Investigative Report on Fukushima City and Koriyama City

Fact-finding mission conducted on November 26 and 27, 2011

Human Rights Now

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Human Rights Now (HRN) is an international human rights NGO based in Tokyo with over 700 members of lawyers and academics. HRN dedicates to protection and promotion of human rights of people worldwide.

> info@hrn.or.jp <u>http://www.hrn.or.jp</u> Human Rights Now Tokyo, Headquarter 3F Marukou Building, 1-20-6 Higashi Ueno, Taito-ku, Tokyo 110-0015 JAPAN Tel : +81-3-3835-2110 Fax : +81-3-3834-2406

Introduction

After the Fukushima Dai-ichi Nuclear Power Plant disaster, a great amount of radioactive materials was released, and the right to the highest attainable standard of health (right to health) of people, especially children who are vulnerable to the harm of radiation, is now on the verge of a crisis.

On November 26 and 27 of 2011, Human Rights Now (HRN), a Tokyo-based international human rights non-governmental organization (NGO), sent a fact-finding mission to Fukushima City and Koriyama City. Fukushima City is the capital city of Fukushima Prefecture, where a serious radioactive contamination has been reported. Koriyama City is a densely-inhabited district and economic center of Fukushima Prefecture. HRN conducted field surveys and heard claims from the residents in the cities.

During the mission, HRN conducted interviews with 23 residents of the area and received further information and claims from the residents on the completion of the mission. Although the number of interviewees is relatively small, considering the number of residents living in Fukushima City and Koriyama City, HRN found many similarities in their claims and believes that the result of the interviews represents a common concern shared by the majority of residents in the area. Based on the resident's claims, HRN made an inquiry to Fukushima Prefecture and received answers. This report is composed of findings from the field research and a series of investigations that show the actual conditions of residents living near the Fukushima Dai-ichi Nuclear Power Plant after the Great East Japan Earthquake.

HRN would like to express appreciation for all people who helped our activities during the mission.

November 26 (Saturday) in Fukushima City			
Starting time	Closing time	Activities	
10:00	13:00	Visit to Watari District • Interviews with four residents	

Schedule of the fact-finding mission

13:00	15:00	Interviews with Fukushima Network for Saving Children from Radiation	
15:20	17:30	Interviews with two staff members of children's institution	
17:30	19:00	Meeting with five female residents	
19:00		Meeting with on-site support NGOs	
November 27 (Sunday) in Koriyama City			
Starting time	Closing time	Activities	
11:00	13:00	Interviews with five residents (mothers)	
13:30	14:30	Interviews with teachers of Fukushima Prefectures	
15:00	17:30	Interview with four Koriyama residents and one teacher	

1. Overview

Fukushima City is the capital city of Fukushima Prefecture with a population of 287,211. The number of households living in the city is 112,662 (as of December 1, 2011). Even though the city is located about 60 kilometers from the Fukushima Dai-ichi Nuclear Power Plant, according to the map published by Ministry of Education, Culture, Sports, Science and Technology (MEXT), the city includes a large part of areas where the level of cesium-137 is 100-300 kilobecquerel per square meter $(kBq/m^2)^1$.

Koriyama City is an economic center of Fukushima Prefecture with a population of 331,919. The number of households living in the city is 131,185 (as of December 1, 2011). Even though the city is located about 60 kilometers from the Fukushima Dai-ichi Nuclear Power Plant, according to the map published by MEXT,

¹*See* the distribution map of radiation published by MEXT, at <u>http://ramap.jaea.go.jp/map/mapdf/pdf/air/v01/cs137/5640-A.pdf,</u> <u>http://ramap.jaea.go.jp/map/mapdf/pdf/air/v01/cs137/5640-C.pdf.</u>

the city includes a few large areas where the level of cesium-136 is 100-300 kBq/ m^{22} . The government has not declared any areas of these two cities as an evacuation area³.

2. Current condition of radioactive contamination

At the time of the fact-finding mission, the government has not determined any part of Fukushima City and Koriyama City as areas where the radiation dose is expected to exceed 20 millisivert (mSv) per year (excluding background radiation). Thus, there are neither "Planned Evacuation Areas" nor "Designated Evacuation Encouraged Areas" in both cities. Despite such decisions of the government, residents in the cities show clear concern over the high level of radiation.

Since the government has not conducted any precise investigation on the level of radioactive contamination, residents themselves are measuring the radiation doses. It has been reported that the radiation dose measured by the residents is higher compared to data published by the government. It is reported that measurement conducted in some areas shows air contamination level that might exceed 20 mSv per year.

HRN received claims that "the government does not measure radiation in areas where residents found a high level of radiation but only measures areas that are designated by the government itself and show low radiation levels." Also, residents reported that "the levels of radiation tend to be higher closer to the ground level, and although parents are concerned with the effect of soil contamination and of radiation close to the ground on children, the government maintains a standard of measuring radiation one meter from the ground level."

(1) Watari District, Fukushima City

Watari District in Fukushima City drew public attention when its residents, concerned with high concentration of radiation, requested Fukushima City and the

²See the distribution map of radiation published by MEXT, at

http://ramap.jaea.go.jp/map/mapdf/pdf/air/v01/cs137/5640-B.pdf.

³Current evacuation area at the time includes Minami Soma City, Hirono Town, NarahaTown, TomiokaTown, Kawauchi Village, Ookuma Town, Futaba Town, Namie Town, Katsurao Village, Iitate Village, and a part of Iwaki City, Tamura City, Date City and Kawamata Town.

government to order evacuation in the surrounding areas⁴. However, the district was not categorized as an evacuation area because the government determined that the estimated radiation level in the district was lower than 20 mSv per year. 20 mSv is the official criteria for designated evacuation area.

Contrary to the government's decision, HRN received claims from residents that they had found areas where radiation levels exceeded 20 mSv per year despite the government's measurement.

Parents in Watari District founded a private organization called "Save Watari Kids" and have been conducting radiation measurements in places where children often use, such as route to and from school. Results of the measurement published in September 15, 2011 are as shown in Annex 2. A distribution chart of radiation level measured at one centimeter from the ground level can be found in the Annex 3. The chart shows that more than a few areas have the radiation level of 5 to 10 microsievert per hour (μ Sv /h). Simple mathematics shows us that (24 hours×365 days×1/1000) 5 μ Sv/h amounts to about 50 mSv per year, and 10 μ Sv/h amounts to 100 mSv per year⁵.

Resident A (Watari District, Fukushima City, member of Save Watari Kids. Her explanation is based on data shown in Annex 2 and 3).

"In Watari District, there are spots inside some houses where the radiation level is 1 to 1.5μ Sv[/h]. Once you step outside, there are spots with a level of 10 and 60μ Sv[/h]. Children have to take such routes. When I called the city to talk about the situation, their only comments tend to be: 'try to make children take other routes.' It sounds like they are neglecting the situation."

Resident B (Watari District, Fukushima City, a woman with disability)

"Near my workplace, there are spots where the radiation level is high. There are stonewalls where we plant flowers. When I measured the shutter of a warehouse in the property in mid-October, the meter went off the scale, exceeding the scale of 10 $[\mu Sv/h]$. The warehouse is located near popular roads. A parking space on the other

⁴See "A statement about Designated Evacuation Encouraged Area in the Watari District and compensation – To protect children in Watari", at

http://www.foejapan.org/energy/news/pdf/111028_5.pdf.

⁵At the request of the interviewees, anonymity has been preserved. Background information has been provided as much as possible in the introductory phases.

side of the warehouse showed radiation level of 8 [μ Sv/h]. A main street near the parking space was 4 [μ Sv/h], and a side ditch on the other side was 6 [μ Sv/h]." "There is a wide side ditch next to my house where all the water from surrounding areas flows in. I heard from a person who measured the ditch in early October that the radiation level was 30 to 40 μ Sv[/h]."

The HRN fact-finding mission measured the radiation level of a side ditch near a non-profit organization called IL Center Fukushima⁶, where HRN conducted interviews. A Geiger counter was used (Ukrainian-made, ECOTECT TERRA MKS-05, to ensure accuracy, the same model was used every time) and found that radiation levels got higher as HRN set the counter at a lower place, and the bottom of the side ditch showed the radiation level of over 100μ Sv/h.

Professor Tomoya Yamauchi at the Kobe University measured soil contamination on June 26 and September 14, 2011 and found a high level of cesium contamination on the both occasions. (For example, on September 14, the cesium level of a side ditch under Hukusenji⁷ was 239,700 Bq/kg, soil of Hachiman Shrine was 157,274 Bq/kg, and soil taken from a ditch in Yakushi Town was 307,565 Bq/kg⁸). Thus, the claims of the residents seem to be consistent with these results.

(2) Other areas in Fukushima City

In Fukushima city, HRN received a number of claims of high radiation levels in areas other than Watari District.

1) The periphery of Mt. Shinobu

Staff member at a children's institution (Female, Fukushima City)

"I live at the foot of Mt. Shinobu where the radiation level is high. In Nakagawahara, Oyama District near my house, there is a spot where the radiation level is 80μ Sv(/h).

⁶The address of the organization is 1-1 Kunugimachi, Watari, Fukushima City.

⁷The address of the temple is 5 Oguradera Inariyama, Fukushima City.

⁸See "Report of the research on radiation contamination levels in Fukushima City- regional concentration of cesium," at

http://dl.dropbox.com/u/23151586/110705_fukushima_dojoosen_yamauchi_report.pdf,

[&]quot;Report of the research on radiation contamination levels – the limitation of decontamination in Watari District, " at <u>http://www.foejapan.org/energy/news/pdf/110921_2.pdf</u>, and "Report of the research on radiation contamination levels of soil contamination in Watari District, at http://dl.dropbox.com/u/23151586/111005_watari_soil_report.pdf.

There are spots with 18 or 20μ Sv/h but such areas with high radiation levels are not announced to the public." "Irie Town, where a music hall and the Japan Red Cross Hospital are located, shows an annual radiation level of 18.4 mSv. I heard that it is 9.1 mSv in Kasuga Town." "There are areas with high radiation levels other than Watari District and I think they should be monitored."

2) Ho-rai Town

Resident D (Fukushima City, mother of two children)

"In a housing complex where we live in, the radiation level of our building was once 6 to 7μ Sv/ h. However, a month later the radiation level of our building declined and other building recorded a high radiation level, suggesting that radiation level is not constant."

(3) Koriyama City

HRN received claims of high radiation levels in Koriyama City as well.

Resident I (Koriyama City, mother of a child)

"Our backyard recorded 1.8μ Sv/h. City officials came to measure radiation. They said the value was high and left. They did decontamination activities but the figure has not changed. There are many cases like this."

3. Decontamination

In order to remove radioactive materials, decontamination is now becoming a serious issue. The Act on Special Measures Concerning Radioactive Contamination (The Act), which obliges the government to conduct decontamination activities in an area with a radiation level of 0.23μ Sv/h or over, was passed in 2011 and came into force on January 1, 2012. Following The Act, the government determined "Designated Decontamination Areas" for which it has a direct responsibility for decontamination. However, the Designated Decontamination Areas include only "Restricted Area" (and all area of Nahara Town) and "Planned Evacuation Areas", and decontamination in other areas is left to municipalities. Decontamination activities are often encouraged in lieu of evacuations. In such a situation, decontamination activities are left to local

municipalities and residents in districts other than the Restricted Area and Planned Evacuation Areas. In Fukushima City, the government, contrary to its public statements, barely conducts decontamination activities, while it has been reported that decontamination by private entities had not have much effect. On the other hand, in Koriyama City, residents are forced to take part in dangerous decontamination activities.

(1) Fukushima City

Although Fukushima City designed a "Furusato (hometown) Decontamination Plan", which set a goal of reducing the radiation level to 1μ Sv/h in two years, it still leaves residents to live with the radiation level higher than that of Radiation Controlled Area after two years. Considering this, the plan is not a prompt measure against health damage⁹.

Meanwhile, decontamination has been slow in Fukushima City, and at the time of HRN's investigation, decontamination in Onami District has just began and in Watari District, no organized decontamination has been carried out¹⁰.

Although voluntary decontamination was started by residents in some areas, it has become apparent that decontamination is ineffective when carried out in the absence of expert planning and advice.

The followings are the outcome of interviews the HRN fact-finding team had with residents about decontamination.

Resident A (Watari District, Fukushima City)

"Even though it has been nine months after the incident, very few decontamination activities have been carried out. They [Fukushima Municipal Office] are decontaminating Onami District but they finished only six houses so far. Although they say they will conduct decontamination promptly in Watari District, I am doubtful about

⁹See at

http://shinsai.city.fukushima.fukushima.jp/wp-content/uploads/2011/09/49e6e99384de9eb2f577 d512e6a9c80a.pdf. ¹⁰It is reported that on January 20, 2012, Fukushima city held a briefing session for 30

¹⁰It is reported that on January 20, 2012, Fukushima city held a briefing session for 30 presidents of each neighborhood association in Watari District and announced to the public that the city will decontaminate a total of 727 houses, with giving priority to households with children, by the end of March, and requested their cooperation. *See* at http://mainichi.jp/area/fukushima/news/20120111ddlk07040129000c.html.

it and I think it won't happen within this year [2011]."

"They conducted decontamination once in Watari District but it was very simple. They lifted the gratings of a road in front of Watari elementary school and took some of the soil and that's it. They did not even use a high-pressure water sprayer. Then, they left bags with the soil for two to three days, so the air contamination rose during that time. Although they used a high-pressure sprayer for the road behind the elementary school, it is well-known that while the sprayer may rinse off radioactive materials, it cannot eliminate them and they just remain somewhere else. Radiation levels in other places get higher and the decontaminated areas might record lower levels but there is no net difference in radiation levels for the whole area. As time passes, radiation levels in Watari District sometimes go back to the levels before decontamination. These situations made me realize the difficulty of decontamination work."

Resident B (Watari District, Fukushima City)

"The current decontamination work is almost meaningless. I live at the bottom of a hill and there are many houses and apple fields on the hill. There are many side ditches as well. It [water] comes down to side ditches near my house. I was told by residents who live on the top of the hill that 'We used a high-pressure sprayer to decontaminate and damped the water into side ditches. We feel sorry but we had no other choice.' I heard from a person who measured the radiation level of the ditch in early October that it was 30 to 40μ Sv/h. If we run the contaminated water down to rice paddies at the bottom would be affected as well. Eventually, the water gets to Abukuma River then to the sea. It might be no problem for people in highlands but it is troublesome for people living in lowlands. Decontamination in one place is not effective, it has to be done in all of the district."

Staff F (Staff member at a children's institution, Fukushima City)

"You have to decontaminate your house by yourself. Since lawn contamination is high, we decontaminated them ourselves. After just one hour of the work, I could not continue because my nose felt on fire. It felt so hot. My nose felt like it was burning all night. I am worried that we will be exposed to radiations like this from now on."

(2) Koriyama City

The Koriyama Municipal Office released a manual for radioactive decontamination¹¹ on October 1, 2011, and is actively encouraging decontamination by local residents (in neighborhood association) under the name of "The Koriyama City Support Project for Reducing Radiation." As a result, residents are called in, almost mandatorily, to take part in decontamination work.

The Municipal Office encourages neighborhood associations to conduct decontamination by offering a subsidy of a half million yen to each association. Although participation of residents in the activities of neighborhood association should be voluntary, some neighborhood associations make it almost mandatory. Thus, in many cases women, sometimes even expecting women are forced to participate. (See Annex 6).

<u>Interviews about decontamination work by Parent and Teacher Association (PTA)</u> Resident A [Koriyama City, mother of two children (one in fifth grade and one in fourth grade of an elementary school), and a member of PTA]

"As a member of PTA, I feel obliged to take part in decontamination. The protective gears are inadequate but I feel that I cannot say no considering that decontamination is necessary for children. I work hard to decontaminate polluted soil and can't avoid inhaling the air stirred up without adequate protection." "We removed a layer of soil of a school ground, but the soil has been left between school buildings. The Municipal Office does not take the soil away, and places to put the soil are not determined. A while ago, they secretly took out contaminated soil, took it to an incinerator and burnt it. There were some people who burn their fields, but nowadays they started to bury contaminated soil in a park."

Resident I (Koriyama City)

"If we conduct decontamination work we can get a subsidy. So members of PTA decided to get a high-pressure sprayer with the subsidy and decontaminate school routes, even it is a token effort. We divided parents into groups according to their children's grade, and each group take turns and decontaminates the routes for two hours in the morning and afternoon on Saturdays and Sundays."

¹¹See "Koriyama City Decontamination Manual," at

http://www.city.koriyama.fukushima.jp/upload/1/3471_zyosenmanyal.pdf.

Resident K (Koriyama City)

"Places where we decontaminate do not have side ditches so the water is just left on the roads. To tell the truth I do not want to do it. I once asked 'what does it happen to the water?' and was told that 'the water will be collected in a nearby high school. There will be a high concentration there so we should leave it to experts and let's decontaminate here.' It was not mandatory, and parents were divided into groups according to their children's grade and assigned schedule. I asked what we would do if it rains, then I was told that rain makes the work easier because it prevents droplets from spreading. I could not go but I heard that participants worked, shivering in cold. It is only a young generation like us who think it is wrong that we are decontaminating by ourselves, risking our health. More elderly people think it is better to get a subsidy."

HRN also found that finding temporary storage places for contaminated soil is posing a number of problems. "Koriyama City Decontamination Manual" and other publications stipulate that public spaces (such as parks and athletic fields) within school districts will be used for temporary sheds for storing contaminated soil and the location should be determined with the consent of the neighborhood association. It is also stipulated that such temporary sheds should be fenced and labeled so as to keep people away from the contaminated soil. However, contrary to the rules, temporary sheds are neither labeled nor made public. This suggests that residents living near a temporary shed do not recognize that there is a pile of contaminated soil in their living area. Residents, especially children, have no choice but to live being exposed to the danger of radiation. (See Annex 5.)

Resident I (Koriyama City)

"There are many parks in Koriyama City. When we decontaminated parks we had to deal with contaminated soil, but since the Municipal Office does not have authority to decide the location to put away the soil, the decision was left to our neighborhood association. The majority of its members are elderly people, who then decided by themselves to bury the soil in municipal parks or sports fields. They put the contaminated soil in bags and bury them in public spaces. As a result, we later found out that playgrounds for children now became hot-spots (places with high radiation levels.) Majority of residents do not know where they buried the contaminated soil. There are not even Keep Out signs."

HRN received claims that such situations regarding temporary sheds have not changed even in January of 2012.

4. Effects on Health- Health examination and examination of internal exposure

The interviews with residents revealed that although the radiation level was the highest immediately after the incident at the Fukushima Dai-ichi Nuclear Power Plant a number of people stayed outside and became exposed to high doses of radiation without warnings from the government about the danger of radiation.

(1) Situation concerning radiation exposure immediately after the incident

Immediately after the incident when the radiation level was the highest, due to the suspension of the water supply in Fukushima City and Koriyama City, a number of residents with children waited outside in lines for a long time or went out to get water. Some residents stayed outside for two to three hours and others were exposed to the rain. There were also residents who drank or used contaminated water without knowing about the contamination. Many residents claimed that such long duration of radiation exposure was a cause of their deteriorating health.

1) Fukushima City

Staff F (Staff member at a children's institution, Fukushima City)

"Since water was suspended until around March 11 to 18 and there was no gas either, everyone went outside to get water with children even though radiation levels were the highest during that time. We waited for two to three hours. Also, to get water to flush toilets, we went to a nearby creek or a pool of an elementary school to get water. There was no single resident who had known that the radiation level was high in the city and that residents should stay inside."

Staff G (Staff member at a children's institution, Fukushima City)

"Water was not the only thing we did not have. Supermarkets contained only few things, so I had to go to the other supermarket (to get necessary items) by bicycle. I realized later that I was exposed to a high amount of radiation during that time. I think it was like that from 12 to 17 of March. We could not take a bath for a week. TV programs told you to gargle, wash your hands, and wash all the clothes when you come back from outside, but water was not running, and there was no provision of water."

2) Koriyama City

Resident H (Female, Koriyama City)

"After the explosion at the nuclear power plant, everybody was exhausted and felt various physical disorders. In my case, when the water was not running, I went to Hayama to get water. Although Hayama was one of the places with the highest radiations level there was a long line of people waiting for water for two to three hours. Of course residents were evacuated by buses in districts near the nuclear plant but there were no evacuation orders in Central Region (Naka dori) so we waited outside for a long time. Then on March 16, the waterworks department in Hayama announced suddenly that we should not drink tap water in the area. Isn't it absurd? Everybody had been using the water for drinking, washing vegetables and cooking."

"Everybody was struggling. All members of families took turns getting water, and bringing it home by car. Then it started to rain. It was almost a mixture of snow and rain. We continued like this for six days. The line did not get any shorter, and we were still not given any information (about the contamination). It was not surprising that many children had nosebleeds after that. Even adults like myself felt ill. Despite this situation, our complaints and worries were denied and we were told that there is no immediate effect on health. I had a very bad headache and diarrhea until mid-July..."

Immediately after the incident, Nuclear Emergency Response Headquarters became dysfunctional and monitoring systems and System for Prediction of Environmental Emergency Dose Information (SPEEDI) were not used effectively. It was not until March 16 that the government provided a division of roles among relevant organizations, with MEXT taking a role of publishing all of the monitoring data¹². This suggests that by then, quite a few people had been exposed to radiation without being informed about the level of contamination.

(2) Situation concerning examination of internal exposure

As explained above, there is great concern of radiation exposure of residents immediately after the incident in Fukushima City and Koriyama City. However, the government has neither established an adequate system for testing of internal exposure nor provided free health examinations for residents. Residents in Fukushima and Koriyama City have not received any official examinations including examinations of internal exposure, urine, blood, and thyroid checks.

In May of 2011, the Fukushima Prefectural Government set up a research committee for residents' health examination survey, and decided to conduct "Fukushima Health Management Survey¹³" to check the effects of radiation and entrusted the survey to Fukushima Medical University (FMU)¹⁴. The survey includes a basic survey using a medical interview sheet, health examination, and examination of the thyroid gland (conducted only for people under the age of 18). The results will be compiled into a database for a longtime administration. However, contrary to the plan, the university has sent questionnaires to all people living in Fukushima City and Koriyama City. The questionnaires (see Annex 4) merely ask details of what residents did after March and do not ask about their health conditions at all. The majority of residents have lost track of their behaviors following the incident and such questions drew their strong resentment. Thus, it seems like quite a lot of residents have not responded to the questionnaires. Moreover, during the fact-finding mission, HRN did not receive any reports that residents received free health examinations or other testing after responding to the questionnaires.

Examinations of internal exposure were conducted only for residents living in certain areas around the nuclear plant. There is no prospect of offering free examination of internal exposure for all residents in the city. Since Fukushima Prefectural

¹²See "Residents' Health Administration Survey," at

http://www.pref.fukushima.jp/imu/kenkoukanri/chousagaiyou.pdf.

 $^{^{13}}Ibid.$

¹⁴See "Residents' Health Administration Survey, at

http://www.fmu.ac.jp/univ/chiiki/health_survey/index.html.

Government neither publishes nor accepts applications for examination of internal exposure, residents are left without access to such examinations.

In such situation, private organizations for examinations, such as the "Citizen's Radioactivity Measuring Station" in Fukushima City, have been established. Residents have, however, complained that the place is so crowded that they cannot make reservations any time soon. Although Dokkyo Medical University established a sub-office of research laboratory on international epidemiology on November 10 to provide health examination for residents in Nihonmatsu City, Fukushima Prefecture, there are long waiting lists for the service as well.

Moreover, the health survey itself has raised residents' suspicions considering the fact that Professor Shunichi Yamashita, a vice president of FMU and a chairman of the research committee for "Fukushima Health Management Survey," has been stating publicly that radiation levels under 100μ Sv/h has no effect on health¹⁵. Some residents who HRN had interviews with said that they do not want to respond to the questionnaires because of their feeling of distrust towards Professor Yamashita, or because they do not want to be used as guinea pigs.

Details of claims HRN received from the residents are as follow.

1) Fukushima City

Examination of internal exposure for residents

Q: Has there been any official testing or health examination, including an examination of internal exposure?

A:

Resident C (Mother of a high school student): "No, not at all. Urine testing has been conducted only in areas where radiation levels are expected to be high, such as Futaba, Namie and other evacuation areas. To tell the truth, I wish there were examinations of all children, including high school students, throughout Fukushima Prefecture. However, when I made an inquiry to the Municipal Office, a staff responded that it has no plan of conducting a urine testing."

Q: So does it mean that in spite of the news that the Prefecture will conduct health

 $^{^{15}}$ After the statement, some websites put an apology and correction that he meant to state "radiation levels under 10µSv/h has no effect on health."

examinations and surveys for 30 years from now on, with Professor Yamauchi playing a central role, the city has not conducted such examinations? A:

Resident C: "Yes. It has not conducted any examinations. Although I received a questionnaire, it just asks to write one's behaviors [after the nuclear incident]. For example, one writes 'I waited five hours to get water on this day.' It is not even a survey on health conditions. Not many people remember what they did, thus some people do not even answer such questions."

Q: Are those questionnaires sent to residents not medical interview sheets? Are there any responses after they send back the questionnaires? Do they receive health examination afterwards?

A:

Mr. Nakate (Watari District): "A questionnaire sent by the Fukushima Prefecture does not include questions about health or health conditions at all. I heard that local government would estimate the amount of radiation each resident had received based on the survey, create a group of residents with high radiation exposure, and conduct health examinations only for the high-risk group."

Resident C (Fukushima City): "I believe that health examination should be conducted for all of the residents as they all had been exposed to radiation."

Examination of internal exposure for preschoolers

Q: Has a health examination, including examinations of radiation exposure and internal exposure, urine and thyroid testing for preschoolers started? A:

Staff F (Staff member at a children's institution, Fukushima City): "A health examination of preschoolers is a regular medical check which does not examine effects of radiation. There is a waiting list for examination of internal exposure. Although internal exposure examination has just started in places like Iitate, Iino, and Kawamata it will take several more months until the city will conduct such an examination. It cost tens of thousands yen to take internal exposure examination individually. I called FMU

to ask for an examination using a whole-body counter. My request was rejected on the ground that whole-body counters at the university is used only in a case when those who work at a nuclear accident are exposed to a high amount of radiation. Thus, we do not use the counter for general public. I cannot accept such an explanation.

Staff G (Staff member at a children's institution, a co-worker of Staff F): I was asked to answer what I did on a certain day, but the days were so hectic, and the situation so bad that it was impossible to record or even recall everything we did in each day. Recalling these things in detail is also hard because everyone was in panic. Thus, I think it is disadvantageous for the residents if the survey is used as a qualification for compensation or to determine evacuation areas." "I have a feeling that no matter what happens [to our health] in the future, the government will use the results of the survey as the basis for denying a causal connection [between health and radiation exposure]."

2) Koriyama City

Examination of internal exposure for residents

Q: Are there any official examination such as an examination of internal exposure and urine and blood testing?

A:

Resident G (Koriyama City, mother of two eight year-old and one nine year-old children): "No. I am worried about internal exposure of children to radiation, especially because they are more sensitive. Since there is neither official examination of internal exposure nor health examination, people flood into the Citizen's Radioactivity Measuring Station¹⁶. The station is so crowded that it can't take any more reservations at the moment. Some of my friends took examination at the Station in October using a whole-body counter. As they started to get results, I heard that some children were diagnosed as being at a 'warning level'. Such information makes me even more worried about my children."

Resident H (Koriyama City, mother of two children): (HRN asked her whether she

¹⁶At the initiative of organizations such as Fukushima Network for Saving Children from Radiation (FNSCR) and with the support from Days Japan, a private radiation measuring center equipped with a whole-body counter and radiation counter for food was established.

has received any health examination as she was complaining about her sickness. The following is her answer to the question.) "Adults are not being given health examinations. There is a waiting list and children are given priority. Although I want to get my blood tested, I heard that there are not many doctors who are supportive of those who ask about radiation. I heard that when people bring issues related to radiation at a hospital, doctors dodge questions. Since we face difficulties in Koriyama, we plan to take a trip to Tokyo and take examinations at a hospital during the stay next year."

Situation concerning examination of internal exposure

Resident A (Koriyama City): "Hirata Central Hospital is offering a free health examination of internal exposure with a whole-body counter. However, the results are sent to FMU before they are announced to the examinees. I do not take the examination because I do not want my result to be used by the university staffs such as Professor Yamauchi. Although I thought about taking my children to a hospital outside the Fukushima Prefecture I abandoned the plan when I was told it costs 30,000 yen per person. Also, I heard that thyroid testing might be rejected since the use of echocardiography in the testing has become difficult outside of Fukushima Prefecture. I am not sure if that is because of the policies in other prefectures."

Resident H (Koriyama City): "My children took an examination with a whole-body counter at Hirata (Central Hospital). The result for both of my sons was 70 Bq per one kilogram (Bq/kg). The doctor said 70 Bq/kg is fine since decontamination of body is only necessary when the value exceeds 1000. However, I heard that contamination level of over 50 Bq/kg is considered as an internal exposure in Belarus. My children are actively participating in club activities outside the house. I do not know how to prevent their radiation exposure."

(3) Responses from the Fukushima Prefectural Government

Regarding these problems, the Fukushima Prefectural Government responded as shown in Annex 5. An overview of the responses is as follows¹⁷.

¹⁷According to news on January 12, 2012, Fukushima Prefectural Government decided to conduct radiation examination breast milk for mothers with newborns in the prefecture at their request. <u>http://mainichi.jp/select/jiken/news/20120113k0000m040067000c.html</u>

[Examination of Internal Exposure] Currently, the Fukushima Prefectural Government has neither set up a service counter nor published a schedule for examination, since they are concerned that it will not be able to take prompt action regarding inquiries about examinations due to the very limited number of whole-body counters [there are two counters in Fukushima Prefecture, and four in Ibaraki Prefecture. Fukushima will increase it to seven in March 2012.] Given the circumstances it is conducting examinations and giving priority to Futaba county, which is designated as Restricted Areas. The Prefectural Government is responding to the residents' needs by offering examinations in Fukushima Prefecture and at a Research and Development Organization in Ibaraki Prefecture and offering shuttle services for examinees. From now on, the Prefectural Government will buy five more counters, and the Fukushima Municipal Office plans to ask local municipalities that have bought whole-body counters to respond to the need.

[Thyroid and Urine Testing]

A plan for thyroid testing has been set and published. Regarding urine testing, the city plans to conduct examinations in two ways as described below.

1. Urine testing will be offered as a second examination for residents who were determined that they need an extra examination in a thyroid testing.

Regarding thyroid testing, in order to verify the actual condition, the Prefectural Government has been conducting the first round of thyroid ultrasound for residents of Fukushima Prefecture who were under the age of 18 at the time of the incident (including residents who evacuated to other prefectures). In 2011, the thyroid examination was carried out in several municipalities, including evacuation areas. With regard to2012, the city plans to conduct the examination in other municipalities by the end of 2013. After 2014, the city plans to conduct the thyroid examination twice a year for residents under the age of 20, and once in five years for residents who are 20 or older. 2. Conduct testing of urine occult blood in addition to a regular medical examination for residents in areas including evacuation areas.

5. School lunch and food safety standards.

Since the government has not ordered evacuation, despite of the residents' concerns over their health, residents are demanding at least for the protection against internal exposure and for the safety of food products. However, even the safety of food is in a great danger.

(1) Safety of school lunches

It is necessary to ensure a high standard of food safety for school lunch which children, who are vulnerable to the effect of radiation, have to eat everyday. However, safety inspections of food products used in school lunch are inadequate and the use of food produced in Fukushima prefecture is encouraged in the name of the "local production for local consumption" policy.

In Fukushima City, schools started to use a rice brand "Koshihikari" grown in 2011 in Aizu, Fukushima Prefecture since the winter of 2011¹⁸ and other local products. Also, in Koriyama City, a local rice brand "Asakamai" harvested in 2011 has been used for school lunches since November of 2011¹⁹. Although both cities published on their websites that they had confirmed the safety of the rice brands, the safety is not completely ensured since they did not conduct inspections of all products. Also, milk used in school lunch is produced in Fukushima Prefecture as well.

Most schools in Fukushima City and Koriyama City, with some exceptions, allow children whose parents are concerned about the safety of school lunch to bring rice and milk from their home. However, many schools do not announce the option to parents unless they ask for such option. Also, if they have a choice, children who bring food from their home are still in the minority. Children often worry about being isolated from their peers by standing out, and this makes them hesitate to choose to bring food from home. Moreover, since the availability of the option solely depends on conditions, such as parents' awareness of the food safety and their financial situation, it is not available to all children. In addition, HRN received claims that although parents called a school lunch center, they were not told the origin of food products, and they end up

¹⁸See "Results of radiation inspection of rice used for school lunch," at

http://shinsai.city.fukushima.fukushima.jp/wp-content/uploads/2011/12/hotaikekka.-kome.pdf. ¹⁹ See "Results of radiation inspection of rice used for school lunch," at http://www.city.koriyama.fukushima.jp/pcp_portal/PortalServlet?DISPLAY_ID=DIRECT&NE XT DISPLAY ID=U000004&CONTENTS ID=25179.

letting their children eat school lunches even though they are worried about the safety of school food.

1) Situation in Fukushima City

Resident D (Fukushima City)

"Food for school lunch is based on a "local production for local consumption" policy. We are told that centers provide school lunch with safety inspection. Newsletters from a school lunch center explain about the safety they are not in detail. I think children can bring lunch from home if they do not want school lunch, but I haven't seen children who do that."

2) Situation in Koriyama City

Concerning the use of "Asakamai" and its safety

Resident A (Koriyama City)

"It was first announced that rice produced outside of Fukushima Prefecture would be used for school lunches. However, beginning in November, schools started to use "Asakamai" produced in Koriyama, Fukushima Prefecture. I felt a strong need to take an action otherwise nothing would change. So I talked to the school principal and he explained the reason of using Asakamai as follows. 'First, Fukushima Prefectural Government has been trying to convince the media the rice is safe by conducting a two-stage inspection. Also, the Koriyama Municipal Office and the association of PTA agreed on using Asakamai for school food. In addition, rice produced in Fukushima (Asakamai) is being shipped out to other prefectures. So I think it is not acceptable not to use Asakamai.'

But, I strongly believe that a declaration of safety by the governor itself is so dangerous, and I am very concerned about the current situation of the school food, which does not take children's health into consideration. Approaches [to food safety] vary depending on each school. In other schools, children brought lunch from their home but were not allowed to eat it."

Concerning publishing origins of food

Resident C (Koriyama City, mother of a boy in the fourth grade, a six-year old boy, and three-year old girl)

"My kids' schools provide lunch prepared by a (private) school lunch center. I personally called the center, but I couldn't get information about producers. Even kindergarten does not tell us. I am letting my children eat school lunch although I am worried about its safety. Other kindergartens that make their own lunch publish information about producers. We give up [demanding for the disclosure] since it is hard to makes a request in a group because we might be perceived as 'monster parents'. Fewer people make such requests, and people like those who do that have already evacuated."

Resident B (Koriyama City, mother of a boy in the fourth grade and a five-year old girl)

"My husband says that we can't stop giving rice and milk produced in the prefecture to our kids when kids in other schools are given local rice and milk. I am against that but I cannot get a divorce solely for the purpose of denying his opinion and evacuating. I let children eat rice and milk that their schools provide."

Resident D [Koriyama City, mother of three girls (senior in high school, fifth grade and first grade)]

"Although we have an option to bring rice and milk, there are few people who use the option."

Resident E (Koriyama City, mother of a boy in the sixth grade and a girl in the second grade)

"In my kid's class, three students out of 21 do not drink milk and seven students do not eat rice provided in school lunch."

Resident I (Koriyama City)

"I think it is better if parents could choose whether their children eat school lunches or not, but schools do not propose such an option. We have to tell them first. It is the same for milk as well. If parents make children bring food from home, they complain that nobody else is bringing food." [Although resident A, C, D, E, and I let their children bring rice and milk from home they are minority in Fukushima City and Koriyama City.]

In response to an inquiry by HRN about safety inspections of "Asakamai", the School Administration Division, School Education Department of Koriyama City stated that JA (ZEN-NOH) Koriyama is charged with conducting a two-stage inspection of the rice. At the first stage, inspectors check husked (brown) rice by taking one kilogram as a sample from a bag of 30 kilogram. At the second stage, they check polished rice by dividing a lot (about 1000 to 4000kg of polished rice) into three clusters and taking some from each cluster to make a sample of 1kg. The machine they are using for the inspections cannot detect radiation doses under 10 Bq²⁰²¹.

Regarding the inspection, HRN received claims from residents as the following.

Resident H (Koriyama City)

"Inspectors are taking a small amount of rice from each 30kg bag to make one kilogram of a sample and run it through a machine to check the safety of food product. However, it means they check only 1/900 kilogram and they are using a machine that does not detect radiation levels under 10 Bq. I feel like the accuracy of the inspection is reduced.

3) Opinions of teachers

There are voices from teachers concerning the safety of school lunch. However, they do not constitute majority.

Teacher J (Koriyama City, Male)

"What I am most concerned about is which food products we are providing for children. Regarding internal exposure, in Koriyama, it was decided to use Asakamai for school lunches in November 8, and a week after children started to eat it at school. Personally, it is unbearable, and I'd really like to stop children to eat it at school." "However, to tell the truth, my colleagues and other teachers are thinking that I am weird. There are 290

²⁰It means that if radiation doses contained in food are below 10Bq, the machine cannot detect them and the record shows "Non Detective (ND)". This is problematic in that the machine can overlook contaminated food.

²¹In addition, among nine municipalities in Koriyama City, food products produced in the area where a 20 to 30 Bq level of radiation was detected in the pre-examination were suspended for the school lunch and only food produced in the area where the radiation level is under 10 Bq was used. Also, they conduct an inspection without notice on the rice used in a bakery charged with preparing school lunch once a week. (January 12, 2012)

teachers in my school but only five to six people share my views. It has become taboo to talk about it. Even our principal told teachers 'how come local public employees cannot eat food produced by local farmers.' Students at a neighboring elementary school performed a play that sends messages such as 'Asakamai is safe' and 'let's eat Asakamai together' in collaboration with local farmers as part of study of local cultures. The play is performed every year as part of study of local cultures, but the school is teaching things that are contrary to the actual situation."

Mr. Toshiki Kokubu (Teachers' Union of Fukushima Prefecture)

"Residents' reaction to radiation varies significantly in each area even within the Fukushima Prefecture. For example, In Aizu, it has been discussed whether they make a declaration of safety after radiation level of 0.2μ Sv/h was found in the area. In Kitakata, although a declaration of safety was issued this autumn, when nutritionists of school lunch requested to use food products produced outside the prefecture, they were called in and directed to use local food because it is safe. When they request food produced outside the prefecture, producers put pressures on school and principle direct the nutrition educators." "There is an issue of ND [Not Detective] radiation that radiation levels under 30 Bq cannot be detected in a short-time measurement. Therefore, radiation doses less than 30 Bq tend to be overlooked and recorded as the zero radiation level. The Municipality Board of Education is often doing this."

"Although school nutritionists understand parents' concern, they are giving up tackling the issues on food safety these days. Moreover, they are getting tired as they became busier responding to inquiries from parents. Though we discussed the safety of Asakamai with the Prefectural Government, they did not take our concerns seriously.

Inspection of rice by the prefecture was done by taking rice from two spots out of a 15 ha rice paddy. Inspection of school lunch in Koriyama is not checking cooked food. Some parents were demanding for the safety of school lunch with others who had been active regarding the issue. However, those active people have evacuated."

"Freedom of teachers is protected, but in Koriyama, teachers received a direction from the board of education that teachers should maintain neutrality in this matter. Such pressure has started to arise. There is pressure not only from the government but also from producers." On the other hand, school nutritionists have no choice but keep serving food although they are uncertain about the safety of school lunch. Results of a questionnaire for school nutritionists conducted by the Teachers' Union shows the fact that they are worried about the safety of school lunch (See Annex 7).

The followings are some of the comments from the school nutritionists. "We do not know the actual radiation level [of food that we serve] because our school does not have a radiation counter", "specifically, the safety of vegetables is uncertain"(Iwase). "We cannot be sure whether delivered food is safe or not"(Ishikawa). "I cannot be sure that we should write that school lunch is safe in newsletter" (Fukushima). "I can't agree with the logic 'food is safe because it is provided at school' used in promotion of the safety of food. There should be other ways" (Fukushima). "I am worried about the safety of food because of the pinpoint inspection" (Touhaku). "Food products on the marketplace may be safe but without all-products inspection, we cannot judge whether official data is true" (Koriyama).

There are a number of responses indicating the use of food produced outside the prefecture. However, it seems that school nutritionists at schools where local products are used in school lunch have a lot of concerns.

4) Measures for the safety of school lunch

In both cities, the safety of school lunch is ensured on the grounds that it uses only food products that have passed inspections in Fukushima Prefecture.

However, the argument that school lunch is safe because food products are inspected in advance lacks credibility, for the following reasons: 1) the safety inspection is conducted by taking samples and does not cover all products; 2) the inspection system, as described below, is a very rough sample inspection and far from accurate; and 3) the inspection machine can detect only radiations doses more than 20 or 30 Bq, leaving out contamination under that level as "Not Detected (ND)".

The Fukushima Municipal Office purchased four Belarus-made radiation counters for food, and conducts inspections at Fukushima City School Lunch Center and 26 schools that prepare school lunch. The inspection checks the amount of iodine 131 and cesium 134 and 137 in food products with high usage. The frequency of the inspection is once a week at the school lunch center and twice a month at the independent schools. Moreover, inspection machines cannot detect radiation doses less than 20 Bq/kg. In Koriyama, such an inspection system has not been established.

5) Response of the Fukushima Prefectural Government and the Fukushima Municipal Office

In response to an inquiry from HRN regarding the food inspection system, the prefecture stated that the Prefectural Government is not conducting food inspections in all municipalities, and does not grasp the introduction of radiation counter for school lunch in Fukushima Prefecture. Regarding future measures, the city responded that the government allocated 100 million yen for radiation inspections of school lunch in 17 prefectures in the government's third supplementary budget, and each prefecture is expected to buy five inspection machines with this budget.

Also, MEXT announced to the public on November 30, 2011 that the government would subsidize about half of the cost in the case of a prefecture purchases a radiation counter for school lunch. However, the budget for the subsidies is only 100 million yen for the entire country, which is far from enough to install a counter in all elementary and junior-high schools in Fukushima Prefecture alone²².

Although it is necessary to make available a radiation counter at each school, and conduct inspections of all food products in order to protect the safety of school lunch in Fukushima City and Koriyama City and other areas where the radiation level is over 1 mSv per year (excluding background radiation), no such measures have been taken.

(2) Safety of Food

The HRN fact-finding team heard a number of concerns, not only about food inspections for school lunch but also about the current food inspection system in general.

The Fukushima Prefectural Government conducted a pre-examination on rice before the 2011 harvest season in order to assess patterns of contamination levels, and then a main examination after the harvest to determine whether a restriction on shipments was needed. It was reported that they did not find any places that exceeded

²²See "MEXT response to the concern over school lunch, a subsidy for a half of the cost for radiation counter," at <u>http://www.asahi.com/edu/news/TKY201109210796.html</u>.

the current restrictions. However, by November 11, 2011, an amount of radiation that exceeds the current restriction (500 Bq/kg) was found in husked (brown) rice grown in Fukushima City (Kyu-koguni Village) and Date City (Kyu-koguni Village and Kyu-tukidate Town). Neither of which had been through the sample inspection in the main examination. Following the incident, the Nuclear Emergency Response Headquarters ordered Fukushima Prefecture to restrict shipments of rice grown in the above-mentioned area during 2011²³. The incident has fuelled general public distrust in the sample inspections conducted by the prefecture.

On the other hand, a Koriyama resident (Resident E) told HRN that some people use information on radioactive contamination levels in production areas published in prefectural newspapers, such as Fukushima Min-yu, to decide which food products to buy on any given day.

Given these concerns, HRN conducted an inquiry to the Fukushima Prefectural Government in order to grasp the actual situation more accurately. The responses are shown in Annex 5.

For example, in the area of Fukushima City (Kyu-koguni Village and Onami District), which was under an emergency examination following the incident, the Prefectural Government conducted inspections of all bags of rice at rice farms by taking samples from each 30kg bag. In "Specific Spots Recommended for Evacuation", which includes three cities and 21 former municipalities, one sample per house is taken as standard, but for other areas, there is no clear rule. Regarding vegetables, local government staffs go to farms and investigate by sampling 600g to 1kg of vegetables. However, there are no specific standards for the selection of samples. In the case of artificially cultivated mushrooms, a random 500g sample is taken, regardless of total production. For mountain vegetables, staffs take samples by randomly picking up 300 to 500 g from a cluster. There is no standard regarding the selection of samples. For fish, they check about 100 samples in one week, and for river fish the inspection is conducted once a month for each river with big rivers being investigated only when it is deemed necessary. These rough inspections are far from effective in ensuring the food safety, and cause distress for both consumers and producers.

²³See "Mid-term Report of the Exploratory and Investigation Committee on the incident at TEPCO Fukushima Nuclear Power Station"(p. 320.)

As an example, there was an incident in which shipments of rice grown in Onami District were suspended due to cesium contamination. However, a cultivator of the concerned paddy said that he had demanded the inspection of his rice, but the Prefectural Government did not conduct inspections. Moreover, according to interviews with a resident, a high amount of contamination was found in the rice that he had put aside for personal consumption, because of possible contamination when he voluntarily took it for inspection²⁴.

On the other hand, after the investigation HRN received a complaint from a resident that people are still not buying his rice, even though the rice had been through inspections not only by the prefecture but also by producers. HRN believes that recovering public trust in food safety by establishing an accurate and comprehensive inspection system is crucial, in order to protect local producers from harmful rumors.

Koriyama resident stated:

"I actually want a measuring a center and a radiation counter. Everyone wants to know whether the food they are consuming is safe or not. I want to have a counter because I think that even I have to stay in the city, there is no problem if I can avoid internal exposure. However, a counter is costly. Also, some people even say that we should not use it half-heartedly. I also heard someone say that using a radiation counter will destroy farmers' business."

As such, the right to health, one of the most important rights of individuals, is not protected because the residents' right to know to the contamination of their bodies and the food they consume everyday is not guaranteed. In sum, the interviews with residents have shown that a drastic improvement of the food inspection system is needed.

6. Penetration of "Safety Campaign" and the isolation of residents concerned with radiation effects

²⁴See "Order to stop shipment of rice produced in Onami District, Fukushima City," (November 17, 2011, Asahi shimbun,) at

http://www.asahi.com/national/update/1117/TKY201111170422.html.

The Fukushima Prefectural Government has been actively conducting campaigns for residents around the nuclear plant to disseminate the idea that radiation exposure is not a problem. For example, the Nuclear Emergency Response Headquarters in Fukushima published "Radiation and Health Q&A" on June 30, 2011, and the prefecture organized a "Seminar by health risk management advisors on radiation at Fukushima Prefecture." These activities are designed to emphasize the government's view that there are negligible effects of low doses of radiation on health. This approach is characterizes the "Report of the working group on risk management of low dose exposure" published by the government on December 22, 2011.

Despite the lack of proof that low dose exposure does not present health risks, the prefecture and cities are taking a stance which emphasizes the safety of low dose exposure. Such an attitude has not only caused distrust of official information among residents, but also created an environment where residents who cast doubt on the campaigns become isolated from those who take them in, out of weariness at the current situation.

(1) Emphasizing "safety" while denying "concerns"

The Japan Atomic Energy Agency (JAEA) established a group to answer questions about radiation and held a seminar in Fukushima Prefecture²⁵. However, the content of the seminar was intended to emphasize the safety of radiation exposure and deny residents' concerns over their bodies and their kids.

Staff F (Fukushima City, Staff at a children's institution)

"Since they say they would accept any questions and worries about radiation, I asked them questions. But then I was told 'there is no problem at all.' It was as though they were saying that 'thyroid cancer will never happen to any of the children. The level of radiation leaked by the incident at the Fukushima power plan is much lower than that of Chernobyl. If children get cancer, that is due to mother's stress.' Although children actually have often had physical disorders after the incident, such as nosebleeds and diarrhea, we were told that it is just a matter of our mother's stress."

²⁵See "Notice on a meeting to answer question about radiation (July 12,2011,)" at <u>http://www.jaea.go.jp/02/press2011/p11071201/index.html</u>.

Staff G (Fukushima City, Staff member at a children's institution)

"They laughed through their nose when I told them that the effect of radiation should be as low as zero since people with a high sensitivity have a higher probability of contracting cancer."

Although JAEA argues that radiation levels are safe, Staff members F and G told HRN that a JAEA staff explained that the seminars would be held only three times, because JAEA is worried that frequent visits to Fukushima would increase radiation exposure, and that JAEA must measure radiation before and after the seminar. This suggests that JAEA itself is worried about radiation exposure despite its assurances of the safety of low dose radiation.

Moreover, seminars conducted by the government and schools claim this safety as well. HRN received the following comments. "I attended a seminar in which people from the Health, Labor and Welfare Ministry or MEXT gave a talk. I asked them whether the water is really safe and they told me 'the water is surely safe' and 'it is not a problem because cesium is heavy so it settles at the bottom." (Staff G at a children's institution in Fukushima City.) People even asked an elementary school to select a lecturer who could properly explain the danger of radiation for a seminar; the school rejected the request because "it will increase fear of the risks." Thus, lectures organized by elementary schools tend to emphasize safety. (Fukushima resident A and C) A mother (Resident A) who attended a seminar said she was offended when a doctor said "getting cancer in the future is like winning a lottery. People do not so often win a lottery. So it is safe." This remark ignores the fact that although the risk may be low, some people still have the significant possibility of developing cancer.

Since residents' doubts about the safety of radiation keep being denied, they began to feel resignation, fatigue, and despair. Surrounded by people who believe in or promote the safety of radiation, those concerned about the effects of radiation feel more and more isolated.

Resident A (Fukushima City)

"I think there are many people who are escaping from reality because they are so tired about the situation. Actually, nothing is happening. So those people feel like 'Just keep it quiet and do not raise a question anymore because we are leading a normal life."

Staff F (Fukushima City, Staff member at a children's institution)

"There is a huge gap between information circulating in Fukushima and information outside the prefecture. In Fukushima, it is all about the Safety Campaign in which the prefecture as well as the government say it is safe for now so you can stay where you are, and decontamination will be done so that you do not have to evacuate. As long as they are from the city or the prefecture, they all say it is safe."

(2) Inability to raise concerns

A leaflet distributed by the Nuclear Emergency Response Headquarters for parents suggests that children's physical disorders are often caused by their stress, thus it is important that parents maintain both their physical and mental health²⁶. This approach is preventing parents from raising concerns about radiation effects on health. For example, if parents raise a question about radiation at a seminar, lecturers deny their concern not by citing scientific evidence, but by telling them, "being concerned about it is causing your stress." If parents inquire at schools about school lunch or decontamination, they will be perceived as "monster parents", and many parents give up inquiring because of that. (Koriyama resident D) In a situation where the government and prefecture publicly promote the safety of radiation, people who are concerned about radiation end up feeling that they are being too sensitive to the issue and become unable to talk about their concerns to others.

The situation is the same regarding food safety. When a mother made a comment about internal exposure and school lunch in a Fukushima meeting, the farmers responded by saying "the incident of course did damage to farmers. But right now we are troubled by rumors (about the contamination of food products). So we traced back the cause of the rumors, and found that enemies are right in front of us...the cause of the rumors is actually local people who do not eat food produced in Fukushima." A participant at the same meeting said "I went to the Fukushima meeting expecting to have a discussion to find solutions to the current problems. But when the farmers said we are their enemies, I thought we [consumers] are not enemies. Consumers have a right to choose. Such arguments will further divide people in Fukushima. (Koriyama

²⁶See "Protect Children's Physical and Mental Health," at <u>http://www.pref.fukushima.jp/j/04_web.pdf</u>.

resident K) This shows the difficulty of preventing a division between producers and consumers when they should be cooperating to improve the current situation.

Furthermore, the situation is serious among family members. Since everyone has different views on radiation even within a family, people with concerns about radiation cannot find opportunities to let out their anxiety. If both a husband and a wife share similar feelings about the risks of radiation, they may have already evacuated; or if they both feel they should stay in Fukushima, there might be no conflict either. However, in a case where one side (mostly man) thinks it is safe and the other (mostly women) is worried, there is no one to talk to about the concerns (Staff F and G, and Koriyama resident B). A resident told HRN: "Even people who I have known for a while have different views on radiation. When a person who I thought spoke the same language told me she thinks it has become safe, I got confused, and I do not know what to do" (Koriyama resident A, and other residents made similar comments).

Most of the residents who HRN interviewed preferred to talk in a closed room because they were worried about attention from others and could not talk in open places. The interviews revealed that people are becoming isolated and distressed, unable to voice their honest feelings about radiation among family members and friends.

(3) Isolation from people outside Fukushima Prefecture

Reproach from people outside Fukushima has hurt the feelings of Fukushima residents. Some people criticize parents who do not evacuate, without understanding that residents are having difficulties with evacuation for various reasons, such as children or a lack of money and places to go. Moreover, some relatives told a high school girl not to have a baby for ten years (Staff F, G and others).

Although a majority of people in Fukushima want to evacuate if the circumstances allow, there is a lack of understanding from people in other prefectures about the actual situation and hardships they are facing. That is to say, in Fukushima Prefecture, through a series of safety campaigns residents are forced into believing evacuation is wrong; meanwhile people outside Fukushima criticize them for not evacuating children. In such circumstances, residents are isolated from all sides.

7. Situation of Children

(1) Radiation Protection

Although there were efforts immediately after the incident to make children wear masks or avoid playing outside, under the safety campaign the majority of children do not wear a mask on route to and from school.

Teacher J (Koriyama City)

"Our school, including kids from elementary to high school, has about 300 students in total. Students who wear a mask to school are only six and they are all in my grade. Most of the students do not wear a mask. Parents themselves do not understand the actual situation. Since they are dependent on TV reports, if they hear that it is safe most of them just believe that."

Resident C (Koriyama City)

"I make my children wear a mask when they go to school, but most children do not wear it on the way home. Fewer people care about it now. I think they got tired. I still care about it but I feel isolated. The number of children with atopic dermatitis or other skin problems has increased by wearing a mask for a long time. Adults do not have a problem but I feel bad for children." "I saw children playing outside both in and out of school hours, so I asked their parents and they said 'I let them play because the kids say they want to.' My children say "although I want to play now, I will be patient and avoid it considering the risk to future health."

Resident E (Koriyama City)

"Many children stopped wearing a mask and a jacket. Wearing them in hot weather caused them to have sore skin around their mouth. A small number of children still wear a mask."

It took a long time after the incident for children to receive radiation counters, although the timing varied in each area. In Koriyama, mothers complained, "it was so recently that I doubted if they (the local government) are really concerned about children's health at all" (Koriyama resident G and K). HRN found that although most

preschoolers are wearing it around their necks, children in school are not taught how to use it and it has become a mere façade for them. For example HRN heard a number of comments similar to the following one: "When they distributed radiation counters there was no seminar, they just distributed a paper and they did not even hold a seminar to teach kids how to use it. The paper does not explain what to do in case radiation is high so I do not know. My younger daughter keeps it in her bag, but my older son leaves it home. It is not effective. We submit (the counter) to school once a month and receive a notice with numbers. But I do not know how to read those numbers"(Fukushima resident D).

(2) Outdoor activities and after-school activities

According to an interview taken in a district in Fukushima City, club activities and PE classes have started and parents can choose whether they let their children participate in the activities or not (Resident D). Also, according to interviews in a district in Koriyama City, PE class outside is still prohibited, but students can participate in club activities for three hours at maximum with the consent of their parents. Other outdoor activities are allowed to the extent that parents agree (Resident A and B). However, the majority of kids in school choose to "play outside, participate in club activities and eat school lunch", and children who choose to do otherwise have a fear of being isolated. Given that, many parents have no choice but let their children play outside or participate in club activities despite their concerns about their health.

Resident D (Fukushima)

"It was difficult for parents to control junior-high-school kids. Participation in an outdoor class like PE was at parents' discretion. I told my son not to participate, but a majority of parents think they should let boys do club activities outside. There are only two to three parents who avoided outdoor activities, so my son asked me many times to let him play outside."

The situation of preschoolers is also the same:

Staff G (Staff member at a children's institution)

"I saw a change in parents' opinions. Even mothers, who told us never to let children stay outside immediately after the incident, started to let them outside because everybody is saying it is safe. At first every mother was making sure we keep windows closed, but eventually, many started to say things like 'I want them to play outside after all' and 'I think it is okay because everybody says it is safe.'"

Staff F (Staff member at a children's institution)

"People who are really worried have already gone. Those who are left in the city either have some issues [that make them unable to evacuate] or think it is safe."

Children participate in outdoor activities believing that radiation levels are very low and it is safe to stay outside. Therefore, if parents ask children not to go to club activities, it is the children who suffer the consequences. For example, a mother told HRN about her son in the second grade of junior-high school and how temporary evacuation to another prefecture during a summer vacation caused him isolation, which eventually led him to quit his club activities.

Resident I (Koriyama City)

"When my son had to be absent from his club activities for a while because we temporarily evacuated to another prefecture during a summer vacation, a teacher from the club, who did not understand the need for evacuation, told other students in the club that they should 'think over their relationship with him'. After that, my son was isolated from other members and could not continue his club activities by the end of summer vacation. It was not until November, in a parent-teacher-student meeting, that I realized this. When I told the teacher about the reason for my son's absences at a meeting during the summer vacation, he did not show concern for the fact that he had to be absent because of evacuation. I was told by my son that 'all the things you are doing have not a positive impact but only a negative one for me.' I asked other parents to evacuate during the summer with us but some families could not evacuate because of their kids' club activities."

As shown in the interview, the student who chose to evacuate ended up forfeiting his club activities, which were one of his most important experiences for building relationships in school and for his personal development. Moreover, the case shows the difficulty of helping children understand the necessity and validity of evacuation while schools are allowing outdoor activities on the basis that the current radiation level is safe. Furthermore, such an attitude from schools makes it very difficult for mothers to evacuate with their children because of the foreseeable consequences on their school life. A mother explained the situation as "my kids are hostages" (Koriyama resident I).

(3) Situation of high school students

HRN found that measures regarding radiation protection for high school students are especially inadequate. While decontamination at school and distribution of radiation counters for students were actively discussed in elementary and junior-high school, there were no special measures regarding radiation in high schools. A resident with a high school kid told HRN that when she called the prefecture about plans to remove surface soil from schoolyards, they told her that they had no plan. It was only during a summer vacation that they removed surface soil from schoolyards in areas where radiation was over a certain level (Fukushima resident C).

Moreover, schools resumed club activities at an early stage and continued outdoor activities.

Resident A (Fukushima City)

"Students at a high school in Watari were even running and playing soccer and baseball before the surface soil of the schoolyard was decontaminated. I was very surprised."

Resident C (Fukushima City)

In my kid's high school, a new semester started on April 8, and outdoor club activities began, such as baseball and soccer, although only for a short period of time like one to two hours. After the holidays, my kid came home at a regular time: around six or half past six. Although the school required a parent's permission, it is difficult to recommend suspension of club activities, especially sports for boys such as baseball. I am worried about my kid who is in Japanese archery club, but my kid goes to practice saying that 'I cannot be absent when everybody else is going.' It is the same for PE class, although I was relieved to hear that swimming lessons had been suspended."

The mother expressed her concern about the "National High School Festival²⁷" held in Fukushima in the summer of 2011. She feels that the festival, in which high school students around the country were invited to come to Fukushima, was used as propaganda for the "Fukushima Safety Campaign". She explained that when she called the person in charge of the event to ask about safety concerns, he told her that "there is no problem because we can live normally". Also, a prefectural music hall, a venue for the school festival, was located in Irie Town where high radiation levels were found. So she made an inquiry about decontamination, only to find that decontamination has not been done in the area at all (Fukushima resident C).

It is not easy for parents to change children's behaviors according to their will, especially for high school students who engage in a wide range of activities. Therefore, it is necessary that high schools offer classes that provide enough information about the risk of radiation so that students can make their own judgment about their activities. However, it is hard to say that high schools students are getting adequate education on radiation protection at this point.

8. Evacuation Measures

(1) Evacuation Order

Many residents, mainly in Fukushima City, recognize the probability that radiation levels are higher than the standard set by the government, based on their daily measurement. Some residents have taken actions calling on the government to designate the areas as "Specific Spots Recommended for Evacuation", and have been following the responses of the prefecture. However, their attempts resulted in disappointing results.

At a meeting organized by Fukushima City and the Nuclear Emergency Response Headquarters on October 8, 2011, the Fukushima Municipal Office announced a government decision to forgo the designation of Specific Spots Recommended for Evacuation for Watari and Oguradera District. The residents pointed out that the investigation conducted by the government covered only a part of the

http://www.fukushimasoubun.gr.fks.ed.jp/kaizyo/01sougoukaikaishiki/index.htm.

²⁷See "Fukushima 35th National High School Festival," at

district and that many hot-spots had been found in areas not under the investigation at the time. Although they demanded the government redo the investigation, their request has not been fulfilled (Resident A and B).

"While there is a standard in Minami Soma that orders expecting mothers and children to evacuate when 2μ Sv was detected at 50 centimeter from the ground level, there is no such rule in Fukushima City. The city just promises to do decontamination work. I once asked the Municipal Office whether they think children in Fukushima and Soma (Minami Soma) are any different. I told them that it is discrimination that children in Minami Soma can evacuate but not in Watari. However, the city answered that it is not discrimination at all" (Fukushima resident A). Also, there are concerns about the fact that the radiation levels in the area are actually high enough to be designated as an evacuation area (considering the radiation levels of evacuation areas in other cities). (Staffs of children's institution in Fukushima and others)

In Koriyama City, a provisional disposition calling for a group evacuation was proposed, on which many residents were placing their hope (Resident A \sim D). However, the proposal was turned down on December 16, 2011²⁸.

(2) Voluntary evacuations prevented by safety campaigns

Even though quite a few people living in areas in Fukushima City and Koriyama City where air radiation levels are relatively high have already evacuated on a voluntary basis, there are still many residents who cannot evacuate despite their fear of radiation exposure. As described below, one of the reasons that residents cannot evacuate is financial, due to the lack of governmental support for voluntary evacuations. However, residents' feelings about the issue of evacuation are far more complex.

Resident A (Fukushima City)

"There is a wide range of feelings about radiations among residents. People who really feel the dangers of radiation have already evacuated at their own will. I assume that

²⁸Parents of Koriyama City, Fukushima Prefecture made an allegation against the city for a provisional disposition to suspend education in areas with high radiations and order group evacuations. However, Fukushima Koriyama District court (chief judge Hibiki Shimizu) turned down the allegation. In the summary of decision, the District court stated that "there seems to be no danger so immediate that schools have to suspend educational activities without taking other children's opinions into consideration." *See* at

many people are just escaping from reality because they are fed up with the situation. There are quite a few people who feel like 'Please keep it quiet and do not speak up. We do not care about evacuation because we are living our life as usual.'"

Staff G (Fukushima City, Staff member at a children's institution)

"I feel I have to stick to it and stay here when I am asked, 'what happens to the economy of Fukushima after everybody has evacuated?' or 'don't you think about people left in Fukushima?' However, if I did not feel such pressure, I would not want to stay here for any longer."

The main factor reinforcing residents' decision to stay is the "Safety Campaign" of Fukushima Prefecture, which sends information and messages that reassure residents that it is safe to stay in Fukushima, and if there is a dangerous area, the prefecture will carry out decontamination. In the midst of the Safety Campaign, residents' motivation to make a decision to evacuate and the legitimacy of their decision have been undermined.

For example, HRN received complaints such as the following. "When we are asked why we evacuate when it is safe to stay here, we cannot answer that we evacuate because it is dangerous, so we answer that it is because we are worried; but that is also denied by comments such as 'that's because you think too much' or 'you are being too sensitive.' I have never heard a statement that 'it is dangerous here so it is up to you whether to evacuate or not' in the Safety Campaign."

Staff F (Fukushima City, Staff member at a children's institution)

"If we were told that it is dangerous in the area and it is okay to evacuate, I think I will evacuate with my children immediately. However, when we are constantly told that it is safe, evacuation becomes a difficult decision." "If it is not safe, they should say so, recognize radiation is harmful to children, and provide compensation and support. If they take such a stance, I think everybody will start thinking about more options available to extend the support, such as evacuating children. However, at the moment we are told not to think about those options." "I think many people will feel relieved if they are told clearly that it is okay to evacuate because the radiation level is over 1 mSv. Due to pressure and various circumstances, people can neither speak out nor

leave their homes. Although financial issues are a concern, I think it would make a big difference if the government publicly stated that people in the area should evacuate, because that can prevent those who choose to evacuate from being talked about behind their backs. The safety campaigns make it difficult to evacuate because people, believing it is safe, say that those who evacuate are being nervous or that stress of parents will affect their children."

(3) Obstacles to evacuation

People face various obstacles that prevent evacuation, such as responsibility at their work and their loans. Even if they do not have loans, life at an evacuation center is still full of problems. For example, a mother explained that evacuation is a last resort because it means giving up everything. "We have loans, and if we have to quit our jobs, we might be penniless. Also, children might get bullied in other schools (because they are from Fukushima). I will have to protect the life of my children while looking for a job and without any possessions (Staff F at a children's institution). Also, HRN heard from a mother who said: "Deep inside I know (that it is not safe), but I could not evacuate because I could not be sure what is the best decision for my family, considering that evacuation will change everything such as my husband's job and children's school environment" (Resident G). Others said that kids in junior-high school choose not to evacuate because they want to stay with their friends, while in the case of high school students, it is parents who cannot decide to evacuate due to concern about their children's entrance examinations. On the other hand, parents with younger kids are worried that their kids might get bullied at a new school for the reason that they are from Fukushima (Fukushima resident C and others).

Furthermore, a decision to evacuate becomes even more difficult for people with disabilities, regardless of their ages. For example, a mother of a child with Down's Syndrome explained: "I am worried about what happens to my daughter at a new school. When I talked with a parent of one of her classmates and asked her if she is thinking about evacuation, I was told that evacuation is more challenging. Children with adjustment disorders or autism have just adjusted to their current school. They will not be accepted if they transfer to a new school."

A woman with a disability (Fukushima resident B) explained as follows. "I have a home helper now but I can neither evacuate by myself nor take the helper with me. I am worried how life would be in a totally different environment. I have no choice but to stay here. It seems that many people have given up evacuation, telling themselves that they are too old anyway."

(4) Lack of refuge places and information

Unlike people in designated evacuation areas, voluntary evacuees cannot receive adequate support, such as provision of housing and financial compensation. HRN met a mother who made a decision to evacuate with her children before the third term of school, leaving her husband in Fukushima. She said that although she searched for places of refuge for voluntary evacuees on the Internet, she found that the number of municipalities accepting them is declining (Koriyama resident D). This suggests that finding refuge is difficult for voluntary evacuees, especially those who are not familiar with the Internet or computers.

In addition, an expecting mother with two preschoolers in Watari District said that she had been living in an area with radiation level of 0.8μ Sv/h for eight months after the nuclear accident. Her doctor had not mentioned radiation, although her midwife told her that she should evacuate. Even when she asked the city and a kindergarten about evacuation, they only said that "support is available at various places", which was not very helpful. She thus asked Fukushima Network for Saving Children from Radiation (FNSCR) with the help of Save Watari Kids and found a place of refuge. She said that her friend, who had just had a baby, was still living in a house where the radiation level was 0.7μ Sv/h (Fukushima resident A).

As such, one can assume that voices for evacuations remain unheard, and many mothers with children cannot find places of refuge.

(5) Demands of residents

Residents expressed their demands as follows. "I think it is difficult to evacuate everyone, but there should at least be a right to choose for residents. Some people could evacuate had the government provided support; some people would be able to get out (of Fukushima) and evacuate" (Fukushima resident A).

"I think it would be better if I have some kind of rights. People in designated evacuation areas can receive a lump-sum payment, an apartment at no cost, and compensation of ten thousand yen and what not. On the other hand, there is no support in our area. I wish would do something about it" (Staff G).

Mr. Seiichi Nakate, a FNSCR representative, said that "one cannot say that people's rights to choose are truly protected when people have to give up the option of evacuation on the grounds that they will experience more hardship in places of refuge than they did in their hometown. In order to protect the right to evacuate, authorities have to give support so that evacuees can have the same environment after they evacuate; especially people with disabilities, who should be provided with special support and places of refuge."

(6) Government Measures

On December 6, 2011, the Dispute Reconciliation Committee for Nuclear Damage Compensation (the Committee) made a decision on a revision of the mid-term policy (related to compensations for voluntary evacuations²⁹).

[Voluntary Evacuation Area]

The government explicitly announced Fukushima City, Nihonmatsu City, Date City, Hon-miya City, Kori Town, Kunimi Town, Kawamata Town, Otama Town, Koriyama City, Sukagawa City, Tamura City, Kagamiishi Town, Furudono Town, Miharu Town, Ono Town, Soma City, Shinti Town, Iwaki district, and Iwaki City (excluding areas already designated as evacuation areas) as Voluntary Evacuation Areas.

[Standard for compensation]

The government decided the amount of compensation for residents who lived in the voluntary evacuation area at the time of the accident as follows: 400,000 yen for children and expecting mothers for damage caused from the day of the incident to the end of December 2011; and 80,000 yen for other residents for damages caused during

²⁹See at

http://www.mext.go.jp/component/a_menu/science/anzenkakuho/micro_detail/_icsFiles/afieldf ile/2011/12/06/1309711_2_1.pdf.

the early stage of the accident. However, the amount of compensation is far lower than the actual costs needed for evacuation, and is thus insufficient to support voluntary evacuees.

Furthermore, according to news on December 2 and 3, 2011, Fukushima Prefecture requested each municipality to stop accepting new applicants for private housing leased for evacuees fleeing from the Great East Japan Earthquake and the accident at the Fukushima Nuclear Power Plant³⁰³¹. Fukushima Prefecture has not been making such a request ever since; however it still takes a negative stance toward voluntary evacuation, rather than supporting it due to its concern about population outflow.

Nor are municipalities being supportive of voluntary evacuation. For example, according to Koriyama residents, a "Regional Admission System³²" for children who evacuated from Fukushima to Niigata City (a system that admits children in Niigata City who cannot receive childcare into nursery schools in other municipalities, and children in other municipalities into nursery schools in Niigata City) is not made available to children in Koriyama City. Although Niigata city intends to accept infants from Koriyama City at its request, Koriyama City denies its applicability despite legislation which shows the city falls under the system (See Annex 6).

9. Recommendations

In a statement published on August 17, 2011, HRN has made a series of recommendations to the government and Tokyo Electric Power Company (TEPCO)

³⁰Under this measure, which is based on flexible operation of the Disaster Relief Act, prefectures lease private housings for evacuees fleeing from the affected areas, and claim compensation for the cost from Fukushima Prefecture. The national treasury pays a large part of the cost in the end.

 $^{^{31}}See$ "Presidential statement on a system of leasing private housings for evacuees based on the Disaster Relief Act", at

http://www.nichibenren.or.jp/activity/document/statement/year/2011/111209_2.html.

³²See Child Welfare Act, Article 56-6(1), English translation can be acquired at, http://www.japaneselawtranslation.go.jp/law/detail main?vm=&id=11.

regarding various measures necessary to protect people's rights to health. The outline of the recommendations is as follows³³.

- Provide compensation for residents living in areas with radiation levels of over 1mSv per year (excluding background radiation), and provide evacuees who lost their living basics with comprehensive support so that they can put their lives back in order.
- Protect people in areas with radiation levels of over 1 mSv per year (excluding background radiation) with measures such as: establishment of a radiation monitoring system; disclosure of data to residents; immediate decontamination and restoration of a clean environment; radiation protection; provision of food, healthcare and a long-term health effect assessment, including examinations of internal exposure.
- Reconsider evacuations areas based on the actual levels of contamination.

However, actual measures taken in Fukushima City and Koriyama City are a long way from protecting people's rights to health. HRN is particularly concerned about the fact that the government is not taking initiatives regarding support for evacuation and decontamination residents are suffering from a number of problems. First of all, people, especially children, who have been exposed to high doses of radiation, cannot even find out about the effects of radiation on their bodies due to the lack of health examinations. Moreover, food products are being distributed as safe in spite of the insufficient monitoring system, and children have to eat school lunch prepared without adequate safety inspections. Under such circumstances, people's health has been threatened.

HRN makes recommendations based on the findings during the investigation as follows.

I. To the Japanese Government

³³See "Opinion on the Measures to be Taken by Japan and Tokyo Electric Power Company to Address the Destruction of Health, Environment and Life Caused by the Fukushima Daiichi Nuclear Power Plant Disaster", Human Rights Now (2011), at http://hrn.or.jp/eng/activity/20110912 ikensho.pdf.

- 1. Taking citizens' demands into consideration, carry out fair, precise and exhaustive measurement of radiological dosage, and choose areas with high doses of radiation as measuring points.
- 2. Reconsider the evacuation area based on the results of those measurements.
- 3. Take the following measures in municipalities with areas where an estimated external dose (excluding background radiation) exceeds 1mSv per year, putting maximum priority on "Voluntary Evacuation Areas" designated by the Committee.
 - (1) Carry out free examinations of internal exposure and thyroid glands for all residents within six months. Purchase and distribute medical equipment necessary for the examination, such as whole body counters.
 - (2) Provide citizens with a precise and periodic medical examination at no charge, and establish a health monitoring system in order to prevent development of diseases caused by radiation exposure. Legislate free medical expenses for all diseases that bear a causal relationship to radiation exposure.
 - (3) Using government expenditure, purchase and distribute radiation counters for food to all meal supply centers and kitchens of elementary and middle schools, in order to conduct inspections of all food products and secure the safety of school lunch.
 - (4) Using government expenditure, purchase and distribute the latest radiation counters for food to establish a system of inspection for all food products.
 - (5) Take initiatives to conduct effective decontamination in areas outside "Designated Decontamination Areas".
 - (6) Recognize residents' right to evacuate and support evacuation by providing evacuees with housing and financial support to meet the exact costs of evacuation, separately from compensation from the Dispute Reconciliation Committee for Nuclear Damage Compensation.
 - (7) Based on flexible operation of the Disaster Relief Act, support residents' evacuation by developing administrative services to provide detailed information about municipalities that are accepting so-called "voluntary evacuees."
 - (8) Establish a system of temporary evacuation and recuperation during long vacations such as summer vacation for citizens, especially children under the age of 18.

In addition to the implementation of the aforementioned measures in the recommendations to the government, HRN makes recommendations to Fukushima Prefectural Government and Fukushima and Koriyama City Municipal Office as follows.

II. To Fukushima Prefectural Government

- 1. "Fukushima Health Management Survey"
 - (1) Reorganize the research committee for the "Fukushima Health Management Survey" in such a way that it is composed of experts who have knowledge and experience of the dangers of low-level radiation, and who take a stand on recognizing the gravity of the health risk rather than promoting a "Safety Campaign."
 - (2) Ensure complete and transparent disclosure of results from the survey and explain about the risks of radiation in order to restore citizens' trust in data distributed by the Prefectural Government.
- 2. Provision of information and education about radiation protection

Reconsider the means of providing information on low-level radiation to citizens by calling on experts who take a stand on recognizing the gravity of the health risk from radiation.

3. Acceptance of evacuees in other prefectures

Publicly withdraw the request to stop each municipality from accepting new applicants for private housings leased for evacuees, and make sure the prefecture will never make such a request.

III. To Fukushima and Koriyama Municipal Office

- 1. Do not enforce resident' participation in dangerous decontamination activities against their will.
- 2. Ensure that decisions on the installation of temporary sheds are made in an open and transparent process with the participation of citizens. Put warning signs on the sheds, and declare the area as off-limits.
- 3. Announce the origin of all food products used in school lunch to students and their parents. Periodically hold a meeting with parents for the purpose of exchanging

opinions to ensure the safety of school lunch.

4. Take appropriate measures, including the "Regional Admission System", to help voluntary evacuees and their children to live in comfort at their places of refuge .

III. To other Prefectures

Based on flexible operation of the Disaster Relief Act, support voluntary evacuations by actively accepting new voluntary evacuees and providing them long-term support.

IV. To International and domestic donors and private sectors

Considering the urgent need of protecting Fukushima residents and children who forge the future of the Fukushima, provide support focusing especially on the following two points and proper resource distribution:

(1) Support to provide citizens' groups and municipalities with radiation counters for measuring food contamination and internal exposure.

(2) Support to consolidate a system of accepting voluntary evacuees.