

Benchmarking analysis of overseas policy trends and its achievements ~ from the view point of Japan's national innovation ~

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The 1st and 2nd S&T Basic Plans expanded national S&T budgets and accelerated R&D activity in Japan. Alongside the continued budget increase in the latter half of the 1990s, the Japanese economy fell into the doldrums and remained sluggish until 2003.

Many express concern over a weak linkage between overall R&D activation and our economic strength. One of main factors is a lack of necessary mechanism which utilizes S&T research results in the industry. Based on this observation, we conducted a benchmarking analysis of S&T policies in US, EU, UK, Germany, Sweden, Finland, China and South Korea. Basic survey items are as follows:

- Goal-setting of S&T policy
- S&T related organizations
- Recent trends in S&T policy
- Strategies for R&D prioritization
- Programs for the industry-academia-government cooperation
- Fostering and securing S&T human resources
- Supporting system for regional innovation (policies for developing regional clusters)
- Mechanism for decision-making and S&T budget distribution system
- System for policy review

As a result, we identified the following as the most pressing issues that Japan must address:

- (1) Efforts to identify innovation as cornerstones of both technology policy and economic policy and build consensus in the society
- (2) Exploration of persuasive logics for R&D prioritization aiming at achieving the nation's goal, based upon quantitative approach
- (3) Extended goal-setting for the balance between basic appropriation and external funding for the university and public research institute (integration of external funding from overseas and from industry)
- (4) S&T related personnel fostering, placing emphasis on improving the practical skills of Ph.D. students and post-doctoral researcher (as a principal investigator) and human resource mobility
- (5) Promotion of 'sustainable' regional innovations through adequate role-sharing of central government and local community, as an effective process for bridging S&T activities in the region and the revitalization of regional industry and economy
- (6) Role definition of public research institutes in the industry-academia-government cooperation