Truth about Climate Change

- Facing the Disaster occurred in every Hundred Thousand Year -

I would like to report this worldwide concerned issue. There is no answer till now. But our foundation has this stage conclusion that connects with SB07 Taipei's main goal, also can provide a message from Taiwan to SB08Melbourne.

Now, let's recall the origin of the Earth that you perceive. The Earth is made from fireball. Rocks come out first, then, they turn into deserts through the process of weathering. The weathering caused by the high concentration of carbon dioxide in the atmosphere results in the high temperature in the original Earth, which also bring high air kinetic energy. Then, the rocks are grinded by stones because of the violent wind; it's why there is so much powder. We are sure no organism can attach on the rocks at that time. It's the origin of the Earth.

When the primitive unicellular organism starts to use the heat source or other energy patterns to evolve, it is accidentally accepted the chloroplast for the cell organ and evolves of the algae, the affiliation sunlight-exercise photosynthesis, acts as the highly concentrated CO_2 as the resource, selects C to discharge O_2, changes the primitive the Earth's atmospheric constituent, causes the CO_2 to drop but O_2 gradually to rise.

When the algae constantly evolve along with the time, from the single cell to the multi-cells and then the primitive plants, it enlarges the photosynthesis of the vertical depth, causes the oxygen concentration to be getting higher and higher, supports aerobic organism to propagate and the evolution of animals, forms to consume O_2, gnaws the plants to select C but discharge CO_2. Hence, the O_2 in the

upper air is destructed by the ultraviolet turning into O_3.

Since there is O_3 in the upper air, it enables the intensity of ultraviolet to arrive at the earth's surface to drop largely, causes the animals and plants to be separated from the waters landward reproduction, also, because the sunlight on the land is short with the water obstruction, as long as the plants might increase the space of the photosynthesis, the advantage stands out to create the evolution of tall trees and the animals also follow the evolution to dwell on the trees.

As plants are competing for sunlight, as a whole they will increase the vertical depth of the forest, and the forest will retain more and more moisture, which will change its surrounding microclimate. By means of orographic rains and seasonal winds that move towards inland, the forest will gradually extend into inland, compressing the area of the desert. The expansion of forest will increase the amount of oxygen, and conversely reduce the amount of carbon dioxide, which, in turn, will cool down the temperature.

The data from the ice core of the Antarctica shows that, until the recent 400-500 thousand years, there has been a periodic rise and fall in the temperature of the atmosphere with a cycle of about 100 thousand years. Therefore, before we discuss how man-made emission of carbon dioxide affected climatic change or global warming, we should figure out why there is a 100-thousand-year periodic rise and fall of temperature. By so doing, then it is possible to know to what extent that man-made emission of carbon dioxide affects the climate, and what we will possibly do in the future.

The foundation has held a series of meeting on global climatic change spanning for three months, to extensively collect and review the relevant literature and information, and to conduct two parallel researches: the cross-examination and interpretation between knowledge keepers of various academic disciplines, and the forecasting carried out by the foundation's core taskforce. Through the

double check of these two researches, until January 1, 2005, we arrived at a concrete deductive model.

During hyperthermal to glacial maximum, the animal starts to grow, CO_2 concentration also starts to increase, and then the temperature will follow up. It forms the deglaciation of the pole, sea water increases, earth mass will move towards the equator. Whenever the earth mass moves too far, the crust forms unstable phenomenon. Plate movement, volcano eruption continuously happens, and the whole forest is burned and destroyed. After burning, the CO_2 concentration of the atmosphere rises, making the whole earth temperature upper and upper.

Whenever CO_2 rises, it will bring out high temperature. According to the fact that this process forced climate to change rapidly, typhoon, volcano eruption, frequency of the earthquake and so on. They cause a lot of animals and plants death. Finally, it enlarges desertification. In short, it goes back to the origin of the Earth. We can't make sure what happened in that period. According to the similar situation in Australia, this process reverses rapidly, and it may take only one or two hundred years. In this condition, animals and plants are dead totally, and only the seeds can survive. They are waiting the appropriate conditions to sprout again.

When the appropriate conditions appear, the forest appears again. The amount of animals can't increase rapidly but immigrate only after their extinction. At this moment, the plant will take the advantage of the world. But the plant grows very slowly, making carbon dioxide concentration down also slowly. It causes the temperature down slowly as well. When the process is going down, every little shaking will cause the animal and the plant to rise and fall. The plant increases gradually, making the temperature constantly down. Finally back to the glacial epoch. The ice of the pole gains more and more and the earth mass moves again.

It can be concluded that, the temperature of the earth and the rise and fall of the concentration of carbon dioxide in the atmosphere are the outcomes of

geophysics and the tradeoff between fauna and flora of the earth. When flora is disadvantageous, the concentration of carbon dioxide will increase, and vice versa. It is the evolution of the tall trees that drives the 100-thousand-year cycle in the recent hundred thousand years.

However, there is a small exception in this model. Contrary to the rapid reversion after skyrocketing in the temperature, in the last cycle, there appeared a period with a vibration of small amplitude. But at the same time, it can also be noticed that, the line of the concentration of carbon dioxide has been increasing sharply, along with a slightly horizontally vibrated line of the temperature, which poses a challenge on how the model can explain effectively.

It is estimated that, the agricultural civilization emerged in the Mesopotamia in about eight thousand years B.C.. If we enlarge the cycle of the last two hundred thousand years, then it could be found that, the period of vertical vibration has also occurred since around the last one hundred thousand years. Therefore, it could be argued that, the slightly vertical vibration for about one hundred thousand years was affected by the fact that human beings started the agricultural activities.

This little exception is that the mankind is different in the place of the animal, as the early mankind adopts the slash-and-burn, and as the fuel with the timber, the carbon dioxide concentration will rise; But the mankind at the time of the agricultural civilization about ten thousand years ago is able to plant crops and as the building materials with the timber. The ability of carbon dioxide solidification reveals that the mankind is different from the animal. So the mankind is in unconscious cases, the carbon dioxide keeps the oscillation on small scale for about ten thousand years, the industrial civilization until the most recent 200 years.

Reach one hundred years recently, can see originally steady carbon dioxide concentration rise, temperature surmounts over the oscillation on small scale and

trends towards the block and soars upwards too, this directional industrialization and urbanization in the world are the main reason for breaking the steady climate.

Mankind of industrial civilization, can take ancient forest petrochemical industry energy after the carbonization not merely, still can cut down the forest to utilize, then to burn till it becomes garbage, this means and consumes with the present carbon in the past at the same time, in addition, no longer regard timber as the main building materials, therefore impel the carbon dioxide concentration to rise fast, therefore the oscillation on small scale that the agricultural civilization maintains is broken through.

According to the above-mentioned model, the space of desert will become smaller when the plant takes the advantage of the world. Otherwise, it becomes larger. The desert will increase more and more because of the phenomenon from glacial maximum to hyperthermal in this stage. Therefore, we should observe if the surroundings of the undesert become climatic eruption or desertification by predicting disaster area.

With CO_2 concentration increases, the return of desertification areas will be expanded, and the areas will have more frequent disasters.

The violent weather directly challenges the safety of human industrial products, so when the climate exceeds extreme value, the safety factor will be inactive, then there is no place of expanded areas can be safe at all. Therefore, we estimate the current safety factor can only resist for 2 or 3 years.

To prove this theory, we have matched the places that happened serious climate change from international announcement during 2005 and 2006, which includes high temperature, intense cold, blizzard, rainstorm, unusual drought and flood. Comparing with the area of edge of desert that we just mentioned, the correspondence is about eighty-five percent. This proves our theory is reliable.

Therefore, we predict the global will show climatic eruption phenomenon in the future of CO_2 concentration increasing process, especially for the current area of edge of desert. If we don't control desertification well, the arable land will be reduced and food will be lacked. Right now, biomass energy is popularizing and also excluding food of arable land, so it makes food supply much shorter. This tells us, if people who are threatened by desertification, their subsistence will have serious destruction.

In the past, there were several millions of hungry people in Africa, the current data is about 10 million and it may reach hundreds of millions people for another 3 or 5 years. About half of the Earth's population is living in hotter places between tropic of Capricorn and Cancer. From these 30 hundred billion population, having around 5 to 6 hundred million people situate the famished state, and we are not surprised at that

Taiwan and Australia are located in two different hemispheres with similar latitudes. However, the record of climatic anomaly events in 2005 shows that, the anomaly is more serious in Australia than in Taiwan.

The map is a dynamic simulation of temperature for the year of 2005: the darker the hotter. Taiwan and Philippines have only one-line apart, which means, the simulated temperature of Taiwan is getting closer to that of Philippines, the Southeast Asia.

Why doesn’t the temperature in Southeast Asia increase further? A reasonable hypothesis is that the rain forest in Borneo, Indonesia could control the climate, preventing the increase of the temperature by dissipating the heat into regions of higher latitudes. Therefore we could argue that there will be no winter in Taiwan very soon. In fact, during the winter of 2006, it was often seen that people wearing short-sleeve shirts walked on the street. This testifies our model.

The conclusion is that Taiwan's climate is going to be Southeast Asianization, characterized by the following features: a decrease in the frequency and the scale of typhoon, a clear distinction of dry and rain seasons, change in fauna and flora, tropical diseases shift northwardly, living patterns are forced to change, partial desertification in urban areas. Therefore in this year we had experienced a very different summer, such as bursts of strong wind, sustained heat, drought in east coast and so on.

However, people living in Taiwan are still luckier than people living in desert fringes. Although there are many new challenges that we never faced before, if both the public and governments could prepare beforehand, by way of a more detailed interpretation of our model, then we will be able to bring in more effective strategies and plans, which will secure Taiwan on the one hand, and contribute to the global society on the other hand.

The Earth used to remain stable with agricultural civilization. That's why we propose the 「Symbiotic civilization」, the new one based on agriculture, to reduce human interference with Nature, let Nature regain its vitality. Then, it can slow down the climatic eruption and reduce the probability of desertification.

We name desert oasis if there are water and plants. It's Taiwan's optional strategy to become an oasis in the process of desertification.

Furthermore, we could found a green industry by reducing the emission of CO_2 and the reliability on fossil fuel, replacing with green resources as well. If we could utilize the algae to construct a green industry and form a cycling system for following the gray industry, then we may remain part of gray industry. It's indeed the solution.

We proposed Symbiosis, a cycling system which is constituted by growing wild edible vegetables, diets and composting from the aspect of living. It's the

fifth year of the experiment, and testing its efficiency and safety. After we accumulate the accurate data, we'll recommend revising some relevant rules for commercial practices. It's the key element for Green building as well.

Therefore, the foundation proposed the concept of GB + Symbiosis = SB at SB2002. We continue illustrating its intension more detailed at SB07 Taipei to practically contribute to the universal society.

Finally, with reference to this model, we have to reserve water and conserve trees, make Symbiosis realized to rebuild a symbiotic system by concluding with the universal. The mankind may find their way out from Periodic Disaster every Hundred Thousand Year.

To reset a new horizontally vibrated period, let the human beings realize we are the masters of the universe. May all of us have the future!