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**6-2 Activities for the Enhancement of the Disaster
Prevention Awareness and Distribution of Knowledges
on Disaster Prevention in Japan**



Japan International Cooperation Agency

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Disaster Prevention Bureau

National Land Agency
Prime Ministers Office

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1. Action and the Disaster Prevention Awareness of Citizens

(1) The direction of disaster prevention awareness in JAPAN

In order to prevent disasters and to minimize damages when a disaster occurs, distribution of disaster preventive knowledge and enhancement of disaster prevention awareness are important.

Mainly based on the "Study of the consensus of opinion concerning disaster prevention" conducted by the Prime Minister's Office in July, 1989 (hereafter abbreviated as "Prime Minister Office Study"), recent concerns of our people concerning disaster prevention, and the extent of the distribution disaster preventive knowledge, and their voluntary preparation and awareness for disaster prevention are explained as follow:

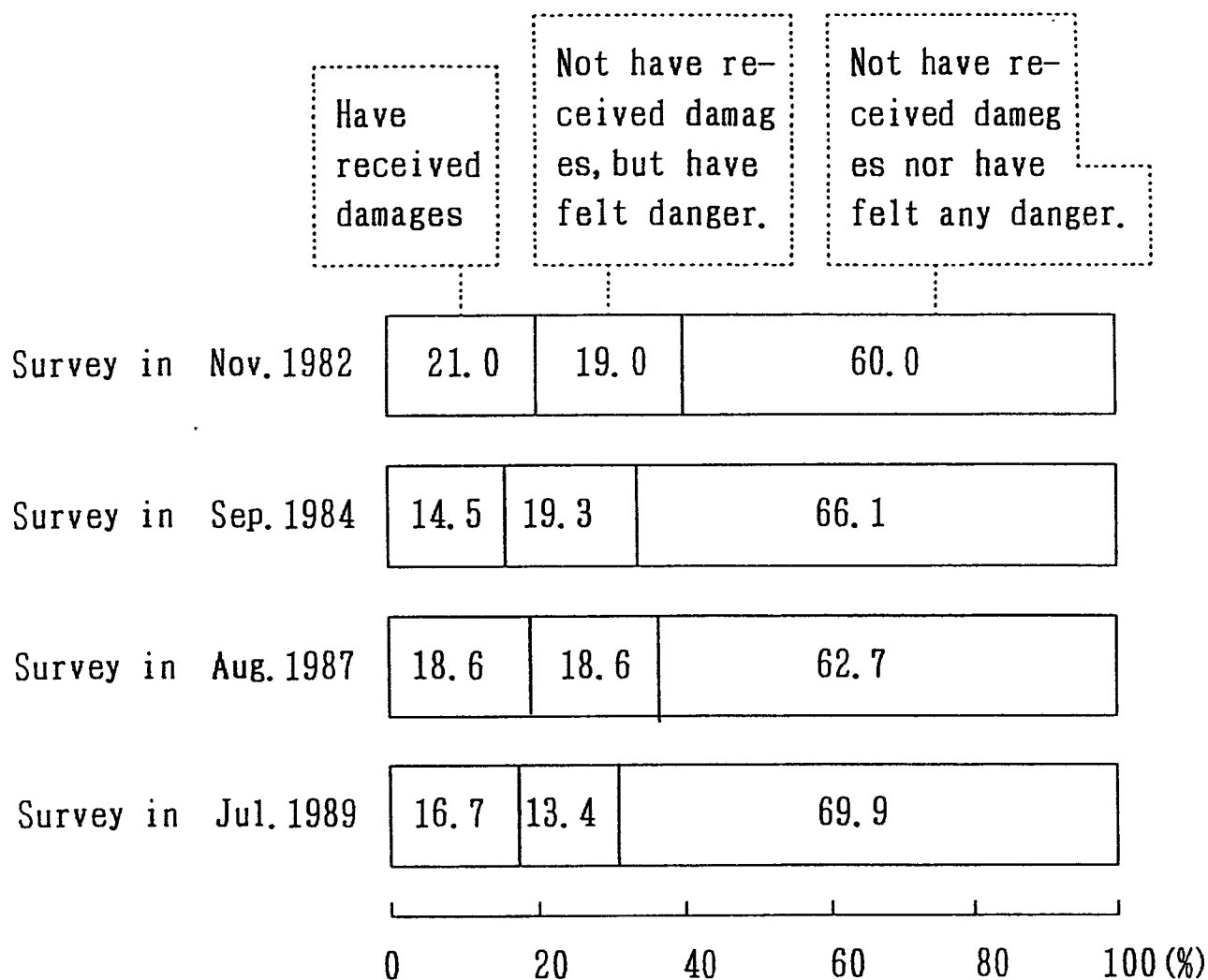
1) Disaster Awareness

Japanese people's awareness of disaster prevention is said to be enhanced when their memories of experienced disasters or their memories of the reports of large disasters are still vivid. Fortunately in JAPAN, there have not been any large disasters recently when compared with the past. Under such circumstances, and while there are still fair number of people feeling doubtful about the safety of places where they live, a considerable number of people are not enthusiastic toward participation of disaster prevention activities. To rouse their active concern about their own safety and to urge their participation in disaster preventive activities are considered important.

a. Decrease of those who experienced disasters

Those who answered "to have received damages" represent 16.7% of the total, and those who answered "to have experienced the feeling of danger" represent 13.4%. This means that only 30% of the total have experienced a disaster, this percentage is the lowest in the past (Figure 1). The percentage of younger people within the range of 20 to 29 years old, who have experienced a disaster fell down to below 20%, which reflects the fact that no serious disaster has occurred in recent years. (Table. 1)

(Figure 1) Experience of disaster damages



(Table 1) Disaster experiences among younger people. (%)

20~29 years old	Have received damages	Have felt danger nearby	Have not felt danger nearby
Survey in 1982	10.1	17.3	72.6
Survey in 1987	12.8	16.0	71.2
Survey in 1989	6.1	12.3	81.6

b. Recognition of the residential area safety

According to the survey whether people feel that their place of residency is safe, the answers were 68.1% for "safe", and 14.4% for "dangerous" (Table, 2). When viewed by the classification of the scales of cities, and the percentage of those who felt "safe" was lower in large cities, and the percentage of those who felt "dangerous" was the highest in central district of Tokyo called "ku" (ward) area.

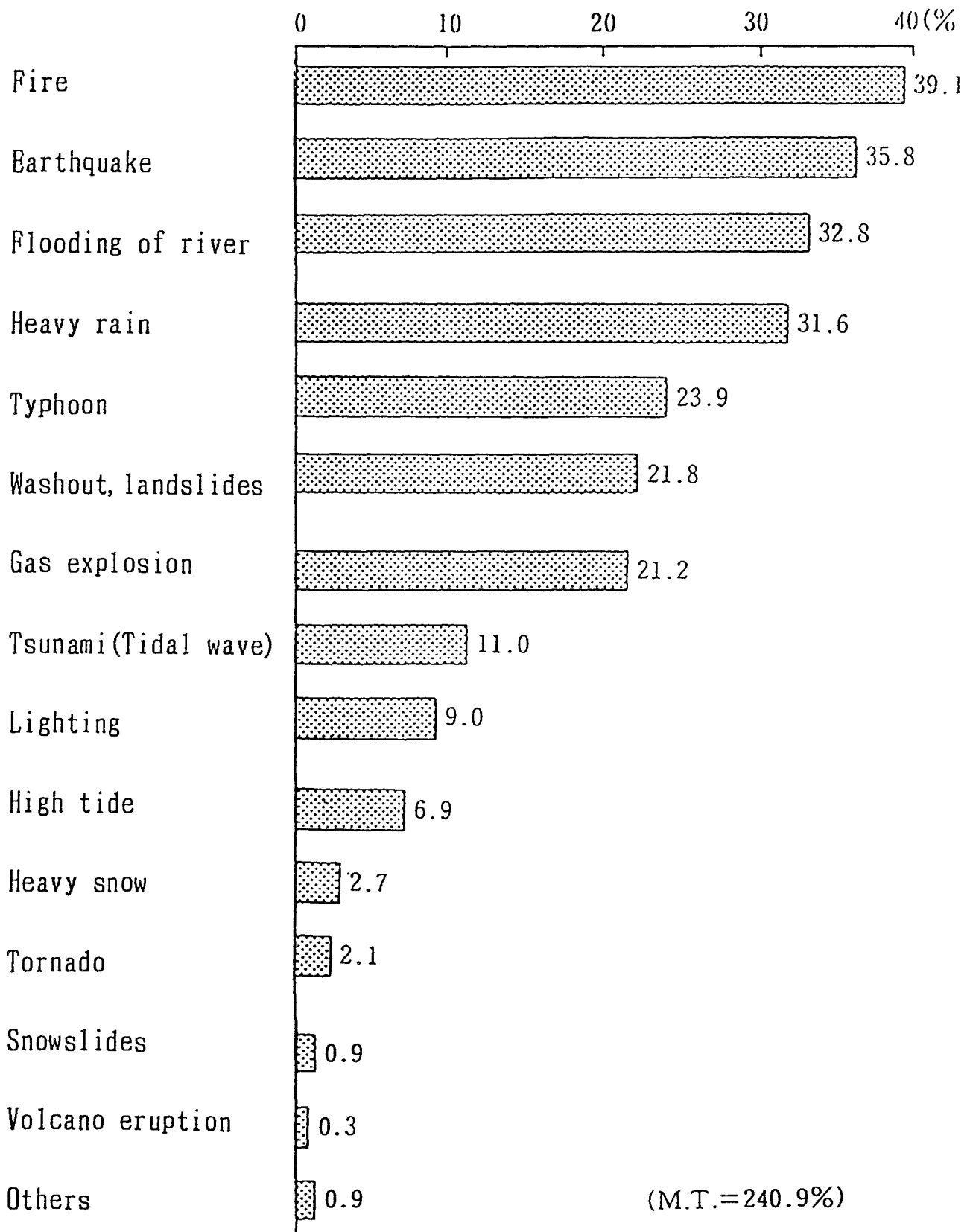
Main types of disasters which caused citizens to feel "dangerous" were fires, earthquakes, flooding of rivers, heavy rains and others (Figure 2).

(Table 2) Safety of living quarter against disasters

	* Safe	Cannot Say either safe or dangerous	** Dangerous	Do not know
Total	68.1	14.7	14.4	2.8
(Classified by the scale of city)*				
1. Large cities of which central district of Tokyo	59.5	21.8	14.9	3.9
2. Medium-size cities	56.7	23.3	17.3	2.7
3. Small cities	71.1	12.9	13.4	2.6
4. Towns and villages	67.8	15.0	14.6	2.6
	70.9	11.4	15.5	2.1
* "Safe" plus "safe to a certain extent." ** "Dangerous" plus "dangerous to a certain extent."				

(Figure 2) Disaster that feel dangerous

(Many answers were sought from 335 persons who answered "dangerous to a certain extent" and/or "dangerous".)



c. Participation in disaster prevention activities

Disaster preventive exercises are carried out in various places during "Disaster Prevention Week" from August 30 to September 5 of every year. Also during fire prevention periods in the spring and autumn, various self-governing communities and autonomous disaster prevention organizations conduct a number of exercises and other events.

According to the survey carried out by the Prime Minister's Office, those who have the experience of participating in fire prevention exercises represent 39.8% of the population, and according to the survey made in 1987, those who have the experience of participating in disaster prevention exercises were 30.3%.

In both cases, the participants have not reached one half of the total population. Those who do not wish to participate in fire prevention exercises and disaster prevention exercises represent 28.3% and 12.5% respectively, and indicate a necessity to further enhance the awareness of those who are less interested in disaster prevention.

2) Problems for the the enhancement of disaster prevention awareness and distribution of Information

Through various opportunities, activities for the upsurge of disaster prevention awareness and distribution of disaster prevention knowledge have so far been conducted, and their effects are being attained although slowly. In order to make these activities more effective, the following problems will have to be taken into consideration

a. Disaster prevention awareness among the young generation still remaining at a lower level comparatively

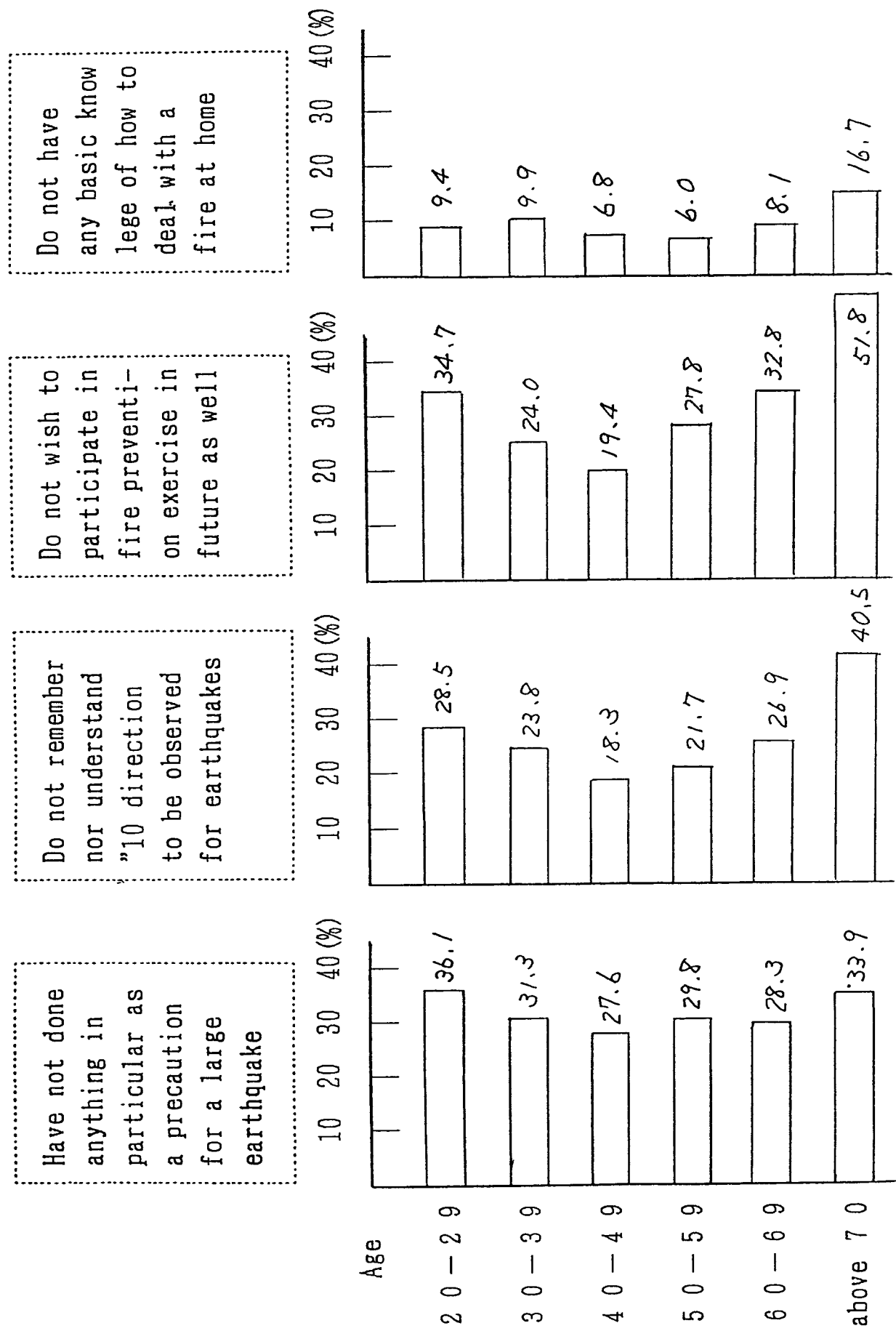
According to the survey made classified by age, it shows that those at the ages of 20 to 29 reply that they "do not do anything as a precaution for earthquakes" at the highest percentage compared with other ages. their knowledge of the 10 directions for earthquakes diasaster prevention to be observed and Their

participation in fire prevention exercises are likewise low (Figure 3).

While the nation as a whole shows higher degree of disaster prevention awareness and preparedness for disaster, a Lower recognition of disaster prevention awareness among young people who should be the main thrust of the society in the future, this is matter of grave concern to be solved.

As they are less experienced in nearby disasters, efforts must be made for the distribution of disaster prevention knowledge and the enhancement of disaster prevention awareness for them.

(FIGURE 2) DISASTER PREVENTION AWARENESS AND KNOWLEDGE, UNCORRELATED BY AGE.



b. Disaster Prevention knowledge of senior citizens

Senior citizens have a higher percentage of having encountered disasters compared with other ages, but in other respects, they cannot be considered to be well prepared for disasters.

Under the circumstances where the increase of the aged is expected, countermeasures relative to the aged who are weak in case of a disaster are very important. Together with the improvement of hardware including the provision of facilities for those who are weak for disasters, countermeasures in the software, such as neighborhood mutual aid system of locality, enhancement of their own adaptation capability through distribution of disaster prevention knowledge and enhancement of disaster awareness, etc. are required.

c. Request for participating in disaster prevention activities to be made easier.

Those in the ages of 30 to 59 are more prepared for earthquakes and are more experienced in participation in fire prevention activities. More than 20% of those under these ages are, however, do not wish to participate in fire prevention activities in the future. As their reasons, over 50% of male show lack of time.

According to the survey made by Tokyo Fire Department in August, 1989, participation of male office workers when classified by occupation, and single household when classified by types of households are low for disaster prevention experiences and fire prevention meetings. As of 1988, both husbands and wives have jobs in 32.9% of modern family household. They have difficulties in participating in disaster prevention exercises or lectures when they are held on weekdays at places of their residence.

In accordance with the survey made by Tokyo Fire Department, full time workers, both male and female, wish disaster prevention exercises to be conducted at their jobsites held at the company. Disaster prevention activities should therefore be held in manners easier for them to attend. Aside from exercises or meetings for distribution of disaster prevention information to be held at places of residence the same as before, there must be opportunities that these are also held at jobsites

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such as class guidance and school events, and in collaboration with relative lessons such as science and civic courses, future guidance is being given.

Disaster prevention education is given at schools, at home, at autonomous disaster prevention organizations and disaster prevention centers, etc. in various forms. By taking all possible opportunities, the places where disaster prevention education can be given must be further increased. In order to make this education more effective, utilization of multi-function media, such as TV, and teaching materials available nearby their locations, which can be used for promotion of attitude, interest and motivation concerning disaster prevention, and other from of education to promote spontaneity, need to be further promoted.

Experiment, demonstration, simulation and use of other the media to attract interest and attention are likewise useful for disaster prevention education.

2. Enhancement of the Disaster Prevention Awareness and Distribution of Information on Disaster Prevention in Japan

(1) Designation of Disaster Prevention Week and Disaster Prevention Day

In Japan, September 1st every year has been designated as Disaster Prevention Day from the year 1960, and the week including Disaster Prevention Day as Disaster Prevention Week in 1982.

In September of 1959, the year previous to the year in which Disaster Prevention Day was designated, the Typhoon Isewan traversed the main land and caused the unprecedented flood damage involving more than 5,000 persons killed or missing, mainly in the Tokai District. The day of September 1st being amidst the typhoon season and also the memorable day of the Great Kanto Earthquake in 1923, the Government designated the day as "Disaster Prevention Day" for the purpose of implementing a comprehensive system of disaster prevention with the programs for enhancing the people's awareness of disasters from typhoons, earthquakes, floods and fires and for disaster prevention exercise, inspection of disaster preventive equipment and maintenance of information and communications.

Thereafter, various activities were developed every year on and around the Disaster Prevention Day. Then, in 1982, one week including the Disaster Prevention Day of September 1st, was also designated as the "Disaster Prevention Week" in order to further arouse the concern of not only the disaster prevention administrative officials but the people in general for disaster prevention. Also this done to improve and strengthen the provisions against disasters and thus contribute to the prevention of disasters before they occur and reduce the damage.

(2) Disaster Prevention Week Events

During the period of Disaster Prevention Week, various events including the comprehensive exercise for disaster prevention and those befitting to the purpose of the disaster prevention week as listed in the following, are carried out from area to area according to the actual circumstances through close cooperation of the central government, local governments, organizations

concerned with disaster prevention and other related organizations.

1) Disaster prevention fairs and other exhibitions

As a main event in the Disaster Prevention Week, the disaster prevention fair is listed. The National Land Agency has held, through co-sponsorship with the local cities, the disaster prevention fairs during the period of Disaster Prevention Week every year since 1982 at the department stores where people gather. The Metropolitan Government has also held the disaster prevention fair during this period. These fairs have been successful, and the visitors to the fairs are well over 150,000 persons every year, and they are going to increase from year to year.

At these disaster prevention fairs, "Let's protect our home and town" is taken as a main theme. Disasters occurring in the past are introduced with panels and videos, while the disaster prevention systems of the central and local governments, updated meteorological observation and weather forecast systems using meteorological satellites and radars and disaster prevention measures for electricity, gas and other lifeline facilities, are plainly exhibited and introduced. Also, with a stage provided at the place of such a fair, a quiz program on disaster prevention, performance of the fire brigade band, puppet show, mini-concerts by talents and other famous persons, and a demonstration of first-aids are produced for the purpose of providing know-how of disaster prevention, and these events are very effective for the fair which is primarily intended to be "interesting to see," "visitors can readily participate" and "easily understand the disaster prevention measures."

2) Contest of disaster prevention posters

In order to have the people deepen the interests in disaster prevention, a contest of disaster prevention posters has been carried out every year since 1985 under the joint auspices of the National Land Agency and Conference for the promotion of Disaster Prevention Week. It invites the works of individual persons having, as a theme, "disaster prevention" or, more specifically, dreadfulness of, correct knowledge of, daily preparedness for, preparation at home against, or disaster prevention exercise for the natural disaster of

earthquakes, volcanic eruptions, typhoons, heavy rains and heavy snows, and including a motto suggesting the foregoing. Every year, there are more than 8,000 applications from school children to adults.

These works are preliminary examined by the teachers of arts at the primary, secondary and high schools and finally by the distinguished persons in the respective fields or talents and artists, and from these 4 art works are chosen. These excellent art works are used in the designs of the disaster prevention week PR poster and disaster prevention fair PR poster, and these posters are distributed to the prefectures, municipalities and organizations concerned with disaster prevention as one of the activities of the disaster prevention week, and are posted so as to catch the eyes of the people in general. Further, the prize winners are invited to the disaster prevention fair and commended at the fair by the Director General of National Land Agency.

3) Disaster prevention lectures

During the disaster prevention week, disaster prevention lectures are particularly held at the National Land Agency and many organizations concerned with disaster prevention. At such a lecture meeting, men with knowledge and experience, and disaster prevention administrative officials introduce, using texts and slides, the history of disasters occurring in the past in a particular area and the present conditions or circumstances of occurring disasters in recent years, and also the regional disaster prevention activities along with the preparations by individual persons against disasters.

4) Commendation of distinguished persons in the field of disaster prevention

To praise the organizations or individuals who have rendered particularly distinguished services for the promotion of the disaster prevention administration in Japan, and ask them for their continued cooperation for the promotion of the disaster prevention administration, the Director General of the National Land Agency honors them on the first day of the disaster prevention week, or August 30th, every year.

The commendation is made for the organizations or individuals who have endeavored for many years in the field of extending and enlightening the disaster prevention and disaster prevention thoughts and rendered particularly distinguished services.

In general, the commendation is made for about five cases including both organizations and individuals every year, for the distinguished services in the field of disaster prevention, testimonials and presentations are awarded.

5) Distribution of "disaster prevention week" through mass communications

In the disaster prevention week, information media such as television, radio and newspapers are used in addition to the disaster prevention week poster to distribute the disaster prevention week under the Government publicity activities and appeal to the importance of daily disaster prevention activities to the public.

Also, on the buildings of the government offices concerned with disaster prevention, they put up messages "Prepare for Typhoon and Earthquake" which are stretched out hanging during the period.

(3) Other PR Months and Weeks Concerning Disaster Prevention

In addition to the "disaster prevention day" and "disaster prevention week," there are various PR months and weeks established concerning the disaster prevention (Table 3) for the central and local governments to develop various PR activities.

(4) Disaster Prevention Campaigns through Mass Communications

1) Disaster prevention campaigns through newspapers and magazines

Newspapers and magazines as PR media are inferior in promptness to television and radio, but they feature over the television radio in (1) that they carry a large volume amount of information (for example, the language information of television news in 15 minutes is said to be of only 3 columns of a newspaper), (2) that they have a capacity of information analysis, judgment, evaluation and annotation as well as transmission of information, and (3) they can be seen any time, anywhere and as many times as we desire, and so they are extensively used as effective media for disaster prevention campaign.

In particular, many of the local governments conveniently utilize the PR bulletins they issue for their own ease of use. (Table 4).

(Table 4) Major PR Activities of Local Governments (1988)

	PR Bulletin	Lecture Meeting	News-papers	Television/ Radio	Total
Prefectures	31	62	28	158	279
Municipalities	1,210	352	331	599	2,492
Total	1,241	414	359	757	2,771

2) Disaster prevention campaigns by television/radio

As a PR medium, television has distinguished features in (1) that it can contain a quantity of information most readily, (2) it allows information in both voice and picture, (3) that it has information simultaneously transmitted to a number of persons and is, therefore, rich in topics, and (4) it directly penetrates to the respective homes so that the information is jointly possessed by the respective families and is thus intensified.

(Table 3) PR Months and Weeks Concerning Disaster Prevention Periods

Periods	PR Months & Weeks	Responsible Agencies
Feb. 28 - Mar. 6	Hill fire prevention exercises	Fire Defense Agency
Feb. 28 - Mar. 13	Fire movement in spring	Fire Defense Agency
May 1 - May 31	Flood control month	Ministry of Construction
Jun 1 - Jun 7	Slope collapse disaster prevention week	Ministry of Construction
Jun 1 - Jun 30	Landslope disaster prevention month	Ministry of Construction
	Sand disaster prevention month	Ministry of Construction
Nov. 9 - Nov. 15	Fire movement in autumn	Fire Defense Agency
Dec. 1 - Dec. 7	Avalanche disaster prevention week	Ministry of Construction

Radio has also been characterized in (1) that it has promptness similarly to television, (2) that it has information simultaneously transmitted to a number of persons and is, therefore, rich in topics, and (3) it is less costly than television. It is also advantageous in that the information is given to a very large number of persons through car radios.

The Fire-Defense Agency is offering a program titled "Do You Know? - Mini-encyclopedia on Disaster Prevention" on a nationwide network once a week according to the PR theme of the respective months for distribution and expanded awareness of the disaster prevention information.

Television and radio are also extensively used by the local governments as media for disaster prevention campaigns.

3. Method of Disaster Prevention Education

(1) Details of Disaster Prevention Education

Details of the disaster prevention education are varying depending on the purpose, object and time. For the local inhabitants, the education is intended for distribution to the vulnerable places of disasters, features, of disasters and cautions against disasters, and for the personnel of the plants and facilities and officials concerned with disaster prevention, the education is mainly comprised of training for the role and activities in the event of a disaster. In this way, the detail of the education is subject to vary depending on the personnel to whom the education is given (Table 5).

Details of the education also vary in the items to be taught or method depending on the type of disaster such as storm and flood, earthquake or "tsunami." In the case of a municipality having experienced a disaster in the past, it is important to incorporate the experience and lessons in the education as much as possible. Here, traditions orally handed down in a particular area concerning the disaster prevention sometimes served an important role in reducing the damage of a disaster in the area, but it would be necessary to examine if such traditions would be conforming to the present condition of the area.

(2)Media and Methods of Disaster Prevention Education

The media and methods for effectively carrying out the disaster prevention education should be considered according to the purpose, details and object of the education.

As a media of the disaster prevention education, there may be listed the print media such as pamphlets, notice boards and books on disaster prevention, image media such as slides, movies and videos, and voice media such as disaster prevention administration telecommunications. These media are respectively characterized in the volume of information contained, registration of information, representation, permeability and ease of preparation and use, and so they should be appropriately combined or chosen so that their advantages would be fully exhibited.

For implementation of the disaster prevention education, various methods are available. For example, texts and PR materials having the foregoing media properly combined may be used, or disaster prevention exercises, seminars and training meetings may be held, or the education may be through exhibitions and training at the Disaster Prevention Center, reference library and other facilities. Thus, disaster prevention education is appropriately carried out according to the objective.

(Table 5) Details of Disaster Prevention Education by Object
(Example of Yokohama City)

	Details	Methods and Media
Disaster prevention officials	<ul style="list-style-type: none"> • Knowledge on earthquake and "tsunami" • Knowledge on measures now taken as a countermeasure to earthquake disasters • Duties to be discharged by the officials • Knowledge on earthquakes in Tokai area <ul style="list-style-type: none"> • Character of the warning statement, and details of the disaster countermeasures • Measures upon issue of earthquake • Prediction information • Problems for the future earthquake disaster countermeasures 	<ul style="list-style-type: none"> • Training and exercise • Manual of disaster countermeasures
Citizens	<ul style="list-style-type: none"> • Knowledge on earthquake and "tsunami" • Preparations for earthquakes <ul style="list-style-type: none"> • Method of contacting the family • Fire preventive measures and methods • Injury preventive measures • Rules of conduct at the time of an earthquake (10 directions to be observed for earthquake disaster prevention) 	<ul style="list-style-type: none"> • Guidance at meetings of autonomous association, etc. • Rearing and strengthening of autonomous disaster prevention organizations • Distribution of disaster prevention handbooks, pamphlets and other PR materials
Infants, children and pupils	<p>Municipality, municipal board of education, kindergarten and schools extending education and guidance on earthquakes and other disasters with "Protecting Children from Disasters" as a main target.</p> <ul style="list-style-type: none"> • Method of sending children back home upon issue of a warning statement, method of protection and evacuation, and emergency measure upon the occurrence of a disaster • Knowledge on earthquakes and "tsunami" <p>Such disaster prevention education can also be made and distributed to parents.</p>	<p>Schools incorporate the specify actions or movements in disaster prevention exercises to be carried out for furthering the disaster prevention education.</p> <ul style="list-style-type: none"> • Preparation and distribution of disaster prevention handbooks • Use of audiovisual teaching equipment (TV, O.H.P. etc.)

(Table 6) Characteristics of Media for Disaster Prevention Education

Classification		Volume of information	Registration	Representation	High	Normal	Low
					◎	○	△
Print media	Pamphlet	◎	○	◎	○	◎	
	Notice board	○	○	○	○	◎	
	Disaster prevention book	◎	◎	◎	○	△	
	PR Bulletin	○	○	◎	◎	◎	
Image media	Slide	○	○	○	○	○	
	Movie	◎	◎	◎	◎	△	
	Video	◎	◎	◎	◎	△	
	OHP sheet	○	○	○	○	○	
Voice media	Disaster prevention telecommunications	△	△	○	◎	◎	
	PR car	△	△	○	◎	◎	
	Radio	△	△	○	○	○	

(4) Disaster Prevention Books

1) Disaster prevention books for the public in general

In Japan where earthquakes, storms and floods, heavy snows, volcanic disasters and fires have been recently occurring frequently, there have been a number of books published on disaster prevention which are designed for readers in general, and some of them are useful for educational purpose also. From the point of view of disaster prevention education, the books published by the local governments are playing an important role. For example, the municipalities that sustained damages from disasters, booklet of disaster records, literature and pictures have been prepared and distributed to the inhabitants, and in some cases, the disasters were for the first time kept on record. Also, there is a movement to excavate the records of earthquakes, storms and floods, and fires in the past, to compile a chronological book of disasters for use in the education of the local inhabitants on disaster prevention.

2) Disaster prevention books for children

Where the disaster prevention education is given to the children at a school or home or in a district, it is important to use an adequate disaster prevention book that matches the level of growth of the children. The children have a preference of the emotional acceptance for logical thought, and so it is desired to choose a good book on the part of giving the text and, at the same time, concurrently use other media than the print so that the education is effectively carried out.

Presently, in the absence of adequate textbooks specialized in disaster prevention, supplementary readers prepared by, for example, the board of education are often used at the schools, kindergartens and other places of education.

3) Other educational books on disaster prevention

The book compiled by the Metropolitan Fire Board is comprised of fourteen folk and true stories concerning disaster prevention including earthquake, fire and flood prevention. In the education of fire and disaster prevention,

it is intended to teach the lessons of disaster and resources of living to the readers in the form of non-fiction and thus serve for the improvement of the disaster prevention awareness of the readers.

After publication, this book had its contents developed into picture-card shows, braille brochures, compositions expressing the impressions of reading of the book and drawings at the primary and secondary schools.

Also, in the disaster-stricken areas, the children and pupils experiencing the disaster are often encouraged to write their account of the experience. Also in old days, after the "Great Kanto Earthquake" in 1923, the primary schools in Tokyo issued six volumes of "Earthquake Memorial Compositions."

Such a collection of compositions is effective for the children and pupils to remember the experiences of the disaster and have them enhance the awareness of disaster prevention. At the same time, by having the compositions read by the other children, they serve to teach the dreadfulness of disaster and importance of disaster prevention, and in this sense, such is useful disaster prevention education.

(5) Image Software

Software of the image media such as video and 16mm film designed for disaster prevention education for the people in general, is provided by the central and local governments, municipalities and organizations concerned with fire and disaster prevention and is used for enhancement of the disaster prevention-knowledge of people through the usual disaster prevention PR activities and disaster prevention exercises. Such media are produced, in many cases, upon entrustment to the commercial movie companies, and they extensively cover fires and earthquakes, to storms and floods. In Japan, the video media are increasing with the extension of equipment, but the 16mm films are still generally used.

For the video software designed for the infants and children, various videos are provided by the prefectural boards of education, NHK (Nippon Hoso Kyokai), television broadcasting stations, movie companies and the Association of Nonlife Insurance Companies, but the videos serving as teaching materials intended for systematic disaster prevention education are very few.

(6) Facilities for Disaster Prevention Education

The purpose of the disaster prevention education is to insure that upon occurrence of a natural disaster such as an earthquake, storm or flood, each inhabitant protects their life and that of their family, cooperates with the neighbors to protect the society and effectively acts to prevent the occurrence or expansion of a secondary disaster.

The bases for such a disaster prevention education must be classified according to the objects and details of education, and also they should be classified according to the roles for the disaster prevention in a particular area or, more specifically, by the prefectural inhabitants, autonomous disaster prevention organizations, children, persons in charge of disaster prevention in the companies, and disaster prevention officials of the prefecture and municipalities. It is desirable that the bases are permanently installed, and the expanded disaster prevention center, general disaster prevention center, community disaster prevention center and fire defense school are frequently used.

(Table 7) Educational Media To Be Provided at the Disaster Prevention Education Bases

	Educational Media
Visual	Textbook, slide, O.H.P.
Audio	Lecture meeting, training, lessons
Audiovisual	Video, 16mm film
Experience	Shaking car, smoke experience dome, first-aid dummy, fire extinguisher

(Table 8) Disaster Prevention Education Bases and Purpose

Bases	Sponsors	Training	Aims of education
Expanded disaster prevention center	Prefecture	Central leaders of autonomous disaster prevention organization	Exchange of information Bring up of leaders for expanded disaster prevention
General disaster prevention center	Prefecture	Inhabitants in general School children	Fundamentals of earthquake and disaster prevention and disaster prevention measures, extinguishing a fire at its initial stage, experience of an earthquake and smoke
Community disaster prevention center	Prefecture	School disaster prevention personnel	Cooperation with the local community Intensification of earthquake disaster prevention emergency measures
Municipal hall	Municipality	Disaster prevention council members Inhabitants	Improvement of disaster prevention knowledge and technology Enlightenment and intensification of disaster prevention awareness
Municipal hall	Municipality Prefecture	Leaders of autonomous disaster prevention organizations	Ditto
Fire defense school	Prefecture	Company personnel in charge of disaster prevention Fire fighting officers Volunteer fire fighting corps personnel	Disaster prevention knowledge, cooperation with the local community, intensification of earthquake disaster prevention emergency measures Updated information, specialized knowledge, law, fire fighting activities at time of disaster

1) Disaster prevention centers

For positively promoting the volunteer disaster prevention activities based on the awareness of the solidarity of the local inhabitants and to establish a disaster prevention system for the whole area, providing a facility serving as the base of activities of the autonomous disaster prevention organization, and it is designated as the community disaster prevention center.

Also, providing a facility which renders advanced disaster prevention education and exercises to the autonomous disaster prevention organization and stores disaster prevention materials and equipment for a wide area at normal times and has a function to serve as a relay and transport base of commodities when the relief activities are started upon the occurrence of a disaster, and it is designated for the expanded disaster prevention center.

For the exhibitions and educational equipment of the disaster prevention center, there may be listed the audiovisual equipment such as projectors, video and acoustic devices, disaster prevention materials and equipment for exhibition such as models and panels for disaster prevention education, seismic movement generating equipment, experiencing fire extinguishing equipment and telecommunication equipment.

Also, a facility functioning as a base of the local disaster prevention activities upon the occurrence of an earthquake disaster in an urban area and serving as a comprehensive disaster prevention base or the place of community activities including the creation of awareness, education and exercise on disaster prevention during normal times, and is designated as the general disaster prevention center. The center is generally of a fire-resistant construction with a flood area of about 3,000m². It is a rigid building withstanding vibration and fire at the time of an earthquake occurrence.

2) Disaster prevention museum

In Japan, museums specializing in disaster prevention are apparently few in that the disaster prevention itself is not adapted as an object of exhibition and that the concept of disaster prevention is subject to vary with the type of disaster so that the character of the museum is hardly determinable. However, in the general science museums, the fundamental sciences including

the mechanism of the occurrence of an earthquake generation, plate tectonics, and explanation of "tsunami," typhoon, high tide and snow, are introduced at the geography and science corners, and at the engineering corner, exhibitions connected with the actual society such as the principle of a seismicity and the difference between rigid and flexible structures are displayed as examples of the countermeasures of buildings for earthquakes, and the buildings which have recently advanced remarkably are displayed.

Also, a museum located in an area including an active volcano has the exhibitions made so as to indicate the conditions of damage in the past eruptions and observations for the prediction of an eruption so that they can attract the interests of the tourists from the other areas on one hand and give an alarm for future eruptions and thus serve for disaster prevention in the area on the other hand.

3) Disaster memorial hall

The disaster memorial hall is a building constructed for the purpose of handing down the disaster calamities by the articles left by the persons killed in the performance of their duties and pictures, photos, statistics and charts representing the disaster conditions, encouraging daily preparation against disaster and distributing the disaster prevention knowledge, along with preventing the recurrence of a disaster.

The memorial hall of the Great Kanto Earthquake is cited as typical for the museums having such a purpose.

(7) Lecture Meetings for People Vulnerable to Disasters

Sick or injured persons, physically handicapped persons, persons of advanced age, infants and foreigners are generally in a weak position in evacuation, etc., at the time of the occurrence of a disaster, and they are called the people vulnerable to disaster from the standpoint of disaster prevention. In Japan, the protection of these vulnerable people has been brought to the fore in recent years, and lecture meetings have been positively held at various places. At such lecture meetings, it is imperative that the education be made according to the features of the vulnerable people and the

means understandable for the these people (for example, chirology, braille and foreign languages), but within the framework of the administration, it is nearly impossible to provide the necessary hands and technology, and particularly for such an area, it is considered necessary to create a system according to which the cooperation of more disaster prevention volunteers are obtainable.

(8) Foreigners and Disaster Prevention Education

(In the Case of Minato-ku, Tokyo)

In Minato-ku, Tokyo, 60 embassies are located, and the foreigners registered number more than 11,000, accounting for about 6% of the population. The foreigners are generally not well acquainted with the Japanese language, and for those coming from the countries free from earthquakes, trembling of the ground is not understandable, and some are apt to feel excessive anxiety.

To reduce their anxiety and have them prepared so that they can take exact actions at the time of a disaster, the Minato-ku Administration has (1) issued the disaster prevention pamphlet in English, (2) presented the disaster prevention PR in the English version of the Administration Guide, and is (3) planning of the biligual (Japanese and English) broadcast on disaster prevention administrative telecommunications (upon occurrence of an earthquake of a magnitude of 5 or higher or when a warning statement is issued).

Also, for the foreign residents, there are some local governments trying to enhance their awareness of disaster prevention through participating in disaster prevention exercises, and in the case of Minato-ku, the integrated disaster prevention training in 1988 had the participation of about 500 foreigners for the emergency communication training, disaster rescue training, and fire extinguishing training.