Know Disaster, Tell Disaster Risk Reduction
Training Handbook for Media Professionals

EUROPEAN UNION
ISDR
United Nations International Strategy for Disaster Reduction
SEEDS ASIA
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SEEDS Asia is a non-profit organization with a vision to improve the environment, and strengthen communities facing natural disasters. Our mission is to ensure sustainable development and human security of people and communities in the Asia and the Pacific region through our activities.
Preface

On 26 December 2004, tsunami from the Indian Ocean hit islands of the low-lying Maldivian islands which stretch over 820 km north-south and 128 km east-west. The Maldives comprises 1,190 small islands that are clustered into 26 natural atolls, which for administrative purposes are grouped into 20, consisting of 199 inhabited islands and another 100 tourist resort islands. There was no record of a major disaster in the Maldives prior to the 2004 Indian Ocean Tsunami and post-assessments show that the community was not aware of the risk of such disasters. Through the activities involving the local communities in the Maldives towards disaster risk reduction (DRR) funded by ECHO through UNISDR, we found that local people’s awareness of DRR was relatively low, and we consider that this is probably due to the low occurrence of disasters in the past.

Over the past seven years, 142 inhabited islands have experienced severe weather events, ranging from strong winds, rainfall related flooding, storm surges, tidal flooding or rough seas causing damage to coastal infrastructure. Considering the facts that over 80% of the land area of Maldives is less than one meter above sea level and that a sea level rise of 0.09 m to 0.88 m is predicted in the period 1990 to 2100 (IPCC), combined with increased extreme weather occurrences, makes the Maldives one of the most vulnerable countries to climate change and sea level rise.

The National Disaster Risk Profile of Maldives shows that Maldives has moderate hazard levels except for the low probability and high consequential tsunami hazard in the near future, and high probability and high consequential sea level rise hazard in the distant future.

The National Disaster Management Centre (NDMC), which was established after the Indian Ocean Tsunami that hit the country in 2004, is the leading organization mandated to coordinate and to manage the activities in any disaster. Specifically, the organization is mandated to coordinate all recovery and rehabilitation activities, coordinate all risk reduction activities and create a prepared public through proper coordination among stakeholders and generating awareness among the government institutions as well as the public. The NDMC has been working to conduct training programmes to raise awareness on the importance of DRR in order to create well-prepared communities against future natural disasters, however, physical isolation of islands in Maldives creates a huge challenge.

One of the most influential sources of information for that local people in Maldives, like in any other country, is mass media, especially television and radio. There are three TV and 6 Radio stations in Maldives as of early 2009. It is well known that mass media plays a critical role for early warning at the time of disaster. For wider dissemination of the importance of pre-disaster preparation, the mass media can also be a significant influence, at local/individual level.

For effective disaster preparedness at local level, harnessing the culture of DRR in everyday life is important. Fortunately, people in Maldives are well aware of issues in their own islands. Access to television and radio is quite high in Maldives and many people obtain knowledge through such mass media. It is expected that through continuous efforts by trained local media staff, a culture of DRR would gradually be nurtured in Maldives. It is expected that understanding the importance of DRR would become possible for the general public in Maldives with the collaboration of capable media groups and relevant government agencies.
SEEDS Asia is committed to contribute by assist the Maldivian media to conduct DRR activities through their mandates for wider dissemination of the importance of DRR to the public. We are please to develop this handbook that will help users to conceptualize the risks, expand knowledge on how to incorporate DRR in their current programmes, and design and develop appropriate programmes to communicate the risk with their audiences published both in Dhivehi and English. Efforts were made to ensure that local media groups would have easy access to various information on DRR that can be incorporated in their future programmes, based on our needs assessment among the media groups, consultative meetings with local radio stations in Japan to study good practices on media and DRR, and field surveys on local communities and media in Maldives.

We are honoured to jointly launch a training programme workshop on DRR contents development for staffs of media stations in Maldives with the NDMC and Department of Information of Maldives. Knowledge and experiences of other countries on DRR media programmes, especially from Japan and Maldivian neighbouring countries were brought into the training and this handbook, while local stakeholders such as the NDMC, other government agencies and local communities are involved in order to ensure relevance and acceptability. Furthermore, we are proud to announce that a pilot radio program on DRR in Maldives is scheduled to be broadcasted at the end of the workshop.

March 2009
SEEDS Asia Secretariat
This handbook is for media professionals who are interested in issues regarding disaster risk reduction such as...

**How to Use This Training Handbook**

**Leaf through pages you need**
Depending on needs that media professionals and their stations have, you can read or exercise only the important parts.

**Discussion**
After reading each tip, media professionals can discuss how they can resolve the problems their stations face.

**Workshop**
Media stations are able to hold workshops by utilizing this training handbook. By establishing main themes, it is possible to exchange ideas and problems that staff face.
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**Terminologies Used**

**Capacity building**
The process by which individuals, institutions and societies develop abilities, human skills and infrastructure to perform functions, solve problems, set and achieve goals which are needed to reduce the level of risk (UNHCR)

**Climate change**
The climate of a place or region is changed if over an extended period there is a statistically significant change in measurements of either the mean state or variability of the climate for that place or region. (UN/ISDR)

**Community**
In the context of disaster risk management, a community can be defined as people living in one geographical area, who are exposed to common hazards due to their location. They many have common experiences in responding to hazards and disasters. However, they many have different perceptions of and exposure to risk. Groups within the locality will have a stake in risk reduction measures, either in favor or against. (ADPC)

**Community-based disaster risk reduction**
A process in which communities at risk are actively engaged in the identification, analysis, treatment, monitoring and evaluation of disaster risks in order to reduce their vulnerabilities and to enhance their capacities. Community people are at the heart of decision-making and implementation of disaster risk management activities. The main role of CBDRM is to support the building, rebuilding and strengthening of communities' capacities to respond to and protect from risks and to make decisions over access to and use of resources. (ADPC)

**Disaster** →P.8
The serious disruption of the functioning of society, causing widespread human, material or environmental losses, which exceed the ability of the affected communities to cope using their own resources. Disasters occur when the negative effects of the hazards are not well managed. (ADPC)

**Disaster mitigation** →P.9
Structural and non-structural measures undertaken to limit the adverse impact of natural and technological hazards as well as environmental degradation. (UN/ISDR)

**Disaster risk management** →P.9
The process of using administrative decisions, organization, operational skills and capacities to implement policies, strategies and coping capacity of the communities to lessen the impact of natural hazards and related environmental disasters. This comprises all forms of activities to avoid (prevention) or to limit (mitigation and preparedness) negative effects of hazards. (UN/ISDR)

**Disaster risk reduction (DRR)** →P.8
Actions taken to reduce the risk of disasters and the impacts of natural hazards, through analysis and management of the causes of disasters. It includes avoidance of hazards, reduced social and economic vulnerability to hazards and improved preparedness for adverse events. (UN/ISDR)

**Disaster preparedness** →P.9
Activities and measures taken in advance to ensure effective response to the impact of disasters, including the issuance of timely warnings and the temporary evacuation of people and property from threatened locations. (ADPC)

**Early warning system**
The set of capacities needed to provide timely and meaningful information to enable individuals and communities threatened by hazards to act in time and in an appropriate way to reduce the possibility of
personal injury, loss of life and livelihoods, damage to property and the environment, and to prepare for effective response. (UN/ISDR)

Environmental Degradation
The reduction of the capacity of the environment to meet social and ecological objectives and needs. The impacts may contribute to an increase in vulnerability and the frequency and intensity of natural hazards. Examples: land degradation, deforestation, desertification, wildland fires, loss of biodiversity, land, water and air pollution, climate change, sea level rise and ozone depletion. (UN/ISDR)

Hazard →P.10
A potentially damaging physical event, phenomenon or human activity that may cause the loss of life or injury, damage to property, social and economic disruption and environmental degradation. (UNDP)

Hazard mapping →P.13
The process of mapping hazard information within a study area of varying scale, coverage, and detail. One example of the hazard mapping is a flood plain map. Hazard maps can be combined in a single map to give a composite picture of natural hazards, providing the possibility of common mitigation technique recommendations; land-use decisions can be based on all hazard considerations simultaneously. The limitations of the technique are that the volume of information needed for natural hazards management, particularly in the context of integrated development planning, often exceeds the capacity of manual methods and thus drives the use of computer assisted techniques. (UN/HABITAT)

Participatory approach →P.28
The development and/or government process in which the proposed beneficiaries of a policy or intervention are closely involved in identifying problems and priorities and have some control over the analysis and the planning, implementation and monitoring of solutions. (UNHCR)

Public awareness →P.18
The process of informing the general population, increasing levels of consciousness about risks and how people can act in order to reduce their exposures towards natural hazards. It fosters changes in behavior leading towards a culture of risk reduction. This involves the development and dissemination of public and educational information through radio, television and print media, as well as the establishment of information centers, networks, and community or participation actions. (UN/ISDR)

Resilience
The capacity of a system, community or society potentially exposed to hazards to resist, adapt and recover from after a shock or crisis, and to restore an acceptable level of functioning and structure. This is determined by the degree to which the social system is capable of organizing itself to increase its capacity for learning from past disasters for better future protection and to improve risk reduction measures. (UN/ISDR)

Risk
The probability of harmful consequences or losses (deaths, injuries, property, livelihoods, economic activity disrupted or environment damaged) resulting from natural or human-induced hazards and vulnerable conditions. It is a function of hazard exposure and degree of vulnerability to a specific hazard. (UN/ISDR)

\[
\text{Risk} = \frac{\text{Hazards} \times \text{Vulnerability}}{\text{Capacity}}
\]

Stakeholder
All those, from agencies to individuals, who have a direct or indirect interest in the humanitarian interventions, or who affected by the implementation and outcome of it. (ALNAP)

Vulnerability
The conditions determined by physical, social, economic and environmental factors or process, which increase susceptibility of a community to the impact of hazards. (UN/ISDR)
In this part, media professionals can learn about:
- The concept of disaster risk reduction and media’s role on disaster preparedness.
- The media’s roles in disaster management cycle.
- Characteristics of each DRR program.
- Natural hazards in Maldives
Tip No.1 Basic concept of disaster risk reduction

Why disaster risk reduction so important?

Fortunately, the Maldives was not as badly damaged as other countries which were hit by the tsunami (commonly known as the Asian Tsunami) caused by the Indian Ocean earthquake. However, the loss of 82 lives and 26 people unaccounted for through one event was undoubtedly a great tragedy. What did the media able to do in response to the tragedy? Of course, it immediately broadcasted the damage of the tsunami both at home and abroad. But that is not all the media can do. If preparation had been made, there is no doubt lives could have been saved. The media cannot directly prevent damage from disasters. However, by accumulating knowledge and experience then passing it on to local communities, it can mitigate the damage caused by natural disasters.

Broadcasting media, because of its speed and ability to cover a wide area, is an important sector of mass media for providing natural disaster information. Natural disaster information is directly connected to lives and property. A wide variety of information is passed on to citizens and society. Citizens, on receiving this information, are motivated to take action. The role of the mass media is to trigger and assist this social action.

On the other hand, we must not forget that disasters are natural phenomena and the damage, irrespective of its scale, becomes a ‘picture’ for the media, and television in particular because of its dependence on visual impact. While the media has the ability to shock people at home and in foreign countries with information about the disaster, TV signals do not reach victims in the disaster-stricken area where infrastructure has been destroyed. People who need information the most, those in the disaster-hit area, are outside the information reception zone. They are cut off. In 2004 when the tsunami struck after the Indian Ocean earthquake, the world media poured into the worst hit regions of Aceh, Indonesia and Phuket, Thailand wanting to get a ‘movie-like picture’ of the disaster. It is well known that the media’s methods of reporting upset affected people and grieving families. There is a story about an incident that happened at the time of the Great Hanshin-Awaji Earthquake in Japan in 1995: it is a fact that a victim of the earthquake trapped under rubble cried out for help, but could not be heard or rescued because of the thundering noise of TV news helicopters flying above. Broadcasting disaster information is inextricably linked to the creation of a hollowing out of information because mass media tend to bring tragic stories to outside of disaster areas.

Beautiful landscape before tsunami happened in Thailand
Source: Siripol Sajjapan

The scene after the tsunami occurred in December 2004
Source: Siripol Sajjapan
Part 1: Conceptualization of Disaster Risk Reduction

Actually, most of disaster news reporters who faced seeing the death of many people not only brought shocking stories to the outside, but they also helped to heal communities, rebuild lives, keep families intact and raise funds. But their inability to do anything on these occasions can create a strong feeling of powerlessness. They begin to ask themselves the basic question of why they entered the world of reporting.

Getting close to victims and families of the deceased and passing on the conditions witnessed to as many people as possible is an important role of the media. Disaster reporting, if carried out with sympathy and care, can go beyond national borders to reach the world and create international solidarity and cooperation.

However, that is not all that the media can do. It can, on an everyday basis, question how it should act in emergencies. No matter where the disaster-hit area might be, if people had even a little knowledge about natural disasters and the damages caused by disasters, and the possibility many lives might be saved. It is almost impossible to prevent natural disasters, though, we can reduce the damage they caused by learning how to respond. What we working in the broadcasting media can do, is increase our knowledge of disasters, and pass it on in as many ways as possible to people and society.

**Disaster Management Cycle and media’s role**

- Provide information on precautionary measures; evacuation, tools to be prepared, preparedness plan.
- Advocate for risk reduction
- Provide appropriate, timely information on disasters.

- Provide timely and factual information; extent of disaster, current situation, secondary risk, missing people, rescue, relief goods.
- Advice about actions to be taken; evacuation, tips to get water.
- Address the needs of survivors; medical aid, relief goods.
- Encourage survivors; entertainment.

- Appeal for financial, technical and material assistance by assessing needs of survivors; temporary housing, micro credit and medical care.
- Address reconstruction plan developed by government, UN and NGOs.
In Maldives, what types of disasters have occurred frequently?

In the Maldives, natural disasters that can be sources of impacts are tsunami, storms (wind, rain and surge), earthquakes, cyclones and sea level rise, risks that are considered as moderate. Male tops the list as being at highest risk, while other islands such as Mandhoo are considered “safe”. The hazard features as well as historical disaster profile and associated risks are briefly described below (UNDP, “Developing a Disaster Risk Profile for Maldives,” 2006).

Overall, Maldives faces moderate hazard risk except for the low probability and high consequential tsunami hazard in the near future, and high probability and high consequential sea level rise hazard in the distant future.

**Tsunamis**
In Maldives, islands along the eastern fringe are more prone to tsunami hazard than those along the northern, southern and western ones, where the threat is considered low. As such, the islands with lower elevation and higher population are at greater risk.

Maldives has already been affected by 3 earthquakes in the Indian Ocean and since 1816, 85 tsunamis have been generated in the region. The maximum tsunami wave height is estimated at 4.5 m and a tsunami similar to the one in 2004 is most likely to occur again sometime within the next 219 years.

On December 26th, 2004, an earthquake of magnitude 9.0, hit Indonesia off the west coast of northern Sumatra generating giant tsunami waves ranging from 1.2 to 4.2 meters that swept across all parts of the country causing destruction. Out of the 198 inhabited islands, 13 were destroyed, 56 sustained major physical damage and 121 were impacted by moderate damage due to flooding. Over 2500 houses were destroyed and more than 3500 others were severely damaged.

About 29,580 residents were displaced and around 12,000 were rendered homeless. Several fishermen lost their boats and women’s home-based fish processing business were badly affected; nearly 15,000 farmers lost one year’s harvest due to salt-water contamination of agricultural land.

Tourism, fisheries and agriculture, which together comprise more than half of the country’s GDP were among the hardest hit sectors. Severe damage was caused to habitats, vital infrastructure such as wharves, hospitals, schools, transportation, fishing processing and communication facilities.

**Storms**
At times, tropical cyclones hitting Maldives are destructive due to associated strong winds that exceed speeds of 150 km per hour, rainfall above 30 to 40 cm in 24 hours and storm tides that
often exceed 4 or 5 m. The combined effect of surge and tide is known as ‘storm tide’. Storm tides can cause catastrophe in low-lying areas, flat coasts and islands such as Maldives.

The islands of Maldives are less prone to tropical cyclones. The northern islands of the country were affected by weak cyclones that formed in the southern part of the Bay of Bengal and the Arabian Sea. The number of cyclones directly crossing Maldives is small. Only 11 cyclones, which were formed during the months of October to January, crossed the islands over 128 years. However, in a post-cyclone situation, affected areas are inaccessible for several days due to poor weather and rough sea conditions. In cyclones, risk to livelihoods in the primary sectors such as agriculture and fishing, and in the service sectors is high, mainly in the northern atolls.

Maldives is also affected by severe local storms such as thunder storms, locally known as ‘freak storms’. Sometimes, storms accompanied with rainfall and high waves affect the southern parts of the islands during April and December. From 1958 to 1988, these kinds of events affected 92 islands throughout the year, with peak seasons during May - July. Male was affected by seven storms.

The northern atolls have a greater risk of cyclonic winds and storm surges. This gradually reduces to very low hazard risk in the southern atolls. The maximum probable wind speed is 96.8 knots (180 kilometers per hour), which can cause major damage to structures and environment, as well as, livelihoods.

The southern parts of Maldives are less prone to drought and floods compared to the northern parts, although the frequency of flood/drought years generally in Maldives is low.

**Cyclones**

The vulnerability of the islands in the northern atolls is heightened due to their poor accessibility compared to other parts of the country. In a post-cyclone situation, affected areas are inaccessible for several days due to poor weather and rough sea conditions.

Food security and availability of sufficient fresh water is therefore critical. The islands in the northern atolls have low levels of food insecurity; however the availability of fresh water for public consumption in emergency situations is a major problem.

In cyclones, risk to livelihoods in the primary sectors such as agriculture and fishing, and in the service sectors is high. The risk to livelihood due to cyclone is uniformly high in the northern atolls. Cyclone risk can be substantially mitigated with effective early warning systems. In the northern atolls, due to poor accessibility and few community-based organizations, the likelihood of warnings reaching the population in time appears to be low. For preparedness against cyclones, suitable measures are recommended for improving the early warning system.

**Earthquakes**

The likelihood of earthquakes with magnitude of 5 and above in Maldives is limited to only the southern parts of the country, namely Seenu, Gnaviyani, Gaafu Alifu and the Gaafu Dhaalu atolls. Since earthquakes of this scale are known to cause damage to life and property, the population of these atolls faces high risk.
From among the vulnerable atoll islands, the atoll capitals would need critical interventions on earthquake risk reduction in future. As such, high loss of life and property in the larger islands would further exacerbate loss in small inhabited islands dependent on them for essential needs.

Earthquakes, being sudden events, can cause unexpected food and water shortages. Adequacy of these resources lowers vulnerability of the population to this kind of disaster. In overall terms, food insecurity (including transitory food insecurity) ranks low among all islands; however, a majority of the islands have faced problems of drinking water supply in the past. One of the priority areas of intervention for future disaster reduction programmes in the country would be to build capacity locally on earthquake preparedness and response.

**Sea Level Rise**

Sea level rise due to climate change threatens the entire country. Estimations are that the projected sea level rise of 0.09 m to 0.88 m is going to take place between 1990 - 2100. As three-quarters of the land area of Maldives is less than a meter above mean sea level, the slightest rise in sea level will prove extremely threatening, for example, Male will be inundated by 15% by 2025 and 50% by 2100. For people living on low-lying islands, a rise in sea levels by 50 cm could see significant portions of the islands being inundated or washed away by erosion.

As a result of the rise in sea levels, a variety of impacts may be expected in Maldives. These include loss of land, flooding of low-lying coastal areas, displacement of population, loss of crop yield, impacts on coastal aquaculture, and erosion of sandy beaches.

As most of the economic activities in Maldives are heavily dependent on the coastal ecosystem, sea level rise will impact the social and economic development of the country. Residential areas, industry and vital infrastructure of the country lie close to the shoreline, within 0.8 to 2 m of mean sea level. Even now some islands are seriously affected by loss not only of shoreline but also of houses, schools and other infrastructure, compelling the government to initiate urgent coastal protection measures.
Part 1: Conceptualization of Disaster Risk Reduction

Hazard map of the Maldives

Source: United Nations Office for the Coordination of Humanitarian Affairs (OCHA)
## Hazard calendar of the Maldives

<table>
<thead>
<tr>
<th>Month</th>
<th>Temperature (°C)</th>
<th>Rainfall (mm)</th>
<th>Natural disasters</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>35</td>
<td>350</td>
<td>Flood</td>
</tr>
<tr>
<td>2</td>
<td>30</td>
<td>300</td>
<td>Drought</td>
</tr>
<tr>
<td>3</td>
<td>28</td>
<td>250</td>
<td>Tropical Cyclone</td>
</tr>
<tr>
<td>4</td>
<td>28.5</td>
<td>200</td>
<td>Storm surge</td>
</tr>
<tr>
<td>5</td>
<td>29</td>
<td>150</td>
<td>Earthquake</td>
</tr>
<tr>
<td>6</td>
<td>29.5</td>
<td>100</td>
<td>Tsunami</td>
</tr>
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<td>7</td>
<td>29</td>
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<td>50</td>
<td></td>
</tr>
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</tr>
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<td>27.8</td>
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<td></td>
</tr>
<tr>
<td>12</td>
<td>27.7</td>
<td>150</td>
<td></td>
</tr>
</tbody>
</table>

**Legend:**
- High
- Medium
- Low

**Natural Disasters:**
- Flood
- Drought
- Tropical Cyclone
- Storm surge
- Earthquake
- Tsunami
- Wind Storm
Media and disaster risk reduction in Indonesia

Imam Prakoso
Combine Resource Institution

Indonesia has begun discussions on the issue of Disaster Risk Reduction (DDR) over the last three or four years. The attention and seriousness of the Indonesian government in responding to this issue has grown ever since three major natural disasters occurred after 2004; the Aceh Tsunami in December 2004, the Yogyakarta Earthquake in May 2006 and the West Sumatera Earthquake in September 2007. In fact, there have been numerous other major natural disasters apart from these three, that have occurred in the past in Indonesia. It was because of dramatized intensive media coverage at the time, that put these disasters into the public spotlight. Television stations were national scale media that most intensively informed the Indonesian public about the disaster handling in emergency situations. Indonesian television media tended to create empathy among their audiences through their post-disaster news coverage. Radio stations, despite their limited coverage area, played more important roles in the management process. Many radio programs were aimed to help the disaster victims, for example, in searching for missing people, evacuating IDP (internally displaced persons), distributing logistics, and taking care of children and women, etc. In addition, they also focused on distributing information about day-to-day progress of the disaster handling.

Several weeks after the earthquake occurred in Yogyakarta. Most of the TV station broadcasts focused less on news from affected areas. They do not focus on tips on how to build safer houses in order to prepare for future disasters.

During the emergency situation, there was a lot of media involved in the response, but it was a very different story once the crisis had subsided. Gradually the amount of information decreased. Meanwhile, although radio stations had also decreased the amount of information they broadcasted, they still followed the progress of what was happening locally.

Does the media in Indonesia respond to the issue of Disaster Risk Reduction? Most media generally talk about public interest and do not seem to be concerned about dealing with this issue. Today there is not a single Public Service Advertising (PSA) that promotes this issue although information about natural phenomena like earthquakes and floods is broadcast almost every day in the media. It is a fact that exists in Indonesia and is indeed very ironic.
Awareness of how to make the people prepared to face any possible disaster has not grown in Indonesia. It can only be found in a few groups of people, especially in those concerned about the issue of disaster management. They are civil society groups concerned with humanitarian issues and donor agencies that focus on the implementation of regulations on disaster management. The other groups are communities who have experienced the great disasters; they are, for example, people of Aceh, Yogyakarta and Bengkulu.

In promoting the issue of DRR, the activities of humanitarian aid groups are aimed more to build awareness of how to manage natural disasters to be part of their lives, which cannot be avoided. Good management is to build among the people awareness of how to prepare them to deal with the risks of a disaster. UNDP and several donor agencies are greatly interested in this issue.

To enhance people’s understanding of the DRR issue, most donor agencies do not cooperate with mass media such television and radio. Cooperation with these media is minimal. Donor agencies tend to print their own leaflets or posters to distribute to the public. Obviously, the distribution of leaflets means very limited coverage and is usually not very effective in reaching the wider public. The government itself through the Department of Communication and Information does not have any program in place to promote the campaign on the DRR issue. In contrast, for instance, the issue of avian influenza, drug abuse etc., have been integrated into government agendas that are broadcast on both television and radio. In fact, in terms of the impact on victims, natural disasters are on a far larger scale. Moreover, most regions of Indonesia are susceptible to major natural disasters that could at any time.

Today, although the campaign on the DRR issue has not been too extensive, most stakeholders in this field have begun attempting to tackle this problem through elementary school education. They are trying to incorporate DRR related issues into textbooks of formal education. Accordingly, it can be an advanced measure to build critical awareness of this issue. However, we can never really know when a natural disaster will occur. Preparedness to deal with one must certainly be taught to children from an early age. The problem faced today is that if an earthquake suddenly occurs in one region of Indonesia, should those people be allowed to experience the same thing as the people of Aceh and Yogyakarta? They were completely helpless as their housed collapsed so easily, and their panic caused more casualties.

Two weeks after the earthquake and tsunami occurred in 2004 in Banda Ache, where ongoing evacuation and emergency response measures were being carried out. Indonesian TV stations prefer to focus on the very disastrous aspects of hazards, rather than broadcasting programs, which focus on disaster risk reduction and disaster preparedness.
In this part, media professionals can learn about:

- How to identify problems and to establish objectives depending on targeted people and concept what media professionals want to tell to audiences.
- Characteristics of each DRR program.
- The steps to produce each DRR program.
Think what and how media can do for rising people’s awareness!

In order to broadcast appropriate programs on disaster preparedness, media professionals need to identify the problem first. Depending on the problems and objectives identified, you are able to determine clearly WHO you need to tell WHAT.

The following diagram helps you to understand what you need to identify to produce a DRR program. And depending on the target and concept that media professionals would like to tell, it is possible to decide the type of programs they can produce regarding disaster risk reduction.

**Problems**

- Local people do not have enough knowledge on disaster risk reduction or to prepare for natural disasters.

**Objectives**

- Raise the awareness of people on disaster risk reduction.

**Target (to WHOM?)**

- Local people who are not interested in disaster risk reduction

**Concept (tell WHAT?)**

- We can learn how to cope with natural disasters from experiences of affected people

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### Program Characteristics

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<tr>
<th>Program</th>
<th>Characteristics</th>
<th>Consideration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tips on DRR</td>
<td>• Low preparation cost</td>
<td>• Need to explain easier to raise awareness of those who have never heard about disaster risk reduction.</td>
</tr>
<tr>
<td></td>
<td>• Less human resources.</td>
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<tr>
<td>Documentaries</td>
<td>• Able to address opinions of producers towards society.</td>
<td>• Need to explain in simple terms to raise awareness of those who have never heard of disaster risk reduction.</td>
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<tr>
<td></td>
<td>• Tool for proposing policy.</td>
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</tr>
<tr>
<td>Dramas</td>
<td>• Audiences can enjoy learning about disaster risk reduction.</td>
<td>• Need to assume people having no interests in DRR as targeted people.</td>
</tr>
<tr>
<td></td>
<td>• Even children can easily understand the disaster risk reduction and reproduce the songs by singing.</td>
<td></td>
</tr>
<tr>
<td>Songs</td>
<td>• Participatory program can be produced by collecting songs from audiences.</td>
<td>• Need to target those who already have interests in social problems and awareness of the issues.</td>
</tr>
<tr>
<td>Experiences</td>
<td>• Able to tell stories to the next generation.</td>
<td>• Presenters need to support telling experiences in simple terms for audiences to easily understand the topics.</td>
</tr>
<tr>
<td></td>
<td>• Participants can actually experience.</td>
<td>• Huge events require resources (money and time, etc.) in order to prepare.</td>
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<tr>
<td></td>
<td>• Audiences can also feel a sense of being there by watching programs.</td>
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<tr>
<td></td>
<td>• Easy to get sponsorship.</td>
<td></td>
</tr>
<tr>
<td>Networking</td>
<td>• Can prepare for emergency situations with the cooperation of other stations.</td>
<td>• Media professionals need to cooperate with the staffs of other stations by taking their time.</td>
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</table>
Process of broadcasting programs

Planning
- Understand the needs and preferences of audiences and listeners → P.37
- Choose program → P.18
- Collect information on natural disasters and disaster risk reduction from national and international organizations → P.55

Feedback from audiences/ listeners → P.37

Raise awareness of people!!

Broadcasting
- Disseminate information → P.18
- Share experiences with audiences and listeners → P.19
Collecting materials

- Interview people to collect real voices
- Collect materials from audiences
- Collect materials from existing resources

Compiling/Editing

- Compile collected materials by explaining with care so that audiences can easily understand the contents.
The introductory way of broadcasting programs on disaster risk reduction, to raise people’s awareness, is to only provide valuable tips regarding the actions which people need to take before, during, and after natural disasters. This kind of program can be the first step to DRR broadcasting.

Moreover, any tip on disaster risk reduction which the media provides has the ability to save many people’s lives. In December 2004 when the Indian Ocean tsunami hit the Maldives, if people had known before that they needed to evacuate far from beach and that they could not return to an affected coastal area until mentioned it was safe since a tsunami is a series of ocean waves. It seems little influential to provide small knowledge on actions that local people need to take in order to prepare for the future risk of disasters; however those small tips have extremely huge influence on raising public awareness especially for those who have never experienced disasters and do not have any knowledge on disaster risk reduction, since being aware of the danger of natural hazards means the difference between life and death for them.

Detailed process of broadcasting tips on DRR is:

- **Risk Identification**: Identify the hazards and the potential threats they may pose. The aim of risk identification is to develop a comprehensive list of sources of risks and events that might have an impact on local people.

- **Risk Analysis**: This process aims to establish an understanding of the level of risks and its nature. It involves consideration of the sources of risk, their positive and negative outcomes and the likelihood of those consequences occurring.

- **Risk prioritization**: The purpose of this step is to analyze and identify priority areas for action. Decision would be based on the level of risk, specific circumstances, the likelihood of specified events or outcomes, and the overall effect of multiple events.

- **Choice of tips on DRR**: According to those 3 steps, choose the category of tips on DRR, by introducing the risks and threats that need to be identified by local people in order to take action.
Examples of “tips” program
- MBS
- Radio FM YY and Japan International Cooperation Agency (JICA) Hyogo
Tip No. 4 Producing programs: Documentaries

How can TV/ radio programs raise public awareness of DRR?

Broadcasting documentary program could be one of the easiest ways to argue the opinions of TV/ radio producers and to provide their messages on disaster risk reduction and disaster preparedness to audiences. In addition, it could be a tool of suggesting policies towards government and whole society. Documentary programs, therefore, have more effectiveness on awareness rising of local people.

Appropriate target people of the program are those who are interested in social issues, especially the issues of natural disasters and the practical ways of disaster risk reduction.

For both TV and radio documentaries, the most important criteria for producing programs is the style by which media professionals will address issues and raise people’s awareness. The style can be emotional, political, or educational, depending on how media professionals aim to convince them on audiences. In terms of the motif which reproduces the scene disastrous tsunami occurs, however, it is easier and cheaper for radio documentary producers to collect appropriate sound materials.

Detailed process of broadcasting the experiences and knowledge of disasters is:

- **Risk Identification**: Identify the hazards and the potential threats they may pose. The aim of risk identification is to develop a comprehensive list of sources of risks and events that might have an impact on local people.
- **Risk Analysis**: This process aims to establish an understanding of the level of risks and its nature. It involves consideration of the sources of risk, their positive and negative consequences and the likelihood that those consequences may occur.
- **Risk prioritization**: The purpose of this step is to analyze and identify priority areas for action. Decision would be based on the level of risk, specified consequences, the likelihood of specified events or outcomes, and the overall effect of multiple events.
- **Composing the details of contents**: According to the 3 steps, compose the contents by considering main theme with opinions and messages that media professionals want to argue and address to audiences.
- **Collecting materials**: According to prioritized theme, chose theme of songs and announce to collect contributions of song lyrics from audiences through TV/ radio programs.
- **Compiling materials**: Depending on the theme to be prioritized, compile collected materials. After compiling the program, revise it by checking whether prioritized theme can be understood by audiences and whether producers need to collect more material to convince audiences of raising the need for awareness on disaster risk reduction.
Referring to the previous tips No.4, think about the method you can utilize.

- Advocacy
- Emotional
- Educating
- Proposing policy to government and society

**Objectives**
- 

**Target**
- 

**Concept**
- 

**Method**
- 

**Examples of “documentary” program**
- MBS
Tip No.5 Producing programs: Dramas

How can TV/radio programs raise public awareness of DRR?

Dram is one of the programs which are able to attract an audience who have no interests on the disaster risk reduction programs by TV/radio stations. If the content of the drama is very interesting, producers can tell their messages regarding disaster risk reduction to their audiences. Therefore, the greater audience dramas attract, the stronger the messages which producers want to present will be received. Powerful scenes remain embedded deep in an audience’s mind. Ideas, feelings and words in those scenes are forever etched on their memory. These are contained in the emotion, empathy, learning and entertainment found in dramas.

The media can use this unique role of drama to increase the audience’s awareness. For example, if a drama is based on true or fictional story showing a family who has a tsunami affected person as its main character, it can pass on to the audience the message of the preciousness of life and the importance of disaster risk reduction through the lessons learned from the tsunami disaster.

In Japan, there is an example of a story based on true events which is used in DRR. The title of the story is “Inamura no Hi” ("A Living God" – by Koizumi Yakumo (Lafcadio Hearn) / “The Burning of the Rice Field” – a supplementary text used in elementary schools in Colorado State, USA). This is a story about when the Ansei Nanakai Earthquake struck in 1854. A village chief, Gobei (real name: Hamguchi Goryo) set fire to the newly harvested rice drying in the fields on the hill. This led village people to run up to the hill, therefore escaping from a tsunami and saving their own lives in the process. At one time, this story was used in elementary school textbooks, and in more recent years this story has enjoyed somewhat of a revival, often being presented in the form of storytelling using picture panels. It is often cited as an example of excellent DRR educational material for tsunamis. The story is composed of only about 1,400 characters (Japanese and Chinese letters or about 800 words). The reason this story has endured over the years, lies in its content and the skilful way it is told. The story can be summarized in one short phrase, “the preciousness of life”, which is strongly emphasized. But if looked at in detail, it deals with various virtues and lessons on “the importance of quick action and imagination when a natural disaster occurs” and “the fact that human life is more important and precious than anything else.”

The mastery of “Inamura no Hi” is not only in its presentation of virtues and lessons, but also in the excellent description of scenery which impresses children. This greatly moves the children, like the effects of stage lighting. The drama and entertainment draws children into the story.

This is where the role of TV/radio drama lies. Dramas based on stories which have been passed on as well as on true stories are the best way of passing on experiences of disasters. The use of many sounds assembled to build an image, in other words, the radio drama, makes listeners create the drama in their minds. The radio is an ideal medium for passing on stories like “Inamura no Hi.”
Brainstorming activity to consider about positive effects of “Infotainment,” which is information-based media content or programme that also includes entertainment to enhance popularity with audiences.

Examples of “drama” program
- Government Internet Radio

Consider what kind of theme is appropriate to raise people’s awareness.

- “If” series
  (If a tsunami occurs, If an earthquake occurs)
- Emotional drama
  (Importance of people’s lives, painful separation of people)
- Knowledge
- Recalling past disasters
Producing programs: Songs/Music

How can TV/ radio programs raise public awareness of DRR?

One of the most attractive ways of broadcasting participatory programs on disaster risk reduction is to produce songs which may raise public awareness and to introduce songs which affected people have composed during reconstruction period. The main advantage of this program is to naturally attract people’s attention to disaster risk reduction and to diffuse them over the longer term once people memorize the songs.

In addition, this kind of participatory program has another advantage that local people are able to enjoy learning about disaster risk reduction, and that provides opportunity to those who are not interested in disaster risk reduction, especially for children who have never experienced disasters and do not have enough knowledge of disaster management. The participatory program is, therefore, a tool for attracting those who have no knowledge or experience of natural disasters.

The detailed process of broadcasting the experiences and knowledge of disasters is:

- **Risk Identification**: Identify the hazards and the potential threats they may pose. The aim of risk identification is to develop a comprehensive list of sources of risks and events that might have an impact on local people.
- **Risk Analysis**: This process aims to establish an understanding of the level of risks and their nature. It involves consideration of the sources of risk, their positive and negative consequences and the likelihood that those consequences may occur.
- **Risk prioritization**: The purpose of this step is to analyze and identify priority areas for action. Decision would be based on the level of risk, specified consequences, the likelihood of specified events or outcomes, and the overall effect of multiple events.
- **Collecting contributions from audiences**: According to those 3 steps, chose the theme of songs and collect contributions of song lyrics from audiences through TV/ radio programs. The themes can be emotional or educational.
- **Composing the song**: In order to finalize the songs, find people (either volunteer or professional) who can cooperate in composing songs depending on the cultures and preferences of local people.
- **Introducing the song**: At the time of broadcasting the song, introduce its background how the song has been made with the object of raising public awareness on disaster risk reduction. (→P45).

In addition to the participatory song program, media professionals are able to produce special jingles on disaster risk reduction through the above mentioned process.
Part 2: Media’s Role on Disaster Risk Reduction

Brainstorming activity to consider about positive effects of “Infotainment,” which is information-based media content or programme that also includes entertainment to enhance popularity with audiences.

Songs
- Easy to attract different groups of people such as children, housewives, etc.

DRR
- Difficult to attract people’s interest.

Example of DRR song: Bringing Happiness to All the World (P. 45)

We are strong in spirit to be
Against the Great Quake in victory
We’re thankful that we are here today
And remember the precious lives as we pray

We have rebuilt Kobe to be
As beautiful as in our memory
With hope for tomorrow in our hearts
We reach helping hands to you

(Chorus)
Let our song echo through our hearts
In harmony as sing our parts
We send our song from our town Kobe
To bring happiness to all the world

Consider what kind of theme is appropriate to raise people’s awareness.

Examples of “songs/music” program
- Radio FM YY
- Yomiuri TV
- Yomiuri Shinbun (Newspaper)
The best way broadcasting can have a huge impact on audiences in terms of telling the experience of natural disasters is to invite people who have experienced natural disasters to tell their experiences. That is because audiences who have never experienced disasters do not fully understand the negative impact of disasters, such as the loss of lives, livelihoods, disruption of lifestyle, and destruction of property. In order to raise people’s awareness, therefore, media professionals need to use “real voices” of people who have experienced disasters, and explain how disasters have threatened people’s lives and how people have coped with difficulties and have cooperated with each other in order to recover their livelihoods.

The main objective of the program is that local people who have never experienced disasters are able to share vicariously what people actually experienced when disasters occurred by listening to the real voices of people experienced disasters.

Detailed process of broadcasting the experiences and knowledge of disasters is:

- **Risk Identification**: Identify the hazards and the potential threats they may pose. The aim of risk identification is to develop a comprehensive list of sources of risks and events that might have an impact on local people.

- **Risk Analysis**: This process aims to establish an understanding of the level of risks and its nature. It involves consideration of the sources of risk, their positive and negative consequences and the likelihood that those consequences may occur.

- **Risk prioritization**: The purpose of this step is to analyze and identify priority areas for action. Decision would be based on the level of risk, specified consequences, the likelihood of specified events or outcomes, and the overall effect of multiple events.

- **Inviting people experienced disasters**: According to those 3 steps, invite people who can contribute to raise public awareness by telling their real voices on experienced of disasters. The way to invite people to the DRR program can be a telephone interview (→P46).
**Objectives**
- Telling lessons learnt to the next generation by analyzing how affected people could save their lives.

<table>
<thead>
<tr>
<th>Target</th>
<th>Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td>• Able to pass on experiences towards their families, especially to children.</td>
</tr>
<tr>
<td></td>
<td>•</td>
</tr>
<tr>
<td>Children</td>
<td>• Able to pass on knowledge to the next generation.</td>
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</tbody>
</table>

The most important points are:
- Explain again the words of the people who have experienced natural disasters by utilizing easy terms so that those who have never experienced disasters can understand what happened at that time.
- Address the importance that those who never experienced disasters also need to become important storytellers to the next generation by obtaining information and knowledge from the media and people who actually have experienced disasters.

**Examples of “experience” program**
- NHK Kobe
- MBS Network 1.17
- Radio FM YY
As an off-air activity, events play an important role in providing audiences with an opportunity to learn about disaster risk reduction and about the importance of life with their five senses. Unlike watching TV or listening to the radio, participation in events creates opportunities to actually experience many things.

Also, TV/Radio stations need to inform the public in advance that it will broadcast live an event on the theme of natural disasters. Broadcasting the event live will result in many audiences gathering and participating. Broadcasting events in which residents participate, gives audiences a sense of participation and a feeling that it is something close them.

For example, through live broadcasting of annual memorial events of natural disasters held together with local residents, the TV and radio can pass disaster experiences, the message of the preciousness of life, and the importance of DRR activities on to our audiences.

Another representative example of a disaster prevention event is the ‘town-walk workshop’. It is an open event where Radio listeners can listen to disaster risk reduction specialists, program personalities and announcers as they walk around the town looking at it from a DRR perspective. It is an event combining DRR study and hiking.

Live coverage of the event with commentators and announcers gives listeners who cannot have the chance to learn about things that may likely prove useful in times of disaster, or problems that might occur in a disaster.

In this way, events provide TV/Radio stations with the opportunity to bring the audience directly in touch with DRR. Also, live broadcasting of these events can give the audience the feeling they are actually at the event.
Part 2: Media’s Role on Disaster Risk Reduction

Practice Drill

**Merit of combining Event and Media**

- **Event**
  - Participants can enjoy experiencing.
  - Attract local people’s attention.
  - Brings many local people into one place

- **Media**
  - Easy to disseminate information to local people.
  - Have influences on disseminating information to large area.

**Position map of each event**

- **Anniversary event**
  - More preparation
  - Only participants can enjoy

- **Broadcasting event**
  - Less preparation
  - Both participants and audiences can enjoy

- **RRR car**

Propose your ideas on an event program which your station could organize and broadcast.

- **Title of the event:**
- **Targeted people:**
- **Concept of the event:**

Examples of “event” program
- Radio FM YY
- NHK Kobe
Tip No.9 Producing programs: Networking

How can TV/ radio programs raise public awareness of DRR?

There are limits to what one TV/Radio station can do during any of the following phases: pre-disaster mitigation, during disaster, and the post-disaster reconstruction period.

For example: What would happen if the building housing the radio station was seriously damaged in a natural disaster? What would happen if radio station staff were victims of the disaster and couldn’t carry out their broadcasting work? In situations like this, the most dependable measure is support from other stations. Because they know about TV/Radio stations and how they operate, they can provide various kinds of support necessary for broadcasting.

However, if there is no regular contact or communication among stations, mutual support will not work efficiently when a disaster occurs. If stations meet regularly, co-produce TV/Radio programs, and work together, a disaster management network can be built. Below are examples of how networking can be carried out.

- **Regular Meetings**
  Through regular meetings, not only for DRR but also for exchanges about everyday affairs, a mutual exchange of knowhow and experience can be created.

- **Network Programs / Co-produced Programs**
  A network composed of multiple radio stations can create a timetable for broadcasting the same programs, decide a theme and in turn, broadcast programs each station has created. By choosing disaster risk reduction as a unifying theme, stations can create programs on this theme from various points of view. This can lead to an increase in audiences’ awareness on disaster preparedness. Creating co-produced programs also strengthens the network.

- **Program Contests**
  Program contests can be held in which judges chosen from each station judge programs in different categories and present prizes to excellent programs. “DRR” should be included in the program category list, and every station should broadcast the most excellent program in this category.

- **Equipment List**
  Each station should prepare a list of equipment it can lend out, and share this list with other stations to prepare for when a station’s equipment is damaged due to a disaster, or for an occasion when equipment breaks down or cannot be used.

By carrying out such regular networking activities, TV/Radio stations can strengthen the ability to reduce disaster risks, and the attitude may promote obtaining the trust of audiences. Such activities can be begun at a level that can be managed depending on the capacity of each TV/radio station.
### Part 2: Media’s Role on Disaster Risk Reduction

#### List of broadcasting equipment

<table>
<thead>
<tr>
<th>Transmitting system</th>
<th>Studio</th>
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<tbody>
<tr>
<td>Antenna</td>
<td>Portable sound mixer</td>
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<tr>
<td>Transmitter</td>
<td>Computer</td>
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<tr>
<td>Uninterruptible power system</td>
<td>CD player</td>
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<tr>
<th>Other</th>
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<tbody>
<tr>
<td>Electrical generator</td>
</tr>
<tr>
<td>Car</td>
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<tr>
<td>Stockpiling radio receiver</td>
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</table>

List some equipment which your station is able to share with other stations.

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<th>Transmitting system</th>
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<th>Studio</th>
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<th>Other</th>
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#### Examples of “network” program

- FM YY
- AMARC

People having discussion during meeting
Source: AMARC Japan

Contest organized by Japan Community Broadcasting Association
Source: Radio FM YY
Part 3
Feedback from audiences
-Media status in the Maldives:
Case study in Shaviyani Atoll and Male’-

In Part 3, media professionals can learn about:
- Audiences preferences regarding broadcasting programs
- Tendencies of audiences who listen to radio and watch TV
The Republic of Maldives is an archipelago of islands stretching over 820 km north-south and 128 km east-west. Maldives comprises 1,190 small islands that are clustered into 26 natural atolls, which for administrative purposes are grouped into 20. Of the more than 1,000 islands, only 199 islands are inhabited, and another 80 islands have been developed into tourist resorts.

Over 80% of the land area of Maldives is less than one meter above sea level. The predicted sea level rise of 0.09 m to 0.88 m in the period 1990 to 2100 (IPCC), combined with increased extreme weather occurrences, makes the Maldives one of the most vulnerable countries to climate change and sea level rise.

One of the most influential sources of information to local people in Maldives, like in any other country, is the mass media, especially television and radio. There is one television station and one FM and one AM radio station in Maldives (CIA Factbook). The most popular radio station is Voice of Maldives which is operated by the government.

It is well known that mass media plays a critical role for early warning at the time of disaster. However, for wider dissemination of the importance of pre-disaster mitigation, mass media can also have a significant influence, at local/individual level.

**Tip 12** Feedback of audiences in islands

Media in Maldives is motivated to disseminate DRR information to the Maldivian audience and consider that it is possible. However, the resources are limited and the expertise needs to be built on from now. According to the information collected from various media staffs in Male, none of the media station has demographic date of the audience. Programmes are broadcasted between 30 – 60 minutes, and the programmes are developed in try and error manner: favorite themes of the audience are uncertain and programmes are reviewed when the station receives complaints. In order to assist such efforts of the Maldivian mass media to understand its audience better to start developing programmes on DRR, below information on radio was collected as a preliminary audience demographic data in 2 local islands in Shaviyani Atoll in August 2008.

1. 91% of the respondents own radio set at home.
2. 93% of the respondents listen to radio programs daily.
3. Among the type of programmes, News, Stories, and Religion are the favorite programmes. Majority of them also listen to other programmes regardless.
4. While some listen to the programme throughout the day, favorite time is in the morning and the afternoon. There is difference between male and female audience: Male audience listen to programs in the afternoon the most and the female audience do in the morning. It is assumed from the island lifestyle that male listen to programmes when relaxed at home after coming back from work while female listen to programmes in the morning when they have house works to do.
5. People take radio as a source of information. Most well appreciated source of information is on religion among all, and information on new, health, and entertainment follows.
6. People appreciate the program all the time and consider that it is important for them when they hear on news, disasters, and incidents.

Q: When do you think the radio programme the most important?

7. Purposes of the audience listening to the radio vary among information collection, entertainment, and religious. Some specifically collect information on health, news, and education.
Feedback of audiences in Male’

The audience demographic data collected in Male’ is different compared to that the data collected on the islands since distribution of occupation varies from island to island. Because of their vulnerability towards natural disasters, we mainly targeted fishermen when collecting information. The ratio of respondents is half fisherman and half other occupations such as shop owner, hotel employee, and those who work outside such as tour guides. The following information was collected as audience demographic data in Male in February 2009.

1. 79% of the respondents listen to radio programmes every day when they work outside. 84% of fishermen listen to the radio all the time when they are on boats.
2. In terms of where they listen to radio programmes, 75% respondents listen outside the house when they work, 25% listen in their living rooms after going home.
3. 57% of the respondents watch TV programmes every day when they work outside.
4. Of the programmes, News, Music, Drama, and Politics are the favorite programmes. 100% of the fishermen having radio/TV listen to/watch news in order to obtain weather information.

5. 93% of the respondents watch/listen to weather information broadcasted on news programmes. 100% of the fishermen listen to or watch information carefully, especially during the rainy season.
In Part 4, media professionals can learn about:

- Detailed cases of producing DRR programs in different methods: tips on DRR, documentary, drama, experiences, event and network.
Japanese “Government Internet TV” has programs on disaster risk reduction. In the program, a famous Japanese DRR story is introduced. In Japan, there is an example of a story based on true events, which is used in DRR. The title of the story is “Inamura no Hi” (“A Living God” – by Koizumi Yakumo (Lafcadio Hearn) / “The Burning of the Rice Field” – a supplementary text used in elementary schools in Colorado State, USA). This is a story about when the Ansei Nanakai Earthquake struck in 1854. A village chief, Gobei (real name: Hamguchi Goryo) set fire to the newly harvested rice drying in the fields on the hill. This caused the village people to flee to high ground, saving their own lives, in the process.

Tips on DRR

Case 01 Activity Tips (NHK Kobe, public TV, Japan)
A program called, “Study on Disaster Risk Reduction,” inspects the mechanism of disasters and introduces some tips of disaster preparedness learned through the lessons of the disastrous earthquakes. For instance, the program recommends the construction of earthquake-resistant buildings by analyzing the mechanism of earthquakes and by presenting stories of affected people. Most deaths in the Hanshin-Awaji earthquake of 1995 were the result of old buildings collapsing.

Documentary (Social, Emotional)/ Experience

Case 02 Addressing the Importance of People’s Lives (MBS, private radio, Japan)
The MBS radio station has tried to broadcast the reality of the reconstruction process by taking up issues which resulted from the Great Hanshin-Awaji earthquake. For example, people in affected areas have had problems regarding the readjustment of town lots because of weak community ties. It is also important for media to broadcast both the negative side of the reconstruction process as well as the positive activities in order to raise public awareness of disaster preparedness by telling them about the tragedies that happened after disasters.
In addition, the documentary programs produced by this station also address the importance of people’s lives. Bringing out such programs which focus on people’s feelings encourage other audiences and listeners to prepare for future disasters.

Drama

Case 03 Story based on True Events (Government Internet TV, public TV, Japan)
Japanese “Government Internet TV” has programs on disaster risk reduction. In the program, a famous Japanese DRR story is introduced. In Japan, there is an example of a story based on true events, which is used in DRR. The title of the story is “Inamura no Hi” (“A Living God” – by Koizumi Yakumo (Lafcadio Hearn) / “The Burning of the Rice Field” – a supplementary text used in elementary schools in Colorado State, USA). This is a story about when the Ansei Nanakai Earthquake struck in 1854. A village chief, Gobei (real name: Hamguchi Goryo) set fire to the newly harvested rice drying in the fields on the hill. This caused the village people to flee to high ground, saving their own lives, in the process.
**Songs/Music**

**Case 04**  **Song Produced by Affected People** (FM YY, community radio, Japan)

"Yumehikaru machi wo" (Dream-light to the city), a song expressing the pain caused by the earthquake and the desire for recovery, composed and sung by a 3-member band “Fukkotai” who were victims of the Great Hanshin-Awaji Earthquake, is broadcast as the theme song of a daily lunchtime program.

Listeners who hear “Yumehikaru machi wo” sing it as their own song on various occasions. The song has now become their community’s theme song.

**Case 05**  **Song for DRR Education** (Yomiuri TV, private TV, with Board of Education Kobe City, Japan)

In the handbook produced by Yomiuri TV, Yomiuri Newspaper, and the Board of Education in Kobe city to be utilized for disaster education in schools in Kobe city, a song “Bringing Happiness to All Over the World” was introduced. The song was composed after the Great Hanshin-Awaji earthquake in 1995. It was meant to encourage the people who have experienced disasters to live their lives with hope and happiness. It also enabled those who have never experienced disasters not to forget this earthquake, by which a large number of people were killed.

It has been translated into English, Chinese, French, Arabic and Persian to help the people who have been affected in other parts of the world by earthquakes and other natural disasters.

**Experiences and knowledge**

**Case 06**  **Telephone Interviews** (MBS, private radio, JAPAN)

Radio stations often utilize telephone interviews, which are a very easy way to broadcast the real voices of victims and specialists; however, huge networks should be established in order to obtain voices from local people who have experiences of natural disasters.

**Case 07**  **Talking about “The Preciousness of Life”** (FM YY, community radio)

In order to prevent the experiences of the Great Hanshin-Awaji Earthquake from being forgotten, a thirty-minute program “Daishinsai wo kataritsugu” (Continuing to talk About the great earthquake disaster) is broadcast every week on Sundays (holidays). In this program Radio FMYY wants to pass on to future generations the important themes of “The Preciousness of Life” and “Lessons Learned from the Earthquake”, and create communities that can cope with natural disasters by having disaster victims, disaster-relief volunteers, local government staff and specialists, etc. discuss the earthquake disaster and how to create communities that can endure through disasters. The program is uploaded onto the Internet the following day and can be downloaded on demand by those who missed it.
**Case 08 Disaster Management Q&A** (MBS, private radio, Japan)

In addition to normal DRR programs, the MBS station allocates a time to answer questions that come up from the audience through telephone, facsimile, and e-mail. Thus those who do not understand technical terms, especially children, are able to ask questions to specialists on disaster management.

**Case 09 Talk Live** (UNISI FM Radio, private radio, Indonesia)

UNISI FM Radio, a commercial radio station located in Yogyakarta, produced a short talk live of approximately 3 minutes. A talk live was live conversation between the announcer and certain people interviewed by phone. This program was aired within the duration of an hour with three different talk lives. It raised issues about the post-earthquake reconstruction process that was being conducted in Yogyakarta in 2006. It also covered various topics depending on the questions that were asked by listeners, for instance, logistics distribution, weather conditions, disaster knowledge, etc. The invited speakers usually were government officers or experts on the discussed topics. The program was aired every day.

**Case 10 Public Service Advertisement**
(Persatuan FM, GCD FM, SARwa FM and RWK FM private radio, Indonesia)

ASB (*Arbeiter Samariter Bund, Deutschland*), an NGO from Germany working on the issue of disaster management produced a radio program with disaster risk reduction as the theme. The program promoted various issues, among them being how to build an earthquake-resistant house, how to deal with earthquakes and other disasters in general, etc. They collaborated with four private commercial radio stations i.e. Persatuan FM, GCD FM, SARwa FM and RWK FM. These four stations are located in the two districts most affected by the great earthquakes, which occurred at the end of May 2006 in Yogyakarta and Central Java, killing more than 5,000 people and destroying more than 100,000 houses.

At the beginning they did assessment in order to identify problems faced by people, issues developing within the society related to the post-earthquake reconstruction process and also people’s knowledge on how to deal with disasters. The results of the assessment were formulated into scripts used to produce broadcast programs like radio plays, talk lives and public service advertisements (PSA). These three programs were produced in recorded formats. Then, they were packed and aired once a week. This weekly programs were designed for one-hour shows with three different programs namely Radio Drama, Talk Live and Question and Answer. Each program had a duration of about 15 minutes in between of breaks. These breaks were filled with PSA on how to deal with disasters. Some PSAs were produced using local language and local artists. For Q and A segments, input or questions were replied to via mail and short message services and would be discussed in the next week. The play itself was produced in a series consisting of 24 episodes. The content of the play mainly talked about the subject of how to build an earthquake-resistant house; starting from the building of the foundations to finishing process. Comments and questions concerning the radio play and talk live were given by listeners through mail, telephone and SMS. Then, the questions were discussed off-air, involving corresponding experts. Afterwards, announcers delivered the discussed material in a Q and A program the following week.
Case 11  Fishing Community Radio (Radio “Alakal,” India)

It was the first exclusive community radio initiative in India for fishermen, reaching 15 villages through a network of radio kiosks at three fish landing centers (Poonthura, Veli and Velithura) in Kerala State. Programs give tips on sea safety as well as real time weather and tide reports, so that fishers can plan their trips better. DRR issues cover monsoon safe precautions that need to be taken when there are huge changes in the sea conditions. They also provide a monsoon control room contact number. Programs are broadcasted daily in two slots of one-hour duration each: a 6AM program is followed by an afternoon (1.30 - 2.30 pm) and an evening (8 - 9 pm) program daily.

Case 12  Lessons learnt (NHK Kobe, public TV, Japan)

A program called “Ties of Lives” provides information on disaster risk reduction by looking back at the experiences of the people affected by disastrous earthquakes. In addition, it focuses on providing lessons learnt from those experiences. In addition, several programs that received a lot of positive feedback from audiences were re-broadcasted on the memorial day of the Kobe earthquake in January 2009 in order to raise more public awareness on disaster risk reduction.

Event/ Off- Air Activity

Case 13  Anniversary event (Radio FM YY, community radio, Japan)

On the anniversary of the Great Hanshin-Awaji Earthquake (January 17), the commemorative event 1.17 Kobe ni Akari wo in Nagata (1.17 “Bring Light to Kobe” in Nagata) is held together with many listeners and local residents as a memorial to the victims of the earthquake as well as to increase DRR awareness. The figures “1.17” are created with candles which are lit at the time the earthquake struck. At that time all participants offer a silent prayer for the repose of the spirits of those who lost their lives in the earthquake. The event includes the singing of a song born from the earthquake by junior high school students, a Japanese drum performance in memory of the deceased and for the recovery of the disaster-hit area and music performances on stage. Radio FMYY broadcasts live radio coverage of these memorial events as well as talks about earthquake experiences and DRR activities with earthquake victims, specialists, local government staff, NGO staff and various artists from its outdoor studio set up at the event venue.
**Case 14** DRR Taxi reporter (MBS, private radio, JAPAN)

A very unique activity of the MBS radio station is to train and to utilize so-called “DRR taxi reporters.” Currently, there are 50 DRR taxi reporters who have the responsibility to report on situations to the radio station when natural disasters occur and to explain about the importance of disaster risk reduction to passengers. These drivers are volunteers and have been trained by the station. In addition, these DRR taxies always have special equipment such as a first aid kit, a fire extinguisher, rope, jack, and saw in their boots for members of the public to deal with emergency situation.

**Case 15** Coordination with NGO (All India Radio, public radio, India)

In Andaman and Nicobar Islands, All India Radio and Save the Children aim to protect tsunami-affected children, their families and communities, to support recovery and rehabilitation, reducing vulnerability to future disasters. A 30-minutes-weekly radio program on children’s rights informs and raises children’s awareness on health, disasters, education and protection. There are popular songs, rhymes, jokes and puzzles that keep the young audience informed about how to live safely in a disaster-prone area. The program also took part in a radio interview on DRR to remember the tsunami 2nd anniversary day.

**Case 16** Film festival (Kairali, public TV, India)

Film Festival “Deconstructing Disasters” – an initiative between the humanitarian website and the Kerala Independent Fishworkers Federation, Kairali TV, Amrita TV in Kerala Sate, India. From October 1st to 30th, five south Indian cities (Bangalore, Thiruvananthapuram, Chennai, Kanyakumari and Mumbai) held film festivals which were also broadcasted on the local TV stations (Kairali TV and Amrita TV). These were followed by discussions with filmmakers at select venues at different times. In order to raise public awareness on natural disasters and rehabilitation, the films focused on preparedness, rehabilitation and rights not only on the tsunami, but also on issues such as the recurring floods in Bihar, drought in Orissa and the earthquake in Gujarat The films featured stories of people coping with these disasters even after their lives had been torn apart. They addressed the economics, politics and ecology of disasters, as well as the humanitarian agencies' response to disasters, probing their efficacy and the challenges involved.

**Case 17** DRR education handbook

(Yomiuri TV, private TV & Yomiuri Shimbun, private news paper company, Japan)

I Cooperating with Board of Education in Kobe city, the station and the company created the DRR handbook, “Bringing happiness” and visual materials for school children in order to pass down the experiences of earthquake to the next generation. The main staffs producing the handbook are volunteers, and thus have enthusiasm to tell how the Great Hanshin-Awaji earthquake was terrible and what people can do to cope with future disasters.
Case 18  **Earthquake car** (NHK Kobe, public TV, Japan)

The TV station provides people, especially children with the opportunity to virtually experience an earthquake by utilizing an “earthquake car,” which is designed to experience the same tremor that occurred during the Kobe Earthquake. The experience is possible to makes people realize that the earthquake is fearful disaster and thus it is important to prepare for the disaster to save people’s lives.

Case 19  **Producing audio data on disasters** (FM YY, community radio, Japan)

When a natural disaster occurs in other regions, Radio FMYY provides information support to foreign residents, etc in the area who cannot understand the local language. With this experience, Radio FMYY works on the production and promotion of audio data for radio broadcasting in times of disaster, in 6 languages for foreign residents living in Japan when a natural disaster occurs, and audio data in 9 languages (English, Chinese, Thai, Tagalog, Indonesian, Vietnamese, Spanish, Portuguese and Russian) for radio stations in developing countries to assist them in providing quick and easy information support to local residents in times of natural disasters. The audio data was produced with the cooperating of JICA Hyogo DRLC (Japan International Cooperation Agency, Disaster Reduction Learning Center).

Networking

Case 20  **Networking with other stations** (FM YY, community radio, Japan)

January 17, the anniversary of the Great Hanshin-Awaji Earthquake, is an important day that the residents of the area, not to mention, the whole nation can never forget. Throughout the country, seminars, workshops, etc. on such themes as disaster-relief, post-disaster reconstruction, DRR are held. However, as time passes, the number of these events has decreased. In order to prevent the experiences of the earthquake from being forgotten, Radio FMYY produces programs that pass on the lessons learned from the earthquake to enhance residents’ DRR awareness, and it also provides other community radio stations with these programs. On top of this, Radio FMYY provides live coverage of events in the disaster-hit area, on January 17, by telephone to a number of radio stations.
There is an international NGO with around 4,000 community radio stations worldwide as members. It is both a grassroots activist network and an institution recognized by the United Nations system. Its goal is to support and contribute to the development of community and participatory radio along the principals of solidarity and international cooperation. Through service to members, networking and project implementation, the World Association of Community Radio Broadcasters AMARC, brings together a network of more than 4,000 community radios, Federations and community media stakeholders in more than 115 countries.

The main global impact of AMARC since its creation in 1983 has been to accompany and support the establishment of a worldwide community radio sector that has democratized the media sector. AMARC advocates for the right to communicate at the international, national, local and neighbourhood levels and defends and promotes the interests of the community radio movement through solidarity, networking and Cooperation.

**Role of Community Radio at times of Natural Disaster**

The Asia Pacific regional office of AMARC organized training workshops on the role of community radios in poverty alleviation and disaster management in Yogyakarta, Indonesia. The workshop on the role of community radio in Disaster Management was held in October, 2008. 42 participants from Indonesia, the Philippines, East Timor, Japan, Fiji Islands, Pakistan, Bangladesh, India, and Nepal representing the community radio sector, NGOs/donors supporting community radio, government delegates, development workers and radio activists participated in the workshops.

This workshop addressed three key concerned areas:

1) How can community radio ensure safety of their resources at times of disaster and quickly come back into operation following a disaster;

2) How best can community radio help or assist in the immediate relief of those affected by natural disaster;

3) What role can community radio play in the longer term rehabilitation and rebuilding of the community?

After extensive deliberations and discussions on the three issues, the workshop concluded with the preparation of guidelines, recommendations and a pledge document for safe guarding community radio stations during disaster to be followed by the radio stations to ensure better preparedness. A task group was formed from among the participants to coordinate and finalize these guidelines.
**Disaster Readiness (Pre-disaster Preparation)**

<table>
<thead>
<tr>
<th>External - Preparation and Planning</th>
<th>Internal - Preparation and Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Broadcast programs to raise people's awareness of disaster prevention measures</td>
<td>• Back up important documents and files (including audio content) and store in a safe location</td>
</tr>
<tr>
<td>• Develop networks with local Disaster Management and Response (DMR) NGOs, local government and key stakeholders: hold regular meeting with them</td>
<td>• If possible, place a set of minimum broadcast equipment such as a microphone, tape/CD player, transmitter and antennae in a safe location</td>
</tr>
<tr>
<td>• Develop news sources in emergency situation</td>
<td>• Training of on-air personnel - what and how to broadcast</td>
</tr>
<tr>
<td>• Liaise with community leaders</td>
<td>• Plan radio programs to raise people's awareness of disaster prevention</td>
</tr>
<tr>
<td>• Publicise station frequency</td>
<td>• First aid training for station personnel</td>
</tr>
<tr>
<td>• Broadcast public planning meetings</td>
<td>• Technical preparedness (generator, APS, securing transmitter.....)</td>
</tr>
<tr>
<td>• Outreach to the elderly, women, children, mentally and physically disabled people, as well as other marginalised and other vulnerable groups</td>
<td>• Guidelines for managing staff and volunteers</td>
</tr>
<tr>
<td>• Arrange emergency drills in the community</td>
<td>• Arrange emergency drills in the station</td>
</tr>
<tr>
<td>• Encourage stockpiling of (hand –powered) radio receivers</td>
<td>• Develop a contact list and post in station</td>
</tr>
<tr>
<td>• Compile local knowledge on signs of impending disaster and share it with community</td>
<td>• Map community (ethnicity, religion, race, culture, vulnerability)</td>
</tr>
<tr>
<td>• Prepare pre-recorded Emergency Response Announcements and scripts and post in the studio</td>
<td></td>
</tr>
</tbody>
</table>

**Emergency Response (During Emergency)**

<table>
<thead>
<tr>
<th>External – On Air</th>
<th>Internal – Behind the Scenes</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Broadcast pre-prepared announcements</td>
<td>• Ensure safety of all station personnel</td>
</tr>
<tr>
<td>• Broadcast emergency public meetings</td>
<td>• Call station briefing meeting</td>
</tr>
<tr>
<td>• Broadcast emergency evacuation announcements</td>
<td>• Notify CR networks of status</td>
</tr>
<tr>
<td>• All announcements broadcast in a reassuring and calm manner</td>
<td>• Monitor all official announcements and activities of national government, local government and aid agencies(NGOs)</td>
</tr>
<tr>
<td>• Dispel myths and rumours and provide timely and accurate updates</td>
<td>• Enact station evacuation plan if needed</td>
</tr>
<tr>
<td>• Broadcast updates on damage situation</td>
<td>• Log all communications for reference</td>
</tr>
<tr>
<td>• Produce programs in which victims can express themselves</td>
<td>• Stay calm</td>
</tr>
<tr>
<td>• Establish contact with the meteorological office and broadcast weather information</td>
<td>• Divide information work so that all voices of the community can be heard and not just male leaders.</td>
</tr>
</tbody>
</table>

**Recovery and Rehabilitation (Post Disaster Responses)**

<table>
<thead>
<tr>
<th>External – Networking and Support</th>
<th>Internal – Evaluation and Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Broadcast pre-prepared announcements</td>
<td>• Decentralise and copy important documents</td>
</tr>
<tr>
<td>• Broadcast programs to heal victim’s psychology trauma. Interview trauma counsellors, monks, Imams and priests</td>
<td>• Call meeting of all personnel to debrief</td>
</tr>
<tr>
<td>• Broadcast recovery announcements</td>
<td>• Monitor all official announcements and activities of national government, local government and aid agencies(NGOs)</td>
</tr>
<tr>
<td>• Cooperate with DMR NGOs, local government and key stakeholders</td>
<td>• Evaluate response and update guidelines</td>
</tr>
<tr>
<td>• Broadcast recovery public meetings</td>
<td>• Check physical infrastructure and repair damage</td>
</tr>
<tr>
<td>• Provide call in or talk-back programs for people to people interactions</td>
<td>• Log all communications for reference</td>
</tr>
<tr>
<td>• Broadcast positive entertainment programming</td>
<td>• Update preparedness and response manuals as required</td>
</tr>
<tr>
<td>• Establish Information Support Centre for information sharing and logistic distribution</td>
<td></td>
</tr>
</tbody>
</table>
Radio FM YY is a community radio station established by the residents themselves immediately after the Great Hanshin-Awaji Earthquake in 1995 to provide disaster information to victims of the earthquake. Broadcasts were especially directed toward foreign residents who did not understand Japanese and in their native language.

The terrible disaster caused by the Great Hanshin-Awaji Earthquake, the likes of which had never been experienced before, resulted in great damage to the lives of minority peoples in the area. Many foreigners who lived as residents in the community suffered more than the Japanese. One reason for this was that most of the information provided at that time was in Japanese only. Foreigners not only suffered from the language barrier but also from a mental barrier and system barrier. These problems that had been left unattended became urgent and foreign residents were suddenly faced with them. To improve this situation and help the foreign community, the multicultural / multi-language community radio station FM YY was established by residents themselves.

It was discovered that these activities by Radio FM YY provided more detailed information to citizens than the larger mass media radio and TV stations, etc. This led to community radio stations springing up here and there. As a result of these people’s participation-type community radio stations being established, bonds within communities became stronger which in turn led to an increase in community DRR capabilities.
Tips for disaster risk reduction

- **Earthquake**
  - You can’t act immediately when an earthquake occurs while sleeping.
  - Before sleeping, it is important to prepare a flashlight, glasses, and slippers at bedside.
  - As a preparation, drinking water should be stocked.
  - Fix heavy furniture such as a bookshelf and a chest.
  - Protect yourself from the obstacles falling down on you.
  - Maximum length of an earthquake is around one minute.
  - After an earthquake stops, make sure to extinguish any fires.

- **Tsunami**
  - Once you feel an earthquake at the seaside, stay away from the sea and immediately run for higher ground.
  - A tsunami is fast (as fast as 800km/h at the deep sea level) and it has a long wave; therefore, it is hard to be recognized from the land.
  - The speed of a tsunami can be faster than that of bullet train.
  - First tsunami doesn’t mean the highest wave, and the second wave may be higher than the first.
  - A tsunami may continue to surge into the shore for several hours.

- **Flood**
  - In times of adverse weather conditions, always listen to the official warnings issued by local authorities and news reports on the local television or radio.
  - Prepare and discuss the details of local flood hazard map with the involvement of other community members.
  - When there is heavy rain warning, stay away from rivers and canals.
  - If it is flooded when you go outside, use a long stick to check obstacles underwater.

- **Storm**
  - As a preparation for a blackout, a flashlight, candles, portable radio and water should be stocked.
  - Close windows firmly, and if needed reinforce the windows.
  - Check the roof for loose sheeting or loose nails. Use spiral thread nails for repairs.
  - Make sure to bind TV antenna tightly, so that it is not blew away by the strong wind.

- **Drought**
  - Pay attention to plants near normally wet areas such as low areas.
  - Do not destroy natural vegetation.
  - As a preparation, drinking water should be stocked.
Sources and Knowledge

Global Open Learning Forum on Risk Education (GOLFRE)
http://www.seedsindia.org/golfre/Index.aspx

UNDP Bureau for Crisis Prevention and Recovery

United Nations World Meteorological Organization (UN WMO)
http://www.wmo.ch/pages/index_en.html

UN Office for Coordination of Humanitarian Affairs (UN OCHA)
http://ochaonline.un.org/

Asian Disaster Reduction and Response Network (ADRRN)
http://www.adrrn.net/index.html

Center for International Studies and Cooperation (CECI)

UN Educational, Scientific and Cultural Organization (UNESCO)
http://portal.unesco.org/en/

UN Economic and Social Commission for Asia and the Pacific (ESCAP)
http://www.unescap.org/esd/water/disaster/

The International Federation of Red Cross and Red Crescent Societies
http://www.ifrc.org/note.asp

World Bank Global Facility for Disaster Reduction and Recovery
http://gfdrr.org/index.cfm?Page=home&ItemID=200

The Inter Action Risk Reduction Working Group
http://www.interaction.org/disaster/riskreduction.html

National Disaster Coordination Council (NDCC)
http://ndcc.gov.ph/home/

Global Risk Identification Program (GRIP)
http://www.gripweb.org

World Bank Hazards Management Unit

The International Federation of Red Cross and Red Crescent Societies
http://www.ifrc.org/note.asp
# Contact Lists

## National

<table>
<thead>
<tr>
<th>Name</th>
<th>HP</th>
<th>Address</th>
<th>Telephone</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Disaster Management Center</td>
<td><a href="http://www.ndmc.gov.mv/">http://www.ndmc.gov.mv/</a></td>
<td>Majeedhee Magu</td>
<td>+960 3333431</td>
</tr>
<tr>
<td>Department of Meteorology</td>
<td><a href="http://www.meteorology.gov.mv/">http://www.meteorology.gov.mv/</a></td>
<td>Hulhulé 22000, Republic of Maldives</td>
<td><a href="mailto:nmc@meteorology.gov.mv">nmc@meteorology.gov.mv</a></td>
</tr>
<tr>
<td>Ministry of Housing, Transport and Environment</td>
<td><a href="http://www.biodiversity.mv/environment/">http://www.biodiversity.mv/environment/</a></td>
<td>3rd floor, Fen Building, Ameenee Magu, Malé 20156, Republic of Maldives</td>
<td>+960 332 4861</td>
</tr>
<tr>
<td>UNICEF Maldives Office</td>
<td><a href="http://www.unicef.org/maldives/">http://www.unicef.org/maldives/</a></td>
<td>UN Building Railydhebai Higun, Republic of Maldives</td>
<td>+960 3343 321/ 3343 344</td>
</tr>
</tbody>
</table>

## International (Disaster Risk Reduction)

<table>
<thead>
<tr>
<th>Name</th>
<th>HP</th>
<th>Address</th>
<th>Telephone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian Disaster Reduction Center (ADRC)</td>
<td><a href="http://www.adrc.or.jp/index.php">http://www.adrc.or.jp/index.php</a></td>
<td>Hitomiiran 5F, 1-5-2 Wakinohamakaigan-dori, Chuo-ku, Kobe 651-0073, JAPAN</td>
<td>(81) 78-262-5540</td>
</tr>
<tr>
<td>Asian Disaster Preparedness Center (ADPC)</td>
<td><a href="http://www.adpc.net/v2007/">http://www.adpc.net/v2007/</a></td>
<td>SM Tower, 24th Floor 979/69 Paholyothin Road, Samsen Nai, Phayathai, Bangkok 10400 Thailand</td>
<td>(66-2) 298 0682-92</td>
</tr>
<tr>
<td>United Nations International Strategy for Disaster Reduction (UNISDR)</td>
<td><a href="http://www.unisdr.org/">http://www.unisdr.org/</a></td>
<td>International Environment House II, 7-9 Chemin de Balexert, CH 1219 Chatelaine, Geneva 10, Switzerland</td>
<td>(41) 22 917 8908/8907</td>
</tr>
</tbody>
</table>

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55
| **SEEDS Asia** | HP: http://www.seedsasia.org/  
Address: 2-11-21-401 Okamoto, Higashi Nada-ku, Kobe 6580072 Japan  
Telephone: +81 78-766-9412 |
| --- | --- |
| **SEEDS India** | HP: http://www.seedsindia.org/  
Address: 15/A First Floor, Institutional Area, Sector-IV, R.K. Puram, New Delhi-110022, India  
Telephone: +91-11-26174272 |
| **The InterAction Risk Reduction Working Group** | HP: http://www.interaction.org/disaster/riskreduction.html  
Address: 1400 16th Street NW, Suite 210, Washington, DC 20036, USA  
Telephone: +202 667-8227 |
| **National Institute of Disaster Management (NIDM)** | HP: http://www.nidm.net/  
Address: Ministry of Home Affairs, I.P. Estate, Ring Road 110002, New-Delhi, India  
Telephone: +91 11 2370 2432 |
| **National Alliance for Disaster Risk Reduction** | HP: http://www.nadrrindia.org/about.html  
Address: NADR Secretariat, c/o SEEDS 15 A, DMA Building, Sector 4, R.K. Puram, New Delhi – 110063, INDIA  
Telephone: +91 11 26174572 / 4272 |
| **All India Disaster Mitigation Institute (AIDMI)** | HP: http://www.southasiadisasters.net/  
Address: 411, Sakar Five, Near Nataraj Cinema, Ashram Road, Ahmedabad 380009, Gujarat, India  
Telephone: +91 79 2658 6234 |
| **National Disaster Management Authority (NDMA)** | HP: http://ndma.gov.in/  
Address: NDMA Bhawan, A-1, Safdarjung Enclave, New Delhi - 110 029 India  
Telephone: + 91-11-26701700 |
| **Gujarat State Disaster Management Authority (GSDMA)** | HP: http://gsdma.org/  
Address: Gujarat State Disaster Management Authority Block No. 11, 5th Floor, Udyog Bhavan, Gandhinagar 382 017, Gandinagar India  
Telephone: + 91 79 2325 9220 |
| **South Indian Federation of Fishermen Societies (SIFFS)** | HP: http://www.siffs.org/  
Address: SIFFS Central Office 695 002, Karamana, Trivandrum, Kerala, India  
Telephone: + 91 471 2343711 |
| **Swayam Shikshan Prayog (SSP)** | HP: http://www.sspindia.org/  
Address: 101, 1st Floor, Baptista House No. 76, Gaothan Lane No. 1, Behind Paaneri Showroom, S.V. Road, Andheri West, 400 058. Mumbai, India  
Telephone: + 91 2222907586 |
International Federation of Red Cross and Red Crescent Societies
HP: http://www.ifrc.org/
Address: P.O. Box 372 CH-1211 Geneva 19 Switzerland
Telephone: +41 22 730 42 22

International (Media)

Asia-Pacific Broadcasting Union (ABU)
HP: http://www.abu.org.my/
Address: 2nd Floor, New IPTAR Bldg., Angkasapuri, 50614 Kuala Lumpur, Malaysia
Telephone: +60-3-2282-3592

World Association of Community Radio Broadcasters (AMARC)
HP: http://www.amarc.org/
Address: 705 Rue Bourget #100, Montreal, Quebec, H4C 2M6, Canada
Telephone: +1-514-982-0351

World Association of Community Radio Broadcasters, Asia-Pacific Regional Office
HP: http://asiapacific.amarc.org/
Address: GPO #3887, Kathmandu Nepal
Telephone: +977-1-5521696

International Center for Journalists
HP: http://www.icfj.org/
Address: 1616 H Street NW, Third Floor, Washington, DC 20006, USA
Telephone: +1-202-737-3700

InterNews
HP: http://www.internews.org/
Address: P.O. Box 4448, Arcata, CA 95518-4448 USA
Telephone: +1 707 826-2030

References
NPO P.R Improvement Committee (2004) Tsutaeru Kotsu –NPO no Kouhou wo Kangaeru 15 no Hinto- (Tips of P.R -15 Hints to consider NPO P.R-).
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Makoto Yasutomi (Yomiuri Shimbun)
Masaru Kawanishi (Yomiuri Shimbun)
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