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**“HEALING OUR BROKEN ENVIRONMENT”
Reflections on Eco-Faith Concerns of the
Church after the 3.11-Japan’s Nuclear Disaster**

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Introduction

It is one year after the Great Eastern Japan Earthquake on 11 March 2011 and the eventual accident in the Fukushima Daiichi Nuclear Plant occurred which contaminated the ocean and land by radiation, and tragically disrupted the daily life of an enormous number of people. Apart from the 19,100 people dead or missing¹ in the event of earthquake-tsunami disaster, tens of thousands of people are evacuated from the neighbouring area of the nuclear plant, and numerous people are forced to live in fear and anxiety because of the nuclear disaster. The government, still not knowing exactly what to do with resettling, decontamination and reconstruction, has not made any sign of dropping the nuclear plants. Moreover around 3000 people are working daily inside the unsafe plant to repair, control and make it safe. There are 54 nuclear plants all over the country

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¹15,800 dead and 3,300 missing until February 25, 2012 (TBS News Japan).

which has regular earthquake and tsunami warnings. People, who take an intellectual or scientific approach on environmental issues, discover the grave problems in the environment and the people who suffer them. Others, in the social field, begin from the suffering of the poor from environmental degradation and look to science for help. Some see human reality in explicitly ecological terms; for others, ecology is a spiritual vision or a theological world-view; and still others take an economic or political viewpoint, an ethical or theological one, in their approach to environmental issues. Still others gaze on the horizon and are simply puzzled by the topic or frankly disinterested in it. The issues of ecology therefore are multi-faceted, and a constant interplay amongst the viewpoints may be the best approach: intellectual-scientific aspects combining with the spiritual-theological dimensions for the sake of effective action and networking. Scientific controversy and socio-political-cultural complexities ought not to block people from prioritizing ecological issues and acting on them.

In the following pages, I would like to reflect on the experience of Japan in the aftermath of the great Earthquake and the tragedy followed by the nuclear accident at Fukushima daiichi (number 1) nuclear plant and the eco-faith concerns of the Church focusing on the Statement of the Japanese Bishops' Conference which took a stand on the issue titled, *"Abolish Nuclear Plants Immediately ~Facing the Tragedy of the Fukushima Daiichi Nuclear Plant Disaster~"*.² I also will refer to two recent Jesuit documents, namely *"We live in a broken world" – Reflections on Ecology* (1999)³ and *"Healing a Broken World"* (2011),⁴ which gave lively expression to environmental concern in the Society of Jesus and raise a vital "ecological consciousness" in the various apostolic activities.

3.11 Japanese Nuclear Tragedy And Environmental Contamination

Nuclear meltdowns, and releases of radioactive materials at the Fukushima daiichi (number1) Nuclear Power Plant, following the east Japan earthquake and tsunami on 11 March 2011 is the largest nuclear disaster since the Chernobyl disaster in 1986. The meltdown

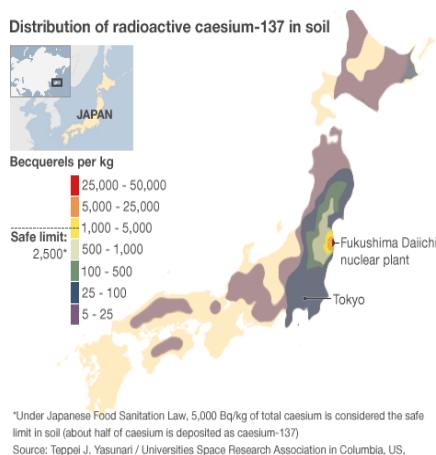
²*"Abolish Nuclear Plants Immediately ~Facing The Tragedy of the Fukushima Daiichi Nuclear Plant Disaster~"*, Statement of the Catholic Bishops' Conference of Japan, Sendai, November 8, 2011, published also on CBCJ website, last accessed on February 29, 2012.

³*"We Live in a Broken World – Reflections on Ecology," Promotio Iustitiae*, Social Justice and Ecology Secretariat, Rome: General Curia of the Society of Jesus, 1999.

⁴*"Healing a Broken World," Promotio Iustitiae*, Social Justice and Ecology Secretariat, Rome: General Curia of the Society of Jesus, 2011.

of three nuclear reactors at the Fukushima contaminated large areas of farmland, forests, sea and air as radioactive isotopes were blown over Japan and its coastal waters. Fears that agricultural land would be contaminated prompted research into whether Japanese vegetables and meat were safe to eat. The prefecture of Fukushima was Japan's fourth-largest agricultural area, a top producer of many fruits, vegetables, tobacco, and raw silk. But samples of fish, mushrooms and meat from Fukushima prefecture continue to exceed regulatory standards for radioactive contaminants. Restrictions were lifted as of 7 November 2011 on the distribution and consumption of leafy vegetables and turnips produced in specific areas of Fukushima prefecture.

New research has found that radioactive material in parts of north-eastern Japan exceeds levels considered safe for farming.⁵ The findings provide the first comprehensive estimates of contamination across Japan following the nuclear accident in 2011. According to this study conducted by a research team, Caesium-137 lingers in the environment for decades, and so is more of a concern than other radioactive elements released in the cloud of steam when the reactors' cooling systems failed, leading to explosions. The team found that the area of eastern Fukushima had levels of the radioactive element that exceeded official government limits for arable land.⁶



⁵James E. Hansen, "Cesium-137 Deposition and Contamination of Japanese Soils Due to The Fukushima Nuclear Accident," *Goddard Institute for Space Studies*, New York, October 5, 2011.

⁶Jennifer Carpenter, "Fukushima Fallout Fears over Japan Farms," *Science Reporter*, BBC News, November 15, 2011.

According to studies there are various impacts of radioactive pollution on living species. In the short term, all the species in the marine trophic chains in coastal areas close to the Fukushima-Daiichi power station are likely to be impacted by the radioactive pollution of the sea water. A study conducted on the impact of marine environment immediately after the nuclear disaster pointed out that measurements taken over several days in the sea water in the vicinity of the power station have revealed severe contamination of the marine environment by various radionuclides released as a result of the accident at the Fukushima-Daiichi nuclear power station.

As a general rule, the radioactive pollution of the sea is caused partly by the direct release of contaminated water from the power station, and partly by conveyance via rivers of the radioactive pollutants deposited on the ground following atmospheric release, and subsequent rainwater run-off, and partly finally by the fallout in the ocean of a proportion of the radionuclides from the atmospheric plume, which the winds carried over the sea during a large fraction of the accident sequence. Some of these radionuclides are soluble; and will be carried over very long distances by the marine currents and dissipated throughout the ocean water masses. Others will tend to be more or less bound to suspended particles in the water, causing sedimentary contamination by deposition on the ocean floor. The short-lived radioactive elements, such as iodine 131, will only be detectable for a few months (the radioactivity of iodine 131 reduces by a factor of 1000 every ten half-lives (the period after which the radioactivity of a radionuclide reduces by half, i.e. every 80 days). Others, such as ruthenium 106 and cesium 134 will persist in the marine environment for several years. Cesium 137 has a long radioactive half-life (30 years). It will undoubtedly justify careful long-term monitoring, in Japanese coastal areas where it is liable to be present in sediments. The same would apply to plutonium that is found in the marine effluents.

The Myth of Decontamination

Lacking land for resettlement and facing public outrage over the accident, the Japanese government has chosen a very different path, embarking on a decontamination effort of unprecedented scale. Decontaminating the Fukushima region to remove radioactive particles will not be possible without removing large amounts of soil, leaves and plants. Beginning 2012, at least 1,000 sq km of land — much of it forest and farms — will be cleaned up as workers power-

spray buildings, scrape soil off fields, and remove fallen leaves and undergrowth from woods near houses. The goal is to make all of Fukushima livable again. But as scientists, engineers, and ordinary residents begin this massive task, they face the possibility that their efforts will create new environmental problems in direct proportion to their success in remediating the radioactive contamination. “Decontamination can be really effective, [but] what you have is a trade off between dose reduction and environmental impact,”⁷ says Kathryn Higley, a radio ecologist at Oregon State University who has studied several decontamination sites in the United States. That’s because removing the radioactive particles without removing large amounts of soil, leaves, and living plants is nearly impossible. The Ministry of Environment estimates that Fukushima will have to dispose of 15 to 31m cubic meters of contaminated soil and debris by the time the decontamination projects end. Costs are predicted to exceed a trillion yen. Given these drawbacks, an International Atomic Energy Agency fact-finding mission advised the Japanese authorities to “avoid over-conservatism” in their decontamination plans - in other words, not to clean up more than necessary to protect human health. Yet the health impacts of long-term exposure to low levels of radiation are not entirely clear. Many scientists believe exposure to even very low levels can slightly increase cancer risk, and many Fukushima residents feel they should not be forced to live with that risk - or the undercurrent of fear it brings.⁸

But while the political debate over how much to clean up rages on, more practical preparations are already underway. Officials involved with the cleanup are well aware of the drawbacks to these approaches: huge amounts of radioactive waste that no one wants to store long-term; immense investments of money, labor, and time; damage to wildlife habitat and soil fertility; increased erosion on scraped-bare hillsides; and intrusion by people and machinery into every area scheduled for remediation. “You remove leaf litter from the forest floor and radiation levels fall,” said Shinichi Nakayama, a nuclear engineer at the JAEA who is overseeing the 19 decontamination pilot projects planned or underway. “You take away the deeper layers and they fall more. But you take it all away and the ecosystem is destroyed. Water retention goes down and

⁷Winifred Bird, “Nuclear Cleanup Could Create Its Own Environmental Disaster,” Yale Environment 360, part of the Guardian Environment Network, published in *guardian.co.uk*, January 9, 2012.

⁸Winifred Bird, “Nuclear Cleanup Could Create Its Own Environmental Disaster.”

flooding can occur.”⁹ In other words the effects of nuclear pollution are not easily contained by the decontamination projects.

The fallout goes beyond the myth of decontamination when it comes to the safety of the environment. What about the safety of Human health? So far, Japan's central government has taken direct responsibility for decontaminating areas within 20km of the plant and those where yearly exposure could exceed 20 milliSieverts. (Together these areas make up the evacuation zone.) The environment ministry predicts natural radioactive decay and weathering alone will reduce levels by 40% within two years, but a “clean Fukushima” is impossible to envision for the next many decades. One year after the nuclear disaster, recovery and reconstruction activities of tsunami affected areas is under way, but trust in the authorities is nearly non-existent in the case of nuclear reactors. Without it, Japan's government risks the biggest cleanup fiasco of all: a decontamination effort that carries huge financial and environmental costs but still fails to convince Fukushima residents that their homes, farms, and forests are safe once again.

Debate On Energy Policy

Japan has had a long history of earthquakes and seismic activity, and destructive earthquakes, often resulting in tsunamis, occur several times a century. Due to this, concern has been expressed about the particular risks of constructing and operating nuclear power plants in Japan. Amory Lovins has said: “An earthquake-and-tsunami zone crowded with 127 million people is an un-wise place for 54 reactors”. To date, the most serious seismic-related accident has been the Fukushima Daiichi nuclear disaster.

Although Japan's nuclear crisis has forced several countries to rethink nuclear energy, in Japan, where the industry has long wielded influence over energy policy, the emphasis for now is on improving safety, rather than abolition. But a growing number of Japanese are concerned about the cost of continued investment in nuclear power and are attempting to push Japan toward replacing nuclear energy with renewable. By shattering the government's long-pitched safety myth about nuclear power, the crisis dramatically raised public awareness about energy use and sparked strong anti-nuclear sentiment. A June 2011 Asahi Newspaper poll of 1,980 respondents found that 74 percent answered “yes” to whether Japan should

⁹Winifred Bird, “Nuclear Cleanup Could Create Its Own Environmental Disaster.”

gradually decommission all 54 reactors and become nuclear free.¹⁰ An energy white paper, approved by the Japanese Cabinet in October 2011, says “public confidence in safety of nuclear power was greatly damaged”¹¹ by the Fukushima disaster, and calls for a reduction in the nation’s reliance on nuclear power. It also omits a section on nuclear power expansion that was in last year’s policy review. Survivors of the Hiroshima and Nagasaki atomic bombs have joined forces with younger Japanese to voice concerns. The Catholic Church of Japan also joined these voices to go without “nuclear power” which is nothing but “atomic power”.



Anti-Nuclear Power Plant Rally
19 September 2011 at Meiji Shrine Outer Garden, Tokyo.

However, Japan’s present prime minister Yoshihiko Noda echoed that Japan must continue to rely on nuclear power, despite the meltdowns at Fukushima. He has moved away from his predecessor Naoto Kan’s political approach. Mr. Kan promised to reduce Japan’s reliance on atomic power after the world’s biggest nuclear disaster. Noda has acknowledged that public safety concerns will make it tough to build new reactors, but he said decisions on reactors already under construction would have to be made “case-by-case.” Public safety fears remain high. Tens of thousands rallied in Tokyo urging an end to nuclear power, a hefty showing in a country where taking to the streets is rare. Their concerns include how to deal with

¹⁰Kazuaki Nagata, “Fukushima Meltdowns Set Nuclear Energy Debate on Its Ear,” *The Japan Times*, January 3, 2012.

¹¹Tsuyoshi Inajima and Yuji Okada, “Nuclear Promotion Dropped in Japan Energy Policy After Fukushima,” *Bloomberg*, October 28, 2011.

increasing nuclear waste, such as the Fukushima reactors. Japan, the world's third-biggest nuclear generator, has postponed a decision on where to build a nuclear waste repository.

The traditionally close ties between the nuclear industry, politicians, and safety agencies (the Japanese "nuclear village") have hidden the true financial and other costs of atomic power plants. While the public opinion is divided on the status of Japan's nuclear energy and plants, the Japanese Church has come out publicly condemning the government position and calling for immediate abolition of the nuclear plants. Before getting into the statement in detail let us see briefly the background of the position of the Church's position.

The Response of the Church: Catholic Social Teaching and Ecological Concerns

Care for the environment is, first and foremost, based on recognizing the environment as a true good. Psalm 104, a sustained hymn to the glories of Creation, leads to praise of the Creator. Our primary human response to the good is to appreciate it, which is a contemplative response. Without such appreciation, any ethical duties attributed to us will seem secondary, or even oppressive. Secondly, this intrinsic good is a common good. The goods of creation belong to humanity as a whole.¹² The Church has a responsibility towards creation, and she considers it her duty to exercise that responsibility in public life, in order to protect earth, water and air as gifts of God the Creator meant for everyone, and above all to save mankind from the danger of self-destruction. The degradation of nature is closely linked to the cultural models shaping human coexistence: consequently, "when 'human ecology' is respected within society, environmental ecology also benefits."¹³

The principle of solidarity thus applies to the environmental no less than to the social field, for environmental damage is also a social evil; in particular, it harms the poor who have the least chance of evading its consequences, whereas the products of environmental exploitation go overwhelmingly to richer countries and richer people. *Caritas in Veritate*,¹⁴ reflecting Catholic Social Teaching as a whole, insists that

¹²Benedict XVI, "If You Want to Cultivate Peace, Protect Creation," *World Day of Peace Message-2010*. (Available also in The Holy See website, last accessed on February 20, 2012).

¹³*Compendium of the Social Doctrine of the Church*, No. 467, Rome: Pontifical Council for Justice and Peace, 2004.

¹⁴Benedict XVI, *Caritas in Veritate*, *Encyclical Letter*, Rome, 2009. (available also in The Holy See website, last accessed on February 29, 2012).

justice and the service of the common good lie at the heart of what it is to love. It applies to the environment the principle of the universal destination of the goods of creation to the principal dimensions of human life: commerce, the international political order, and each person's choices, often expressed through civil society. The appreciation and service of this common good calls us to responsibility. Human beings legitimately exercise a responsible stewardship over nature, to protect it, to enjoy its fruits and to cultivate it in new ways so that it can worthily accommodate and feed the world's population.

We have a grave duty to hand the Earth on to future generations in such a condition that they too can worthily inhabit it. From a Judaeo-Christian perspective, there is a “covenant between human beings and the environment, which should mirror the creative love of God.”¹⁵ In other words, we assume an obligation that follows from faith to sustain creation and even enhance it. “The world's present and future depend on the safeguarding of creation, because of the endless interdependence between human beings and their environment. Placing human well-being at the centre of concern for the environment is actually the surest way of safeguarding creation; this in fact stimulates the responsibility of the individual with regard to natural resources and their judicious use.”¹⁶

Challenges of Eco-Faith Consciousness

Faith Challenge: The ecological crisis also challenges our faith. It is the very dream of God as creator that is threatened. It is the entire world, the one God put in the hands of humankind to keep and preserve, which is in real danger of destruction. This is not an apocalyptic message but a very real possibility if we stick to our ‘business as usual’ attitude and refuse to act with conviction and strength. The first victim is the Earth, the resources that it contains and that are destined for present and future generations. Special mention must be made first of biodiversity, the loss of which is irreversible and dramatically reduces the richness of nature.

Linkage between environment and poverty: Next among the victims are the poorest of this world. The ecological crisis threatens the livelihood of all people, especially the poor and most vulnerable: they live in increasingly fragile contexts characterized mainly by natural

¹⁵Benedict XVI, *Caritas in Veritate*.

¹⁶John Paul II, “Respect for Human Rights: The Secret of True Peace,” *Message for the World Day of Peace-1999*. (available also in The Holy See website, last accessed on February 29, 2012).

hazards, changing climatic conditions, pollution, deforestation, and desertification and soil exhaustion. Diminishing access to natural resources makes livelihood management more difficult; disasters such as flooding, fire or chemical pollution can suddenly push a family into extreme poverty. The poor, in relying on natural resources more heavily, feel themselves to be more vulnerable to environmental change. Despite their knowledge of seasonal conditions, poor people, limited in resources by their socio-economic condition, are unable to prepare themselves for the consequences of diminishing natural resources and to respond to the speed of change. Unsanitary conditions and a poor working environment are obviously contributors to poor health. In urban areas in particular, pollution of water sources, flooding of houses and lack of drainage, stagnant water and absence of sanitation facilities are both causes and consequences of poverty.¹⁷ The linkage between environment and poverty is unavoidable, and that is the real challenge for all of us.

The role of science and technology: In reviewing the context of our response to environmental challenges we need to mention the role of science and technology. Advances in technologies with high environmental and/or human health costs (e.g. GMO crops, growth hormones in meat production, destructive natural resource extraction, etc.) have significant ethical implications. An ethical perspective, lacking to date, should always play a rigorous role in this growing industry. On the other hand, scientific and technological knowledge can generate a potential for 'benevolent' innovation. Technological developments in areas such as clean energy production, energy efficient architectural design, water reclamation, microbial degradation of pollutants, and sustainable agriculture hold promise for climate change mitigation. Our knowledge of nature can be oriented toward developing new natural and technological resources. It is crucial to recognize that science and technology have opened up the possibility of organizing a sustainable economic process. A productive process grounded in the generation of a more complex, dynamic, and flexible technical structure, integrated with the global ecological process of production and reproduction of natural resources, offers more versatile options for sustainability than those that emerged from the valuation of resources by means of market signs and sectorized economic planning. Furthermore, it allows for better space distribution of productive resources and more

¹⁷Mary Ann Brocklesby, *Poverty and the Environment: What the Poor Say*, Centre for Development Studies, University of Wales Swansea, 2001.

equitable access to social wealth.¹⁸ Human beings are entrusted with the sole responsibility of promoting environmental ethics and non-violence, while concern for all creatures and compassion are deep values.

Faith-Concerns of the Church: Reconciliation with Threefold Relationships

The Church, and especially the two most recent Popes, have been insisting on the need for efforts to preserve the environment, and thus to protect creation and the poorest populations, who are those most threatened by the consequences of environmental degradation. The overwhelming majority of environmental problems have economic, social, political, and cultural forces at their origins, and it is only by taking these broadly into consideration that ecology as a viewpoint acquires its full human scope. Pope John Paul II diagnosed the ecological crisis as a moral problem.¹⁹ Environmental questions can be interpreted and resolved by applying various social and physical sciences in a multi-disciplinary approach that responds to the many inter-related aspects of typical environmental problems. Similarly, "ecology" refers to many differing and complementary approaches: as awareness or concern, as science, as action, as movement.

With a vital "ecological consciousness" in the 1990s, the Jesuit social justice secretariat in 1999 brought out a document titled *We live in a broken world": Reflections on Ecology*.²⁰ The purpose of "*We live in a broken world*" is not to simplify the complexity of the scientific, social, ethical or spiritual issues involved in ecology, nor to make the pluralism of approaches more uniform, but to bring many viewpoints together. In 2011, the Jesuit Social Justice secretariat brought out another document called "*Healing a Broken World*" in which responding to the environmental challenges of our world affirmed, the best thing to foster would be dialogue, co-operation and networking across geographical and disciplinary lines, and between the different levels: action, organization, reflection, research. It describes the rationale of establishing the Task Force on Jesuit Mission and Ecology, the general vision that animates its analysis and recommendations, the context of the world, the Church and the

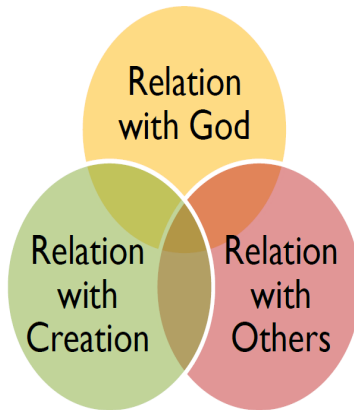
¹⁸ "*Healing a Broken World*," *Promotio Iustitiae*, 2011.

¹⁹ John Paul II, "Peace with God the Creator, Peace with All of Creation," *Message for the World Day of Peace, 1990*. (available also in The Holy See website, last accessed on February 20, 2012).

²⁰ "*We Live in a Broken World*," *Promotio Iustitiae*, 1999.

Society of Jesus today, the relationship of 'reconciliation with creation' with faith, with justice, inter-religious and cultural dialogue, and finally proposes a set of practical recommendations.

The document "*Healing a Broken World*" encouraged ever more effective ecological solidarity in our lives: spiritual, communal and apostolic. The reflections showed that some do live with this brokenness, while most still have, in one part of the world or another, little shared awareness. It tries to incorporate the theme of ecology under the broader theme of 'Reconciliation' in its three-fold dimension: reconciliation with God, with others and with creation.²¹ It is a development from the understanding of faith and justice relationship. In the new understanding of the right or just relationship, our concern for ecology and creation has to be seen primarily in the context of two other sets of relationships: with God and with others.



(from *Healing a Broken World*, p.32)

In other words, restoration of a new relationship with creation must be seen as a consequence of our commitment to establish a just relationship with God (our commitment to faith), and with other human beings (our commitment to justice). The fulfilment of our mission requires that the rightness (the justice component) of the three types of relationship is actualized simultaneously. This three dimensional relationship of the human person with God, Creation and Others is shown above explains our interconnectedness.²²

²¹"Decree 3 of the General Congregation of the Society of Jesus," No. 34, *Decrees of the 34th GC*, Rome: Jesuit Curia, 1995.

²²"*Healing a Broken World*," 2011, 30-31.

Our faith acknowledges God as the Author of all reality, all truth and all knowledge. God is present and working in all of creation: in nature, in history and in persons. The Church's teachings affirm the radical goodness of the world "charged with the grandeur of God"²³ and it regards every element of creation as worthy of study and contemplation, capable of endless exploration. Our theology should try to create a sense of wonder and mystery in learning about God's creation. A more complete knowledge of creation can lead to a greater knowledge of God and a greater willingness to work with God in his ongoing creation. It is in this context the statement of the Japanese Bishops' conference on the nuclear energy policy is relevant to discuss.

Implications of the Statement of the Bishops' Conference of Japan

After the nuclear plant accident at Fukushima, people started to discuss whether nuclear plants should be abolished or maintained. However, the Japanese government is gradually heading toward the maintenance of nuclear plants without paying attention to the public debate. The government has initiated the path to resume the operations of nuclear plants, and restarted the negotiation on the export of nuclear technology. Particularly under such circumstances, the pros and cons of nuclear plants should be examined respecting the outcome of public discussion. It is in this context the Japanese Bishop's Conference announced its message: "Abolish Nuclear Plants Immediately ~Facing the Tragedy of the Fukushima Daiichi Nuclear Plant Disaster~", on 7 November 2011.

The Statement reviews the weak position the Church has taken in the past, referring to their message "Reverence for Life - A Message for the Twenty-First Century from the Catholic Bishops of Japan" as follows: "It has provided a totally new source of energy for humanity, but as we can see in the destruction of human life in a moment in Hiroshima and Nagasaki, the disaster at Chernobyl and the life-threatening criticality accident at Tokaimura, it also has the potential to pass huge problems on to future generations. To use it effectively, we need the wisdom to know our limits and exercise the greatest care. In order to avoid tragedy, we must develop safe alternative means of producing energy."²⁴ They agreed that the "tragedy" in this message was brought about by nothing less than the

²³Gerard Manley Hopkins, S.J., "God's Grandeur", in *"Healing a Broken World,"* 2011.

²⁴Catholic Bishops' Conference of Japan, "Reverence for Life –A Message for the Twenty-First Century from the Catholic Bishops of Japan," 2001, 104-105.

accident in the Fukushima Daiichi Nuclear Plant. This nuclear disaster wiped out the "safety myth", which was created because people put too much trust in science and technology without having "the wisdom to know our limits". However regretting over their ambiguous stance the Bishops reviewed:

In the message "Reverence for Life", we, Japanese bishops could not go so far as to urge the immediate abolishment of nuclear plants. However, after facing the tragic nuclear disaster in Fukushima, we regretted and reconsidered such attitude. And now, we would like to call for the immediate abolishment of all the power plants in Japan.²⁵

It further cautions that the prediction that a new disaster will occur due to another earthquake or tsunami, all the 54 nuclear plants in Japan are at risk of horrific accidents like the latest one. Therefore, in order to prevent human-generated calamities associated with natural disasters as much as possible, it is essential to eliminate nuclear plants.

Respecting the concerns about energy shortages by this decision, the statement confirms, "as members of the human race, have responsibilities to protect all life and nature as God's creation, and to pass on a safer and more secure environment to future generations. In order to protect life, which is so precious and beautiful nature, we must not focus on economic growth by placing priority on profitability and efficiency, but decide at once to abolish nuclear plants."²⁶ Although nuclear plants have been supplying energy in the context of "peaceful use" to society until now, they have also released an enormous amount of radioactive waste such as plutonium. Taking responsibility on social issues the statement points out the ethical issue: "We are going to place the custodial responsibility of these dangerous wastes on future generations for centuries to come. We must consider this matter to be an ethical issue."²⁷

Acknowledging the challenges of implementation of natural energy and decommissioning of reactors, and inconveniences by taking a responsible ethical stance, the Bishops point out that Japan has its culture, wisdom and tradition that have long co-existed with nature. Religions such as Shinto and Buddhism are also based on the same spirit. Christianity has the spirit of poverty as well. Therefore, Christians have an obligation to bear genuine witness to the Gospel especially through the ways of life expected by God; 'simplicity of

²⁵Catholic Bishops' Conference of Japan, "Abolish Nuclear Plants Immediately" CBCJ Statement, 2011, 1.

²⁶"Abolish Nuclear Plants Immediately" CBCJ Statement.

²⁷"Abolish Nuclear Plants Immediately" CBCJ Statement.

life, the spirit of prayer, charity towards all, especially towards the lowly and the poor, obedience and humility, detachment and self-sacrifice'. "We should choose anew a simple and plain lifestyle based on the spirit of the Gospel, in cases like saving electricity. We live in the hope that science and technology will develop and advance based on the same spirit. These attitudes will surely lead to a safer and more secure life without nuclear plants."²⁸

The context of this firm stand by the Bishops' conference is the different stance of citizens when they talk about the pros and cons of nuclear plants. For instance, one citizen is mainly interested in profitability, while another is anxious about protecting children's health and the security of civil life, and yet, another is thinking about the needs to maintain international competitiveness. On the other hand, the Bishops commented later that "the Catholic Church regards the pros and cons of nuclear plants as an ethical issue and a problem of human life. We also have responsibilities to protect nature, the environment and all life as God's creation, in solidarity with all people. We would like to undertake our responsibilities as religious to speak on the pros and cons of nuclear plants from these two stances."²⁹

Conclusion

Present environmental concerns are both old and new: old, in that there has always been human greed and a fear of nature's power; new, in that there are global problems of human origin having widespread local impact. Yet a deep sense continues to obtain that all life is linked, and this links us with the very source of life. Therefore, we are called to consider the needed action in all aspects, from Creation via today's crises through to the Kingdom. There is need of reinvigorating scientific research for socio-environmental concern which calls for establishing the global focus; linking science to justice, maintaining an intense sense of the mission. In other words, it will be necessary to articulate the educational goals in view of the broader aims of our society. It is not to simplify the complexity of the scientific, social, ethical or spiritual issues involved in ecology, nor to make the pluralism of approaches more uniform, but to bring many viewpoints together.

²⁸"Abolish Nuclear Plants Immediately" CBCJ Statement.

²⁹Joseph Mitsuaki Takami, (President of the Episcopal Commission for Social Issues), "Comments on the Bishops' Message 'Abolish Nuclear Plants Immediately,'" CBCJ, Sendai, November 10, 2011.

This paper is an invitation to the Church and its teachers to continue the exchange and deepen the collaboration, to show ever more effective ecological solidarity in our spiritual, communal and apostolic lives. Pope John Paul II reminds us that “the Creator has put man in creation, charging him to administer it for the sake of the good of all, thanks to his intelligence and his reason. We can therefore be certain that even a person’s tiny good actions have a mysterious effect of social change and contribute to the growth of all. On the basis of the covenant with the Creator, towards whom man is called over and over to return, each one is invited to a deep personal conversion in his or her relationship with others and with nature.”³⁰ Let me conclude with a call to an awareness that “we live in a broken world” that leads us to a commitment to “heal our broken world”, with heartfelt prayer and shared commitment, all within a spiritual perspective of hope.

³⁰John Paul II, Address to the Seminar on “Science for Survival and Sustainable Development,” *Pontifical Academy of Science*, n.7, March 12, 1999.