

INTRODUCTION

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On November 22 and 23, 1996, the APEC Cabinet Members Conference was held in Manila, the Philippines. In their joint declaration, the cabinet members welcomed the call for a demonstration of initiative by the ministers in regard to the APEC Economic Committee's FEEEP issue (The impact of expanding Population and Economic Growth on Food, Energy & the Environment). In response, the Task Force on Food Problems was established, and emphasis was placed on achieving cooperation to encourage progress in FEEEP problems, such as through marine resources preservation, human resource development, fisheries development and energy cooperation. In September 1997, an international symposium on the FEEEP problem was held in Canada, and in December 1997, the Kyoto Conference on the Prevention of Global Warming will take place, with representatives from 158 countries scheduled to attend.

Given the importance of the FEEEP problem, prior to these events, the Institute of Developing Economies and the Japan Economic Foundation organized an international symposium on the FEEEP topic in June 1997, with support from Japan's Ministry of International Trade and Industry. Specialists from Japan and overseas were invited to participate in the symposium, which was designed to contribute to APEC cooperation by fostering understanding of the FEEEP issue.

One unique characteristic of the symposium was that the issues were not covered individually; emphasis was placed on the overall relationship of the elements comprising FEEEP. The FEEEP issue was taken up as a whole, with participants investigating ways to tackle the issue from within the framework of APEC cooperation, as well as by achieving cooperation from countries outside the region.

In the keynote paper, it was pointed out that the FEEEP problem is a global problem for which no single country or region—including the APEC region—can provide a suitable solution. Solving this problem will require the liberalization and facilitation of trade and investment, as well as cooperative relationships with countries outside the region. APEC must do everything within its power to find ways to contribute to solving this global problem.

Part I consisted of three papers on the topic of energy and environmental problems which accompany economic growth.

The first paper provided an empirical look at the energy issue, utilizing predictions of energy supply and demand in the APEC region - particularly in East Asia - developed from econometric models. It is interesting to note that coal, which currently accounts for an extremely high share of the primary energy consumed in East Asia, will be an imported commodity by the year 2010. Furthermore, we can predict enormous growth in the demand for electric power, which necessitates tremendous amounts of investment. It was reported that 1.42 trillion dollars' worth of investment would be needed for power facilities and other infrastructure work, a figure which clearly cannot be met by the East Asia region. This point brings up the new issue of whether or not this is a role that APEC should fill.

Comments on the paper shared the view that a high demand for energy will continue in the process of rapid economic growth in East Asia. But the commentator poses a question where these East Asian countries will acquire such large amounts of investment capital to satisfy such a huge demand for energy. Furthermore he examines the demand for energy, the use of nuclear and hydro power in developing countries, and the role of Japan in supporting the energy sector of developing countries. He pointed out that the Japanese contribution can be in the forms of technical and financial assistance and from both public and private sectors.

The second report built on issues presented in the first paper, discussing the impact that increased energy consumption would have on environmental protection, especially in terms of the issue of global warming. The report recommended that the private sector look for ways to introduce new technology under the APEC framework, and that governments provide proactive support for this initiative.

The commentator on the paper agreed that it is an urgent issue to discover policies which achieve a balance between economic growth and concern for the global environment, and pointed out that the developed countries and developing countries should cooperate to propagate renewable energy systems.

The third paper focused on the coexistence of environmental protection and industrial development issues, particularly in Southeast Asia. In this report, it was pointed out that both of these factors are equally important, and that while reaching a balance between the two is essential, we must also account for societal and cultural factors when looking for solutions. Environmental protection has become an important issue throughout the ASEAN region, and countries are making progress through joint efforts. One reason why environmental protection is so important for ASEAN countries is that they still rely on development which uses natural resources and agricultural products as a lever, and they must work to preserve and develop those resources. The paper introduced several factors which must be given consideration when dealing with this problem, including differences in stages of development within the APEC region. Currently, the world is undergoing tremendous change, especially in the political and economic arenas, and developing countries are paying a heavy price in order to adapt to such change. It was recommended that the developed countries, which profit from such change, contribute appropriately to finding solutions.

One comment given after the report pointed out the differences in the capacity of adapting developing countries to FEEEP and the need for equal partnership among APEC countries.

In Part II, two reports were given on the topic of population growth and estimates of food production and supply.

The first paper covered predictions of population growth and food demand in the APEC region. The first part of the report introduced a pessimistic view linking population growth to a potential food crisis, especially in China, and then brought up the opposing argument. The report highlighted the limitations of predictions provided by international organizations (impossibility of straight-line technical progress, increasing demand for a meat-based diet, disregard for limits on the environment and water resources). Using an econometric model, the reporter provided estimates of the increase in food supply required in the APEC region by the year 2030. It was estimated that a maximum increase in annual food production of 1.66% would be required if we take into account increases in population and income, as well as responsibilities to supply food to other regions. If we consider the fact that, in recent years, the rate of increase in harvest yields has declined, it is apparent that special effort will be required in order to achieve increased agricultural productivity. Specific ideas mentioned were the need to rethink the relationship between agriculture and environmental problems, expanded education to increase productivity and policies to counteract rural impoverishment.

In the comments given after the report, the pessimistic view received criticism, for as the developing countries continue their economic development, increases in the demand for food will rapidly level off, and we can expect clear progress in technology for higher yields. Thus, there is little necessity for a rapid increase in food production. Finally, it was mentioned that, in order to increase agricultural output, it will be necessary to reconfirm water, cultivation and fishing rights, and to revise the high taxation on agricultural products, while continuing to investigate other areas of concern.

The second report covered the food problems of China, which must provide for a population of 1.2 billion citizens. The paper introduced a variety of opinions about (1) China's latent potential for grain cultivation, (2) market reforms in the agricultural sector and (3) development of agricultural trade. The conclusion was that through progress in agricultural technology, China's agricultural sector will not face a critical situation, and that China already possesses the long-term latent capabilities required for increased food production. This view stands in opposition to the pessimistic predictions of Lester Brown and others. Future issues confronting China's agricultural sector (food demand) are (1) the necessity of a unified, comprehensive domestic revolution for increasing productivity in China's agricultural sector (reconstruction of the traditional ways of thinking and basic perceptions based on the old agricultural policies) and (2) the shift away from China's traditional policy of self-reliance for food to a framework based on flexible agricultural and trade policies that are in harmony with changes in domestic agricultural economics. It was emphasized that these two adjustments in government policy are top priorities.

Comments raised with regard to the report focused on the view that China, like other giant countries, should seek some balance between the extremes of traditional food-sufficiency policy and policy solely based on comparative advantage, by introducing more market forces for efficient resource allocation and building a solid infrastructure for raising food production capacity.

In Part 3, participants heard two reports on urban problems and lifestyle changes. In the first report, the reporter introduced three points concerning those cities which are demonstrating the greatest economic development and population growth, as well as changes in the lifestyles of the people who live there, through a contrast with developed countries. The first point mentioned was the rapid speed of urbanization in today's developing cities. During the 32-year period since 1960, the urbanization rate of developed countries such as Japan and the U.S. fell to below 3%. In contrast, the majority of developing countries (including heavily populated countries such as China, Indonesia and India) are showing "hyper-urbanization" exceeding 3%. The second point brought up is the appearance of mega-cities. There are 25 cities in the world boasting populations exceeding 5 million residents; of those, 15 are in Asia, and only 4 are in developed countries. Third, the urbanization resulting from economic growth is having profound effects on the lifestyles of residents, as they become more Americanized and materialistic. The shift toward this lifestyle symbolized by mass production, mass consumption and mass waste goes hand in hand with rapid population growth and urbanization. It was pointed out that these shifts are causing tremendous changes in the living environment of urban areas, and that finding appropriate and rapid solutions to these problems will be an extremely difficult challenge.

One comment made after the report pointed out that, as a result of developments in communications, urban lifestyles are changing daily due to influences from the outside world. Thus, it will be necessary to reconsider the time and space factors in the urbanization issue from the perspective of globalization.

In the second report, debate was opened up about the effects of urbanization on the living environment and potential policies for environmental protection, focusing on Bangkok as an example of a city which has experienced tremendous urbanization as a result of remarkable economic development and population growth. First, a wide range of problems accompanying urbanization were introduced, including crowding and traffic jams; degradation of the environment, including air and water quality; regional disparities; and poverty. This was followed by discussion on the factors determining the scale of a city. It was pointed out that while there is no fixed ideal size for a city and it is impossible to hamper the growth of mega-cities, it is essential to keep focused on the future and create policies which preserve the urban environment. Such policies include alleviation policies (promotion of unleaded gasoline, efforts to control power consumption) and preservation policies (recycling activities, regulations in the form of taxation, etc.). It was mentioned in the report that even in Thailand, which has only recently begun to grapple with such issues, a variety of environmental activities are already yielding results.

The comment was made in regard to this report that we must consider the issue of urbanization from a global perspective, and that it is necessary to implement a strategy of regional development by building up the economic infrastructures in mid-sized regional cities.

In Part 4, discussion was opened up on the role of the private sector in resolving food and environmental issues, as well as the role of the private sector in food trade and infrastructure development.

The first topic of debate was the necessity of the private sector in food trade. It was explained in this report that easing regulations which restrict the activities of the private sector in food production and distribution is essential, using as an example the free trade for rice and wheat. APEC members are promoting the easing of regulations and liberalization of trade, aiming to achieve the ideal allocation of resources within the region. It was emphasized that this will result in an expansion of food trade within the region, allowing all members to reap the tremendous economic benefits of liberalization.

One comment brought up in regard to this theory was that while easing regulations would indeed lead to the expansion of food trade in the APEC region, there are concerns that the world grain market will become increasingly unstable in the future as a result of the effects of global warming and so forth. In recent years, the self-sufficiency rate for grains in Asia has rapidly decreased, and it will be necessary to investigate how to guarantee stability in food supply.

The second report discussed how infrastructure can coexist with environmental preservation, and the role of the private sector in this field. For countries such as the Philippines, which has continued to enjoy rapid economic growth, infrastructure implementation and development are not simply methods to achieve economic and societal goals. Rather, it was emphasized that ample attention must be paid to environmental factors when a country's infrastructure is put in place. This requires policies which veer away from the traditional pattern of development used by the developed countries. The developing countries should use new development patterns based on clean technology and production methods which show adequate concern for the environment. It was pointed out that the private sector will play an important role in this type of development.

Comments raised in regard to this report included the fact that it will be necessary to use energy resources which are kind to the environment. However, current energy resources might be able to achieve improvements in energy efficiency, and contribute to environmental protection.

Part 5 focused on the relationship between production activities - especially agriculture and industrial production - and the environment. The reports investigated the problems associated with achieving sustainable economic development, and countermeasures which could be used to combat such problems.

The first report took up the issue of agricultural production, using a model designed to summarize the connection between production and the environment.

The model used the X axis to show the effects of agricultural production on the environment, and the Y axis to represent profitability. Through the use of this model, participants were able to gain a clear awareness of the positioning of past and current production systems, and the direction we need to head in the future. It was pointed out that in terms of planning production systems for the future, there tends to be a perception gap between the planners, who value long-term reform, and the farmers, who focus on short-term profitability. To sidestep this perception gap and implement clear reforms in the production system, it is important that the planners understand the social and economic position of the farmers, and make an effort to ensure short-term profitability. Comments raised in regard to this report brought up the issue of China, and how agricultural production during the “Great Leap Forward” and the “Cultural Revolution” wreaked great havoc on the environment. In contrast, agricultural production following the implementation of a market economy system in 1979 has shown progress, and environmental preservation is improving. This progress emphasizes the point that methods which provide farmers with economic incentives are also effective for environmental preservation.

The commentator on the paper argued that, under certain circumstances, policy adjustments may lead to the achievement of the two seemingly conflicting objectives, i.e., economic efficiency and environmental conservation, by drawing on the example of China’s shift away from the strategy focusing on grain self-sufficiency during the Cultural Revolution and the adoption of market-oriented reform policies.

The second topic covered the issue of industrialization in Malaysia in the post-war period, especially since the latter half of the 1980s, and reported on the government’s policies in regard to environmental problems. Since the 1960s, the government has issued seven 5-Year Plans, with a shift in industrial production from a substitute for imports to a focus on exports, and a shift toward heavy industry. During this period, Malaysia experienced worsening environmental damage, and from the 1970s, the government implemented a legal system in an attempt to achieve environmental preservation. However, due to a lack of funding, technology and human resources—especially at the regional level—these laws and regulations were not always adhered to. Malaysia’s next major issue will be to figure out a way to effectively implement this legal system on par with the developed countries. It was mentioned in the comments that, in this age of increasingly prosperous borderless economic activity, countries should implement international environmental standards, and that by accepting rather than avoiding the link between trade and the environment, Malaysia would be able to achieve a balance between industrial production and environmental preservation in the long run.

Comments on the paper shared the optimism about harmonization of development and environment in Malaysia, but pointed out that effective implementation of environmental legislation requires enforcement without exception and building a system to facilitate compliance, and that at some point Malaysia will have to accept the linkages between trade and environment, given the awareness of global environmental issues and the degree of integration of Malaysia into the world economy.

In Part 6, as a summary of the previous debate, a panel discussion was held on the topic of what practical cooperative policies could be taken within the APEC framework in regard to the FEEEP issue. The following 5 points were discussed:

(1) Reiteration of the 5 Elements of FEEEP

All panelists emphasized that in order to achieve a unified understanding of the 5 elements which comprise FEEEP, it will be necessary to achieve a more detailed and practical concept for FEEEP, and called for joint research between APEC members and non-members. Furthermore, some of the panelists indicated the necessity of strengthening the APEC Research Center Network and establishing joint research organizations similar to APERC (Asia-Pacific Energy Research Center), which was established by the Japanese government. In order to achieve more beneficial research results, it will be necessary for APEC to establish a joint research system and obtain funds from developed countries. Furthermore, research on the FEEEP issue must be independent, separated from governments. While academic, unified research must aim for low-cost yet effective solutions, we must also bear in mind the necessity of research on the specific problems of each developing country - including problems related to urbanization - because solving these problems must be done individually.

(2) Effective Solutions

All participants agreed on the necessity of drawing up an action plan to achieve FEEEP cooperation. An economic, effective cooperative system to solve the FEEEP problem first of all requires the smooth functioning of market mechanisms. For example, the food shortage crisis in China was caused by policies which restricted prices, resulting in an insufficient supply of agricultural products. It was pointed out that if market mechanisms are functioning smoothly, it will be possible to conquer this problem effectively.

Second, it will be necessary to aim for lower costs by expanding trade. For example, Thailand is covering its insufficient energy supply by importing electricity from Laos, where power generation is relatively less expensive.

Third, it should be noted that market economic mechanisms are not always appropriate in achieving environmental protection. APEC must actively encourage members to invest in environmental protection.

(3) Development of an Action Plan

An action plan for solving the FEEEP problem first of all requires an educational program which fosters leaders who recognize the importance of FEEEP cooperation and problems related to this issue. Secondly, while funds for FEEEP cooperation must be based on the principle of self-sufficiency, developed countries should actively contribute as well. Third, while governments play an important role, the private sector, NGOs and individuals are also expected to play a leading role in the solution-making process. APEC must take the initiative to achieve a cross-cutting, international organization which covers

multiple disciplines and to develop activities which are both low-cost and effective.

(4) Involving the ASEAN Formula

Almost all panelists agreed that the adjustment and decision-making process for APEC cooperation should be based on the ASEAN formula. One of the conditions of the systematic framework for APEC cooperation is, first of all, that a government-level council be established as a control organization for FEEEP. Second, it will be necessary to establish the funds for investigative research, unified government policies, implementation of activities and training of specialists. Third, in order to achieve smooth FEEEP cooperation, APEC members must make every effort to share information about individual and joint activities. Fourth, it will be important to encourage the cooperation of the private sector, which possesses both a worldwide business network and potential funding.

(5) Steps to Cooperation

As was discussed at the symposium, the FEEEP problem is an issue which APEC must confront without hesitation. However, FEEEP is a long-term issue, and it will be necessary to deal with each issue step by step. The first step is to clarify the FEEEP issue and to eliminate unnecessary factors. This will require APEC's financial support. The next point is to establish a cooperation center which can develop strong leadership. Through the implementation of a variety of research activities and cooperative activities, we can expect the creation of a clear goal and an action plan to solve the FEEEP problem.

The purpose of this symposium was to clarify the tight correlative relationship between the FEEEP issues, and based on this mutual relationship, further clarify and investigate the overall problem.

It is my sincere hope that this debate will contribute to APEC cooperation in regard to FEEEP.