

Science and Technology Collaboration with India for Sustainable Development based on the Experience of SATREPS

(Science and Technology Research Partnership
for Sustainable Development)

インドとの科学技術協力について —SATREPSの経験をもとに—

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July 23, 2012

The importance of S/T collaborations with India and other Asian countries

- **S/T collaborations are essential** for resolving global energy and environmental issues

--- Asia accounts for 30% of global energy consumption and 38% of CO2 emissions.

- **S/T collaborations are effective** for making solutions

--- Most of the issues exist in developing countries.

--- Science & technology in Asian countries is becoming increasingly sophisticated.

--- Most Asian countries are rich in resources.

--- Collaborations are effective for developing international standards.

- **Advance of S/T in Asian countries is important** for economic growth

--- Asian countries are key locations of manufacturing and markets.

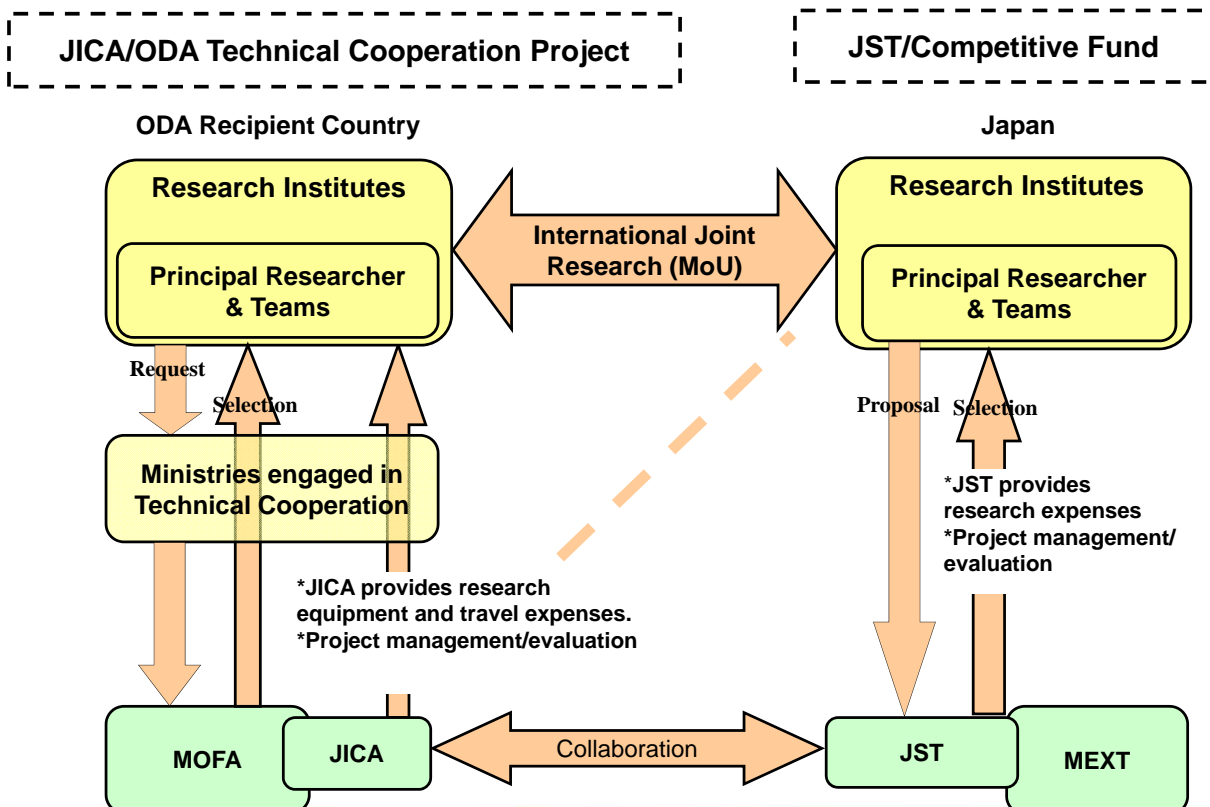
--- More human resources for R&D work in Asian countries are needed.

Mission of SATREPS

Promote international joint research cooperation between Japan and developing countries to resolve global issues

- Create scientific knowledge, technologies, and new frameworks/methods
- Satisfy needs from developing countries
- Build-up scientific and social capacities of both countries
- Contribute to the society and other stakeholders

Framework of SATREPS



Selected programs

Research Areas	Region			FY				
	Asia	Africa	Others	2008	2009	2010	2011	2012
Adaptation to or mitigation of climate change	34	20	14	4	4	0	—	—
Energy systems for low carbon society				—	—	4	3	2
The resolution of global-scale environmental issues				3	2	4	1	2
Sustainable utilization of bio-resources				—	6	5	2	3
Natural disaster prevention measures				3	4	2	2	1
Infectious diseases control				2	4	2	2	1
Total				12	20	17	10	9
				68				

SATREPS (2010.4)

SATREPS projects in the world



SATREPS (2010.4)

SATREPS projects with India

- **Research partnership for the application of low carbon technology for sustainable development**
(IGES - TERI, 2009)
- **Information network for natural disaster mitigation and recovery**
(Keio University – IITH, 2009)
- **UASB-DHS integrated system - A sustainable sewage treatment technology**
(Tohoku University – NRCD, MoEF, 2010)
- **Decentralized biomethane energy system for rural development**
(Nagoya University – IITD, 2012)

Key components for S/T collaborations

- **National vision and scenarios** consistent with the world
 - Visions and appropriate scenarios are needed, together with the road maps and action plans required for achieving them.
- **Joint R&D** conforming to local needs
 - Existing technologies could rarely be used without modifications.
- **Systems that maintain a win-win situation**
 - A win-win situation, based on a long-term perspective, may bring benefits to both countries and help building trust.
- **Appropriate evaluation of the research contribution to the global issues** by international community
 - Contribution of research should be taken into account in CDM, REDD-plus and bilateral carbon offset programs.
- **Strengthening basic research**
 - Reformation of energy-related research systems in universities is needed.

Other important issues to be tackled

- **Societal applications** of the scientific findings, returning benefits to society, and ensuring taxpayer satisfaction

- **Multinational collaborations**
 - Planning a system that can work on a global scale
 - International acknowledgement of research outcomes
 - International standardization of technologies developed

SATREPS policy: Providing opportunities for global networking

- Holding seminars and symposiums
- Running the Friends of SATREPS SNS (social network service) etc.



*Thank you for your
warmhearted attention*

JST
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