

## Specific actions for the Japanese government to enhance Science & Technology as Diplomacy

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CSTP(Council for Science & Technology Policy) developed a mid-term report to promote Science & Technology as Diplomacy. This mid-term report covers basic guideline and specific/strategic programs to coordinate Science & Technology and Diplomacy Policies so that the synergy between the two could further enhance effectiveness of the policies. The organization directly in charge of the programs was the working group which was established under the Expert Panel on Basic Policy.

Executive members of the CSTP developed the following recommendation on specific actions for the government to take. The Executive members expect that the following recommendations would be incorporated into the discussion at the Expert Panel on Basic Policy.

We emphasize that the year 2008 is a critical year for the Japanese government to take initiative in the Science & Technology as Diplomacy, as various meetings such as G8 summit at Lake Toya, Hokkaido and G8 Science Ministers meeting. We urge relevant ministries to develop specific action plans immediately to make the best of this rare opportunity.

### 1. Framework for Multi-lateral Collaboration to resolve global issues

We recommend that the Japanese government should develop a framework for multi-lateral collaboration in the field of Research & Development to share the most advanced scientific knowledge and to resolve global issues such as global warming, infectious diseases and water.

1) Implementation of large-scale networked project

For the purpose of resolving the global issues, we recommend the following:

- Joint and shared use of R & D infrastructure (large facilities and equipment) which belong to the universities and research institutes throughout the world
- Large scale project based upon comprehensive and integrated systems

2) Investigation of the mechanisms to support international joint research

We recommend the government to investigate the mechanisms to support international joint research, for the purpose of resolving the global issues of mankind

2. More aggressive efforts to capitalize on our excellent Science & Technology base to contribute to the world

We recommend specifically for the government to do the following:

To provide data to forecast global climate change by using the earth simulator

To provide the visual data of each country by using the DAICHI, our Advanced Land Observing Satellite

We recommend that both public and private sectors to collaborate so that the leading technologies developed by the private sector could be utilized and developed internationally

3. Support of capacity building in the developing world

In the past, the Japanese cooperative initiatives through Science & Technology have been skewed to the advanced countries. We recommend that the collaboration should focus more on the developing countries in Asia and Africa

We recommend the government to:

- Establish the center of capacity building of high international caliber, by making the best use of the research and education centers developed by the Japanese aids and support (for example, ODA), and by promoting the alliance with the universities in Japan.
- Support capacity and network building by promoting joint/collaborative research projects by the Japanese and the local researchers in the developing countries
- Improve the quality of life for the incoming researchers

4. Promote the marketing and PR activities through people and information to announce the activities, output and contribution of Science & Technology to the world
  - a. Increase publicity and marketing activities based upon our country's Science & Technology assets through the following means:
    - by appointing the excellent scientists and engineers in private and public sectors as specially assigned Science & Technology Ambassador to various areas throughout the world
    - by promoting the collaboration among research institutes in Japan and the Japanese embassies throughout the world
  - b. Announce and update the news related to Japanese Science & Technology activities and Policies in English in order to make the value of Japan's Science & Technology felt more in the international arena

In promoting the afore-mentioned public relations activities related to Science & Technology, we consider it critical to reverse the recent trend found among the young researchers and graduate students to withdraw and be insulated from the world.

Specific actions and programs should be established and implemented in the following areas, to promote research activities by the Japanese researchers and engineers overseas.

- To encourage joint research by the Japanese researchers and engineers overseas. For example, the specific target of increasing the number of researchers and engineers who would stay overseas for the considerable time (for example, over month) for research back to the peak level (some 7000 a year for those who stay longer than a month) should be set and programs to achieve this target should be implemented.

- To further promote Dual Degree and Credit Exchange Program with the overseas universities

- To send at least 10% of those in the doctoral program overseas for the research