Session 1: Policy & Role of Government

Chairperson: Hsien-Chun Meng
               ProfessorDr., Director General of Science and Technology Information Center, National Science Council

Session 1 "Policy & Role of Government" included three presentations from Dr. Mark Dodgson, Dr. Kyn Jin Oh and Dr. Sirimali Fernando, which covered the topics of NIS and regional innovation policy, and narrowed down to the firm's level innovation.

It is well-known that the role of government is mainly to provide guidelines and infrastructure for innovation. The first presentation "Innovation policy and the innovative capability of firms" was made by Dr. Mark Dodgson, the Technology & Innovation Center of Queensland University, Australia. He pointed out that the correlation among the innovation policy, technology policy and science policy, especially the innovation policy at the firm level is aimed at building up the innovative capability while organizational learning and leveraging resources play critical roles. Interestingly, he gave the strategic learning trajectory from 1950s to 2000s, with different time frame for far East Asia economies, and described how effective innovation strategies in firms and government leads to the transition from imitation to innovation. Three institutional models of leveraging resources and technological learning have been proposed to describe the key for the success in Korea, Japan, Taiwan and China. It is clear that the innovation policy aims to develop the firm's innovative capability.

The second paper presented by Dr. Oh, the senior deputy Director of MOST, Korea, with the title "National Framework and Promotion Polices for Regional Science and Technology" sharing the experiences in Korea, from the long-tern prospects of technological trajectories. It also provided concrete evidences that Korea has transferred itself from the imitation stage to the innovation stage, which fits nicely with the paper which Dr. Dodgson presented earlier. Dr. Oh's paper described the situation and successful story of Korea economic achievement. It has been emphasized that we are now in a situation of developing technologies used for creative problem-solving, and in design

and architecture. During the transformation of NIS from imitation to innovation, paradigm changes include from catch-up regime, to knowledge system; from government-led system to private sector-led system; from R&D funding to R&D infrastructure, etc. In other words, Dr. Oh gave some context of NIS in the KBE. The transformation also means the innovation cluster could be the important element of industrial manufacture clusters. Since the Korea government encouraged proper balance and sustainable development among the innovative SMEs and MNEs in order to improve the industrial structure which is highly emphasized by Dr. Dodgson. In his paper, also, in terms of the envolving institutional models for technological learning, Korea is now in the transitional process, shifting from Model A to Model B.

The paper provided the economic and S&T development strategies of Korea, but more importantly we need to know why the transition took place. In the paper presented by Dr. Fernando, Chairperson of the National Science Foundation, Sri Lanka, gave a lot of information in innovation of Sri Lanka perspective. It seems like promoting innovations should be an issue with the consideration of safeguarding the society, the environment, the traditional knowledge and the inovators. Also in comparison with East Asia, South India-Asia is still in the imitation phase. I do believe that the East Asia experiences could be shared and would be a good learning model. Especially, the Model B for strategic learning trajectory of Dr. Dodgson's paper could be also helpful.

In summary, this session gave the policy and role of government during innovation which is to provide and also to create the innovation environment such as how to enhance the R&D investment, by means of the policy tools to "speed up" the knowledge transfer etc. In other words, the innovation policy is a key element of government policies. The issues and agenda should be integrated across R&D in Science and Technology, economic and social development in order to generate regional and national competitive capabilities for sustainable development.