2006 Blue Planet Prize
Commemorative Lectures

財団法人 旭硝子財団

THE ASAHI GLASS FOUNDATION

CONTENTS

Dr. Emil Salim (Indonesia)

Professor, Faculty of Economics and Post Graduate Course, University of Indonesia
Former Minister of Population and Environment, Republic of Indonesia

Selection rationale: For contributing in establishing the concept of sustainable development and furthering global environmental policies through various United Nations' committees especially as the chairman of the Preparatory Committee for the World Summit on Sustainable Development.

Education and Academic and Professional Activities

1930	Born on June 8 in South Sumatra, Indonesia
1958	Graduated University of Indonesia, Faculty of Economics
1959-1964	University of California at Berkeley, USA, PhD in Economics
1970-1972	Vice Chairperson of the National Development Planning Agency, and concurrently State Minister for State Apparatus Reform
1972-	Professor, Faculty of Economics, University of Indonesia
1973-1978	Minister of Transportation, Communication and Tourism
1978-1983	Minister of Development Monitoring and Environment
1983-1993	Minister of Population and Environment
1983-1987	Member of the World Commission on Environment and Development
1992-	Founder and Chairperson of the Board of Trustees of the Sustainable Development Foundation
1993-2003	Founder and Chairperson of the Board of Trustees of the Indonesian Ecolabelling Institute
1994-2003	Founder and Chairperson of the Board of Trustees of the Indonesian Biodiversity Foundation
1994-1999	Co-chair the World Commission on Forests and Sustainable Development
1995-1999	Deputy Chairperson of UN High Level Advisory Council for Sustainable Development
2000-2002	Chairperson of the UN Commission for Sustainable Development
2001-2002	Chairperson of the National Economic Council
2001-2002	Chairperson of the Preparatory Committee of the World Summit on Sustainable Development
2001-2002	Member of Advisory Group for the President of the Republic of Indonesia

Major Awards Received

1973	Bintang Mahaputera Adiprandana from the Government of Indonesia
1982	Golden ARK (Commandeur) of the Netherlands
1990	Paul Getty Award, USA
2005	Zayed Prize Winner for Environmental Action Leading to Positive Change in Society

Dr. Salim was born in South Sumatra in 1930 and was educated in a Dutch elementary school during Dutch colonial period and in a Japanese school under Japanese occupation. He learned the importance of a capacity for logic from his father who was an engineer and acquired an interest in religion from his mother who was a devoted Muslim. He grew to become interested in economics and studied economics at the University of Indonesia.

After graduating the university, Dr. Salim went to University of California Berkeley in 1959 and studied mainstream economics at that time in the United States, and earned a PhD degree. Later, returning to Indonesia and while teaching at the University of Indonesia, he participated in a team of economics experts for President Soeharto and dealt

with the issues in building the nation with a sound management based on macro economics with an emphasis on market principles and began to have influence on the management of the economy.

In 1971 at the age of 41, he became Minister of State for Administrative Reform, and till 1993 for 22 years served four terms the ministerial positions as Minister of Transportation, Communication and Tourism, Minister of Development Monitoring and Environment, and Minister of Population and Environment. He became the first minister of the Environment in Indonesia in 1978 with the strong request of President Soeharto who became concerned of the environmental destruction caused while the country goes through economic development and executed environmental policies which enable economic development consistent with environment conservation.

As minister of Environment, he enacted the Basic Guidance for Environmental Management in 1982 which is Indonesia's first general and comprehensive fundamental law on the environment, and further built the foundation of environmental administration in Indonesia by establishing the Environmental Impact Management Agency.

The foresight Dr. Salim had shown through trying to build a sustainable society gained high international reputation, and from 1984 to 87, he participated in the United Nations World Commission on Environment and Development (The Brundtland Commission) representing Asia and made a significant contribution in establishing the concept of "Sustainable Development". After the Earth Summit was held in Rio de Janeiro in 1992, as Deputy Chairperson of UN High Level Advisory Council for Sustainable Development, he contributed in coordinating the discussions on sustainable development carried out in the United Nations. In 1994, he became the co-chair of the World Commission on Forests and Sustainable Development which was established modeled after the Brundtland Commission, and in 1999 published the report "Our Forests Our Future" by listening to the voices from worldwide, stressing the need of sustainable development in forest conservation which was facing crisis.

At the Johannesburg Summit which was held ten years after the Earth Summit, Dr. Salim as the chairman of the 10th Commission on Sustainable Development which served as Preparatory Committee for the World Summit made a significant contribution in getting the consensus and in preparing the draft implementation plan.

Dr. Salim addressed from early on the environmental problems in the developing nations region in Asia, and as the chairman of the ASEAN Environment Ministerial Congress, set the target, the scope, the program and the action plan for the ASEAN nations to cooperate in the environment area. He also participated in the meetings of the Asia-Pacific Forum for Environment and Development (APFED) and made a large contribution in arranging the recommendation to the Johannesburg summit and the final report. It is of great significance that the opinions from the developing nations of Asia were voiced to the world by Dr. Salim being the pioneer, when there were hardly anything raised about environmental problems in the developing nations of Asia in the international arena.

After serving as Minister of the Environment of the Indonesian government, while teaching at the University of Indonesia, Dr. Salim has put his efforts in promoting various environmental NGO activities such as the "Indonesian Biodiversity Foundation," placing himself at the core of various promotion propagation activities. He has also helped and assisted the African nations in its development problems and environmental issues.

Dr. Salim has taken the initiative ahead of the world in consolidating the development plan with environmental consideration. And to realize Sustainable Development, he showed great leadership consistently in Indonesia, in the developing nations of Asia, in the Asia-Pacific region and the whole world, played an active role internationally, and contributed to better the global environment.

PLAIN LIVING, HIGH THINKING

Dr. Emil Salim

It was in March 1978 when President *Soeharto* invited me to joint him on a boat ride at the Jakarta Bay. This was the time when the just elected President invited candidates for cabinet position to have a person-to-person talk with him away from the glare of television lights and crowded journalists.

We passed the mouth of the *Ciliwung River*, when he showed me the polluted dirt entering the sea. The water close to the coast was full with filth. The President told me that he enjoyed fishing here in the past, but he now had to sail further away from Jakarta Bay into the ocean. He told me about his village life when he was a small boy playing with friends in the forests, washing his water buffalo and joyfully swimming in clean rivers. But now not only the Jakarta Bay is heavily polluted, but also the river in his village and all other rivers, the forests have also gone and we have not even started our development yet, he uttered a sigh with anguish.

Then he looked into my eyes and said with a firm voice, that he wanted me to prevent further environmental destruction. We must reconcile development with environmental construction. Development should not be anti environment and environment should not be against development. Development and environment must be merged into one flow of joint effort. I want you as Minister of Environment to assist me.

I was honestly surprised by this offer. I am a trained economist and I have served in the National Development Planning Board. I know somewhat about economics and development but to be frank, I don't know anything about ecology.

The President however argued that because I am a developmental economist, it is easier for me to reconcile development with environment. "Since you are an *economist* it must be somehow related to the same word of *oikos* in *ecologist*, isn't it? Why not reconcile economy with ecology?" And with a smile he extended his hand and shook my hand.

Since then I have traveled the road searching to reconcile development with environment and economy with ecology. In this journey I have gained some wisdom and knowledge from numerous leaders, experts and common people around the globe to make me beginning to understand the idea of sustainable development and ecological economy.

Environment Ministers usually have to attend regular annual meetings organized by *United Nations Environment Programme (UNEP)* in Nairobi, Kenya. UNEP was created in Stockholm, Sweden, at the *UN Human Environment Conference* (1972). Since then the word "environment" entered into the world's vocabulary. Some progress has been made in environment, but the negative impacts of development on environment have moved much faster.

UNEP called in 1982 for a Special Session to review progress made ten years after Stockholm. The general consensus of this session was that environment had to be considered within the framework of development. Based on the proposal made by Japan, the Special Session agreed to set up a *World Commission on Environment and Development (WCED)* to explore efforts to reconcile environment with development in a global agenda for change. Prime Minister of Norway, Gro Harlen Brundtland, was asked to chair and she selected 21 personalities representing different continents of the globe to become members of what became known as the *Brundtland Commission*.

Japan was represented by *Saburo Okita*, who was the oldest but also the most experienced of the group. He

was one of the prominent architects of Japan's post war development in the fifties. He shared his experiences with commission members on the good and the bad sides of development when environment was not known at that time. Developing countries can learn from the mistakes made when development neglects the environment. Discussions among commission members were held everywhere and at any occasions. The group celebrated *Saburo Okita's* birthday on the boat while traveling on the Amazon River on the way to Manos, Brazil.

On the basis of discussions within the group as well as in public debates with various stakeholders from all continents that were visited by the commission, ideas were gradually sharpened up and have found its way into the Commission report "*Our Common Future*" (1987). After the publication of this report, numerous conferences and meetings have taken place in and outside the UN, which contributed to the enhancement of sustainable development concept with distinct differences from the prevailing concept of conventional development.

Almost twenty years after the *Brundtland Commission* has completed its work in Tokyo, February 1987, and the world has moved into the 21st century, the time has come to ask the questions what has development in the globe achieved thus far, what has gone wrong with the development model that we have pursued and in what direction do we have to go?.

To answer these questions we need to revisit the ideas of Sustainable Development as it was perceived twenty years ago when "Our Common Future" was published with the hope for a better future.

THE WORLD OF "OUR COMMON FUTURE" REVISITED

The world has witnessed that nations, like Ghana, Nigeria, Sierra Leone, Venezuela and others have reached the level of 1999 Gross Domestic Product per capita already in or before 1960 (World Bank, 2003, 149), which put them in a more advanced level than Botswana, Republic of Korea or India at that time. Now however the positions of these countries have been reversed, the latter countries have surpassed the former indicating the non-sustainability of former countries' development.

Conventional development has been able to raise income, education and health condition of developed countries but it has failed to do the same in developing countries. Out of 6 billion world population in 2000 more than 2.2 billion people were living on less than two dollars a day. In many countries of Africa, Asia, Latin America and the Caribbean more people are suffering undernourishment, high infant mortality rates, low education quality, inferior health facilities, lack of clean drinking water and poor housing. In the meantime developed countries on the other hand, have to cope with increase of obesity, aging population, underutilized class rooms, highly sophisticated disease control, abundant clean drinking water and increased demand for second summer housing.

In San Francisco the Vermont Meeting (1995), chaired by *Mikhail Gorbachev*, has voiced the concern that the current trend of global development is leading towards a world of 20/80, implying that 20% of the global population of developed countries will control 80% of global resources, while 80% of global population of developing countries will control only 20% of global resources, because of continued economic and technology strengthening of the developed countries at the expense of the weakening of developing countries in the world of globalization, open market and free competition.

This gap between developed and developing countries is also increasing because of lack of capital and

limited transfer of financial resources from the rich to the poor countries. It is recorded by the *Organization for Economic Cooperation and Development* that during 2000-2002 in the European Union, domestic subsidies to agricultural have reached up to $105 billion compared to $25 billion of net official development assistance; in the United States, $95 billion total agricultural support is accompanied by less than $10 billion net official development assistance; in Japan $58 billion total agricultural support is match by almost $5 billion net official development assistance (World Bank, 2005, 184).

It indicates that funds are actually available in developed countries to assist developing countries, but the political will is seriously lacking. While in developing countries globalization, open market and free competition is widely promoted, in developed countries however, protection and unequal competition in subsidized agricultural products still persist.

Growth of Gross Domestic Product in developed countries also requires larger inputs of natural resources. *World Wildlife Fund* has estimated in 1999 the "ecological footprints" as "the amount of productive land needed per person to support patterns of consumption", which in US was 9.7 hectares compared to Japan (4.3 hectares), the global economy (2.2 hectares), People's Republic of China (1.5 hectares), Asia Pacific (1.3 hectares), Indonesia (1.2 hectares), India (0,8 hectares) and Bangladesh (0,6 hectares) (Asian Development Bank, 2005, 3). This "ecological footprints" is currently much deeper and is expected to be worst in this 21st century, if development continued to proceed along the path of "business as usual".

The main features of conventional development as promoted by the *World Bank* were to build infrastructure, import machines, protect industries from competition, invest in human capital, technology transfer, liberalize markets, free the exchange rate, privatize state-owned industries and expose them to competition. This model is widely supported by the *US Treasury* and the *International Monetary Fund*, and is popularly known as the "*Washington Consensus.*" Under these conditions the main engine of sustained economic growth is private enterprise operating through the market (World Bank, 2005, 45-46).

There is a rational logic in this development model that makes sense. Private enterprises will flourish in a market that is geared up for growth. It assumed however, that those private enterprises are of similar strength and operate in a global market of equal level playing field. The grim reality is that competition between developed and developing countries are conducted with unequal strength, as if we are watching a boxing match between the heavy weight US champion, Mohammad Ali, against the heavy weight Indonesian champion, Elias Pical. It is obvious that the Indonesian champion with nutrition intake, training facilities, body weight and boxing skills far below the US champion, looses the fight.

The world has no facility in agriculture, industry or trade to close the gap between developed and the developing countries. The weak has to compete against the strong in a free competitive market. The results are that the gap has grown in the past and it will grow further in the future if no drastic change is made in the currently prevailing development model.

When the *Brundtland Commission's* report "Our Common Future" was published in 1987, total World Gross Domestic Product was about U$33 trillion. In 2006 it has reached around $60 trillion, a doubling of World GDP in a time span of less then 20 years. In spite of such a growth, most shocking are the facts that the Commission's evaluation of the world situation 20 years ago is for the most part still valid today.

The world of today is still suffering poverty, hunger, low education and health facilities with ravaging effects on the quality of life in developing countries. On the other hand developed countries are much better off, although suffering from "rich country's diseases" like obesity, hearth diseases, overcrowded cities, traffic jams and lower birth rate. The gap between developed and developing countries is still widening, because of un-equal growth that still prevails today.

The basic flaw of the conventional development model is that it relies heavily on the market but fails to cope with market failures. Social and environmental goods are public goods, which the market cannot sell. Public vaccination against infectious diseases, for instances, is a social service whose values are not registered by the market. Clean air, rivers, mountains, forests, comfortable climate are environmental goods that has no market value.

Development that relies solely on the market will necessarily put economic values of goods and services on the forefront, while ignoring the values of social and environmental goods and services.

The market is also not accommodating externalities, in which one's action creates negative effects or externalities to "outsiders" and therefore raises their costs. One's action may create positive effects and positive externalities that raise benefits to "outsiders". Both negative and positive externalities are not revealed in the market and are therefore not accommodated in the cost structure of the producer and price structure for the consumer. With a distorted cost and price structure in the market, those products that pollute, like fossil fuel, will be over-valued, while those that are clean, like solar energy, will be under-valued. Under these conditions of price distortions, fossil fuel and other non-renewable energy sources are flourishing, while solar and other renewable energy sources are dwindling.

Private enterprises are oriented towards the interests of shareholders first and stakeholders later. Financial returns on investment dominate, while social and environmental interests play a subordinated role. With this outlook, it is not surprising if conventional development produces rapid economic growth, at the expense of social deterioration and environmental degradation as demonstrated by development indicators of the globe thus far.

Looking closer to resource use, conventional development model does not explicitly take into account the different nature of natural resources as renewable and non-renewable resources. Renewable resources have a threshold beyond which its regeneration will *not* take place. In utilizing renewable resources, development must therefore take this threshold into account. It also means that the choice and the use of technology must not exceed the threshold level for regeneration of renewable resources.

When renewable resources are located in public domain, like fish, we must apply principle of "sustained yield." Adequate and enforceable restrictions must be effective to avoid the validity of the "*tragedy of the common*"; in which everybody will face the tragedy of loosing if everybody wants to use freely common property.

Resource use management is different when using non-renewable resources that are subject to resource depletion and produce as by-product pollution and waste. These factors are not taken in the conventional development model and will then necessarily raises pollution and waste. When non-renewable resources are depleted, like in mining, the company usually leaves the place after paying some "farewell money" to the people left behind. There are no plans in the company's budget to deal properly with appropriate compensation to locally affected people who lost their livelihood. No time frame is drawn for the period before resources are used up to develop alternative substitutes to enable development to sustain beyond the time of depletion.

Factories ignore to deal comprehensively with wastes, especially hazardous and toxic waste, by not internalizing them in factories' costs structure and by not managing well its negative impacts. Unless the government and the corporate strictly enforce the environmental and pollution laws, these external costs will *not* be internalized in the conventional development model.

To cope with pollution and waste, the company should from the beginning and all the way through the life-cycle of production take into account the choice of clean technology. The corporate must cope with all costs related to social and environmental degradation at all stages of production.

Closely linked to the external problem is "property right", which according to the *Coase Theorem* posits that assigning property rights to any good, even if externalities are present, makes bargaining between affected parties and reaching efficient solution possible (Callen and Thomas, 2000, 87).

A second basic flaw in conventional model of development is the use of scales, such as the time and size scale. Practically most conventional developmental issues are of short term duration, highly influenced by the usual 5 year time frame of elected government officials. This limited and short term period influences the way we conceive development, which has the tendency to be myopic and to deal only with developmental issues as observed through a tunnel vision. Only the short term issues are caught on the radar screen, while the longer term issues are outside the purview of conventional development. Social and environmental issues are typical long term issues. Its impacts are felt after sufficient time has elapsed. In the short term model of economic policy, these long term issues are insignificant because, as Keynes likes to say, on the long run we are all dead.

Another scale-issue is size. Most experiments of social and environmental development are initially conducted on a pilot project of limited scale. When it proves to be successful, the inclination is to blow these small scale pilot projects into bigger size, with the risk of failures. Rice production which was successfully experimented in Indonesia on peat-soil as pilot project in a scale of less than 10 hectares was blown up into 1 million hectares of peat-soil. The results have been disastrous.

Government bureaucrats are eager to reach for quick results. Small scale projects are trapped in the "fallacy of scale", where it is believed that the multiplication of small into larger scale of these projects will also multiply the results in growing proportions. This is not realistic.

.

The pressure for large and quick results has induced governments to launch development with a big push approach. Countries that has the ambition to jump on the ladder of technology development from low to high-technology in a short period of time has to pay highly subsidized costs With economic crises these high-tech projects become easily the victim of bankruptcy.

After decades of centralization and strong central authority, under the spell of democracy, Indonesia has decentralized government's central power straight to the districts and by-passing provinces. When decentralization is executed with a big bang approach in 1999, it has created a stinginess effect that is still felt today. The adjustment from a highly centralized into a highly decentralized model of governance within a too short time period has created waves of confusions and instability that has now not been subdued.

A third basic flaw is that main actors in conventional development model are too limited to governments as regulators and policy makers with only businesses as executors of economic development. The government's task is to provide legal structure to create a healthy climate for businesses to flourish and grow. Other non-governmental and non-business actors are not playing a significant role.

In democratic system that has been widely promoted in developing countries, top decision making leaders are elected through general elections. Since campaigning and running political parties are quite expensive, candidates for top ranking government's positions are inclined to look for financial support from business people. The formation of illicit collusion between elected government and business leaders are the bitter consequences of such political alliances. It makes elected government leaders obliged to conduct policies that are very much pro-business and pro-free market to enable businesses to obtain a profitable rate of return on their political investments.

Currently a growing tendency emerges that successful and rich business people are actively striving for top positions in governments.

Under these circumstances it is difficult to expect government to be objective in intervening and correcting market forces for the benefit of the whole society. There are numerous examples of governments' policies that are very much pro-business while ignoring the interests of the small, the weak, the vulnerable and the poor.

The content of "development" is steadily eroded from its initial ideal goal of sustained livelihood and social welfare for the common people, to the content that is becoming increasingly commercial to raise material wealth and money. "Development" becomes now the general commodification of economic goods to be followed later of environment and social goods (Rist in Development Dialogue, 2006, 71).

The market is increasingly replacing the state as the primary means of allocating resources that reduces also its executive capacity, its mandate and scope of its activities. The more the market dominates and the less the state regulates the better. This seems to be the hidden assumption of the Washington Consensus.

Under these circumstances it is of crucial importance to induce civil society groups that are non-governmental and non-business to grow into countervailing powers to push government and businesses to strive for policies and development that are very much pro-poor and pro-environment. With the dominance of neo-liberal paradigm that has pushed aside development from the road to improve conditions of the poor, civil society organizations are increasingly growing in opposition to the state and to corporate capital (Hyden in Development Dialogue, 2006, 183).

Since the *World Summit on Sustainable Development (2002)*, a range of partnership among various actors has sprung up vividly to execute jointly the "Johannesburg Plan of Implementation". These partnerships follows in general the pattern of the triangle of equal actors comprising of government as regulator and policy maker, businesses as implementers with economic interests and civil society as balancing power to articulate societal interests, especially of the deprived citizens. The emerging triangle of equal partnership among government, business and civil society, if working effectively, opens the possibilities to make proper corrections of market failures on the way of sustainable development.

After 20 years of conventional development as pursued in the past, it is clear that radical change is necessary

to move development away from the pattern of "business as usual" and in to the correct pattern of sustainable development.

MAIN FEATURES OF SUSTAINABLE DEVELOPMENT

Conventional development model is used to follow a single linear line of approach to deal with economic developmental issues only, while other non-economic variables are frozen. When environment deteriorates, it cannot supply the needed resources to sustain development. Similarly if social factors are ignored and erupt into social conflicts, the sustainability of development will also be at risk.

It is clear that sustainable development requires a bundle of triple lines, consisting of economic, social and environmental lines moving in a spiral upwards of poverty alleviation, higher quality of human development with social cohesion, within a perpetuating life supporting eco-system.

This triple approach is to be formulated into "sustainable development matrix", that reveals dimensions of economic, social and environment in vertical and horizontal columns. Sustainable development requires an inter-disciplinary approach combining economic, social and environment in a "three column and three row matrix" simultaneous development.

To pursue poverty alleviation through employment creation as the goal of *economic* development, will raise impacts on social and environmental development that must be managed.

Similarly, to raise human quality through education, health and human resource development with efforts to improve social cohesion as the goal of *social* development, will exert its impacts on economic and environmental development.

By the same token, to assure the sustained functioning of eco-systems to support life, such as water, land, air, climate, and genetic resources as the goal of *environmental* development will affect economic and social development.

With the application of "*inter-sector impact analysis*" the interrelationship and interactions between economic, social and environmental factors can be pursued. By managing the triple sector impacts within and between each factor, this comprehensive and holistic approach can ensure the sustainability of development.

In economic theory, *growth* was initially considered as moving along a singular linear line of economics only. Since the fifties "growth" has to make way for a wider concept of "development", which involves economic and social dimensions along a two linear lines. With the introduction of "sustainable development" however, development covers now a broader field of economic, social and environmental development. Development has left the single approach to shift into the triple lines along an upward spiral of sustainable development "that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Our Common Future, 1987, 430.

This "triple lines" of sustainable development require strong management that is able to coordinated government, business and civil society through the triangle of equal partnership. Sustainable development can however be hampered by the weakest line in the bundle of triple lines. This calls for a management that strengthens and empowers the weakest link, which refers currently to the social and environmental dimensions of sustainable

development.

Sustainable development model recognizes five modes of capital: natural capital, human capital, social capital, financial capital and human-made capital. The quality of natural capital is influenced by the sustained function of networks of interlocking eco-systems. Water, air, climate, soil, forests and biological resources are elements of natural capital, whose quality and quantity depends fully on the sustained function of eco-system.

Human capital is accumulated by raising the quality of human resources through education, cultural, spiritual and health development.

Social capital depicts the quality of togetherness, social relationships and networking among individuals, which is affected by the quality of the "*We-ness*" or "*Wir-heit*" approach. Interesting is the fact that the Indonesian language has two words for "we", namely "*kami*" implying the mode of togetherness of "we *without* you", and "*kita*" as the mode of togetherness of "we *with* you" (Kita and Kami, 2005, 19-22). Investment in social capital means the strengthening of togetherness of "*kita*" that enable inclusion of all members of society in a "we *with* you" togetherness, regardless of race, ethnic, religious belief, culture, custom-law, language and political differences. Social cohesion requires value formation and value strengthening of "unity in diversity".

Financial and human made capital are both creation of human beings, which requires investment in hard as well as soft ware.

With the proper combination of all these capital and recognizing the constraints of resources carrying capacity or the "*Plimsoll line*" (mark on a ship indicating the water level limit that a full loaded ship may reach), we can pursue patterns of sustainable production and consumption.

Sustainable production can be achieved if in terms of *natural resources*, renewable resources are used below the threshold level; non-renewable resources are limited to the use of those resources that are recyclable and recoverable.

In terms of *energy*, priority must be given to maximize energy efficiency, to actively stimulate and promote the use of renewable energy, to reduce pollution by non-renewable resources through the use of clean technology with full awareness that "green house gas emissions" must be controlled in accordance to the *Kyoto Protocol* allowable limits to prevent climate change. On the demand side, we must launch cleaner and more efficient transportation modes, environment friendly urban development plans that are able to cope with floods, sanitation, and waste, pollution while assuring distribution of safe drinking water, clean air and healthy public open spaces. Construction of tropical architecture and building codes must promote energy efficiency and energy savings.

In terms of *spatial use*, through effective enforcement of spatial plan we optimize the use of land and other natural resources within the constraints of eco-systems' carrying capacities. Spatial planning serves to prevent and solves social conflicts in resource use between resource exploiting companies and local people.

In terms of *technology*, it can optimize natural resource use and raises value added especially of biological resources, it eliminates hazardous and toxic wastes, and it recycles, reduces and reuses pollution and waste for further production. Bio-technology, genetic-engineering, marine technology and nano-technology are most effective in raising value added of biological and marine resources.

Sustainable consumption requires that government's policies, taxation, subsidies, budget spending, laws and regulations are geared toward making available goods and services that are produced along the sustainable

production patterns as close as possible to the consumer's purchasing power ability. Examples are by shifting tax burden away from immaterial human mind creativity towards material intensive human made consumption goods. Human mind creativity, such as science and technology development, creative arts and culture as well as spiritual endeavors will satisfy social-cultural demand that are using less material compared to material intensive consumption goods.

Similarly with government's interference through financial incentives in fiscal, trade and industry, we can promote renewable resource and recyclable non-renewable based consumption goods and services, such as in automotive industries that make more use of light, recyclable non-renewable material in construction of cars.

Through health regulations, government can impose requirements in accordance to the *World Health Organization* conventions to reduce harmful and unhealthy substances in consumption goods, like nicotine in cigarettes or pesticides in vegetables.

To assist consumer to choose healthy and environmental friendly consumers goods, eco-label, ISO 14.000 and ISO 28.000 and other international standards for environmental friendly products must be imposed by countries.

To ensure sustainable consumption, we must apply transparency and disclosure of information on the content and quality of consumption goods.

Since markets fail to register social and environmental preferences, environmental-economics have developed instruments to overcome market failures through efforts in "getting the prices right" (The Wealth of Nature, 2003, 116-126).

To deal with pollution problems, *emission charges* are instruments to reduce the quantity of pollution. Under the Kyoto Protocol permits are issued equal to the permissible total emissions in the region. Polluters that are not using their allowable emission levels can sell this unused emission level as *tradable pollution permits* with scarcity values that provide incentives to create a market for these permits.

There are two methods for valuing in environmental resources, namely the *indirect* method in estimating the use value of resources by means of *travel cost method* and *hedonic pricing*, and the *direct* method through the *contingent valuation methods*.

Travel cost method uses the amount of expenditure spend on the trip and transport charges as well as the average time spent on the trip in reaching the sites of recreational forests, which reveals the total value of the forests. (Environmental Valuation, 2000, 140-141 and Natural Resources and Environmental Economics, 2003, pp.411-438).

Hedonic pricing, for instance, reveals to particular characteristic of a building to obtain high value because of its contribution to environmental benefits, such as the hotel rooms with ocean view compared to hotel rooms looking to the wall of its neighbors.

Contingent valuation methods assess the economic value of environmental services through surveys on the "willingness to pay" for demanding a given environmental service to be harmonized with the "willingness to accept" its compensation. The equilibrium between the "willingness to pay" and the "willingness to accept" determines the value of the environmental services.

Realizing that market failures persist in the economy, government policies can make the necessary corrections required by interfering in the market through fiscal, trade, industrial policies, regulations, licensing and

by creating values for environmental goods and services through tradable permits, travel cost method, hedonic pricing and contingent valuation methods. More instruments are expected to become viable for valuing environment in the future.

THE ESSENCE OF SUSTAINABLE DEVELOPMENT

At the international forum there are no similar national government's operating institutions, which makes market corrections difficult on global level. This will be more complicated if powerful governments and international institutions are enforcing their own convictions and economic ideologies of liberal economy, free trade and private enterprise in a world where the level playing field is not equal among developed and developing countries. Under these circumstances, international conventions can do the job but to be effective, it requires the involvement of all nations, rich and poor.

Since the world is differentiated in economic, technology and political strength between the rich and the poor countries, developing countries adhere to the principle of "common but differentiated responsibilities". All countries have common responsibilities to enhance sustainable development, but these responsibilities must be differentiated in accordance to the differences in economic strength and development capacities between the two groups of countries.

Because the fruits of development are not equally shared between the rich and the poor countries, the burden of development cannot be distributed even. Unless developed and developing countries have equal rights, especially in influential world institutions such as the World Bank, International Monetary Fund and the World Trade Organization, the validity of "common but differentiated responsibilities" is its logical outcome.

On the other hand if this goal of equally sharing the benefits between the rich and the poor are not achieved, the danger will be that social and armed conflicts will perpetuate, as revealed in the current battles in developing countries of Afghanistan, Lebanon, Iraq and Palestine against the armed forces of developed countries of US and United Kingdom, making the world unsafe and unsustainable.

This calls for the need to strive for the essentials of sustainable development to live within the carrying capacity of the global economic, social and eco-systems. There is basically enough for everyone in the world as long as we apply the features of sustainable development.

The world has enough natural, human, social, financial and human made capital to support a humane sustained livelihood. Based on the accumulation of knowledge, science, wisdom and technology, human and social life can be sustained within a healthy ecological system.

The needs of the world today is in changing the course of development from an increased materially based style of life into an increased enrichment of immaterial, cultural, spiritual, knowledge and science based style of life.

There are increased efforts today to critically review the economically based Gross Domestic Product and to strive for Green GDP to make the necessary corrections through internalizing externalities, by incorporating resource depletion and by including social and environmental benefits.

The life style of tomorrow does not imply reducing consumption, but consuming *differently*. What is needed is changing the quantity of consumption from resource exhaustion with finite energy inefficiency to raising the quality of consumption with resource enrichment and sustained by perpetual energy efficiency.

To reach for this different life style, plain living is the most ideal, supported by the creativity of high thinking on the basis of science, technology, culture and spiritual ideas.

To strive for this goal, the following efforts are required:
First, to educate and enrich human capacity to enhance the understanding of interdependent net-working processes of the economy, society and ecology on the basis of symbiotic relationship of *natural* sciences (biology, ecology, physics and chemistry) that interacts with *social* sciences (economics sociology, psychology, anthropology, political science) to give substance to sustainable development;

Second, to deliberate strategy of sustainable development to change the orientation from "*aku*" ("I") and "*kami*" ("*we without you*") into "*kita*" ("*we with you*"). This is most important to consider within the Asia context, which is expected to become the main locomotive of global growth in this 21st century. In Asia there is a strong urge to ascertain harmonious relationship between person and God the Creator, between person and nature, and between person and society. These are basic values in sustainable development and needs to be strengthened through moral persuasion, social marketing, cultural and spiritual enhancement;

Third, incentives, disincentives, punishment and rewards must be created through government policies, law enforcement and institutional development to shift paradigms of resource exploitation to resource enrichment by applying science, technology, local indigenous wisdom that is aimed at adding values to social and natural resources;

Fourth, leadership in sustainable development requires the involvement of government, corporate and civil society in a triangle of equal partnership to enable maximum participation of all citizens to reach for poverty alleviation through full employment, raising quality of persons within a cohesive society and perpetuating life support eco-system.

Fifth, global partnership among nations to strive for the fulfillment of the Millennium Development Goals and Johannes Plan of Implementation of Sustainable Development towards a prosperous, just and sustainable society.

On the basis of these five points of efforts, it is essential to draw the essence of sustainable development, which is revealed in the notion of *plain living, high thinking*.

Jakarta, September 17, 2006.
Emil Salim

References

1. World Bank, *Sustainable Development in a Dynamic World*, IBRD Washington DC, 2003, page 149;
2. World Bank, *Perspectives on Development*, Pressgroup Holdings Europe, S.A. Spring 2005, page 184;
3. Asian Development Bank, *Making Profits, Protecting Our Planet*, Manila, ADB 2005, page 3;
4. World Bank, *Ibid*, Spring 2005, pages 45-46;
5. Callan, Scott, J. and Thomas, Janet, M., *Environmental Economics and Management*, Harcourt, Inc., Orlando, 2000, page 87;
6. Rist, Gilbert, "Before Thinking about *What Next*", in *Development Dialogue*, Dag Hammarskjold Foundation, Sweden, June 2006, page 70-72;
7. Hyden, Goran, "Civil Society: What Next?" in *Development Dialogue*. Dag Hammarskjold Foundation, Sweden, June 2006, page 183;
8. The World Commission on Environment and Development, *Our Common Future*, Oxford University Press, New York, 1987, page 43;
9. Hassan, Fuad, *Kita and Kami*, Winoka, Jakarta, 2005, pages 17-34;
10. Nadeau, Robert L., *The Wealth of Nature*, Columbia University Press, New York, pages 116-122;
11. Rietbergen, Jenniver and friends, Editors, *Envronmental Valuation*, United Nations Environment Program, 2000, pp.140-141 and Permen, Roger and friends, *Natural Resource and Environmental Economics*, Pearson Education Limited, 2003, pp.411-438;

"PLAIN LIVING, HIGH THINKING"

By Emil Salim, Indonesia
esalim@rad.net.id

1

THE PROBLEMS

Main theme:

To reconcile development with environment and economy with ecology.

The questions:

1.What has development achieved thus far?;

2.What is wrong with conventional development model of today?;

3.In what direction do we have to go?;

2

CONVENTIONAL DEVELOPMENT'S ACHIEVEMENTS

1. Unequal growth between develop and developing countries towards a world of 20/80;
2. Unequal growth between economic and non-economic sectors (social and environment);
3. Unequal flow of domestic support for agriculture in developed countries compared to aid flow;
4. Unequal "ecological footprints" between developed and developing countries;
5. Private enterprises operating through markets are main engines of growth;

3

MARKET, POLICY AND INSTITUTIONAL FAILURES

1. Market fails to function for public goods and services, to internalize externalities (social services, pollution, waste);
2. Conventional development policy fails to consider long term and scale of size;
3. Institutions in conventional development fail to balance civil society's interest at the same footing with private enterprise's and government's interests;

4

MAIN FEATURES OF SUSTAINABLE DEVELOPMENT

1. Bundling up economic, social and environmental development lines moving upwards to reach for poverty alleviation, higher quality of human development with social cohesion, within a sustained life support eco-system;
2. It requires an inter-disciplinary approach through "sustainable development matrix" to reach for combined economic, social and environmental goals simultaneously;

5

REQUIREMENTS FOR SUSTAINABLE DEVELOPMENT

1. Good governance through the triangle of equal partnership between government, business and civil society;
2. The proper combination of natural capital, human capital, social capital, financial capital and human-made capital within the constraint of societal and ecological carrying capacity;
3. Equilibrium between sustainable production and sustainable consumption;
4. Valuation of environment to correct the market;

6

IMPLICATION OF SUSTAINABLE DEVELOPMENT ON THE WORLD

1. To strive for equity in economic, social and environmental development between developed and developing countries requires the validity of *common but differentiated responsibilities* between the two;
2. It calls for changing the course of development from increasing materially based life style to increasing enrichment of immaterial, cultural, spiritual, knowledge and science based life style;
3. To reach for the goal: "plain living, high thinking"

7

AGENDA FOR ACTIONS (1)

1. Enrich human capacity to develop interdependent societal and ecological net-working process on the basis of symbiotic relationship of natural science interacting with social science;
2. Ascertain harmonious relationship between person with God, nature and society through moral persuasion, social marketing, cultural and spiritual enhancement;
3. Shift paradigms from resource exploitation to enrichment through incentives and punishment with government policies and law enforcements;

8

AGENDA FOR ACTIONS (2)

4. Leadership in sustainable development requires triangle of equal partnership between government, business and civil society to reach for poverty alleviation, human resource quality development with social cohesion and sustained life supporting ecological system;
5. Global partnership through international institutions on the basis of country votes in democratic decision making for a prosperous, sustainable and just global society.

9

LIFE STYLE FOR GLOBAL SURVIVAL

Essence of Sustainable Development is "Plain living, high thinking"

This is achievable if we all strive together with God's blessings

10