

Session I Wrap-up

-Making Innovation Strategic for Development -

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Challenges and solutions for promoting innovation (in Session I)

- Challenges

- Lack of innovation capacity components: strategy, infrastructure, HRD
- Lack of “innovation” awareness
- Poor management with weak goals
- Agency not empowered, No coordination of agencies involved

- Solutions

- Restructure policy framework
- Improve innovation capacity elements: coordination, STI activities & funding
- Restructure organization/ management including centers of excellence and industrial focus
- Setting priorities
- Commercialization of technology including PPP approach
- Support R&D and HRD

Strengthening the strategic promotion system for Innovation

- A nation should establish a collaboration system that enables the proactive participation of various persons concerned in a wide range of areas, including industry, university and government, and the sharing of future visions among them and concerted efforts involving them.
- With the establishment of such a system, each participating entity will be able to recognize their individual roles of an overall picture and promote activities in close cooperation with each other.

Strengthening “knowledge” networks among industry, university and government

- Due to
 - globalization of socio-economic,
 - the growing sophistication of S&T,
 - scaling up of R&D activities,
- It is necessary to concentrate various knowledge assets and R&D capabilities of industries, universities and governments and to establish a chain of places in order to advance S&T-based innovation promptly and efficiently.
- In many countries, given the situation, in order to promote innovation, core R&D centers are being established by concentrating various R&D capabilities of industry, academia and government.

Construction of effective systems for STI

- Environmental improvement for strengthening commercialization support
- Utilization of regulation / institutions for promoting innovation
- Establishment of regional innovation systems
- Promotion of intellectual property strategies

S&T communication activities

- In order to implement STI policies with the public understanding, support, and trust,
- Activities for interactive communication between the people and the government, research institutions, and researchers is necessary with regard to R&D activities and expected results.
- The government needs to improve the public literacy in S&T so that people may adequately grasp and flexibly use knowledge concerning S&T.

Quadrant Model of Scientific Research

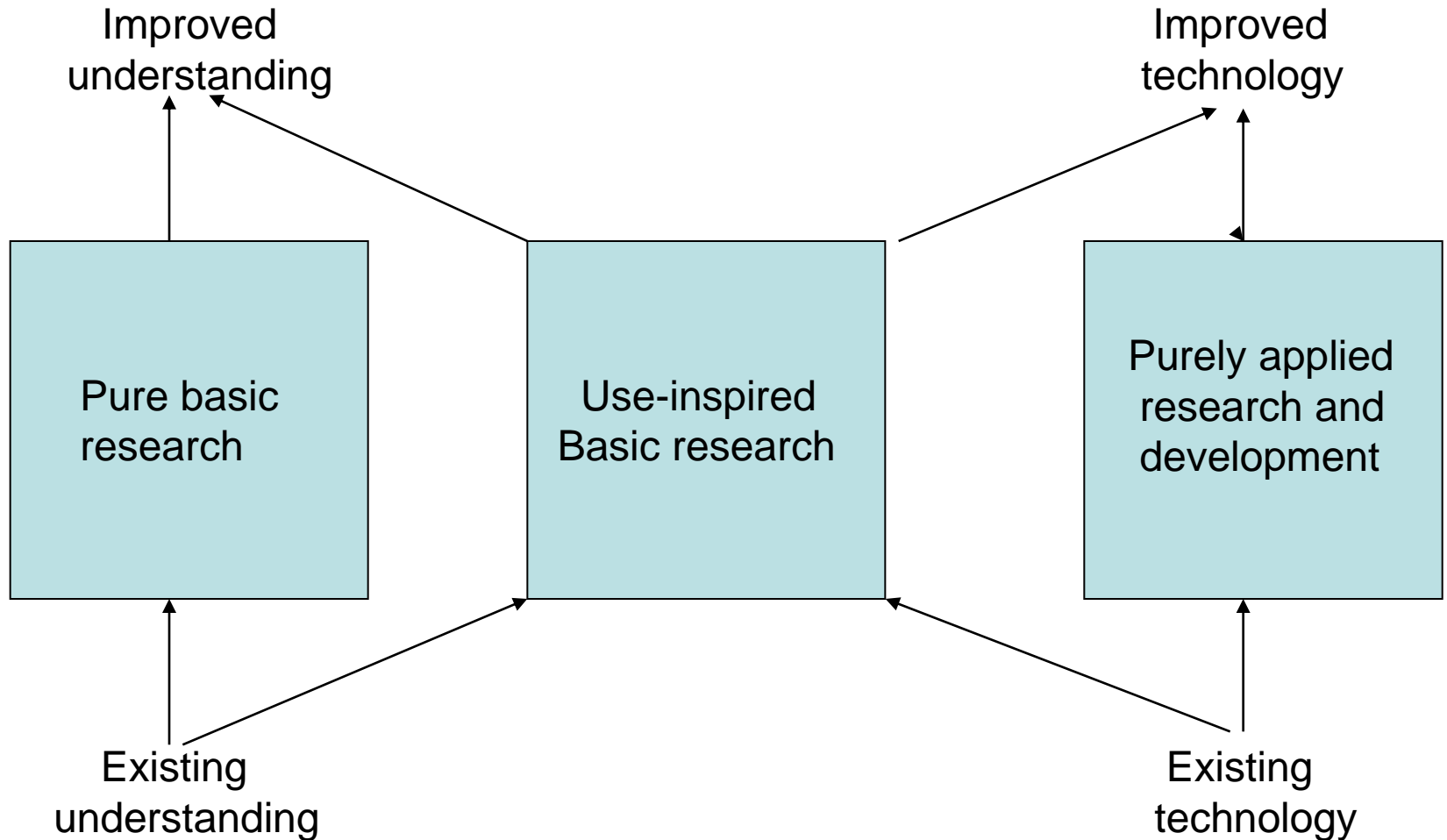
(Basic Science and Technological Innovation,
D.E. Stokes)

Research is inspired by:

Consideration of Use?

		No	Yes
Quest for Fundamental Understandings?	Yes	Bohr Pure Basic Research	Pasteur Use-inspired Basic Research
	No	Peterson	Edison Pure Applied Research

Research Dynamic Model (D. E. Stokes)



Motivation for the projects which produced top 1% highly cited papers

Solving specific issues in real life

Other

Very important

Pursuit of fundamental
principles/understandings
Very important
Other

45%	15%
25%	15%

JAPAN

Solving specific issues in real life

Other

Very important

Pursuit of fundamental
principles/understandings
Very important
Other

46%	33%
9%	11%

US