TRIBUNE. Fukushima : Time for an end to the End Of Times

5 years have past since the earthquake of 2011, the subsequent tsunami and the resulting explosion of the nuclear power plant. The name of the place is now synonymous with the catastrophe : Fukushima. So where are we now ?

Every March brings a reminder that another year has past since the explosion of the nuclear power plant in Fukushima. This accident, with no equivalent in scale, has put the market of nuclear energy to a severe test, although it still benefits from widespread political support. In response to this situation, citizens from around the world have decided to meet in Tokyo on the week of March 23rd to 27th, 2016, for the Thematic World Social Forum on Nuclear Energy. This world-wide forum proposed a two-day study trip to Fukushima, a day of demonstration in Tokyo, as well as multiple workshops covering diverse issues related to the topic. It is in this context that we publish "Fukushima : Time for an end to the End Of Times", a summary of the situation today in Fukushima, as seen by Cécile Asanuma-Brice, adjoint to the Director of the CNRS North Asian bureau.

All efforts have been made to brush the issue under the carpet before welcoming the olympic games to Tokyo in 2020, the last impulse necessary to forget it all. The pomp and circumstance of the olympic party, accompanied as usual by social cleansing and a persuasive patriotic fervour, will present a golden opportunity : the collective amnesia of this recent disaster which will open the way for the return of the nuclear industry. Despite the decision of the japanese government to reopen the entire evacuation zone around the Fukushima Daiichi Nuclear Power Plant for inhabitation from March 2017, in fact, nothing is solved. "The past is not dead, it has not even passed" wrote William Faulkner. One cannot find more accurate words to describe the current situation.

In the world of Sisyphus, the eternal clean-up becomes an absurdity

More than 9 million garbage bags, each containing 1 cubic meter of contaminated waste, have been spread up in <u>114</u>, <u>700 sites within the Fukushima prefecture since the end of September 2015</u>. These plastic bags are only able to contain radioactive earth and waste for a limited time. As the seasons passed by, deformed shoots sprouting from seeds in the ground have ripped them open to let the contaminated debris escape into the wind. Despite its fanciful nature, this policy will see its budget peak at 91 billion yen for 2016 (727 million euros). The expenses for <u>decontamination have reached 1 billion 500 million euros</u> in total since 2011. The programme of so-called 'decontamination' aims to convince the public that all efforts are being made to protect life but in reality, it has only one objective: to fool the population into accepting a return to nuclear power.

How the lobby is putting on a show through 'risk communication'

A political choice has been made to implement an increasingly pernicious risk communication strategy, claiming for example, that the risk of an earthquake or a volcanic eruption is more threatening than that of a nuclear disaster (dixit Dr Kumagai Tomohiro, neurologist, Medical University of Fukushima) and that obesity and high blood pressure, due to the lack of sport caused by spatial limitations in contaminated zones, is more harmful than irradiation (Dr Tsubokura Masaharu, general hospital of Minamisôma, Tokyo University). There is even a program of teaching the primary school children of Fukushima prefecture how to filter cesium out of the earth (workshops organised by Pr. Mizoguchi Masaru, Tokyo University). Others, like the Pr. Hayano Ryugo (Tokyo University, fervent actor of the program Ethos Fukushima), have skilfully convinced groups of high school students, not only from the Fukushima prefecture, but also from France, the USA and Belarus to sign a report endorsing the safety of radioactivity. The ICRP (International Commission on Radiological Protection) and the program Ethos organise seminars that allowed these students to publish their works in an international scientific journal and to present them at a press conference at the Foreign Correspondent's Club of Japan in December 2015. The lead agitators of the policy of continuing the

dependency on nuclear power understand they must communicate their message to future generations and do not miss the opportunity to better prepare them to accept their irradiated future, since it cannot be radiant.

"My husband no longer talks about the future"

Nevertheless, the inhabitants are not fooled and, despite the fact that the government has called them to go back to live in contaminated zones as well as its decision to reopen the entire evacuation zone in March 2017, voices are rising. No less than 12, 539 people have started legal proceedings to ask for damages, estimated at 895 million euros (113 billion yen) in total. This figure remains relatively modest if one takes into account the 99,991 official refugees of the nuclear accident, of which about 50,000 are within the Fukushima prefecture. Amongst them, 18,322 still reside in temporary housing, 30,000 live in private housing with their rent being paid by the State, and 654 people live in public housing. All will see an end to their housing aid in March 2017.

In addition, only 10 to 20% of the population of litate village, classified as a priority zone for community reconstruction, plan to come back, even if the environment improves. This matches the percentage also expressed by the total of all the other districts questioned. On February 27th, 2016, during a symposium in Fukushima on whether it will or will not be possible to return and live in the village, Imanaka Tetsuji, professor in nuclear physics at the Research Institute of Kyoto University studying nuclear reactors, estimated that, despite a natural decrease in the environmental contamination, the radioactivity level is in some places still 10 to 20 times greater than that before the accident. According to Tetsuji, the policy of rehousing residents is still a pressing issue and it remains all the more so, as it is impossible to remove contamination from the surrounding mountains. In addition, Mr. Masuda Naohiro (Chief Director of the Commission for the Fukushima Nuclear Power Plant) confirmed on March 2nd, 2016 that the cores of reactors 1, 2 and 3 have indeed melted, making holes in the reactor tanks but that where the molten cores went is unknown. In this context of uncertainty, it is difficult to put the mind of the public at rest.

The body does not lie

Information about the increasing number of children affected by thyroid cancer is being provided through announcements made by the health commission in charge of the detection tests, to almost complete indifference by the international community. By February 2016, the number of children under 18 who are affected, or suspected to be affected, by thyroid cancer, had reached 167 after testing conducted on 37,0000 individuals, whereas the natural rate is 1 in 1 million. Specialists from the commission contradict themselves by asserting that they do not know about these cancer cases, while reporting that it is not possible to attribute them to radiations. The argument put forward is one of 'over-diagnosing', that is to say the theory that more frequent systematic screenings would lead to the diagnosis of a higher number of cancer cases than before. This argument could hold if screening was done over the entire territory but it cannot hold when we only consider the population at risk, which it is in this case. The current health investigation only concerns the inhabitants of Fukushima, but a serious study would be forced to generalise the tests both nationally and over the whole age spectrum, in order to allow for a comparison between geographic zones. On the contrary, the commission is heading for a reduction of the tests that are considered too expensive. Professor Tsuda, Epidemiologist at the University of Okayama believes that it is high time to sound the alarm. With his research group, he re-examined all the data gathered from October 2011 to June 2015. They undertook a comparative study, published in the international journal *Epidemiology*, that takes into account the known mean of thyroid cancer development over Japan, according to age group and by year. Their aim was to quantify the causal link between the pollution generated by the isotopes spread in the atmosphere after the nuclear explosion and the rise in the number of thyroid cancer among the children under 18 in the region. "If we make a comparison with the nationally known mean, we deduce that the rate of thyroid cancer in sufferers below 18 years old has been multiplied by 50. In places where the rate is naturally low, we find that the number of thyroid cancer cases has increased by 20. In localities (accross the country) where the rate was lowest, we have not yet detected any case of thyroid cancer development."

Japan and France are only one step apart : whether the levels kill or not

The aim of the japanese government and nuclear industry is to prove to the world that we know how to manage the aftermath of a nuclear catastrophe, when we clearly do not. International institutions use underhand tactics to raise safety levels to 'acceptable' in the area surrounding a continually declining power plant in order to allow for the reopening of the evacuation zone. By January 17, 2014, The European Union (let's make a note that this is not a story that concerns just Japan) was paving the way for the continuing use of nuclear power by announcing : 'Without prejudice to the reference levels fixed for equivalent doses, reference levels expressed in effective dose are now fixed between 1 and 20 mSv per year for current exposure situations, and from 20 to 100 mSv (acute or annual) for

emergency exposure situations' (page L13/39 (Appendix I, article 1). In a report of August 2014, following the ICRP (the International Commission on Radiological Protection that provides the reference on this matter), the Japanese Ministry of the Environment defended the position that levels below 100mSv per year will have no negative consequences on health. This was met by the great discontent of epidemiologists specialising in the matter. Following such logic, the surface of the zone to be evacuated after the next accident will likely be reduced when, in reality, it should be enlarged. Reducing the size of the evacuation zone indeed allows a drop in the cost of the calculated risk to the nuclear industry. This is exactly what is foreseen by the CODIRPA plan (the Directing Committee for Post-Nuclear Accident Management) elaborated in 2005 for France by the French Nuclear Safety Authority (ASN). Its objective is clear : managing *'the rehabilitation of living conditions in contaminated zones*". Nevertheless, this same agency is sounding the alarm today. The president of the ASN, Pierre-Franck Chevet, remains very cautious on the issue of lengthening the life span of a nuclear park that is already out-dated. He declared recently that one must <u>"imagine that an accident like Fukushima may happen in Europe"</u>...

Excerpt borrowed from Günther Anders, La menace nucléaire, Considérations radicales sur l'âge atomique, work published in 2005, text written in 1959.

The declaration of Dr Kumagai Tomohiro was made during a seminar by the ICRP on ethics organised in Fukushima in June 2015.

Former inhabitant of litate, 42 years old (interview in Fukushima, February 2016)

Asahi Shinbun Journal, March 6th, 2016

Mainichi Journal, January 8th, 2016