PATICCASAMUPPADA AND ENVIRONMENTAL PRESERVATION

Ven. Dr. Thich Tam Duc (Vietnam Buddhist University) April, 2012

Our Earth, in which environment is now increasingly polluted, is sending an SOS asking for help from humanity! As one of great religions in the world, What can Buddhism do for it?

Nowadays, people world-wide are worried about the current environment problems including 10 issues as follows:

- 1. The expanding of the hole in the ozone layer.
- 2. Global climate change.
- 3. Population explosion.
- 4. Depletion of forest resources.
- 5. The pollution of marine and ocean.
- 6. Depletion of freshwater resources.
- 7. Soil pollution and desertification phenomenon.
- 8. Biodiversity decline.
- 9. The depletion of mineral resources.
- 10. The increased waste.

Out of the ten issues mentioned-above, climate change is the most worrying problem today.

Climate change has been a hot issue at the most. It's not just environmental issue but also issue of development, attracting the attention of many countries, many scientists, many managers and politicians in the world. Kofi Annan considers climate change as a threat to peace and global security, there is the danger level on a par with other armed conflict, arms trafficking or poverty.

Climate change seriously threatens the vital interests of many nations, many countries around the planet, including Vietnam. The most obvious manifestations is unusual weather phenomena, the earth is heating up, and consequently to an increase of ice melts, sea level rise, flood, cyclones, storms. People have faced the unpredictable effects of climate change such as disease, poverty, loss of accomodation, lack of arable land, the loss of biodiversity..... The Human Development Report 2007-2008 of the UN Development Program (UNDP) said: Climate change caused five human setbacks: 1) Climate will affect rainfall, temperature and water used for agriculture. In 2008, the world will add about 600 million people to malnutrition, 2) To 2008, there will be about 1.8 billion people living in water scarcity, especially in North China, the Middle East, South America and North Asia. 3) Approximately 330 million people will be displaced temporarily or permanently by flooding if the Earth's temperature

increased by $3^{\circ}C - 4^{\circ}C$. 4) Rate of species extinction will rise if warming temperatures around $2^{\circ}C$. 5) The deadly disease will spread. There may be additional 400 million people with malaria.

The monitoring data shows Earth's temperature rise to 1°C from 1920 to 2005. 2035 Forecast Earth's temperature will increase by 2°C and the twenty-first century will increase from $1.4^{\circ}C - 4^{\circ}C$. Earth's surface temperature increase will make ice melt and sea level rise. As a result, many areas of abundant food production, populated areas, large plain, low islands on earth can be submersed in water. According to the UNDP, Vietnam is among the top 5 of the world's leading and most vulnerable to damage directly due to climate change: if the sea level rises 1 meter, Vietnam would be taken off 5% of land, about 11% of the population lost their homes, reduce agricultural output by 7% and 10% national income, nearly 50% of agricultural land. Cuu Long River Delta would be submerged and no longer a cultivation land. Red River Delta and all the people living along the coast 3.200km would be also greatly affected. Ministry of Natural Resources and Environment summarized for about ten years, Vietnam has suffered major impacts of climate change, as evidenced by the extreme weather phenomena: natural disasters occur continuously, in increase in strength, size and strength, causing great losses of life and property. In 2006 alone, the damage caused by storms in Vietnam up to \$ 1.2 billion. In particular, in the winter of 2007-2008 the cold weather lasting 38 days has killed more than 53.000 cattle and harm about 34.000 hectares of transplanted spring rice, and tens of thousands of hectares of mountain-clad rice seeds in all the northern and North Central have been lost. Damage estimated at more than 11.600 billion VND, and over 723.900 times of households and 3.000.000 mouths fall into starvation. The bird flu, blue ear pig disease outbreak... has repeated and persisted in many places.

Scientists confirm that the direct cause of climate change is caused by excessive emission of greenhouse gases, especially CO₂ from the burning of an unprecedented volume of fossil fuels like coat, oil and gas in the process of industrial development. Deforestation and unsustainable logging also causes more than 20% of greenhouse gas emission globally. Some forms of farming, husbandry, transport, habits of using non-renewable fuels and other forest products have significantly increased greenhouse gas emissions, making the warming temperatures, and consequently to the creation of climate change on global.

Before the risk of global climate change, mainly due to human activities, at the Summit on Environment and Development held in Rio de Janero, Brazil in 1992, the Nations around the world adopted the United Nations Framework Convention on Climate Change. By 1997, States have agreed through the Kyoto Protocol on cutting greenhouse gas emissions. To date, 165 countries have ratified this Protocol, including Vietnam. This commitment clearly stated that all parties signing the Protocol have to

comply with a number of steps including: Design and implement programs to minimize and adapt to climate change. Prepare a national statistics on removal by reducing carbon emissions. Encourage technology transfer climate-friendly. Promote collaboration in research and observations of climate change, impacts and response strategies.

Recently, on April 9, 2012 the UN warned of severe weather events, which are happening more frequently around the globe¹: United Nations launched a special report on the handling of the risk of extreme weather events and disasters to accelerate adaptation to climate change (SREX), which warned of that this fact will increase in four decades with more intense rainfall in the tropics and high latitudes. The "record" severe weather events are increasing in number and extremes due to heat and humidity of environment because humanity continues to burn billions of tons of fossil fuels².

For sustainable development, in planning economic and social development of immediate and long-term of the nation and regions, we must soon raise the issue of global climate change as an important factor to consider seriously. It should be noted on mitigation, prevention and adaptation.

In order to address pressing issues mentioned-above, the conference: "Global climate change and adaptation measures in Vietnam" was held in February 2008 and set out some measures to minimize the impact of climate change as follows:

- Improving performance and approval of projects and activities aimed at reducing greenhouse gas emissions.
- Assessing the forest cover in terms of carbon absorption and trade.
- Building capacity to regulate, manage and promote the carbon market.
- Building capacity of studying emissions.
- Reviewing the objective of greenhouse gas emissions.
- Changing the behavior of consumers on reducing carbon consumption, in private and industry sector.

Clearly, climate change is a cause but also an effect in the interaction between environment with humanity.

In Buddhism, *Pațiccasamuppāda* or the law of cause and effect which was discovered by Monk *Gotama* just before his getting enlightenment to become a Buddha. A short of the *Pațiccasamuppāda* is as follows: "This exists, that exists; This arises, that

¹ www.moitruong.com.vn/Home/Default.as px?portalid=33&tabid=19&distid=4089

² The most dangerous man-made gases for human health and the Earth's atmosphere have been known as follows: carbon dioxide (CO2), sulfur dioxide (SO2); Carbon monoxide (CO); Nitrogen Oxide (N2O); Clorofluorocarbon (also known as CFCs) and Methane (CH4).

Typically, the amount of CO2 produced naturally balanced with the amount of CO2 is used for photosynthesis. Two types of human activities that burn fossil fuels and deforestation have made the above process imbalances, have adverse impacts on global climate

arises. This doesn't exist, that doesn't exist; this doesn't arise; that doesn't arise"³. And the Buddha did warn of the unlimited craving of human, saying: a) This unstable world is brought to an end, b) This world is no refuge, no guard, c) This world is not one's own, one must go leaving everything, and d) This world lacks and is unsatisfied, a slave to craving.⁴

According to Paticcasamuppada, a human being cannot live alone but live with surroundings or environment. He should be wisely in the interaction between him and environment, so that both develop together. This should not harm that and that should not harm this. If this principle is broken, imbalance or unsustainability will occur. However, the first element to break it is from humanity!⁵ And it is certainly worth in terms of environmental preservation (as suggestions) when the Buddha gave advice to monks:

- "to abandon killing, to abstain from killing... to feel sympathy for / to be concerned about the wefare of living and sentient beings".⁶
- 'to make no harm to seeds and species of plants."⁷
- "to be pleased with the minimum necessities on robe to cover body, on food to feed stomach".⁸
- "not to receive raw seeds, not to receive raw meat".⁹
- "to abstain from adorning with garland, aromatic spices and fashions. To abstain from using high beds, big beds. To abstain from receiving gold, silver."¹⁰

To apply the Buddha's advice on environmental preservation or nature protection, monks need to increase the awareness of lay Buddhists about climate change through media campaigns or lectures on *Dhamma*, public information and education to change community behavior. Protect the green lung of the human race by greening hills,

³ Majjhima Nikāya, "Mahātaņhāsankhāyasuttam," Trans. Thich Minh Chau, Vol. I, Saigon: Van Hanh University, 1973. Imasmim sati idam hoti, imass'uppādā idam uppajjati (p.262-3); Imasmim asati idam na hoti, imassa nirodhā idam nirujjhati (p. 264).

⁴ *Majjhima Nikāya*, "Raţthapālasuttam," Trans. Thich Minh Chau, Vol. II, Saigon: Van Hanh University, 1974, p. 68. a) 'Upanīyati loko addhuvo ti'; b) 'Attāņo loko anabhissaro ti'; c) 'Assako loko sabbam pahāya gamanīyan ti'; d) 'Uno loko atitto tanhādāso ti'.

⁵ The ecological environment is a network can adjust the relationship between closely with land, water, air and living organisms in the global scope. Disruption of instability at a certain stage in the system will cause serious consequences. People and society comes from nature, are part of nature. Through the process of labor, human has accrued to nature from exploiting and protecting it. Also through the process that human society has gradually opposed to nature.

⁶ So...pāņātipātam pahāya pāņātipātā pativirato hoti....sabbapāņabhūtahitānukampī. Opcit. Vol. I, p. 267.

⁷ So bījagāmabhūtagāmasamāramohā pativirato hoti. Opcit. Vol. I, p. 268.

⁸ So santuttho hoti kāyaparihārikena cīvarena kucchiparihaarikena piņdapātena. *Ibid*.

⁹Āmakadhaññapatiggahaņā pativirato hoti. Āmakamamsapatiggahanā pativirato hoti. *Ibid*.

¹⁰ Māla-gandha-vilepana-dhāraņa-maņdana-vibhūsanatthānā pativirato hoti. Uccāsayana-mahā-sayanā pativirato hoti. Jātarūparajatapatiggahaņā patvirato hoti. *Ibid*.

against the deforestation. Preserve, restore and develop mangrove forests. Build and reinforce the dike systems to prevent the phenomenon of rising sea levels. Encourage to use clean energy sources like solar, wind, hydro,...Transfer and apply of advanced technologies for environment friendly. And, especially, strengthen the international cooperation in the global activities of environment preservation.

In short, although the Buddha's advice or his discovery of *Paţiccasamuppāda* has been long ago, all of His instructions remain useful in the strategy of global environment preservation at the present time. All of us should be united, and try to keep our planet blue (of sea), green (of mountains) and compassionate (of human hearts) from extinction before it's too late!