

## **KEYNOTE ADDRESS**

# How Should We Approach The FEEEP Issue? <sup>1</sup>

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## A New Area on the APEC Agenda

Good morning ladies and gentlemen. It is my honor to be invited to give a keynote speech on the FEEEP issue. FEEEP is an acronym of Food, Economic growth, Energy, Environment, and Population. It is now becoming a new area on the APEC agenda, the third major track after TILF and Ecotech. apologize for the flood of acronyms in APEC, especially this FEEEP with uneasy pronunciation. TILF stands for Trade and Investment Liberalization and Facilitation, while Ecotech stands for Economic and Technical Cooperation. These two have been identified as two major tracks on the APEC agenda since the Bogor Declaration. The Osaka Action Agenda in 1995 set their guidelines and MAPA(Manila Action Plans forAPEC) announced their action plans for implementation, and they have started to be implemented since early this year.

FEEEP was initially proposed by Prime Minister Murayama at the Osaka Leaders' meeting in 1995 but originally came from an earlier proposal by MITI on the Triple E's of Economic growth, Energy and Environment. Food and Population were added later to make this acronym with uneasy pronunciation. It was reiterated in the Manila Leaders' statement and has been promoted under the Canadian chair this year, probably because it fits with the Canadian preference for sustainable development. APEC's Economic Committee has been in charge of the FEEEP issue and it plans to submit a FEEEP report to the Vancouver APEC in November. Its Canadian chair, Dr. John Curtis, drafted a discussion paper on the FEEEP issue and distributed it to the APEC members for further discussion<sup>2</sup>. Economic Committee plans to organize a seminar on FEEEP in Saskatoon, Canada, in early September. The present conference by the IDE aims to make a contribution by the original proponent.

FEEEP covers the five major aspects or variables concerning sustainable development of the Asia Pacific economies. APEC was formed on the basis of the past record and future potential of high growth in the Asia Pacific economies and aims to realize this potential. Everybody admits their high potential, but high growth will not be realized without deliberate efforts for overcoming bottlenecks. The five variables involve major bottlenecks to sustainable development in Asia Pacific.

Not all five variables are new to APEC. Food and energy have already been included in Ecotech work projects, while environment has been handled by the Environment Ministers' meeting. However, it is new for APEC to handle these five variables jointly "in a long-term, inter-related manner" (Leaders' Declaration at Osaka in 1995). It requires a different approach from Ecotech, which justifies the third track for APEC. We have to put the new wine into a new wineskin.

Another new element of the FEEEP issue is its global implication. Everybody will see that the FEEEP issue cannot be dealt with by individual APEC members independently and APEC has decided to approach to it jointly. It is also clear that it can be solved not within APEC but in collaboration with non-APEC members. That is, the FEEEP issue has global impacts and APEC is now attempting to tackle this global issue. TILF too has a global inter-linkage since the liberalization within APEC is inevitably inter-related with the liberalization in the WTO regime. However, APEC's approach to the FEEEP issue makes its global implication more explicit.

Ladies and gentlemen, it is my pleasure to report to you that the Japanese government has launched its consultation on "global partnership" with the United States in the Japan-US Framework Talks since 1994 and that the original FEEEP proposal was consistent with this line of its global efforts.

## **What is the FEEEP Issue?**

Each of the five variables of the FEEEP issue represents a major area of expertise, and many experts have already accumulated study results of applying their expertise to Asia Pacific. It is not sufficient for us to collect these studies but to add value to these existing studies by identifying the proper inter-linkage among the five variables. Neither is it our main intention to accommodate the business interests of big vested interest groups in food and energy. The FEEEP issue addresses how to help all APEC member economies to break probable bottlenecks to their sustainable development.

A popular approach for formulating the interaction among FEEEP is to rearrange the five variables in the order of their cause and effect, that is, to examine the impacts of population increase and economic growth on food, energy and environment as appeared in the Osaka Leaders' Statement and the Economic Committee chairman's paper<sup>3</sup>. For example, the United Nations' medium-case scenario projects world population to increase from about 5.8 billion in 1996 to about 10 billion by 2050, an increase of 72 per cent. The figure will be a bit modest for the APEC members, 36 per cent increase from 2.2 billion in 1996 to 3 billion in 2050.

Multiplying this population increase with an appropriate growth rate of per capita GDP (a modified extrapolation of the past trend) will give a future increase of demands for food and energy and estimate of environmental pollution resulting from it. The supply of both food and energy will be examined to find a probable gap between the increased demand and the corresponding supply. If the required sup-

plies of food and energy are not likely to meet the projected increase in demands, the original scenario will not be delivered.

We should also examine what measures are needed to prevent the projected environmental pollution and how costly will it be in order to do so. If it is too costly or cannot be prevented, the original scenario will be achieved with a much degraded environmental standard. If only the population increase is realized, the reduced total economic growth will be accompanied by lesser per capita income, that is, lower quality of life. With all these the original growth scenario will not be sustainable in the long term.

However, each of the five variables can take multiple growth paths and each variable's path will interact with other variable's path closely as correctly pointed out by the Economic Committee paper. The same population growth will exert different impacts on labor supplies to individual industries according to its allocation to urban and rural growth. The excessive urbanization observed in many developing APEC members will cause much severer environmental pollution. To give another example, a particular type of food supply will increase the energy intensity of its production and cause a heavier burden to the environment. On the other hand, a deliberate effort to decrease energy intensity will certainly reduce its environmental impact at the same time. In order to tackle the FEEEP issue, we have to understand correctly the probable interaction among the five variables and identify probable bottlenecks in food, energy and environment to the sustainable development of the Asia Pacific economies.

## **Spatial Element is Important**

In the 1960s, World Bank economists proposed the "Two Gaps Approach" to development assistance<sup>4</sup>. While developing countries aim to grow at a five per cent rate annually, they will be constrained by two different gaps which will emerge in sequence resulting from the growth. First the saving-investment gap, that is, the insufficient domestic saving to meet the required investment, will emerge and will constrain the growth to a lower rate. At the higher stage of development, the export-import gap of foreign exchange will emerge to constrain their growth. Both the type and amount of required development assistance differ between developing countries at different stages of development.

Our FEEEP approach resembles the Two Gaps approach in identifying different bottlenecks to a desired growth and suggesting possible measures to fill the gaps. However, it should be noted that while the Two Gaps approach examines bottlenecks to individual countries separately, our FEEEP approach examines our gaps in a wider horizon than individual countries. The spatial element is important in the FEEEP approach.

We have three spatial units: individual countries, the Asia Pacific region, and the world as whole. Which is the most appropriate spatial unit for examining our FEEEP issue?

It is clear to everybody that all five variables exceed the confines of individual countries. To take Japan as an example, both its growth and living standard have outgrown its self supply of food, energy, and environment. The Japanese growth itself has relied heavily on foreign trade and investment. It has also been the case for Asian NIEs and to a lesser extent for resource rich ASEAN countries and China. The population increase itself cannot be left to individual countries. Pressure for labor migration is so strong that no country can be indifferent to the population explosion in its neighbors.

A few aspects of environmental pollution such as acid rain and some industrial waste can be confined within such sub-regions of Northeast Asia or Southeast Asia. However, a greater proportion of food and energy trade and labor migration can be confined within the Asia Pacific region. That is, the regional demand is met by the regional supply through intra-regional trade. In our regime of open market economy, a big shortage of food and energy in a member economy is quickly transmitted to other members through higher prices and will be adjusted throughout the region. The efficiency of our trade regime is vital to the FEEEP issue and we have to see that the demand and supply adjustment is facilitated through trade and cooperation within our region.

It goes without saying that the rest of the food and energy trade are conducted with those outside the region. The growth of the Asia Pacific economies has relied on trade and investment with the outside world. The emission of carbon dioxide within the region adds to the global warming. The population explosion for the next fifty years is likely to occur outside our region but we cannot be indifferent to it. All the FEEEP variables have the global elements and we have to promote the efficient global regime of trade and cooperation in parallel with the intra-regional regime.

## **APEC's Approach to the FEEEP Cooperation**

With the inter-related nature and the regional/global implications of the FEEEP issue stressed in the previous sections, the following three steps can be suggested as joint actions for the FEEEP.

First, we have to stylize the facts about the five variables in both regional and global context by quantifying both the inter-relationships between variables and probable size of the gaps among them. It is the essential first step for us to share widely the salient features of the FEEEP issue in Asia Pacific.

Second, we have to search for effective means to break these bottlenecks and adopt on consensus the Action Agenda for FEEEP. It is important to emphasize the fact that the FEEEP approach, unlike the Two Gaps approach, is not for development assistance. As was announced in the Ecotech Framework Declaration in Manila, all members shall participate on a voluntary basis, offer their available resources, and benefit from the FEEEP actions.

The modality of our FEEEP actions is characterized by its three main instruments; market mechanism, effective regulation, and transfer of appropriate technol-

ogy or best practices among the APEC members. Some form of regulation and official intervention will be required in order to prevent environmental pollution, and to secure stable supplies of food and energy in the region. On the other hand, we cannot expect that central planning will work effectively in the APEC group with diverse members, and we will have to rely on the price signals for meeting demand with supply. We have to find the best mix of market mechanism and regulation. This best mix will be an important candidate for technology transfer. APEC, with its diverse members and high prospect for the benefit of such transfer, is best suited to this function.

The third step is to formulate the action plans for implementing the FEEEP cooperation. Like TILF, it will consist of individual actions and collective actions and should start to be implemented at the possible earliest date.

So far, this is my idea of the APEC's approach to the FEEEP issue. For the next two days we will listen to the experts' reports on individual aspects of interactions and probable gaps of the FEEEP. In the concluding session tomorrow afternoon, we will have a panel discussion on how to set the whole FEEEP issue as a solid third track for APEC. I happen to co-chair this last session and I plan to ask my expert panelists whether the procedure mentioned above is workable and what aspects of their areas should be included as salient features of the FEEEP. I hope you enjoy the conference. Thank you.

- Discussion on the FEEEP issue was continued at the FEEEP symposium organized by the Canadian government in Saskatoon on September 1–4, 1997. I participated in the symposium and chaired one of four concurrent sessions focusing on “socio-economic context”. Its chair's summary may suggest a clue to developing the FEEEP issue further. (see APPENDIX)

## Notes

1. APEC Economic Committee Chairman's Discussion Paper on “the Impact of Expanding Population and Economic Growth on Food, Energy and Environment in APEC”, October 1996.
2. APEC Economic Committee Chairman's Discussion Paper on “the Impact of Expanding Population and Economic Growth on Food, Energy and Environment in APEC”, October 1996.
3. One of the first contributions made by the IDE to the FEEEP issue adopted this approach. Takashi Nohara, Sustainable Development: Case of East Asia, presented in the session on FEEEP at the APEC Study Center Network Conference in Banff, Canada, in May 1997.
4. Chenery, H.B. and A.M. Strout “Foreign Assistance and Economic Development”, *American Economic Review*, 1966.