

SUSTAINABLE DEVELOPMENT FACING CHALLENGES IN 21ST CENTURY

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ABSTRACT: The 21st Century is the time for human seeking harmonizing with environment and carrying out sustainable development strategy. But sustainable development is facing many challenges. They may mainly include the follows: challenge comes from the contradiction between human and the earth, challenge of local benefit conflict to human common goal, challenge of competition to fairness, challenge of unbalanced development in regions and countries, challenge of diversity and challenge of calamity. Challenges are not only pressure, but also the motive force. Challenge exists, the motive force would never stop. Sustainable development was born in challenges, is developing in contradiction and will sustain in conflict.

KEY WORDS: sustainable development; contradiction between human and the earth; 21st century

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1 SUSTAINABLE DEVELOPMENT IS UNDER UN- CEASING CHALLENGES

The 21st Century has come, people have many forecasts and long for a wonderful prospect. The 21st Century is “a bio-scientific era”, “an economic globalization age”, “a spatial exploration time”, “a scientific and technological globalization and information epoch” and so on. All of them give a piece of beautiful scenery for the coming hundred years. The author believes that these forecast and prospect are reasonable and they may appear, develop and be realized in the 21st Century. But it might be more important that the 21st Century is the time for human seeking harmonizing with environment and carrying out sustainable development strategy. In another word, sustainable development will be the common subject and gist, and will be main direction of

guiding human forward. The author pointed out many times that sustainable development was a correct strategic selection for human future and it represented a new development outlook, strategic viewpoint and value (CHEN, 1997; 2000a; 2000b).

The author also pointed out that sustainable development was an ideal for human pursuing and it was endless. So sustainable development will run through the 21st Century and not to be stopped. In the process, it would meet varied challenges, which act against sustainable development. It means that the ideal of sustainable development would be interfered and violated in social reality and natural process. Furthermore, sustainable coordination is relative, conditioned and time limit while un-harmonization, changes and interfere are absolute, universal and whole process. Indeed, the process for carrying out sustainable development

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strategy should be one of which conquer head off, reduce and check varied un-sustainable events that censure, challenge, wreck and even go against sustainable development. Unquestionably the process of sustainable development should not be calm and tranquil, it must break through brambles and thorns, face various challenges, get rid of all interferences, tackle all obstructions. It must continue to approach, continue to make progress and gradually press on toward to the ideal.

It can be forecasted that human impacting to the earth will be more seriously in the 21st Century comparing with that of the 20th Century and before. The contradiction between human and the earth would be not only without relaxation, but also become sharpened. The formation and pattern of the contradiction between human and the earth would be more varied and complex. Its connotation will be more plentiful and more profound. What human social development and its impact to the earth and the earth reacts to human would cause many new problems, new difficulties and new subjects which might be a new gap of human recognition, among them some are not able to forecast till now by human. So human must be mentally prepared. The quicker the development of society and economy, the bigger wound remaining in the earth (at least wound remaining in some regional environment and ecological factors). The quicker the development of science and technology, the more difficult to warning and forecasting environmental result by science and technology impact (including shock to moral principle, behavior, health and value idea of human). We can't imagine "the earth village" will become what kind of "village". What kind of human society will be come in the end of the 21st Century although contemporary advanced science and technology have modernization of forecasting theories and methods. We are neither agnostic nor fortune-teller. As that above mentioned, the author would like to give an analysis on sustainable development facing challenges in beginning decades of the 21st Century.

2 THE CHALLENGE COMES FROM THE CONTRADICTION BETWEEN HUMAN AND THE EARTH

The first challenge facing sustainable development

is that human development induces a clash of environment constantly and everywhere, especially including the processes of expanding human spatial activities, exploiting resources, seeking economic benefits and supplying subsistence, expenditure and enjoyment. The author pointed up ten years ago that contemporary there were several inexorable or perplexed contradictions between human and environment (CHEN, 1985). These contradictions often menace and more and more strongly injure smooth implement of sustainable development.

1) The contradiction between the stability of human ecology and physiology and rapid changes of human existing environment, especially human physiological structure and strict material component and chemical composition facing rapid changes of the composition of food, water and air, and menace human health up to human disease pattern change. 2) Human exploitations result in species extinction in quantities, but human can't make the extinction regeneration. Species extinction must remain a latent crisis in future development. 3) Man-made or man-created pollutants are easy to be spread and diffused according to matter movement law, and transformed rapid from one environmental medium into the others, but it is very difficult for human to reverse them or to stop them to transform in environmental factors. 4) Human demand and expenditure for matter and spirit are not limit, but resources number; all of population increasing, life standard rising, and enjoyment lust expanding mean that human need to press natural resource and to enlarge active spaces so as to sharpen the contradiction between human and the earth. In short, in the final analysis, it is the contradiction between a limit globe and the limitless population increasing. These contradictions not only run through whole process of human future, but also permeate all kind of human activities, regions, countries and the globe. They are far from harmonization with sustainable development, only become its wrecker, menace and obstacle. In a forecasted future, human can not fundamentally resolve these contradictions between human and the earth, at most human can only alleviate these contradiction by using indirect and complicated methods. But what reduce the interference to environment as possible as we can and

adjust human behavior (for instance, control population, advocate reasonable expenditure, conserve biodiversity, etc.) would be more objective, real and practical. Beside these, no miraculous cure appears for the 21st Century.

3 THE CHALLENGE OF BENEFIT CONFLICT TO HUMAN COMMON GOAL

Sustainable development is a global strategy. The solution of environmental problems, global development and the relative environmental harmony all need global effort as a human common goal. The current environmental problems are beyond the national boundary and become a global problem, such as the acid rain, the destruction of ozone and the green-house effect. Meanwhile, the synthesis of environmental problems almost influence all aspects of human beings and the accumulation of environmental problems from primitive society, slave society, agriculture society, industrial society to information society make them exist everywhere.

What we say human beings have only one globe means not only the limitation of human survival space, but also the earth is human only homeland. The quality, evolutionary direction and destiny of the earth are closely linked with every one, every region and every country. So the enforcement of world sustainable development needs common effort from different social systems, development levels and benefit groups, which, however, is just the most difficult point. Under the complicated world situation: varied benefit groups, unceasing war, mutual cheat and antagonism, "the common future" can not be supported by any common behavior. Even in a country, there are lots of behaviors against sustainable development among different regions, businesses and groups, such as, evading environmental responsibility, fighting for ecological benefit and shifting environmental disasters. The condition become more complicated in the whole world because of the difference of systems, believes and levels. We don't know how long can rid of the environmental misfortune remained by East Central War. Therefore, the most serious challenge of sustainable development comes from

the inside of human beings. These lofty ideals — the harmonization of human beings and benefit distribution may be not realized in the 21st Century. Only formulating international contracts, censuring and preventing the destroying actions can sustainable guide human beings to observe the ecological civilization with international consultation and cooperation.

4 THE CHALLENGE OF COMPETITION TO FAIRNESS

One of the most important contents of sustainable development is fairness, which includes two aspects. One is the contemporary fairness in both benefit and obligation for everyone. As a member of "the earth village", everyone has the right to survive and develop, but hasn't the right to waste environmental resources beyond his need. The other is the inter-generational fairness, which means the current generation has not right to deprive the resource and survival space of next generation.

Sustainable development advocates enjoying resource together, sharing environment and distributing fairly. But the competition accompanies with human development for a long time. The contemporary market economy is the main form of promoting the world economic development and the resources distribution through market is the fundamental doctrine of market economy. In market economy, the ultimate goal is to get the munificent benefit. To some extend, the monopoly of resources, regions and environment is often the method and indispensable action in market economy.

Competition encourages survival of the fittest and permit annexation, whose inevitably conclusion is that a few people occupy the main resource, escape the environment cost and refuse ecological compensation. What's more, the lavish consumption of few people, region or country deprives the fundamental consumption right of the majority. Though there is the base of coordinated evolution, the competitive impulsion is far beyond it. That is to say, the coordinated evolution is more passive and need man's consciousness. Competition, however, more positive, has spontaneity, stimu-

lation and freedom and is accepted more easily by society, especially in the world pattern leading by the wealthy. Competition becomes the time theme and the rich are the dominators of the world. Fairness at most can be considered as the charity or "the compelled-consideration" expressed by the rich occasionally.

The author considers that the aim and concept of fairness in sustainable development is a great thinking revolution, formulated a new common action standard and is a milestone in human history, while its enforcement needs long period of time.

5 THE CHALLENGE OF UNBALANCED-DEVELOPMENT TO BALANCED-DEVELOPMENT

Sustainable development pursues regional balanced-development. But as a common phenomenon in regions, the unbalanced-development, a product of nature-economy-society evolution, has objective existent base and can't be changed by human subjective will. With the development of society, pursuing general prosperity and balanced development is an ideal. However, unbalanced is absolute and balance is relative.

At present, there are two opposite regulars about unbalanced-level in the world.

On the one hand, the unbalanced level of human beings has increased gradually from primitive society, agriculture society and industrial society to information society. Under the primitive condition, the regional development gap is so little that the only unbalanced is the difference of natural environment. With the coming of agriculture, the regional difference was enlarged and the economy of suitable areas for agriculture (good irrigation condition, less disaster) was more prosperous than that of areas where natural condition are more serious. In industrial society, productive forces improved greatly. The economy of coastal areas and industrial revolution areas were developed at an unprecedented rate, for beyond other sealed areas. At present, primitive tribe, slave areas, agriculture areas, industrial areas and information areas all exist in the earth, it is called "the all-information of human society evolution"

depositing in the world.

On the other hand, the regional development gap is shortening, especially in developed countries. For example, the inside gap between the east and the west in U. S has shortened since the 1980s. What's more, the inside gap of Europe was much less than that of Asia and Africa composed by many developing countries. The phenomenon of "All-information of evolution" is especially obvious in developing countries.

Therefore, shortening the regional gap in developed countries is easier than in developing countries. To our embarrassment, the traditional survival ethics in many primitive tribes and sealed communities are keeping their tradition, refusing exchange with outside. And contemporary view is respecting their choice, safeguarding their traditions and protecting their survival space. Even in the space age, the earth still has primitive society. It can be concluded that the difference in development, economic level and living standard will be enlarged. The ideal of sustainable development will not be realized in this kind of regions and social communities.

6 THE CHALLENGE OF DIVERSITY

Diversity is the important prerequisite to the ecosystem balance. But the improvement of ecological balance and maintainable ability hasn't the linear relationship with the index of diversity. The human diversity such as politics, consciousness, economy, system, culture, religions, behaviors, custom and diet etc are not only the base of sustainable development, but also the pre-requirement to keep ecosystem balance and develop. From this point of view, diversity is benefit for the sustainable development. However, it is undeniable that the diversity also brings challenge to sustainable development, such as the culture conflict, economy competition, the antagonism of religions brief and the mutual attack among different political systems. Those competition and intolerance of diversity make the world full of gunpowder smell, just what the sustainable development afraid. Diversity accompanies with difference and benefic conflict. Therefore the coordination is so important and complicated that it must be paid attention

at any time. Or else, any improper action can rise to conflict, flight and war, to interfere the sustainable development. It can be foreseeable that diversity and troubles will coexist in the 21st Century. It is our purpose to harmonize "varied benefit", avoid conflicts and wars in case the sustainable development destroyed by another world war.

7 THE CHALLENGE OF CALAMITY

Calamity is a common nature phenomenon. It often imposes disaster on human beings or result in the violent change of social economy, even ecological disaster, and block the social development, which doesn't accord with the principle of sustainable development.

But it is an inevitable process because of nature retaliation for irrational planning or the violent change of nature itself, such as typhoon, earthquake, flood, landslide, etc. or the combination of the above factors. During the process of sustainable development, it is impossible to avoid the interference of calamity.

Therefore, we should face up to calamities with positive altitude and make good ready for disasters to shorten the influence period, decrease the disaster areas, reduce the destroy degree and lessen the social change.

Although there are many challenges for sustainable

development in the 21st Century, the determination of carrying out sustainable development never swerve. On the contrary, those challenges emphasize the objective of sustainable development, after understanding the possible threat brought by challenges, sustainable development was put forward at the historic moment in order to guide human evolutionary direction, restrain human action, advocate new value and formulate the new development strategy. Challenges are not only pressure, but also the motive force. Precisely because of challenges exist, the motive force would never stop.

Sustainable development was born in challenges, is developing in contradiction and will sustain in conflict.

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