DISCUSSION PAPER SERIES

The Damage by Asbestos and the Problems of Compensation/Relief in Japan

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2010年2月

RPSPP Discussion Paper No.16



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1. The global expansion of the damage caused by asbestos

In June 2005, three mesothelioma-afflicted residents of the community surrounding Kubota Corporation's Amagasaki Plant field charged together with support groups demanding that Kubota assume responsibility for their exposure to asbestos. Although Kubota had offered compensation for industrial disease stemming from asbestos exposure, it was shocked by the level of asbestos exposure and harm that local residents had experienced. Kubota was thus prompted to go to public with details surrounding the extent of asbestos-related contamination from its manufacturing facilities to date and the status of related relief efforts. Popularly dubbed "Kubota Shock", this even set the stage for sweeping public policy response.

"Kubota Shock" brought the damage by asbestos over more than 100 years into the open. This "Kubota Shock" is giving a big impact on South Korea and other Asian countries. The Kubota has started to give a relief treated as the compensation for industrial disease (25 million to 46 million yen for compensation) to the sufferer from environmental pollution. In February, 2006, the Japanese government also constituted the Asbestos' Disaster Relief Act and began to relief for the victim who was damaged by environmental pollution and did not apply for compensation for industrial disease until now. Then, the Kubota and other companies started to disclose the condition of the industrial disease caused by asbestos' damage.

(1) Serious damage

After the Japanese government and enterprises dealt with the damage by asbestos, it is proved that the serious damage has already started to appear although it is hard to grasp a whole picture of the damage because of no epidemiology investigation, which is the fundamental research of damage. As shown in Table 1, the number of the officially acknowledged victim of asbestos until 1994 was 203, the next 10 years (from 1995 to 2004) was only 653. In 2005 when "Kubota Shock" occurred, however, 715 people were acknowledged as the victim of industrial accidents, more than 10 times as many as so far. In 2006, the number amounted to 1783 people, 30 times as many.

The number of victims acknowledged by the Asbestos' Disaster Relief Act amounted to 2,389 including people who were dead and alive. The number of the acknowledged sufferer from lung cancer by pulmonary asbestosis is less than other countries, but there are 2,000 to 3,000 deceased people per year. It shows that asbestos' damage is more serious industrial disease than other pollution's damage like Minamata disease. In the case of Kubota, in September, 2008, the number of the victim caused by asbestos was 347, and the number of the dead was 269. The victims of inhabitants including the family were 185 people, and 129 people of them were dead. The Kubota paid compensation treated as industrial accidents' case to 161 victims.

Table 1
Japanese Trends of the compensation and relief for Mesothlioma and pulmonary asbestosis cancer

			ascestosis carreer		
	~1994	~2004	2005	2006	2007
The estimated of the number of the dead	11,055	21,039	2,733	3,150	3,204
Insurance for workers' disease	203	653	715	1,783	1,002
Insurance for seamen		4		33	18
Compensation for ex-national Japan rail		2	11	30	35
workers					
Compensation for others		1		5	2
relief for Acquisitive (or extinctive)				841	95
prescription					
New Relief Law (for the dead)				1,590	320
New Relief Law (for alive)				799	642
Total of acknowledged victims	203	660	762	5,601	2,114

Source: "Information of labor safety center" 2009, vol. January/February, p74

(2) The damage across the world

As shown in Table 2, about 200 million tons of asbestos has been used since the 1920s. The number of the dead caused by asbestos estimates 10 thousands people per year in the United States, and several millions of people until the end of this century in the world. The Japanese government has prohibited from using asbestos since 2006, but the victim who had been exposed to asbestos from the 1950s to the 1970 come to appear now. It can be said that the damage will exist (occur) through this century as long as disaster such as destruction of buildings and earthquake occurs.

Table 2
Worldwide Asbestos Supply and Consumption Trends from 1930 to 2003
(the amount of production + that of import) – that of export unit: tons

Nation/year	1930	1960	1970	1980	1990	2000	2003
China	315	81,288	172, 737,	150,000	185,748	382,315	491,954
India	1,847	23,652	49,792	96,892	118,964	145,030	192,033
Japan	11,193	92,483	319,473	398,887	292,701	85,440	23,437
South	-	631	36,664	46,641	76,083	30,124	23,779
Korea							
Thailand	-	6,433	21,272	58,756	116,652	109,600	132,983
The U.S.	192, 454	643,462	668,129	358,708	32,456	1,134	4,634
England	23,217	163,019	149,895	93,526	15,731	268	22
France	ı	83,385	152,357	125,549	63,571	ı	1
Italy	6,942	73,332	132,358	180,529	62,407	40	1
Russia	38,332	453,385	680,589	1,470,000	2,151,800	449,239	429,020
Brazil	136	26,906	37,710	195,202	163,238	172,560	78,403
worldwide	388,541	2,178,681	3,543,889	4,728,619	3,963,873	2,035,150	2,108,943

Source: U.S., Geological Survey, Worldwide Asbestos Supply and Consumption Trends from 1900 to 2003

- 2. The collective responsibility of corporations for ignorance of safety and the responsibility of the governmental forbearance
- (1) The offices that creates industrial disease caused by asbestos

More than 80% of asbestos was used for building materials, the rest of that was used for 3,000 kinds of goods such as automobiles (cars), the brakes of locomotives, warships and vessels, energy institutions such as an electric power plant, and cosmetics. The damage is caused in the process of all economic activities, production, distribution, consumption, and disposition.

According to the governmental announcement in March, 2008, the number of offices which notified that they had the victim from industrial disease by asbestos reached 2514. These types of industries were not only the manufacturing industry but also trade, service, and stage making industries.

(2) Mixed (complex) stock pollution

The victim by asbestos exists ranging over Osaka, Hyogo, Tokyo, Kanagawa and nationwide.

. The damage takes 15 to 50 years to develop a fatal disease, such as mesothelioma, lung cancer, and pulmonary asbestosis after one is exposed to asbestos. Such types of pollution is different from so far pollution that contaminants resulting from the process of economic activities cause pollution for a short period. The types of

pollution caused by asbestos is not "Flow Pollution" that pollutant can disappear when a company stops to discharge or changes the production system but "Mixed (complex) Stock Pollution" that pollutant is accumulated in human body, goods, and waste for a long term and causes pollution and workers' disease.

So far asbestos is called "magic material," indispensable for any goods because of its disposition such as heat-resistance and fireproof materials. Although the Japanese government totally prohibited from using asbestos in 2006, there has been no social economic difficulties. After all, alternative materials are no problems to do economic activities. Thus, the reason why the large amount of asbestos had been used is not indispensable but cheaper than alternatives because these were produced by low-paid workers.

(3) Difficulties of corporation's responsibility

Due to the characteristic of "Mixed (complex) Stock Pollution" that it takes long time to appear the damage after exposing, ones cause pollution should pay compensation following principles of PPP and EPR when the government or companies take any compensation and relief measures. However, there is a different problem of workers' disease and pollution from so far ones. Like the case of Sen-nan region in Osaka, almost all enterprises gave up their business, and had no money and even no materials of evidence. In this case, no matter how companies' responsibility should be accused, who takes responsibility?

In the case of the U.S., companies, such as automobile, vessel, power plant, and trading companies, that products are made of a part of asbestos, are accused. However, the principle of EPR has not taken root in Japan, so we have to pursue the responsibility of the Japanese government.

(4) The responsibility of the government

The Japanese government disclosed the damage of pulmonary caused by asbestos in Sen-nan region in 1937 when it was before the war. After the war, the government investigated the condition of the damage by asbestos. At least, there were evidences enough to implement basic measures in the 1970s. While, the measure for asbestos' damage was far behind even though it advanced to taking other pollution measures such as the Pollution's Health Damage Relief Act implemented at that time. In the 1980s, the Scandinavian countries already started to prohibit from using asbestos and disclosed the report about its environmental damage inside and outside the country. Nevertheless, the Japanese Environmental Agency did not investigate the condition of

the health damage of residents living around factories. The Agency just measured the amount of asbestos outside at a particular area and neglected to take its prevention measures. Like called PPM doctrine, the Agency and local governments depend on observational data than human health. This is fundamental failure of them.

(5) The delay of taking prevention measures

It was obvious that the Japanese government did not implement the prevention measures for asbestos' damage when Hanshin-Awaji Earthquake occurred in 1995. Actually, the government finally began to take measures for asbestos after more than 1 month from the earthquake. It just observed and measured the amount of asbestos in the air at parts of regions. According to the observational data, there were some polluted areas where the pollution level was over the standard point of the regulation. However, there were no measures and implementations. So, the government did not issue a warning for construction workers to take safe way to remove asbestos when they engaged in pulling down building and for citizens to wear masks when they restored their town. Due to this, in 2008, there came to appear mesothelioma patients who engaged in the dismantling construction work. There is a possibility of appearing other patients in the future.

The "Trial of Sen-nan Asbestos" will make the responsibility of the Japanese government clear. Moreover, the trial on construction workers in metropolitan area will make clear not only enterprises' responsibility for construction but also their collective responsibility for using and distributing asbestos.

3. Coming measures for asbestos –international comparative study-

Since 2007, Ritumeikan University has researched on asbestos matters internationally. Although it does not reach the conclusion yet, I would like to suggest some measures for asbestos matters in future.

(1) Epidemiologic investigation

We should do the epidemiology research about the workers engaging in asbestos-related factories and residents around there.

The reason why Minamata disease cannot be solved yet is that the investigation of residents' health around the polluted sea has never been done. So, in order to take measures hereafter, such investigation must around be done at places where there are environmental sufferer living around asbestos-using factories, especially like Kubota and Nichias(Nihon Asbestos). Also, the registration of workers engaging in

asbestos-using factories and residents living around there and their long-term diagnosis should be done. It is very hard to collect such data over half century, but we have to do that, because the problems will be not solved unless we do the epidemiologic investigation like the case of Minamata disease.

Enterprises which used asbestos have to disclose details why it started to use asbestos and the history of the production process. In order to make a whole picture clear, movement (campaign) for investigating the victim by asbestos need to be started. The problems are not apparent because they tend to be discriminated in a living area and society and are abandoned from relief. I expect that such a movement will be promoted by support groups helping victim of asbestos.

(2) The legal responsibility of enterprises and the government

A trial should make clear the regal responsibility of enterprises and the government, which should be referred under law.

Enterprises and the government just give relief for their social responsibility at present, so the dead can receive only 3 million yen in the Asbestos Disaster Relief Act. The Pollution Health Damage Relief Act provides compensation of environmental pollution victims treated as one for workers' disease on condition that the Act must fulfill the responsibility of civil affairs. However, the Asbestos Disaster Relief Act does not refer (define) to the governmental responsibility for forbearance.

(3) The revision of the Asbestos Disaster Relief Act

The Asbestos Disaster Relief Act has been defective, because it was established in haste. The amount of compensation prescribed by Asbestos Relief Law is one tenth as many as one for workers' disease. The environmental disease must be severer than that of workers' disease, so the amount of compensation paid by pollution's causers should be the same or more than workers' disease case. Pulmonary asbestosis is acknowledged as a workers' disease, while it is not prescribed under law because there are negative opinions that the factor of the disease is ambiguous. However, in December, 2009, patients with an advanced pulmonary asbestosis were founded around Kubota's factory, so pulmonary asbestosis has to be acknowledged and an object under law. In France, the number of designed victims as pulmonary asbestosis cancer is more than that of mesothelioma. In Japan, on the other hands, that of pulmonary asbestosis cancer is very few because the factor of the disease tends to be smoking (cigarette). Even though there are few medical specialists in Japan, we should identify the illness related to asbestos such pulmonary asbestosis cancer.

(4) Logic of responsibility –the case of France and the United States-

In French case, the government recognized its responsibility legally and established an official relief institution. This provides wide-range targets for relief, a large amount of compensation, and procedural advantage to victims. Its executive committee (including the representative of victim's group) also acts fair.

In the United States' case, the government does not have a conception that the government should take its responsibility and paid compensation for victims. People also have a conception that one should take self-responsibility for his/her action or behavior, so the victim claims for their damages in trial. All the companies which produce goods made parts of asbestos could be the accused because there is a common sense of EPR. According to the Land Research Institution's report 2006, there were 60 thousands trials, 600 thousands accusers, 8,400 accused, and US\$65 billion paid as compensation. Now the number of trials is getting decrease. The settlement by trial seems to be appropriate in the case of following market principle, but there is a problem that victims can get only 30% to 40% of their received compensation, because the rest of that is paid for trial costs to lawyers and the return of public temporal payment for the trial. Thus, this case remains a problem.

In Hong Kong's case, promoted by the Hong Kong Workers' Health Centre, when a construction company contracts to build anything for more than HK\$1 million, it contributes 0.25% of that to the Pneumoconiosis Compensation Fund. This helps victims.

In Japanese case, the Japanese government established the Relief Act quickly, following France. Since then it has helped sufferer who are not acknowledged as workers' disease. Compared to France, however, the legal responsibility of the government is not prescribed clearly under law. In addition, the range of object helped by the Act and the amount of compensation are limited. Moreover, the number of trials is very few as compared with the United States. The definition of every relief institution in Japan is very ambiguous, which rests on Japanese characteristic (peculiarity). Therefore, relief for asbestos' damage is far behind other pollution reliefs.

(5) The safe pulling building down

A coming big problem is the scatter of asbestos in the air when more than 5 million tons buildings are pull down. Another one is how to cope with buildings collapsed by earthquake.

(6) Organizing interdisciplinary research groups

In Japan, almost all environmental researchers are not interested in damage by asbestos, because they regard it as workers' disease. Also, architects do not consider much about the risks of asbestos. Thus, such specialists group should be organized as soon as possible.

(7) Measures for asbestos in Asian countries

As shown in Table 2, a large amount of asbestos had been used in Asian countries, Russia, and Middle South American countries. Therefore, it is important to learn from the failure experiences of Japan and necessary to regulate the use of asbestos at early phase and stop to use. Finally, we should make the world non-asbestos society.

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