GISPRI

ANNUAL REPORT 2003

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Let us raise the brand values of a nation called Japan

With hardly any progress in its structural reform, bad debt disposal in crawling pace, and economy stuck in depression, Japan is increasingly eyed gloomy by people around the world. Considering the incidents of corporate brand images shuddered by Enron's fraud, and by various misconducts at major corporate brands in Japan such as Snow Brand, Nippon Meat Packers, and Tokyo Electric Power Co, I cannot but feel that the value of a brand called "Japan" is gradually eroding as the nation loses its economic dynamism and its economic policies fail sadly.

In the past, Japan did achieve one of the highest economic growths that could be described as a "miracle," and so, in 1979, Professor Ezra Vogel of Harvard University published the book titled "Japan as a number one." Prime Minister Mahathir of Malaysia went so far to propose "Look East" policy with Japan as a model nation in economic development. But no longer. ASEAN leaders do not think of voicing such a policy, and rather direct their interests toward US and China.

In the United Kingdom where the strong leadership of Prime Minister Thatcher had successfully realized necessary reforms, Prime Minister Blair announced the "Britain Trademark Strategy" in 1999, which aimed to appeal UK's attractiveness to the world in a comprehensive way through the activities of intellectual and creative corporations. In the United States, the trend to uphold US's brand value is expanding as Professor Joseph Nye of Harvard University claims the power of software to be an appeal of a nation in 21st century.

Japan still maintains a huge trade surplus, but its relationships with other countries show every sign of Japan's downfall in attractiveness.

First of all, in terms of balance in direct investment, the ratio between direct investment in Japan and abroad was 1 to 4.9 by the end of 2000, though improving slightly since then. This demonstrates extremely low rate of capital inflow into Japan.

Number of foreign visitors to Japan was 4.76 million in the year 2000 with a tendency to increase slightly in recent years. Still, the number is one-16th of France, one-11th of US one-seventh of China, and even lower than those of Singapore or Korea.

Regarding the international meetings held within a country, Japan ranks top in Asia with 227 meetings in 2000, yet it is one-sixth of US and one-2.7th of France and UK.

In the number of foreign students in Japan, UNESCO's statistics of 1996-1997 showed a dismal 3.4% of 1.35 million foreign students worldwide, while US accepted 29%, and UK, Germany, and France altogether shared 32% of foreign students.

It is my belief that a nation must raise its brand value as a nation, just like a corporation does. For this, we need first to identify the factors that constitute the brand value of a nation.

First, a nation must sustain a system to enhance its social dynamism. In politics, this means that the political system is open to allow more active participation of its people, and to enable lively debates on its policies. In economics, it is necessary to have domestic markets functioned efficiently to allow competition, to enable consumers to make free informed selections through various information functions, and to let corporations utilize creativity to increase the values of intellectual properties.

Secondly, a nation must provide greater values in spatial dimension: its cities filled with vitality; its natural sceneries enriched in beauty and warmth; and a nation as a whole providing a space where cultures, economics, technologies, and information functions intertwined in a beautiful spiral with abundant greens. The conservation of global environment and the ensured safety of a society will further constitute the key spatial values of a nation.

Thirdly, it needs to offer higher values in temporal dimension. Temporal values mean that the visitors to that nation, whether staying for a short time or a longer period, can feel benefited throughout the duration of their stay. Spending time in a nation has various aspects, including sensitivity fulfillment, arts and cultural activities, intellectual contentment, and hobbies and recreations. If people want to "visit," "learn," "reside," or "work" in a nation, it means that that nation can offer excellent values in temporal dimension.

Fourthly, a nation needs to respect the values of humanity. Human beings do wish to live life rich in physical and mental values. Typical of such values is self-realization.

Fundamentally, the brand values of a nation depend on its contents and ability to communicate such contents to other nations. In order for Japan to recover a higher brand values of its nation symbolized by the phrase "Made in Japan," only way will be to further develop every aspect of its contents, and to actively communicate the information on such contents to the world.

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Activity Plan for the Fiscal Year 2003

Fiscal 2003 Business Plan (From 1 April 2003 to 31 March 2004)

In accordance with our Institute's purposes of conducting research and surveys from global perspectives on various issues of global industry and culture, including the way of favorable relationships among industry/economy and resource, environment, lifestyle and culture, and the way of global economy and society to achieve the sustainable prosperity of human community, recommending comprehensive policy proposal to national and international communities, promoting international exchanges of such study and survey results, and thereby achieving the ultimate purpose of contributing to the prosperity of a global community, we are to implement the following projects for the fiscal 2003.

1. Research and Survey

(1) Research Committees

We will organize a research committee for each of following subjects and implement research and survey.

a) Global Strategy of Japanese Eco-businesses

Started in the fiscal 2002, this Committee identified the current issues in the preparation of a vision that would aim to expand environmental businesses in the East Asia, and reviewed practical options for realizing such vision. In the fiscal 2003, the Committee will focus on particular markets and fields, and examine what strategies the private sector needs to explore for the further development of Japanese industry in this field, and what policy support the public sector needs to implement.

b) Assessment of Corporative Performance in Environmental Issues

As the standards to assess how each corporation addresses environmental issues, there are ISO 14000 series and "Environmental Performance Index." Growing number of corporations apply environmental management based on such standards, and prepare environmental reports accordingly. Moreover, there is an active and worldwide trend to adopt the environmental rating of a corporation. However, the current corporative rating system tends to address only a part of environmental measures implemented by corporations, and not necessarily provides the comprehensive assessment of their efforts.

The Committee started to study this subject from the fiscal 2002, and conducted the comparison of current standards for the assessment of corporative environmental performance and analyzed the current situation. For the fiscal 2003, the Committee will examine the standards that can provide comprehensive and fair analysis of corporative environmental measures based on the Committee's past analysis, and recommend the preferable way of assessment standards for environmental performance, which can become a driving force in the active promotion of environmental measures, especially among companies in the machinery industry.

c) How China's Accession to WTO Affects Japanese Industries

Started in the fiscal 2002, the Committee conducted the study of changing trends in politics, economy, and society mainly as the result of China's accession to WTO, and examined Japanese corporations' strategies toward China, focusing on strategically important industries. For the fiscal 2003, the Committee will continue its study and survey of individual corporations while extending the range of companies to be interviewed, and will prepare the summarization of the survey from the perspectives stated below:

i) Motivation for corporative advancement to Chinese market, and its supporting strategies with risk assessment
ii) What the private sector must do to advance into Chinese market
iii) Policy support needed for the advancement into Chinese market

d) Dissemination of Japan's Attractiveness through Tourism

The tourism industry is considered as one of leading industries in the 21st Century, and will be an important sector for Japan in its aims to realize the tourism-oriented nation in the future. From this viewpoint, the Government established "the Discussion Group to Build a Tourism-oriented Nation" as a private council for the Prime Minister in January 2003. The Committee is to examine the way of the tourism industry with an aim to conserve environment and to promote cultural exchange in increasingly globalized world, while positioning the tourism industry as one of leading industries for regional development.

e) Corporate Governance and CSR for the Sustainable Socio-economic System

The conventional view on the relationship between corporations and communities is that of social contributions and philanthropies. In the future, however, corporations need to contribute to the building of a sustainable society through their corporate activities, as a corporate citizen. The Committee will have discussions on how corporations, especially those of machinery industry that is globally extending its range of activities, can strive for the re-building of their corporate governance as a corporate citizen, and what relationships they need to develop with their stakeholders including communities. The Committee will also consider what roles corporations can take in the building of a sustainable society, and examine the new model of corporate governance and its constituting factors.

f) Development of Basic Strategies to Achieve the Harmony between "Trade and Environment"

"Trade and Environment" is a difficult theme in terms of reaching consensus in multi-lateral agreement, as it tends to provoke confrontations between developed and developing countries, and trade advocates and environmental protectionists. However, at the Fourth WTO Ministerial Meeting in November 2001, the international community adopted the resolution (Doha Declaration) to designate environment as an important negotiation agendum of the future. The Committee will examine the relationships between multilateral environmental agreements and WTO rules, and review the methods to develop human resources in developing countries, in order to attain the harmony between trade and environment.

(2) Research and Survey Consigned to Other Institutes

a) Addressing CSRs of multinational corporations in European Enterprises, etc.
b) NPO assessment from the viewpoint of government and firms for successful collaboration

(3) Research and Survey Consigned to Our Institute

a) Review and study of global warming mitigation measures
b) Project on the basic study of efficiency improvement for international level energy consumption
c) Survey on the potentials of environmental technology introduction through China Council activities
d) Study on the effectiveness of derivatives in market trading

2. Joint Researches

(1) China Council for International Cooperation on Environment and Development

(2) Japan-US International Cooperation Research on Environment and Trade

3. Symposiums

(1) The future framework on climate change beyond 2012"
(September 19, 2003)

(2) "China's economic development and the future of Asia including Japan"
(February 5, 2004)

Activity Results in 2002FY

I. Research Project

Japan's options for aging society with declining birthrate: the strategies in education, welfare, and economy

Aging societies with declining birthrate are ongoing phenomenon found in many of industrialized countries, but in the case of Japan, we find it progressing at the unprecedented speed. The gross number of Japan's population is expected to hit its peak in 2004, and then decline with the increasing share of aged population. The arrival of such aging society with declining birthrate raises a serious concern for social effects including the shrinking share of younger labor force population, reduction of economic growth rate, and increase in the cost burden of social welfare born by labor-active generation.

GISPRI established the Research Committee on "Japan's options for aging society with declining birthrate: the strategies in education, welfare, and economy" under the chairmanship of Prof. Kazuo Nishimura, Economic Research Institute, Kyoto University. The Committee conducted, from macro-socio-economic viewpoint, comprehensive discussion and review on the kinds of concrete measures that would enable Japan to safely overcome the current "transfer phase" preceding the arrival of highly aged society with significant decline in birthrate.

The report was written by researchers involved in this Committee such as the Committee Chair, individual Committee members and lecturers, and composed on the basis of the keyword "nurturing and utilizing human resources," which had emerged as the key factor in responding to aging society with declining birthrate, from the discussion and review conducted at this Research Committee for the past two years or so.

The themes addressed by this Committee included the problems of current educational policies, assessment of educational services, relationship between the expense to bring up children and the rate of birth, unification of kindergarten and nursery schools, regulatory reforms in employment and labor fields, etc.

In addition, we recorded (in Japanese and English) the lectures given by Prof. Jukka Sarjala (Former Director General of the National Board of Education, Finland), Mr. David Schaefer (Whitgift School, UK), and Ms. Anneli Miettinen (The Population Research Institute, The Family Federation of Finland) at the 13th GISPRI Symposium "Japan's Key Options in Aging Society with Declining Birthrate: Development and more advanced utilization of human resources" on March 25, 2003. Moreover, we published "the Proposal: To realize age-free society through regional initiative" announced at the Symposium, which has been under review in this Research Committee.

Study of Accounting and Approval Issues on Emission Reduction

The Kyoto Protocol established the use of economic instruments to reduce greenhouse gas emissions. They are CDM, JI and emissions trading and collectively called Kyoto Mechanisms. These options would allow each country to earn credits from emissions reduction achieved by implementing a greenhouse gas emissions reduction project in another country, and then to trade such earned credits. Using these mechanisms, each country could comply with its domestic emission reduction target more cost-effectively.

The Marrakech Accord adopted at the COP 7 in November 2001 established the details of these instruments. Europe is striving for the systematization of emissions trading and the start of greenhouse gas reduction projects, led by the forerunners of UK and Netherlands.

For Japan having higher emission reduction costs, the emissions trading can provide an effective and useful option for reducing emissions with cost-effectiveness. In order to promote the utilization of emissions trading, it will be necessary to guarantee the privileges corresponding to the cost of participation or implementation to a corporation that participates in emissions trading or implements emission reduction projects, and to develop practical systems such as: accounting procedures for emissions trading or project activities.

As the continuation of studies from the previous fiscal year, GISPRI conducted the research and survey of captioned subject with an aim to benchmark the advanced emissions trading systems of other countries and their accounting procedures, and to refer them for the designing of a similar system in Japan. The group espe-

cially focused its research and survey on the SO2 emissions trading system of US, the emissions trading system of UK, and the accounting procedures of emissions under the French accounting standard, while noting the presumptions adopted in these systems. The group confirmed the issues pertained in, and the basic concept of, the Japanese accounting procedures such as how to verify assets and debts.

In June 2003, the Government of Japan started the works to develop a guideline on domestic emissions trading system. We submitted the result and conclusion of above research and survey as basic information relevant to such a guideline. Today, GISPRI continues to work on the research and survey of relevant themes.

Evaluation of Non Profit Organizations for the Cross-sectoral Collaboration

As NPOs expand their social roles, the needs of evaluation on NPO and activities have increased, leading to the on-going development of evaluation methods, such as those for project evaluation and organizational evaluation. The following five items can become major issues in the founding and effective functioning of NPO evaluation methods.

(1) Clarification of the purposes of evaluation and feedback: Self-evaluation aims to identify the points of improvement, and the result must be reflected upon the business judgment and organizational management. In the third-party evaluation, it will be desirable to develop common understanding between the NPO and an evaluator over organizational and business management matters, prior to the actual undertaking of evaluation works.

(2) Encouragement of NPO information disclosure: Information on activities and basic statistics are essential for proper NPO evaluation. Possible ways may include NPO's voluntary information disclosure and the administrations' supportive measures such as the establishment of a guideline for information disclosure.

(3) Development of an accounting system: To enable the comparison of financial and accounting information, which is a basic element of NPO evaluation, it is necessary to study for the unification of accounting standards.

(4) Evaluation of evaluation works: Evaluation process needs resources. If the evaluation improves the organization and activities of NPOs, then the input of resources should be recognized as an investment, so it will be possible to calculate the required amount of resource input based on cost-effectiveness.

(5) Study of evaluation methods and training of evaluation experts: It is preferable to implement the systematic transfer of technologies starting from the fields with established methodologies, such as ODA project evaluation. Urgently needed is the training of evaluation experts, with the expected development of programs and the opening of graduate schools suitable for human resource development. To establish NPO evaluation methods requires the review of methodologies through practices, persistent attempts on trial and error, and incorporation of feedback. While many NPOs try to evade or despise evaluation, it would be essential to create an evaluation scheme that would be beneficial to both evaluators and NPOs.

Global Strategies for Japan's Eco-business

1. Situation of Environmental Technology Transfer to Developing Countries

In developing countries in East Asia, despite their continuous rapid economic growth, industrial pollution and environmental problems, such as the issues of air and water pollution and wastes, have become more serious, raising concerns over their further exacerbation in the future. Environmental policies are being designed by such developing countries themselves, but their environmental regulations cannot sufficiently demonstrate their effectiveness, and enough incentives are not given to the introduction of environmental equipment and technologies. Although our domestic environmental technology transfer led by the government and the public sector, such as Green Aid Plan, is showing some progress in human resource development as well as in the resolution of other specific problems, it is faced with a challenge in its diffusion, and required to be implemented according to the appropriate evaluation of developing countries' needs. End-of-pipe type environmental facilities, for example, desulfurization in itself does not generate any profits. It is necessary to internalize the introduction costs through the improvement of productivity and energy-saving, but it is difficult to ensure the recovery of such environmental investment within a short term, due to their low energy costs.

2. Position of Japan's Eco-business in International Market

The amount of orders received by Japan for environmental equipment is approximately 1200 billion yen (FY 2001), only 3% (approx. 32.3 billion yen) of which is for overseas demand. The trend in the international demand is the decrease of approximately 40%

in the last three years, showing the same downward trend as in the sluggish domestic demand.
The plant engineering industry as well -- product-service integrated commodity which is expected to lead our domestic economy and industries in the future -- has a low presence especially in the Asian environmental market, with scattered industrial level efforts across the region with an all-things-for-everybody approach, unable to contribute for the development of our eco-business.

3. European Strategy
On the other hand, there are supporting organizations dedicated to the field of environment, such as Asia Environmental Partnership [AEP] (U.S.A.) and Asia Ecobest (EU) in Western countries, creating their domestic eco-business opportunities by fostering a close relationship between their domestic industries and policy makers as well as potential customers through various measures to develop seminars, political dialogues, and human exchanges. They develop integrated strategies and schemes under these supporting systems of the government and private sector's coordination, constructing strategic measures to support the business activities of their domestic industries.

4. Japan's Strategy
In order to expand environmental plant business, it is necessary to have various efforts such as research and investigation, measures for technical transfer, supports for scheme construction, and human resource development. It is necessary to get closer to the heart of business and management to reform a structural culture, to design strategies to ensure the stable development of business activities in a strategic as well as enduring and continuous manner, and to form a comprehensive framework where the government and the public sector could work hand in hand. Regarding environmental technologies, for example, our exports of waste water management as well as the prevention of air pollution -- which Japan has been good at -- are now shrinking, while in the fields of energy, renewable energy, and waste/recycles which are expected to grow, companies from Europe and the U.S. are taking the lead. Therefore, it is required for Japan to definitely develop strategies in order to expand its eco-business through the strategic transfer of environmental technologies, and to immediately consider what would be the challenges to be tackled both by the government and the public sector as well as their necessary countermeasures to this end. Regarding a corporate structure as well, with a weak foundation for competing in software especially in the field of environment, it is not enough for us to just follow the business model of western companies. Therefore, it would be required from the longer perspective to consider the modality of Japanese business, to disseminate it to Asian developing countries, etc., and to establish a firm credibility. Furthermore, it is often noted that plant business in the field of environment is given to depend on public funds including special yen loans, presenting the characteristics of high-cost and over-specification, and is weak in investigation and risk management capabilities at site. It is necessary to discuss how to improve such a business structure with low profit performance, having the reform of management attitudes in mind.
Traditionally, plant engineering has established an important position in Japan's export as an intellectual value-added industry. Although its recent share in the international market is becoming smaller due to the price competitiveness of Korea and China and the industrial integration of Europe and the U.S., plant engineering, in the eco-business, is perceived to be important as a "vein" with the development of arterial industries, and is considered to be a promising strategic commodity due to its enormous market, diversity, and freshness. It is impossible to enhance the competitiveness of eco-business through environmental technology transfer only by taking over the conventional business model. In order not to make the difference of priorities between economy and environment a barrier for coordinated activities, it is required to design a new paradigm to harmonize environmental technology transfer with concerns over international trade and economic competitiveness.

Assessment of Corporate Environmental Performance

There are some indexes to indicate the level of corporative efforts in environmental measures, such as ISO 14000 series and "Environmental Performance Indexes," and the number of companies using such indexes as a base to adopt environmental management and/or prepare environmental reports and others is increasing rapidly.

Moreover, getting greater momentum in the world is the move toward environmental rating to assess how each company addresses environmental measures. In Japan, Nihon Keizai Shimbun offers "environmental management assessment" and the Sustainability Management Rating Institute provides "sustainability management ranking assessment," while similar ratings were done by Innovest Co., and Dow Jones Co., in US and Europe. Their ratings, however, tend to focus on a part of corporative environmental measures, and do not necessarily provide a comprehensive assessment.

For this reason, GISPRI started the

study of this field from fiscal 2002. Our activities in fiscal 2002 included the identification and comparison of existing standards in environmental performance assessment, analysis of common and unique factors in such standards, and review of a way to conduct the comprehensive assessment.

The result of this study led to the proposal of assessment standard on environmental performance, which can become a driving force for the active promotion of corporative environmental measures, and benefit to the promotion of machinery industries in Japan.

The Influence of Chinese Economy as a WTO Member on Japanese as well as East Asian Economies and Japan's Potential Responses

In FY 2002, the committee conducted a macro-economic analysis, studied the trends of various industries in China, and worked on possible strategies for Japanese companies to deal with Chinese economy mainly in the field of strategic importance, including the of electric-appliance, electronics and automobile industry. The dominating opinion was that Japan should welcome the emergence of Chinese economy -- whose comparative advantage is in its labor-intensive industries -- from a macro-economic perspective, given that the two countries are in a complementary relationship. In addition, the great contributions of foreign capitals in the fields of electric-appliance, electronics and automobile were noted. Although a number of committee members supported that Japanese companies should expand their business into China viewing it as a potential market, the delay in "localization", including a substantial delay in the development and promotion of local Chinese managements compared with that in Western companies, was pointed out as a problem.

The future influence of China's accession to WTO on East Asian economy was considered based on hearings from companies and organizations in six countries and territories including China, Thailand, Malaysia, Indonesia, Vietnam and Taiwan. While China's accession to WTO will accelerate NIES' investment to China as a production base, when it is viewed from its relationship with NIES, it is expected to contribute to the promotion of the service sector with high added value like research and development within NIES. On the other hand, foreign companies investing in ASEAN countries will transfer their production bases to China in a limited manner because their focus is on the market within the ASEAN region. Instead, Chinese capitals are expected to enter into the ASEAN market in a mid-to-long term.

The Effects of Global Environmental Problems and their Response Measures

The Kyoto Protocol for the United Nations Framework Convention on Climate Change (hereinafter referred to as "Kyoto Protocol"), which is an international framework to prevent global warming, was adopted at the 3rd Conference of Parties (COP3) held in Kyoto in 1997, and later led to additional international negotiation on its operational rules. Following the adoption of the Marrakech Accord at COP7 in Marrakech Morocco in November 2001, which determined the operational rules for the Kyoto Protocol, the Japanese Congress passed the resolution approving the conclusion of the Kyoto Protocol on May 31, 2002, while partially amended the "Law on the promotion of global warming measures" that would coordinate the Protocol with domestic legislation. Furthermore, Japan completed the procedure to ratify the Kyoto Protocol by submitting the letter of acceptance to UN Secretariat on 4 June 2002. In addition to Japan, EU and its member countries, other European countries, New Zealand, Canada and others have completed the ratification of the Kyoto Protocol, but the condition of its entry into force has not been met since Australia, Russia, Ukraine, some European countries, and others have not completed the procedures, in addition to the United States declaring its withdrawal from the Protocol.

This research and survey project implemented the studies of subjects stated below with an aim to benefit to the process of international negotiation on the post-2013 international framework, which would start in 2005, and to review measures to implement the Kyoto Protocol in Japan and to fulfill its commitment, in the wake of heightened momentum for Kyoto Protocol's entry into force by the adoption of the Marrakech Accord.

The project composed a wrap-up of international negotiations on climate change including the one discussed at the COP8 and the 16th and 17th Sessions of Subsidiary Bodies on the Kyoto Protocol. Also, it implemented the information exchange and analysis on national registries, which were essential for the evaluation of compliance with the Kyoto Protocol.

The Kyoto Mechanisms, which is widely recognized as options to achieve emission reduction targets under the Kyoto Protocol, is also an effective option for Japan to meet its national target under the Kyoto Protocol cost-effectively, since Japan

has already realized the large part of its potentials in energy efficiency improvement. This research and survey project implemented the information exchange and analysis on the current situation and designing of domestic emissions trading system already practiced in UK from April 2002, with an aim to benefit to the designing of a domestic system of Kyoto Mechanisms in Japan.

Moreover, to promote global warming measures, it is essential to realize worldwide participation in the system including the US, which is the world's largest emitter of greenhouse gases. This research and survey project conducted information exchange and analysis on the global warming prevention policies and measures in each sector of US, including the federal government, congress, state governments and local communities, corporations, etc., for the purpose of realizing the early reinstatement of US, which withdrew from the Kyoto Protocol, and of benefiting to the review of available measures in Japan, so to make the post-2013 international framework comprehensive and sustainable to include the US.

IPCC's Climate Change 2002

Examination of IPCC Technical Papers

IPCC has prepared Special Reports on emissions scenarios and land-use change as well as its Assessment Reports compiled every 5-6 years. In the current fiscal year, we read and examined the Technical Paper on Climate Change and Biodiversity.

Consideration of IPCC Fourth Assessment Report

The IPCC Fourth Assessment Report is expected to be prepared basically in accordance with the same process as that for the past First to Third Assessment Reports. We considered how Japan can contribute for the preparation of this Fourth Assessment Report in the future.

Challenges in Technological Transfer and Their Solutions

Although the importance of technological transfer is widely recognized not only as a climate change measure but also in terms of its contribution to economic development in developing and economy-in-transition countries, actually it does not always function effectively due to various reasons. With an eye to the future utilization of the Kyoto mechanisms (CDM and JI), we analyzed and examined challenges in the global promotion of technological transfer as well as their solutions from various perspectives including current barriers for technological transfer and dissemination as well as their solutions, and new incentive setting, using examples from specific practices (such as international cooperation programs by NEDO).

Assessment of Various Policy Options

As stated in the IPCC Third Assessment Report, there is no single path that could stop the global warming, and it is important to choose the appropriate one from a range of policies-and-measures options. Therefore, in order to extract items for future consideration by IPCC, we summarized how other countries are proceeding with their consideration of climate measures with an eye on the fate of the COP negotiations, and considered issues related to the introduction of specific options including economic instruments (emissions trading and carbon tax, etc.) and voluntary efforts.

In the past, we worked for information gathering by attending IPCC meetings, workshops, UNFCCC-COP sessions, and meetings of other subsidiary bodies joined by international experts. During the current fiscal year, in addition to information gathering, we sought the exchange of knowledge from Japan and research findings from other countries in the following occasions: the IPCC Session, where the new administration of the IPCC Bureau was decided; the COP-8, where rules for the Kyoto mechanisms (Operational Entity for CDM, etc.) were decided; the World Summit on Sustainable Development; and the CDM Panel, where operational rules for CDM were considered.

Basic Research and Survey on Emissions Trading under the Kyoto Mechanism and its Legal Characteristics

In June 2002, Japan ratified the Kyoto Protocol, formally committing itself internationally to the reduction target of greenhouse gas emissions under the Protocol. The Kyoto Protocol also established economic instruments to reduce greenhouse gas emissions cost-effectively. These instruments, namely CDM, JI, and Emissions Trading, are called the Kyoto Mechanisms. As being the country that has already achieved the highest energy efficiency in the world, Japan faces a considerable difficulty in complying with the Protocol's stringent target that calls for significant emissions reduction (6% from 1990 level). For Japan, therefore, the use of these economic instruments will likely provide more effective options to comply with its emission reduction target, while avoiding excessive cost burden.

For this reason, GISPRI conducted the captioned research and survey

for the designing of an emissions trading system framework that would be more efficient and easy to operate, based on the assumption that Japanese domestic corporations and other entities would indeed adopt the Kyoto Mechanisms.

To be specific, we divided the study works into the following two parts and conducted research and survey for each in a sub-committee style: (1) review of emissions trading system itself; and (2) review of how to address emissions from a legal perspective. For (1), the group studied the Greenhouse Gas Bank (or G-Bank) scheme, which is proposed as a system to purchase emissions in proportion to the quantity of fossil fuel imports, and reviewed how domestic emission control measures should be, what would be the expected effects of emissions trading and its promotional measures, how would the international emissions trading relate to WTO, etc. Group (2) studied mainly the legal characteristics of emissions, issues related to emissions trading (how to respond to any trading disputes, etc.), and the functions of registries, in which emissions would be entered.

In June 2003, the Government of Japan started the works to develop a guideline on domestic emissions trading system. We submitted the result and conclusion of above research and survey as basic information relevant to such a guideline. Today, GISPRI continues to work on the research and survey of relevant themes.

Building International Consensus for Global Warming

Upon creating a future framework on climate change, it will be necessary to form a system that is globally feasible, conforms to the concept of sustainable development and provides participation incentives to each relevant entity. Although it will be ideal to have the simultaneous and concurrent participation of the world as a whole, more realistic and practical to adopt will be an approach, in which an agreement is to be formed among main players including major developing countries at first, then to allow other entities to join in the agreement gradually, until realizing the participation of every entity in the world. We must remember also that a framework cannot be sustainable for a longer term unless the flexibility is built in the process of reduction target setting to incorporate the specific situation of each entity. Today, Japan faces a stage of launching more positive message for building a future framework, while contemplating on the revitalization of its industry sector.

The survey studied the history of international negotiation in the past, reviewed relevant literature on burden sharing, and examined the viewpoints and trends of international organizations, thereby contemplated on and identified: a preferable way of an international scheme; responsibility and equity; time frame; methodology in setting reduction targets; a way to formulate international consensus; the securing of participation incentives; and basic concept of a compliance scheme.

Upon considering the participation of developing countries in an international framework of global warming measures, further review will be needed on various agenda. Moreover, there should be efforts to coordinate with the consideration of Japan's national interests as well as its restrictive conditions including energy security, in addition to the viewpoint of controlling greenhouse gas emissions.

The survey hopes to accomplish, through further analysis, the deepening of studies on a favorable international framework that can benefit the compatibility between environment and economy.

The research and survey through the activities of China Council on the possibilities of implementation of Japanese environmental technology in China

Regarding the research and survey through the activities of China Council on the possibilities of implementation of Japanese environmental technology in China, the results were summarized in the following manner.

Chapter 1 analyzed the current situation of China's economy, environment, and energy issues. Based on this analysis, we summarized the future direction of China presented on the "10th Five-Year Plan for National Environmental Protection" which was founded on the China's mid-term plan, "10th Five-Year Plan for National Economy and Social Development", and "The People's Republic of China National Report on Sustainable Development".
Chapter 2 summarized the activities of the "China Council (CCICED:China Council for International Cooperation on Environment and Development)", which was established by the State Council of the Chinese Government in April 1992 to facilitate cooperation between China and international community in the field of environment and development. CCICED, which comprises Ministers and Vice-Ministers of Chinese Government, Chinese experts and

international experts, discussed and adopted the recommendations to Chinese Government at its Annual General Meetings. With the 1st Meeting of Phase III of CCICED, which was held in November 2002, CCICED started its new activities under the new structure and members.

"The Task Force on Circular Economy and Cleaner Production (CE&CPTF)", which is subordinate to CCICED, took over "the Cleaner Production Working Group" that had worked during the Phase II of CCICED, and started it activities. The overall goal of the CE&CPTF is to provide strategic recommendations on the wide-adoption of circular economy and cleaner production as strategy for sustainable development in China.

Chapter 3 analyzed the current situation concerning the implementation of Clean Development Mechanism (CDM) and its project candidates in China under the new Chinese Government and its organization.

The Chinese Government disclosed that they would give priority to the energy efficiency and the new & renewable energy as the CDM activities, and they insisted that China has room for reduction of CO_2 by 100 million tons annually. Chinese Government, however, established the administrative and management structure and started to prepare the procedure for admitting the CDM projects. There are no projects those concreted shape but the Dutch project, "the Wind Farm Project in Inner-Mongolia".

Special Committee on Validity Assessment for Derivatives in Market Trading

This committee aims to analyze various trading systems through an experimental approach, and to explore trading systems that would realize efficient allocations, in view of GHG emissions trading likely to be introduced in the future. In the current fiscal year, we have organized eleven meetings for this committee in order to explore main points to be tested in experiments, and considered issues that had been raised.

There are roughly four issues that have been considered as follows:

(1) Information transmission and market trading
(2) Irreversibility of investment and its influence on investment behavior
(3) Cost efficiency in monitoring and trading system
(4) Influence of monopoly power on the market

(1) Information Transmission and Market Trading

Based on an assumption that a "Bubble" case observed in the trading experiments might have been caused by the information cascade or the herd behavior, the committee discussed the followings: whether the prices could perform as one of the vehicles for information transmission so that the true value could be inferred from price information, given the information disclosure is an important factor in the market; in which situation the information cascade and the herd behavior would occur and which kind of effect they may have on the market; and whether they could be stopped by the disclosure of official information, etc.

(2) Irreversibility of Investment and Its Influence on Investment Behavior

The committee discussed a relationship between uncertainty and investment behavior, including the increase and decrease of investment in response to a change in uncertainties and risks, as well as the influence of irreversibility of investment. It also had a discussion on the current situation and future direction of the electricity market in Japan.

(3) Cost Efficiency in Monitoring and Trading System

In order to design a system incorporating monitoring costs, the committee had a discussion based on a paper titled "The Advantages of Upstream Monitoring Auction System". In addition, it discussed how to formulate various factors like different regulations and permit schemes in those experiments using a simplified basic market model that are dedicated for designing a post-Kyoto system as well as a domestic system under the Kyoto Protocol. It also talked about the modality of an experimental model which deals with electricity as goods.

(4) Influence of Monopoly Power on the Market

Regarding the influence of monopoly power on the market, it discussed whether the permit market would be a competitive environment for emissions trading, how the competitiveness or non-competitiveness of the product market would influence the permit market, and how the influence of monopoly power could be removed.

The International Trends of Environmental Technology Transfer

The full-scale development of a

global market economy since 1990s has accelerated with the advent of the 21st century, enabling the cross-border exchange of all kinds of things in addition to conventional goods and services. While such globalization has given enormous benefits to some developed countries, other developed countries as well as a number of developing countries have not been able to enjoy the benefits, with a gap between the both sides growing day by day, -- though it is be the fate of globalization. In developing countries, such a situation is making their poverty problem more serious, forcing approximately one out of every two people of the global population to live within two dollars per day. Such a difference between developing and developed countries might not only be a heavy drag on the development of globalization -- which should be "economically" efficient --, but also exacerbate the North-South problem, which is already quite a touchy issue. In such a dangerous situation, the issues of developing countries are not just their problems, but also problems of international community. In fact, the issues of developing countries are being addressed with a higher priority by almost all international organizations including WTO, UNDP, OECD, UNFCCC and UNEP, and are always the focus of a heated discussion in their meetings.

A number of international organizations consider that not only direct supports -- such as the provision of foods, health and medical services, safe water, and education,-- but also activities that allow developing countries to create their own development opportunities -- such as technology transfer and capacity building to this end -- would be solutions to resolve the issues of developing countries including poverty, and therefore each of them are working on these issues with a special emphasis. Notably, the recent trend is not a unilateral technology transfer or capacity building implemented only by developed countries or governments, but is the cooperation between developing and developed countries as well as governments and the private sectors, with relevant parties playing their respective roles.

Seven international organizations subject to investigations this time are UNFCC, IPCC, OECD, UNEP, UNIDO, UNDP, and APEC. Items pointed out to be important by these organizations are as follows:

- The development and integration of technology-related database (including match-making functions)
- The improvement of database and an access to other sources of information (in terms of both facilities and human capability)
- The support for the needs assessment of developing countries
- The implementation and enhancement of follow-ups and monitoring
- "Learning by Doing"
- Institutional and human capacity building at the local level
- The integration of environmental conservation issues and the national development plan of developing countries
- Networking of interested parties

Giving a special emphasis on the above items, each of these organizations is implementing various financial and human aids, to comprehensively address the needs of developing countries. Furthermore, they set up an environment for investment in developing countries through those activities, creating a connection between developing and developed countries, to enhance the business opportunities of developed countries including Japan. In this regard, international organizations are earnestly implementing activities that are also useful for developed countries. In practice, however, technology transfer and capacity building activities by each of these international organizations are not well mutually coordinated. Of course, the importance of such activities is recognized, and some organizations bilaterally work in a cooperative relationship. However, the scope of their cooperation is limited, and the comprehension of the whole set of activities might be difficult, even though they all work under the same umbrella of the United Nations. For example, seminars and workshops for experts' capacity building are implemented by individual organizations in their own unique ways, -- hardly well-organized due to their different scopes and approaches. It is doubtful whether human resources given such kind of training can be experts that would play a leading role in designing policies in developing countries. Rather, it might be possible to take that giving such training is only advantageous for organizations and companies from developed countries in utilizing such experts from developing countries, who have not been trained as all-round players, to create a facilitating environment in developing countries for them, and to internally establish a business climate that would serve for such developed countries' strengths. Especially, companies and organizations from the U.S. and the E.U., which always keep a close contact with international organizations, seem to take advantage of such a strategy. Thus, due to the non-effectiveness of coordination among international organizations, the true enhancement of human resources and institutions in developing countries has not been realized as much efficiently as expected

although each of them is spending a huge amount of human and financial resources and time.

Nonetheless, international organizations actively make public and provide information and knowledge they have, providing not only the E.U. and the U.S., but also Japan with options to "successfully" utilize technology transfer and capacity building activities for developing countries. Especially some organizations like UNIDO have a rich experience based on its decades of continuous investigation on the needs, characteristics, and situations of developing countries, being well prepared for such information and experience providing/sharing. The governments and the private sectors in developed countries including Japan should fully utilize such resources. For example, the results of technological needs assessments undertaken by developing countries with the support of GEF, which are incorporated in their national communications submitted to UNFCCC, can be viewed on the official website of UNFCCC. In the COP 8 held in India, however, Thailand expressed a concern that those results had not been fully utilized. The preparation of needs assessment reports from developing countries, which had been recognized to be important but had required a long period of time, has been initiated in a small-but-steady-steps-forward-manner. Developed countries are now able to obtain in real-time such information that did not exist in the past, to see the trend and development of developing countries. In Japan as well, it is important for the government and the private sector to work hand in hand to analyze the result of such investigations, to develop a strategy, and to determinately carry out their own responsibilities.

II. Symposium

13th GISPRI Symposium

Japan's Key Options in Aging Society with Declining Birthrate

--Development and more advanced utilization of human resources

On March 25, 2003, Tuesday, GISPRI held the captioned symposium at the Conference Room of Fukoku Seimei Building in Uchisaiwaicho, Tokyo, co-sponsored by the Ministry of Economies, Trade and Industries, and the Finnish Institute Japan.

The Symposium featured lectures by 3 lecturers from abroad as well as Japanese researchers and corporate executives. After two separate plenary sessions, it provided opportunities to actively exchange opinions and questions among participants including those from the floor.

The plenary session I addressed the problems of current social systems, such as the factors contributing to birthrate declines, and the obstacles hampering the greater participation of women in the society and their entry into labor force. It then reviewed possible measures for such problems.

Plenary Session II took up the issue of education to improve the capabilities and potentials of children who would shoulder our future, and the inevitable problem of labor force reduction in the aging society with declined birthrate, such as how to reenlist the aged but skilled labor force retired from the work front, and how to utilize middle to higher aged skilled laborers unemployed.

Both sessions discussed also the proposal "Community Initiatives for Overcoming Aging Society," which was under review at the GISPRI Research Committee on "Japanese educational/welfare/economic strategies in an aging society with low childbearing rate," which was introduced to these sessions by the Committee Chair, Prof. Kazuo Nishimura of Kyoto University Economic Research Institute.

13th GISPRI Symposium

Building a new socio-economic system

Policy proposal for the collaboration among NPOs, businesses, and governments

III. Policy Proposal

1. Introduction

Current socio-economic system is approaching a turning point. In addition to the changing world trends of extensive globalization and marketization, structural changes are taking place in domestic scenes as well, including the diversified needs and values of people, and the rapid progress of an aging society with declining birthrate. On the rise are varied social issues that cannot be addressed through the conventional framework of "government and market." Combines with the moves toward smaller governments, it has become increasingly difficult for the government alone to supply necessary social services.

2. Emergence of NPOs

Now, we find the emergence of a civilian sector that voluntarily and self-motivatedly addresses these new types of social issues. Initiated by massive volunteer efforts offered for the aftermath of the big Kobe earthquake in 1995, volunteer activities have won greater recognition in the society for their necessities and importance, leading to the legislation of Specific Non-Profit Activity Promotion Law (NPO Law) in 1998 that truly recognized the role of such activities in the society. Today, about 9000 NPOs and other local NPOs address wider issues ranged from citizens' and communities' level to international and global scale.

3. Social entrepreneurs

In the business sector, social entrepreneurs who aim to create new values through entrepreneurship have emerged, while corporations, mainly big companies, promote socially responsible management and address social issues in association with NPOs. Activities of these NPOs and social entrepreneurs are expected to encourage social reforms, with their roles winning even more important in the future.

4. Why "collaboration" now?

Most of social issues we face today are comprised of complex and varied factors, and to solve them will require the provision of necessary services through "collaboration" among governments, businesses, NPOs and social entrepreneurs. Upon the increasing realization of such needs, there are more attempts of cross-sector collaboration or NPO-NPO collaboration.

5. Environment surrounding NPOs and social entrepreneurs and their issues

However, not every collaboration attempt has been successful to achieve the intended results. One reason is because there are fewer organizations among NPOs and social entrepreneurs that have sufficient power and resources to become the central entity of such collaboration. Second reason is because the building of social environment or regulatory changes that favors such activities of NPOs and social entrepreneurs, especially of NPOs, has shown little progress. The request to revise NPO preference taxation system has been voiced for some time in the past, and the revision including the mitigation of requirements for NPO licenses is expected to take place in the fiscal 2003, but further consideration will be needed within the framework of overall revision planned for non-profit entity regulation.

In order for NPOs and social entrepreneurs to activate their activities toward the creation of new social values, it is necessary for them to exert efforts in resolving the issues, and for governments and businesses to actively extend supports and aids to NPOs and social entrepreneurs.

Global Industrial and Social Progress Research Institute has established the Research Committee for "Collaboration between NPO/NGOs and Government and Businesses" (chaired by Prof. Kanji Tanimoto, Hitotsubashi University Graduate School) in fiscal 2001, and, with the participation of experts in each sector of universities, governments, businesses and NPO/NGOs, held discussion on the system to create and supply new social values under the effective collaboration among governments, businesses, and NPOs and social entrepreneurs that address social issues.

Based on the research result of above Research Committee, Global Industrial and Social Progress Committee is to present the policy proposal as follows:

Proposal

As a policy proposal to resolve social issues existed locally or globally and to create new social added values by providing services, which cannot be supplied, or can be supplied only insufficiently, under the current socio-economic system,

through the cross-sector collaboration among NPOs, businesses with social missions, and governments, while encouraging the reactivation of locals and promoting the reform and revitalization of socio-economic systems in Japan, the Committee will like to request each sector of NPOs, governments, businesses, and universities the following 9 items.

<Promotion of mutual trust for collaboration>

(1) To promote mutual understandings and to build mutual trust among collaboration partners, establish a periodical dialogue session, build a platform for the effective implementation of collaboration, for which each sector shall actively participate, and conduct active human resource exchanges.

<Further efforts of NPOs themselves to win more trust and support>

(2) To earn trust from the society and all the supporters, including corporations, partners, beneficiaries of services offered by NPOs, and contributors, manage and control the organization with ensured transparency and explanatory responsibilities.

(3) Explore potential issues, and manage businesses with a pioneer spirit.

(4) Promote exchanges between NPOs, especially with mid-level support organizations, such as mid-level support NPOs. Also for mid-level support organizations, exert efforts in closer information exchanges with government and business sectors.

<Development of governmental support measures to activate NPO activities>

(5) Review the application of middle to small scale business support measures that can be applied for strengthening and supporting the organizational foundation of NPO social project activities.

(6) In order to facilitate the social project activities of NPOs and social entrepreneurs, such as those in welfare and education fields, realize, at earliest opportunities, the mitigation and removal of NPO license regulation, and reduce a gap in the preferential taxation system.

<Active participation of businesses for the collaboration with NPOs>

(7) For project activities with greater emphasis on social impacts, such as education, welfare, and recycling activities, attempt to build active collaboration with NPOs and social entrepreneurs, while challenging to build a new project model.

(8) Upon collaboration, actively utilize resources within the organizations, including funds, equipment, information, and technologies.

<Human resource development for NPOs and social entrepreneurs at universities and other academic institutes>

(9) To develop human resources for NPOs and social entrepreneurs, expand and develop a network of researches and education.

The PDF file of GISPRI Annual Report can be downloaded at:

http://www.gispri.or.jp/english/Annual/index.html

Note: From the next year, we will not longer publish the printed version of GISPRI Annual Report. Please access the above web site for the PDF versions of GISPRI Annual Reports in the future. Thank you.

GISPRI: Global Industrial and Social Progress Research Institute

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