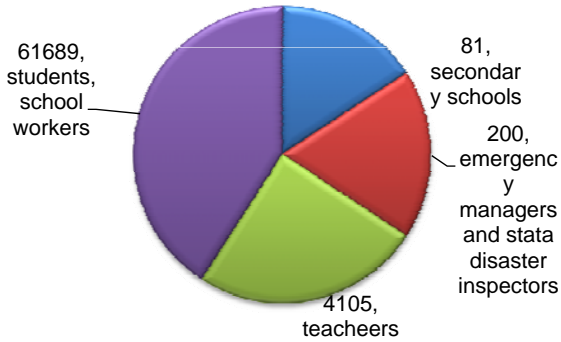
Do you know to what extent of disaster? (Source: Research paper of DRI, 2011)



Community participatory form. (Source: Research paper of DRI, 2011)



3.1.1 Recent Activities for Enhancing Community Capacity for Disaster Risk Reduction in Mongolia



The Capital City Emergency Management Department in cooperation with the Department of Education conducted "Earthquake Evacuation Drill" and "Fire Prevention Table Top Training" simultaneously at all.



3.1.2. Capacity Development and Raising Awareness of Communities



Disaster protection complex training



Disaster protection command staff training



Joint Training and Exercises



Disaster protection preparedness inspection



3.2. Community Participation in Disaster Risk Reduction in Japan



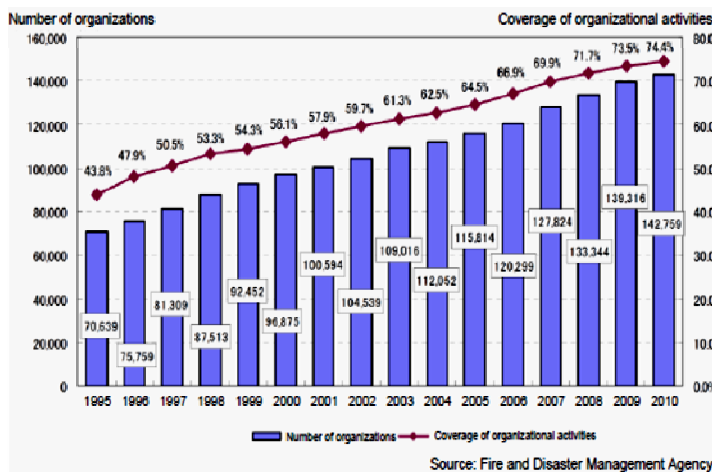
- ❖ Japan has many experiences about natural disasters most frequently in the world
- ❖ gained the knowledge and developed the skills of responding and preparing for disasters through its past experiences
- ❖ “Community –based disaster Management” has drawn people’s attention in the field of disaster management
- ❖ “preparations” for emergencies that have been made on a regular basis will be greatly valued.
- ❖ Recently developed new term, Gensai “to reduce disasters” has commonly be used in Japan.
- ❖ Community based disaster prevention led by citizens that plays the central role in reducing disasters



3.2. Capacity Development and Raising Awareness of Communities



Involvement of various local groups



“Kobe City Disaster-Safe Welfare Community”

Rate of formation 100%

Area: Elementary school district
*191 bodies in the city

Common name: **BOKOMI**

Disaster management activities
(disaster management training,
etc.)

Welfare activities
(fraternity visit, etc.)

disaster management based on daily welfare activities

- | | |
|-----------------------------------|------------------------|
| • Resident’s association | Business establishment |
| • Aging association | Youth association |
| • Women’s association | Volunteer fire corps |
| • PTA | Others |
| • Welfare children’s commissioner | |



Development of Attractive Educational

Tools for Proper Understanding

- Wide Variety of Tools by Using Various Medium
- Develop Educational Tool of High Quality



Hazard mapping and assessment for effective Community based disaster risk
(Source: www.drh.bosai.go.jp)



Participants are to compete for building up points, using cards depicting materials needed for each scene.



Participants are to enjoyably learn about topics which will be useful in the event of an earthquake.



Educational TV Program

(Source: ADRC reference material)



Public Awareness for the Disasters in Japan

Role of Education System has been Modified to prepare the Community for all kinds of Disasters in Japan.

1. Elementary Education
2. High school Education
3. University Education
4. Community Education
5. International Education



Source: internet

School Disaster Prevention Education Programs: This programs are designed and utilized mainly by teachers, but most of the program can be conducted in cooperation with local communities.



Community's programs in Japan (Cont.)



Community Emergency Drill Programs: City government has focused on establishing and developing voluntary organization for disaster prevention in communities



Fire and disaster management agency in Japan (FDMA): Role of the FDMA "Safe and secure regional development with the cooperation of local residents" and "National response in times of need"



3.2.2. Case studies in external on community participation in Japan



Iza! Kaeru Caravan

a new kind of disaster reduction training program learning through fun

the following points:

Overcome lack of knowledge of children

Support evacuation of disabled people

Promote a spirit of teamwork

Transferring not only how to implement the event, but also background and process to create the event.





Comparative Analysis of community participation in Japan & Mongolia



JAPAN

- Disaster prone. Volcanoes, earthquake, tsunami, typhoon & floods, landslides
- Strong DM Basic Countermeasure Act (formulated in 1961) Updated regularly
- Japan highly developed country and pioneer in DM & DRR since 1959
- Community mobilization and strong Community to response against any kind of disaster. Every citizen knows the concept of self help, mutual help/ neighbor help and community help during disaster

MONGOLIA

- Mongolia is prone to a variety of natural hazards. Major disasters are drought, earthquakes, epidemics, famine, floods, forest fires, wind damage, snow damage (Dzud)
- DM Countermeasure Act (formulated in 2003) Amendment
- Mongolia developing country and pioneer in DM & DRR since 2004
- Community mobilization and community volunteers expanding gradually. Study starting the concept of self help, mutual help/ neighbor help and community help during disaster



Comparative Analysis continue



- | | |
|--|---|
| <ul style="list-style-type: none">• Strong activities voluntary organization for disaster prevention• Developed Tools for Proper Understanding: Educational TV Program (NHK), Wide Variety of Educational Tools (Disaster-management card game)• Promotion of Contribution to Disaster Reduction Activities by Corporate Sectors• Inculcating the culture of transferring the lessons learnt from a disaster to next generation – Through telling story, museums, community drills, learning centers, video films, etc.• Town Watching (Preparedness)- Disaster Management Cycle including that of community education• Common educating children in basics of disaster management through participatory exercises like Kaeru Caravan | <ul style="list-style-type: none">• Still low activities voluntary organization for disaster prevention• Developing tools for proper understanding• Promotion of Contribution to Disaster Reduction Activities by Corporate Sectors• Still not yet (museum, video films, community drills, learning centers for disaster)• Still not yet• Starting framework ongoing project |
|--|---|



CONCLUSION

- **CBDRM puts community participation at the heart of process so that the main stakeholder and most vulnerable to disaster will have greater roles over the decisions and mitigation activities. As many of the cases show, it is imperative to promote a culture of participatory planning and implementation of disaster risk reduction initiatives.**
- **Community process and participation builds confidence, pride that they are able to make a difference and capabilities to pursue disaster mitigation and preparedness and bigger development responsibilities at the local level. This leads to empowerment.**
- **Community involvement in risk assessment and risk reduction planning leads to ownership, commitment and individual and concerted actions in disaster mitigation, including resource mobilization;**
- **Community Based Disaster Mitigation is cost effective, self-help and sustainable even if it is time consuming.**

Mongolia:

Conclusion cont...

- **CBDRM is new in terms of “terminology” but in practice, this approach has been employed at different levels and in distinctive areas in Mongolia through many generations. The meaning and objectives of CBDRM are well reflected in policies and fundamental principles of Mongolian Government.**
- **Conspicuously from research awareness and knowledge as most people still lack the proper knowledge, understanding/appreciation of disaster protection, thus, the need for it to be mainstreamed into national policies and initiatives.**
- **Community awareness to recognize disaster prevention and mitigation by themselves is established.**
- **Also conspicuously from research awareness and knowledge as CBDRR to them to continue the future research work.**
- **In this step for getting more understanding CBDRR, we can get the outputs to transfer to create some kinds of educational material; for create some activities.**
- **Additionally, case studies a wide array of policy areas, highlight broader issues of institutional strengthening and local capacity building on different hazard types and with different stakeholders,**

Conclusion cont...

Japan has many experiences about natural disasters. It has gained the knowledge and developed the skills of responding and preparing for disasters through its past experiences. In Japan, 1995 January 17, Kobe city experienced an exceptional, disaster, called the Great Hanshin –Awaji Earthquake,

- In the recent years in Japan, “Community based disaster Management” has drawn people’s attention in the field of disaster management. This is an idea that it is important not only to provide support for developing countries, but also to provide support for the improvement of the ability of their local communities to prevent disasters in order to reduce damages, of lives and property.
- For effective disaster management, it is important that the Central Government, Local government, Public corporations and private citizens must work out their roles appropriately.
- Especially the role of local government and Local community has been increasing. Such experience and knowledge of disaster mitigation action in Japan should be shared with other countries by taking into consideration of local conditions in each country.

Conclusion cont...

- Having more parties at stake would lead to active participations from as many sectors of the community as possible into the project, decreasing/ shrinking the unknown areas, integrating the information useful, and hence sharing the responsibility.
- When the project is failed, parties concerned share the responsibility, ready to review the preceding programs and their actions, and hence take new measures for recovery /change strategies for human security, Educational tools for children.
- However Disaster risk reduction paradigm requires a multi-faceted approach either in preparedness or in response. Because Active participation, sharing the important information and responsibility from as many sectors of the community, as possible to reduce the disaster risk at all level.





LESSONS LEARNED



◆ Community awareness through drills, museums, training centers, etc

- A very important learning that community should be at the centre stage of each activity pertaining to disaster management cycle
- I could also learn the fact that community are being trained to save themselves first and then their neighbors until the emergency responders reach the site
- It was also surprising to know that community saved more lives than emergency responders during The Great Hanshin-Awaji earthquake



Lessons learned cont...



◆ Documenting the experiences of major disasters through photographs, movies, messages and research

- An important learning in itself when we realize how much it can be useful to younger generations who have not experienced major disasters
- It could encourage the younger generations to be prepared or face dire consequences
- It is also amazing to see old photographs (1891, 1931), black and white video movies (amateur) preserved for public education
- International Trainings- ADRC VR program is a very Good and Important example to the world





Lessons learned cont...



- ◆ **“ self-help, mutual help”**, and then public aid function needed to be properly coordinated to reduce impact of disasters .
- ◆ Introduce DM & DR education at schools, **“Disaster Risk Reduction begins at school”**
- ◆ Disaster Prevention is the person’s bonds. The motto of every community is **“make a town is happy town, Happy town against disaster.”**
- ◆ Booklets, Maps, Sign Plates, are valuable means of communication for disaster mitigation.
- ◆ City, Region, Home, Individual role is important for Improvement of the disaster responsive capability in the Region.
- ◆ Kaeru Caravan” is amazing learning tools, to reduce the risk of disasters.
- ◆ The most powerful tool for disaster management is community empowerment and community sustainability.



RECOMMENDATIONS FOR COMMUNITY PARTICIPATION ON DISASTER RESK REDUCTION IN MONGOLIA ...



For stakeholders:

- Government of Mongolia has to integrate disaster reduction activities into normal practice of good governance and into the regular planning and budgeting process.
- Development of participatory land use and development plans that incorporate disaster risks considerations
- Networking among the communities should be further strengthened to share the experience and knowledge and expertise on disasters.
- Awareness creation, sensitization and capacity building of media in disaster risk reduction are necessary for effective use of the reach of media and civil society.
- Strengthening of local governance, including the disaster risk reduction capacities of local governments
- Government has to provide financial and technical and morale support to disaster related training centers, NGOs who would act as change agents in the community participation process on disaster risk reduction.



recommendation cont...



II. For NEMA:

- Greater need for formalization of disaster management plans at the community level
- Comprehensive Action plan should be developed for increasing seismic safety of public facilities, schools, hospitals and life lines to minimize the future losses of lives and properties that may result from major earthquake.
- Development of disaster mitigation tools for communities at risks by involving schoolteachers and students in the process, in order to assess hazard and risk of community.
- Participatory Learning Action (PLA) introduced by community based disaster management should be strengthen so that community's capacity for managing disaster related project will increase.
- Strengthen the Community member's capacity building processes that promote self help, unity within the framework of local disaster reduction.
- A mechanism for continuous training should be put in place to improve the capacity and skills of all those who are involved in disaster management. Arrangements for the necessary training of relevant staff should also be made to build up capacity for making assessments after any natural disaster. The Disaster Management Department may be strengthened in terms of human resources and logistics to undertake the responsibility.



recommendation cont...



III. For Disaster Research Institute:

- Continue research and analyze CBDM, CBDRM, CBDRMit, the additional element in disaster management necessary to reverse the worldwide trend
- Research and analyze local perceptions and adaptations to disaster risks as a basis for a disaster reduction strategy in Mongolia.
- Research and analyze Methodology to enhance communities' awareness of disaster risk and to develop their ability to cope with and to respond disasters correctly.



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**Thank you for your
kind attention !**

