Provisional Translation



Disaster Prevention and Reconstruction from a Gender Equal Society Perspective

- Lessons from the Great East Japan Earthquake -

From the "White Paper on Gender Equality 2012"

Cabinet Office, Government of Japan June 2012 The Cabinet annually submits to the Diet a report on the state of formation of a gender equal society and policies implemented by the Government (the White Paper on Gender Equality).

The 2012 White Paper has a special section devoted to providing analysis and proposal under the theme of "Disaster Prevention and Reconstruction from a Gender Equal Society Perspective."

Table of contents

| D | isaster Prevention and Reconstruction from a Gender Equal Society Perspective | 2 |
|---|---|----|
| | Section 1: Occurrence of the Great East Japan Earthquake | 3 |
| | Section 2: Situation and Circumstances of Affected People | 19 |
| | Section 3: Recover and Reconstruction Measures | 42 |
| | Section 4: Lessons from the Great East Japan Earthquake | 48 |

Gender Equality Bureau, Cabinet Office, Government of Japan 1-6-1 Nagata-cho, Chiyoda-ku, Tokyo 100-8914, Japan Tel: +81-3-5253-2111 URL : http://www.gender.go.jp/english_contents/index.html

Disaster Prevention and Reconstruction from a Gender Equal Society Perspective

One year and three months have passed since the Great East Japan Earthquake and subsequent tsunami hit the north-east coast of Japan, causing enormous damage and the loss of so many lives. Even today, many of those affected are still enduring inconvenient and comfortless living circumstances, as they continue to cope with the terrible sadness and emotional aftereffects of this unprecedented disaster. In Fukushima prefecture, in particular, the accident at the Fukushima Daiichi Nuclear Power Plant has caused significant anxiety and alarm.

Since then, the affected areas have been working to stabilize living circumstances as quickly as possible and to bring about a return to normal local life; various measures have been put in place in order to achieve this goal. While the response to this disaster continues, it is emergently required to improve and strengthen disaster prevention and mitigation measures in anticipation of a similarly large-scale event in the future.

This feature examines the Great East Japan Earthquake as it happened and government's response to the event from the perspective of a gender equal society. We also clarify any lessons that are of particular note in the context of implementing current or formulating future disaster prevention and recovery & reconstruction measures.

Feature Summary

Section 1: Occurrence of the Great East Japan Earthquake

- There were more female casualties than male in Iwate, Miyagi and Fukushima prefectures, and more than one quarter of all female casualties were aged 80 years or over.
- The survey targeted people affected by the earthquake and tsunami indicates that women obtained information on calls to evacuation from family members and neighbors and evacuated with other people, suggesting that women have a stronger connection with their local community than men.

Section 2: Situation and Circumstances of Affected People

- Trends in Internal Migration indicate that, in Fukushima prefecture, the number of male and female residents aged 0-14 years and the number of female residents aged 25-44 years (the generation most likely to include the parents of residents aged 0-14 years) out-migrating from (leaving) Fukushima prefecture were considerably higher than the previous year.
- In coastal areas, the active job openings -to- applicants ratio is low in the food production sector— with a comparatively high number of female applications. In contrast, the number of active job openings exceeds that of active applications in the construction and civil engineering sectors with small number of female applications.
- An examination of the impact of the disaster on health was greater for women than men in terms of insomnia and mental health.

Section 3: Recovery and Reconstruction Measures

- Basic Guidelines for Reconstruction in response to the Great East Japan Earthquake states that its basic approach is to "promote the participating of women in all platforms and organizations of reconstruction". Despite this, the proportion of women taking part in local government committees and bodies involved in the formulation of disaster recovery and reconstruction plans in affected areas remains low.
- Measures are in place in the affected areas to support women's employment and entrepreneurship.

Section 4: Lessons from the Great East Japan Earthquake

- The occurrence of the Great East Japan Earthquake has prompted the amendment of the Basic Disaster Management Plan, and the amended plan includes greater emphasis on gender equal perspectives. Despite this, the proportion of women on Regional Disaster Management Councils remains low.
- The lessons from the Great East Japan Earthquake made clear the importance of gender equality in disaster response; the importance of the day-to-day collaborative frameworks by multiple entities among national and local governments, Gender Equality Centers, universities, NPOs, NGOs, neighborhood associations, and private business; and the vital importance of the participation of women in the formulation of policy and principles for disaster management and recovery.

Section 1: Occurrence of the Great East Japan Earthquake

1. Disaster

At 14:46 on Friday March 11 2011, a 9.0 magnitude earthquake occurred, its epicenter off the coast of the Sanriku region in the north-east of Japan. In the northern part of Miyagi prefecture, the earthquake registered at the maximum of 7 on the Japan Meteorological Agency seismic intensity scale. The earthquake registered at 6 upper in the southern and central regions of Miyagi prefecture, the central area (Naka-doori) and coastal area (Hama-doori) of Fukushima prefecture, the northern and southern regions of Ibaraki prefecture, and the northern and southern regions of Tochigi prefecture. It was recorded as a 6 lower in the southern coastal, northern inland and southern inland regions of Iwate prefecture, the western region (Aizu) of Fukushima prefecture. The earthquake resulted in a major tsunami, concentrated around the Pacific coastline, which resulted in widespread and severe damage along coastal regions of Tohoku and Kanto. The earthquake caused extensive damage to the Fukushima Daiichi Nuclear Power Plant, operated by Tokyo Electric Power Co (Tepco), resulting in a large-scale nuclear power plant incident.

lwate, Miyagi and Fukushima prefectures were the worst affected, with 8,363 female and 7,360 male casualties for which all post mortem examinations have been completed ,recorded in total as of March 11 2012 (the gender of 63 further casualties is not identified). Female casualties outnumber male by around 1,000. The majority of these additional 1,000 female casualties were aged 70 years or older; the gap in the number of deaths for elderly men and women is considerable (Sec.1-Feat.-Fig.1).

The number of casualties in the Great Hanshin Earthquake in 1995 was 3,680 women and 2,713 men; here, again female casualties outnumbered male by around 1,000, or by a rate of 1.4 to 1 (Sec.1-Feat.-Fig.2).

More than 70% of the casualties in the Great Hanshin Earthquake were caused by suffocation or crushing as a result of building collapse. In the Great East Japan Earthquake, however, the cause of death for more than 90% of casualties was drowning due to being swept away by the tsunami.



Section 1-Feature-Figure 1 Casualties by Gender and Age Group in the Great East Japan Earthquake (Iwate, Miyagi, Fukushima Prefectures)

(Notes) 1. The data source is 'Cause of Death for Casualties in the Great East Japan Earthquake, 11.03.11-11.03.12', National Police Agency 2. Figures do not include casualties whose gender or age is not identified.

Section 1-Feature-Figure 2 Casualties by Gender and Age Group in the Great Hanshin Earthquake (Hyogo Prefecture)



(Notes) 1. The data source is 'Survey on Casualties in the Great Hanshin Earthquake (2005)', Hyogo Prefecture. 2. Figures do not include casualties whose gender or age is not identified.

A comparison of the respective number of casualties in Iwate, Miyagi and Fukushima prefectures, segmented by gender and age group, with population data obtained from the 2010 National Census, shows that the proportion of women and men aged 60 years or more is 35.0% and 28.9% respectively, while the ratio of casualties aged 60 or over is 67.6% for women and 63.7% for men. These figures reveal that the ratio of casualties disproportionally higher for the elderly. Indeed, for women, the number of women aged 80 years or more in the general population is less than 10%, and yet such women comprised more than one quarter of the total number of casualties overall (Sec.1-Feat.-Fig.3).

Section 1-Feature-Figure 3 Comparison of Male and Female Casualties in the Great East Japan Earthquake and Regional Population by Age Composition (Iwate, Miyagi, Fukushima Prefectures)



(Notes) 1.The data source is 'Cause of Death for Casualties in the Great East Japan Earthquake, 11.03.11-11.03.12', National Police Agency, and the National Census (2010), Ministry of Internal Affairs and Communications.

Population data for the three affected prefectures does not include persons whose age is not identified. The casualty figures for the Great East Japan Earthquake do not include casualties whose gender or age is not identified.

2. Rescue and Relief Operations

The damage caused by the Great East Japan Earthquake was extensive and spread out over a large area. As a result, large-scale rescue and relief operations were conducted through extensive cooperation among police, fire services, Japan Coast Guard and the Self-Defense Forces.

The National Police Agency dispatched teams from police organizations throughout Japan, and these Inter-prefectural Emergency Rescue Units worked together with prefectural police forces in affected areas to rescue people affected by disaster and search for missing persons. As of May 28 2012, the total number of National Police Agency employees dispatched to the affected areas was 98,700.

The Fire and Disaster Management Agency ordered the deployment of Emergency Fire Response Teams, and 109,900 personnel in total were dispatched in the 88 days between disaster occurrence and June 6 2011.

Immediately after the disaster occurred, the Japan Coast Guard mobilized all available patrol vessels and aircraft from around Japan to assist in search and rescue operations. As of May 21 2012, the Japan Coast Guard has dispatched 15,200 patrol vessels, 4,700 aircraft, and 2,500 Special Rescue Team members etc.

The Ministry of Defense arranged search and rescue forces, totaling 107,000 persons at their most numerous point, and in the 174 days between disaster occurrence and August 31 2011 the Ministry was responsible for the dispatch of 10.58 million personnel.

No data by gender of the personnel dispatched to the affected areas from the National Police Agency, Fire and Disaster Management Agency, Japan Coast Guard and the Ministry of Defense is available.

^{2.} The sum of all age brackets is 100.

The Ministry of Land, Infrastructure, Transport and Tourism organized the dispatch of Technical Emergency Control Forces (TEC-FORCE) to affected areas, to provide smooth and speedy technical support to disaster response measures undertaken by local governments in the affected areas. TEC-FORCE personnel worked for a total of 18,115 person days, of which women accounted for 79 person days. Work undertaken by women included: providing support to local authorities in affected areas (by personnel sent out in advance immediately after the disaster to support the work of local government, including work intended to establish the circumstances in disaster affected areas and what kind of support was required by affected local authorities; 32 person days); helicopter surveys of affected areas (using disaster response helicopters to survey large areas of affected land and establish damage levels as quickly as possible; 1 person day); and fieldwork surveys of affected areas (inspecting affected areas through fieldwork methods to survey damage to public facilities and establishing damage levels as quickly as possible; 46 person days).



Technical Emergency Control Forces (TEC-FORCE) in action

Article 1: Trends in the Proportion of Women in the National Police Agency, Fire and Disaster Management Agency, Japan Coast Guard and Japan Self-Defense Forces

An examination of changes in the number of female personnel in the National Police Agency, Fire and Disaster Management Agency, Japan Coast Guard and Japan Self-Defense Forces over the past ten years shows that the proportion of women in each organization is increasing, and is likely to continue in the coming years. (Sec.1-Feat.-Fig.4, Sec.1-Feat.-Fig.5, Sec.1-Feat.-Fig.6, Sec.1-Feat.-Fig.7)





- 1. The data is taken from the National Police Agency.
- Total number of police officers is the total number of officers in all prefectural police agencies as determined by the relevant ordinance issues each year on April 1.
- For female police officers, data on officer numbers up to and including FY2010 does not include those officers on maternity leave, as these officers were considered supernumerary.
- The proportion of female police officers for FY2011 includes those officers on maternity leave who had previously been considered supernumerary.



(Notes)

1. The data is taken from the Fire and Disaster Management Agency.

2. Number of fire service personnel and volunteer fire corps members for each year as of April 1 of that year.

3. Due to the impact of the Great East Japan Earthquake, numbers of FY2011 for lwate prefecture, Miyagi prefecture and Fukushima prefecture are as of April 1 2010.



Section 1-Feature-Figure 6 Changes in Japan Coast Guard Personnel Numbers (over 10 years)

2. Total number of Japan Coast Guard personnel for each year is as of the end (March 31) of that year.

3. The proportion of female personnel has been calculated as of the number recorded on April 1 of each year.



Section 1-Feature-Figure 7 Changes in Japan Self-Defense Forces Personnel Numbers (over 10

(Notes)

1. The data is taken from the Ministry of Defense.

2. Total number of Japan Self-Defense Forces personnel for each year is as of the end (March 31) of that year.

Article 2: The Activity of Female Self-Defense Forces Dispatched to Affected Areas and the Importance of Nursery Support

Many Self-Defense forces were dispatched to the affected areas immediately after the Great East Japan Earthquake. And many of these forces left their children temporarily on military bases while concentrating on the work required of them.

One female member of the Japan Ground Self-Defense Forces Tohoku Logistics Depot described her experience as follows: "When the disaster occurred, I was at work, and my workplace was badly damaged. I have a daughter who has no one else but me to look after her, so I went to find my daughter, who was in third grade of elementary school. I couldn't leave her alone in my living quarters, since we were still experiencing aftershocks. So I brought her to the temporary nursery on the base. They looked after her for one week, which enabled me to concentrate on my work. After that, I was able to ask my parents to take care of her, but I think it is really important that, in times such as these, better nursery functions are made available so that more people are able to dedicate themselves to serving their country without having to worry about what is happening to their own children".

The Ministry of Defense and the Self-Defense Forces administration both consider it important that such facilities be available on a day-to-day basis, in order that troops who do find themselves called up for disaster response work as the result of a dispatch order can concentrate on the task in hand without worrying about their own children. Nursery support for those troops with small children is particularly important in order to ensure that as many female troops as possible are able to be involved in disaster relief, and efforts are in place to establish facilities where children can be temporarily left in the care of responsible adults (for example, securing staff to look after children, ensuring a safe environment by putting laging down safety mats, etc.).

Following the Great East Japan Earthquake, nurseries were set up on the same day as the disaster in 19 Ground Self-Defense Forces bases, and these facilities looked after a total of 1,138 children. This allowed 931 Forces in total to dedicate themselves to their work. The provision of such facilities was therefore significant in terms of allowing the Self-Defense Forces to provide an immediate emergency response, and also in enabling female members to perform their tasks as required.



Emergency Nursery Support at Camp Asaka

3. Tsunami Evacuation Operations

The tsunami that occurred after the earthquake was larger than any tsunami previously envisaged, and caused the death of many thousands of people. According to the September 2011 report of the Central Disaster Management Council's Committee for Technical Investigation, the extent of the damage may have been impacted by the manner in which tsunami warnings were issued and communicated after earthquake occurrence, and the way in which local residents evacuated.

The Cabinet Office, Fire and Disaster Management Agency, and Japan Meteorological Agency jointly conducted 'Survey on Tsunami Evacuation' on the evacuation behavior of persons in the affected areas. The purpose of the report was to provide reference material for the formulation of future evacuation measures. The survey, which was conducted from early to late July 2011, targeted 870 people (525 women, 345 men) affected by the earthquake and tsunami who were resident in Iwate, Miyagi and Fukushima prefectures and were evacuated from coastal areas to other locations in their respective prefectures. The survey was conducted by visiting emergency temporary housing and evacuation sites and interviewing persons resident there. The results of the survey are summarized below, with a focus on the differences between male and female evacuation and the reasons (awareness, etc.) for such behavior.

Over half of survey respondents were men or women aged 60 years or more. The fact that such a high proportion of survey respondents were elderly and the impact of that proportion on the overall representativeness of responses should be kept in mind when looking at some survey questions, for example the fact that around 60% of all respondents said that they were at home when the earthquake occurred. (Sec.1-Feat.-Fig.8, Sec.1-Feat.-Fig.9)



Section 1-Feature-Figure 8 'Survey on Tsunami Evacuation': Respondent Age Groups (by gender)

- Figures for each sex calculated by the Gender Equality Bureau of the Cabinet Office based on 'Survey on Tsunami Evacuation' (2011) conducted jointly by the Cabinet Office, Fire and Disaster Management Agency, and the Japan Meteorological Agency.
- 870 people (525 women, 345 men) who were evacuated from coastal areas to other prefectural locations in lwate, Miyagi and Fukushima prefectures were surveyed. The survey was conducted by interview during field visits to temporary housing and evacuation sites.
- 3. The survey was conducted between early and late July 2011.

Section 1-Feature-Figure 9 Location of Respondents at Time of Earthquake Occurrence (by gender)



- Figures for each sex calculated by the Gender Equality Bureau of the CabinetOffice based on 'Survey on Tsunami Evacuation' (2011) conducted jointly by the Cabinet Office, Fire and Disaster Management Agency, and the Japan Meteorological Agency.
- 870 people (525 women, 345 men) who were evacuated from coastal areas to other prefectural locations in lwate, Miyagi and Fukushima prefectures were surveyed. The survey was conducted by interview during field visits to temporary housing and evacuation sites.
- 3. The survey was conducted between early and late July 2011.
- 4. "Other" includes persons who gave answers including: school, on a train or bus, on a boat in the harbor, on elevated land outside where there was no threat from the tsunami, at an inland location where there was no threat from the tsunami, other.

When the initial earthquake subsided, 28.6% of women first "checked whether family and friends were safe", a slightly higher figure than men. By contrast, slightly more men "tried to get information via the radio" (15.4%) than women (Sec.1-Feat.-Fig.10).

Section 1-Feature-Figure 10 Action Taken after Initial Earthquake (by gender, multiple answers possible)



- Figures for each sex calculated by the Gender Equality Bureau of the Cabinet Office based on 'Survey on Tsunami Evacuation' (2011) conducted jointly by the Cabinet Office, Fire and Disaster Management Agency, and the Japan Meteorological Agency.
- 870 people (525 women, 345 men) who were evacuated from coastal areas to other prefectural locations in lwate, Miyagi and Fukushima prefectures were surveyed. The survey was conducted by interview during field visits to temporary housing and evacuation sites.
- 3. The survey was conducted between early and late July 2011.

In terms of whether attention was paid to warning announcements about large tsunami or calls for evacuation, there was a roughly 50-50 split among both men and women as to whether they did, or did not, watch out and listen for such announcements; no significant difference was observed between the gender (Sec.1-Feat.-Fig.11).



Section 1-Feature-Figure 11 Attention Paid to Tsunami Warnings and Evacuation Calls (by gender)

- Figures for each sex calculated by the Gender Equality Bureau of the Cabinet Office based on 'Survey on Tsunami Evacuation' (2011) conducted jointly by the Cabinet Office, Fire and Disaster Management Agency, and the Japan Meteorological Agency.
- 870 people (525 women, 345 men) who were evacuated from coastal areas to other prefectural locations in lwate, Miyagi and Fukushima prefectures were surveyed. The survey was conducted by interview during field visits to temporary housing and evacuation sites.
- 3. The survey was conducted between early and late July 2011.

Looking at how those persons in the affected areas who watched and listened out for information on tsunami warnings attempted to obtain that information, the survey reveals that 57.5% of women sought information from the "local emergency communication system", and 7.9% from "family members and neighbors"; both these figures are higher than those for men. By contrast, men sought to obtain information "from the radio" (22.6%) and "from the television" (11.6%) at a higher rate than women. The survey therefore revealed differences in the sources from which men and women obtained information (Sec.1-Feat.-Fig.12).

Sources for information on evacuation calls were also different, with 18.3% of women seeking information from "family members and neighbors", a higher rate than men (Sec.1-Feat.-Fig.13).

Finally, a higher proportion of women (23.3%) than men gave as their motivation for evacuating the fact that "family members or neighbors wanted to evacuate" (Sec.1-Feat.-Fig.14).

Section 1-Feature-Figure 12 Sources Used to Obtain Information on Tsunami Warnings (by gender, multiple answers possible)



- Figures for each sex calculated by the Gender Equality Bureau of the Cabinet Office based on 'Survey on Tsunami Evacuation' (2011) conducted jointly by the Cabinet Office, Fire and Disaster Management Agency, and the Japan Meteorological Agency.
- 870 people (525 women, 345 men) who were evacuated from coastal areas to other prefectural locations in lwate, Miyagi and Fukushima prefectures were surveyed. The survey was conducted by interview during field visits to temporary housing and evacuation sites.
- 3. The survey was conducted between early and late July 2011.
- Those persons who indicated they watched or listened out for warnings and information on severe tsunami risk before being evacuated were asked to respond to this question.

Section 1-Feature-Figure 13 Sources Used to Obtain Information on Evacuation Calls (by gender, multiple answers possible)



- Figures for each sex calculated by the Gender Equality Bureau of the Cabinet Office based on 'Survey on Tsunami Evacuation' (2011) conducted jointly by the Cabinet Office, Fire and Disaster Management Agency, and the Japan Meteorological Agency.
- 870 people (525 women, 345 men) who were evacuated from coastal areas to other prefectural locations in lwate, Miyagi and Fukushima prefectures were surveyed. The survey was conducted by interview during field visits to temporary housing and evacuation sites.
- 3. The survey was conducted between early and late July 2011.
- Those persons who indicated they watched or listened out for warnings and information on evacuation before being evacuated were asked to respond to this question.



Section 1-Feature-Figure 14 Motivation for Evacuation (by gender, multiple answers possible)

- 1. Figures for each sex calculated by the Gender Equality Bureau of the Cabinet Office based on 'Survey on Tsunami Evacuation' (2011) conducted jointly by the Cabinet Office, Fire and Disaster Management Agency, and the Japan Meteorological Agency.
- 2. 870 people (525 women, 345 men) who were evacuated from coastal areas to other prefectural locations in lwate, Miyagi and Fukushima prefectures were surveyed. The survey was conducted by interview during field visits to temporary housing and evacuation sites.
- 3. The survey was conducted between early and late July 2011.
- 4. Those persons who indicated that, in terms of post-earthquake evacuation action, they either "evacuated immediately after the shaking had stopped" or "evacuated after finishing doing something else" were asked to respond to this

Respondents were also asked whether they evacuated together with other people. 82.1% of women responded that they evacuated "in a small group", whereas that figure for men was 64.0%, with 29.2% of men responding that they evacuated "alone", a higher proportion than single female evacuees (Sec.1-Feat.-Fig.15).

The survey indicates that, when the disaster occurred, women obtained information from talk with people around them like family members and neighbors, and evacuated with other people, suggesting that women have a stronger connection with their local community than men.



Section 1-Feature-Figure 15 Accompanying Persons during the Evacuation process (by gender)

- (Notes) 1. Figures for men and women calculated by the Gender Equality Bureau, Cabinet Office, based on 'Survey on Tsunami Evacuation' (2011) conducted jointly by the Cabinet Office, Fire and Disaster Management Agency, and Japan Meteorological Agency.
 - 2. 870 people (525 women, 345 men) who were evacuated from coastal areas to other prefectural locations in lwate, Miyagi and Fukushima prefectures were surveyed. The survey was conducted by interview during field visits to temporary housing and evacuation sites.
 - 3. The survey was conducted between early and late July 2011.
 - 4. The respondents to this question were those who selected one of the following options: "I evacuated immediately after the
 - shaking had stopped"; "I evacuated after I finished doing something else"; "I was doing something else when the tsunami hit".
 - 5. "Other" includes answers such as "I don't remember" and "other".

Section 2: Situation and Circumstances of Affected People

1. Evacuation Sites

The number of persons who evacuated from affected areas after the Great East Japan Earthquake totaled 386,739 persons one week after disaster occurrence (National Police Agency figures). As of March 8 2012, 18,244 persons remained evacuated, included those persons who evacuated to the homes of family members or friends (Sec.1-Feat.-Table 16). No data by gender of Great East Japan Earthquake evacuees is available.

Section 1-Feature-Table 16 Changes in Evacuee Numbers

| | (Unit: people) | | | | | | | | | | | |
|--|----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|
| | Day of | After 1 | After 2 | After 3 | After 1 | After 2 | After 3 | After 4 | After 6 | After 9 | After 1 | |
| | occurrence | week | weeks | weeks | month | months | months | months | months | months | year | |
| Nationwide | 20,499 | 386,739 | 246,190 | 167,919 | 147,536 | 115,098 | 101,640 | 58,922 | 27,531 | 18,144 | 18,244 | |
| 3 Affected Prefectures (Iwate, Miyagi, Fukushima) | 1,198 | 368,838 | 216,963 | 141,882 | 124,450 | 94,199 | 75,215 | 35,643 | 7,583 | 1,080 | 1,807 | |

(Notes)

 The data is taken from documentation from the Reconstruction Agency and from a July 2011 report by the Special Headquarters for Measures to Assist the Lives of Affected People, Cabinet Office: 'Trends in Evacuation Site and Evacuee (Persons Living at Evacuation Sites) Numbers after the Great East Japan Earthquake, Niigata Prefecture Chuetsu Earthquake and the Great Hanshin Earthquake.

2. Figures for the period between the day of earthquake occurrence and two months after the earthquake are aggregate figures for the number of evacuees in public buildings (e.g. community centers, schools) and in accommodation such as ryokan inns and hotels, and have been based on data released by the National Police Agency. Figures for three months after earthquake occurrence onwards are aggregate figures for the number of evacuees at evacuation sites (e.g. community centers, schools), in accommodation such as ryokan inns and hotels, and staving with family or friends, and have been based on the results of surveys conducted by the Special Headquarters for Measures to Assist the Lives of Affected People, Cabinet Office and the Reconstruction Agency.

With regard to living circumstances in evacuation sites and other temporary accommodation sites, relief items were provided by local government bodies and private companies from throughout Japan and distributed to evacuation sites by the Japan Self-Defense Forces. There was some difficulty in establishing via the local authorities in affected areas what relief items were required. Special teams, including female Self-Defense Forces personnel, visited individual households at evacuation sites to determine what need there was for which items, in order to try and provide those relief items most required by evacuees.

The National Police Agency also put measures in place in order to try and resolve some of the problems inherent in long-term residency in temporary accommodation such as evacuation sites and temporary housing, as well as to secure the safety and peace of mind of affected people. Specialist teams were formed in police units across the country, with a particular focus on the inclusion of female officers, and these teams visited evacuation sites to provide support to affected people, such as listening and responding to their concerns.

The interim report (published March 2012) of the Central Disaster Management Council's Working Group reported significant discrepancies in the operation of evacuation sites, pointing to the fact that those centers run in areas where the local government and local residents had undertaken regular joint training exercises were operated without incident. Immediately after disaster occurrence, women who were members of local and community organizations—such as local women's groups, women's fire prevention clubs, Red Cross volunteers—that operate regular community-based activities, were able to carry out catering and goods distribution activities in evacuation sites either autonomously or under the direction of local authorities.

Once means of transportation to the affected areas had been secured, relief items were delivered to evacuation sites from all over the country, and individual and groups of volunteers began activities to support evacuation sites and the people residing there.

Article 3: The "Bond Team"—Community Safety Officers Strengthening Community Links

The "Bond Team", or *kizuna-tai*, was a specially dispatched community support team put together by the Metropolitan Police Department, comprising mostly female officers. The team was sent to Miyagi prefecture, to areas hit particularly hard by the earthquake, to provide support from immediately after disaster occurrence until June 2011.

A woman with partial paralysis who had been at the evacuation sites in Shiogama, in Miyagi prefecture, sent this letter to the Metropolitan Police Department: "I had been thinking about killing myself, but something made me stop. It was my meeting with a young woman, with a bobbed haircut, from the Bond Team. She was very empathetic, and spent time listening to me. She took me out for walks. I felt so relieved and much happier. I am grateful to her from the bottom of my heart. I am so sorry that I did not find out her name. I would love to know who she was". A few days later, a gift arrived for that same police officer from the author of the letter.



Female police officers talk to affected people

Article 4: Sending Medical Professionals to Affected Areas (Focus on Disaster Support Nurses)

In the days after the Great East Japan Earthquake, many medical professionals lent their support to those affected, despite being affected people themselves. The Ministry of Health, Labour and Welfare released a dispatch request for Disaster Medical Assistance Teams (DMAT) from each prefecture to the affected areas, and around 380 teams travelled to the affected areas to assist affected people. Many medical professional associations, including the Japan Medical Association, the Japan Dental Association, the Japan Pharmaceutical Association and the Japanese Nursing Association sent teams of volunteers to the affected areas. The assistance of all of these medical professionals was vital in maintaining the health and wellbeing of people affected by disaster.

The Japanese Nursing Association sent a total of 3,770 disaster support nurses to medical facilities in affected areas and to evacuation sites between March 21 and May 17 2011. A further 4,181 nurses were dispatched to affected areas through agreements with local government, as members of Japan Medical Association Teams (JMAT), and through 21 prefectural nursing associations.

Nurses, including those on medical teams and registered as disaster support nurses, were permanently stationed at evacuation sites and medical facilities in disaster affected areas. These nurses attended to emergency cases, provided care to evacuees with healthcare and care needs, and saw to the medical requirements of increasing numbers of emergency outpatients and persons resident in care homes for the elderly. Evacuee center managers were particularly grateful for the presence of the nurses, with one manager saying: "Having the nurses on call 24 hours a day was wonderful; people felt at ease during the nighttime, and we did not have to call out so many ambulances".



Disaster Support Nurses Travel to Affected Regions

Article 5: Female Fire Volunteers and Fukushima Power Plant Evacuees: How Women Helped

Tamura city in Fukushima prefecture is located around 40 kilometers west of the Fukushima Daiichi Nuclear Power Plant. It received a number of evacuees from areas around the Power Plant as a result of request from prefectural and national bodies.

The Tamura City Volunteer Fire Corps is comprised one of central and five district teams, and two of those district teams—Ogoe and Tokiwa—have female personnel. Of these, the 20 female volunteers in the Tokiwa District Team began the preparation of facilities in the nearby towns of Tomioka and Okuma, together with male personnel and local government officials, from the morning after the day of disaster occurrence. Around 600 evacuees were initially housed in local gymnasium. Evacuees included very young children and the elderly, but only two heating devices were available, making it very hard to keep all the evacuees sufficiently warm. Unable to simply wait for further instructions from the city authority, the women made some decisions about more appropriate accommodation: families with young children should go to the local health service center, which was carpeted, and the elderly to the local community center, which had Japanese style rooms with tatami floors and was warmer than the gymnasium. Once the evacuees arrived in the gymnasium, female volunteers gathered up these most vulnerable evacuees and moved them to more appropriate accommodation.

Female volunteers were also responsible for sorting through and distributing the many blankets and relief items that were donated by local citizens and businesses. Although this was done as fairly as possible, priority was given where appropriate to those persons who were most in need, for example a person suffering from illness should receive the thickest blanket possible. After items were distributed, the women inspected the gymnasium to ensure that items had been divided up fairly and that no-one was lacking; those who were lacking were then provided with what they needed.

Four or five days after disaster occurrence, the evacuees began to undertake the responsibilities of evacuation site operation themselves, and the female volunteers were only required to assist this work. All the local administration workers were extremely tired, however, having worked with almost no sleep for a week.

During this time, there was not a single complaint from the evacuees. The female volunteers wore matching red jumpers, to make them easily identifiable to evacuees, and they had also regularly been called upon to assist by government administration workers. Many evacuees also mentioned that the fact that women were present to help made it easier to request items such as sanitary menstruation items.

Reference: Volunteer Fire Corps: The Fight after the Great East Japan Earthquake (March 11), Japan Firefighters Association, 2012

It has been noted that, after the Great East Japan Earthquake, although affected local residents remained in evacuation sites for comparatively long periods in order to remain safe, there was failure to adequately adapt to the changing needs to these people, which meant that living circumstances in evacuation sites took a relatively long time to improve.

The 2011 joint survey conducted by the Cabinet Office, Fire and Disaster Management Agency, and Japan Meteorological Agency, 'Survey on Tsunami Evacuation in 2011', asked persons resident in evacuation sites immediately after the disaster what they were finding difficult about life in the centers. 49.5% of women responded that there were "inability to take regular showers or baths", 39.0% that there were "lack of privacy" and 27.8% that there were "shortage of toilets". The number of women identifying these areas as problematic was greater than men, suggesting that women found life in evacuation sites more inconvenient than men (Sec.1-Feat.-Fig.17).

Section 1-Feature-Figure 17 Problems Encountered during Residence at Evacuation Sites Immediately after the Disaster (by gender, multiple answers possible)



- (Notes) 1. Figures for men and women calculated by the Gender Equality Bureau, Cabinet Office, based on 'Survey on Tsunami Evacuation' (2011) conducted jointly by the Cabinet Office, Fire and Disaster Management Agency, and Japan Meteorological Agency.
 - 870 people (525 women, 345 men) who were evacuated from coastal areas to other prefectural locations in lwate, Miyagi
 and Fukushima prefectures were surveyed. The survey was conducted by interview during field visits to temporary
 housing and evacuation sites.
 - 3. The survey was conducted between early and late July 2011.

In Iwate, Miyagi and Fukushima prefectures, 96-97% of leaders of community organizations were men who were charged with the design and operation of evacuation sites. It has been pointed out that there was not sufficient awareness of the need to consider the requirements of women.

The Cabinet Office conducted 'Survey on the Disaster Response from a Gender Equality Perspective', between November 2011 and March 2012. Respondents were local governments and private organizations in affected areas as well as those that had provided support to affected areas. The survey reported due to the lack of female involvement in taking responsibility for the operation of evacuation sites: (a) there was a tendency not to place any importance on the requests and opinions of women; (b) there was a tendency among women to hesitate to request those items required by/for women when they were in short supply. Furthermore, stereotypical perceptions of traditional gender role perpetuated the idea that men should clear rubble while women should prepare meals for the evacuation site. In many cases, daily allowance was provided for clearing rubble while no such compensation was provided for working on food preparation.

Equally, however, the survey reported cases in which: (a) women-only spaces, breast-feeding rooms and women-only laundry airing spaces were provided and rooms divided to ensure greater privacy, based on an understanding of the needs of women and families raising children; (b) jobs preparing food were offered on a paid basis including to persons who had evacuated to the homes of friends and family, and organized on a shift basis. There were also examples of local government collaborating with private organizations to open specialist evacuation sites and centers with welfare facilities in the early stages after disaster occurrence, intended for pregnant and breast-feeding women.



Women-only changing tent in an evacuation sites (inside a gymnasium) (Kamaishi city, Iwate prefecture)



Flyer informing women of a women-only space in Big Palette Fukushima, a conference center (Fukushima prefecture)

The same survey asked respondents what kind of reserve and relief items were asked to be provided to lwate, Miyagi and Fukushima prefectures and the affected municipalities within them subsequent to the Great East Japan Earthquake. Many of the requests for items were from women needing items related to child care, such as powdered milk, diapers for children, baby wipes, and baby food (Sec.1-Feat.-Fig.18).

Some difficulties were experienced by persons who had remained in their own homes with regard to the provision of relief items. For example, persons who did not evacuate to evacuation siets but were able to remain in their homes were not able to easily obtain information about the distribution of relief items delivered to local evacuation sites.



Section 1-Feature-Figure 18 Reserve and Relief Items Requested (by gender, multiple answers possible)

(Notes) 1. The data is taken from the 2011 Cabinet Office report, 'Survey on the Status of Disaster Response from a Gender Equality Perspective'.

 Gender equality managers from 108 local authority bodies in the three affected prefectures (lwate, Miyagi, and Fukushima) were spoken to for the survey. The survey was conducted in November 2011.

Article 6: Business Innovation and Support in Relief Items

The response of private business immediately after disaster occurrence was fast; many companies committed to large-scale support programs as part of their corporate social responsibility (CSR) policies. CSR activities meant that people affected were provided with relief items, with support from volunteer workers, and with financial support such as charitable donations and subsidies.

People affected by the disaster were in need of a range of relief items, ranging from shared requirements such as water and food, to more specific items by men and women. The need, for example, to provide women with menstrual sanitary products was realized at a relatively early stage, and large amounts of such items were obtained. But other items, such as underwear, hand cream, and cosmetics, were in demand among women but difficult to obtain immediately after disaster occurrence, with some women commenting that "what is available isn't right for me", or "this isn't an urgent matter". One apparel manufacturer provided underwear in different sizes, as well as a one-size-fits-all type bra.

The support of a cosmetics company made it possible to offer cosmetics at evacuation sites as well as massages using cosmetic products and creams. Women were also provided with a cosmetics set, including face wash, skin tonic, moisturizer and hand cream; this provoked requests for similar items from men. Some men and women were of the option that creams and similar products were luxury items and not required; but once available these items were well appreciated by both gender, and used to prevent dry skin, for example, as well as go some way to improving the wellbeing and mood among people affected.

2. Emergency Temporary Housing

The total number of emergency temporary housing ("temporary housing") units for which building has commenced is, as of April 17 2012, 53,077 units (of which 52,858 units have been completed).

The 2011 joint survey conducted by the Cabinet Office, Fire and Disaster Management Agency, and Japan Meteorological Agency, 'Survey on Tsunami Evacuation', asked residents of temporary housing to identify problems they experienced with temporary housing. "No air conditioner, room is hot" was a particularly common response, with 47.9% of women and 40.0% of men giving it in their response. Only 8.2% of women and 13.9% of men responded that there was "nothing in particular" problematic about the housing, indicating greater satisfaction among men (Sec.1-Feat.-Fig.19).

Respondents were also asked what they were worried about at the time of the survey. Responses more common to women than men were "Want to be told what living support will be available as soon as possible" (48.2% of women), "Want to see preparations being made against aftershocks and tsunamis brought on by aftershocks" (40.0%), "Want to see preparations being made against further natural disasters, e.g. flood, landslide, tidal waves, etc." (29.9%) and "Want to know what will happen with children's schools" (12.0%) (Sec.1-Feat.-Fig.20).

Section 1-Feature-Figure 19 Problems with Life in Temporary Housing (by gender, multiple answers possible)



- 1. Figures for men and women calculated by the Gender Equality Bureau, Cabinet Office, based on 'Survey on Tsunami Evacuation' (2011) conducted jointly by the Cabinet Office, Fire and Disaster Management Agency, and Japan Meteorological Agency.
- 870 people (525 women, 345 men) who were evacuated from coastal areas to other prefectural locations in lwate, Miyagi and Fukushima prefectures were surveyed. The survey was conducted by interview during field visits to temporary housing and evacuation sites.
- 3. The survey was conducted between early and late July 2011.
- 4. Those persons who were living in temporary housing at the time of the survey were asked to respond to this question.