

FY2011

**Science and Technology Research Partnership
for Sustainable Development
(SATREPS)**

Invitation for Application of Research Proposals

[Application Guideline]

Provisional Translation

This Application Guideline is prepared for the researchers who belong to Japanese research institutions/ universities in Japan.

The researchers in developing countries must consult to their national governmental agency that is responsible for Official Development Assistance (ODA) “technical cooperation”, Embassy of Japan or JICA Offices in their resident countries.



Japan Science and Technology Agency

September, 2010

Important Notes Regarding to Application of Research Proposals for FY2011

JST begins calling for research proposals before announcement of final budget for FY2011, as the deadline of request for Official Development Assistance (ODA) technical cooperation is set in 2010 and as the selected projects will enable to start immediately in FY2011 in collaboration with the corresponding technical cooperation. Please be notified that requirements, amount of research expenses supported for a selected project and number of the projects selected may change without any notice as the result of outcome of the final budget for FY2011. Please check the latest information announced at the following portal site;

<http://www.jst.go.jp/global/english/info.html>

1. Application method

The research proposals for FY2011 will be made using the Electronic system for Research and Development (e-Rad).

Before using e-Rad it is necessary to (1) register research institutions information on e-Rad (by system administrator in MEXT) and register researchers information on e-Rad (by administrative staff in those institutions) for researchers affiliated with research institutions and (2) register researchers information on e-Rad (by e-Rad system administrator in MEXT) for those researchers unaffiliated with a research institution. Please refer to the e-Rad portal site below for the registration method.

The registration procedures may take several days; please start the registration procedure at least two weeks in advance. When registration is complete, there is no need to re-register when other ministries invite applications for their programs or projects. Also, it is not necessary to re-register when registration is already completed for programs or projects at other ministries.

Electronic system for Research and Development (e-Rad) Portal Site
<http://www.e-rad.go.jp/> (in Japanese only)

Application Period for Research Proposals is September 1st, 2010 (Wed) to <u>November 2nd, 2010 (Tue) at 12:00 hour (noon) in Japan</u>

2. Request for technical cooperation to Government of Japan

As Science and Technology Research Partnership for Sustainable Development (SATREPS) is a collaborative program with Official Development Assistance (ODA) technical cooperation, **researchers in developing countries (counterpart countries) must submit a request to their government agency that is responsible for submission of the request for ODA technical cooperation to the Government of Japan** while Japanese researchers submit a research proposal to JST in Japan. It is highly recommended for researchers from both Japan and counterpart developing countries to discuss about and to agree on the research plan prior to the submission of the research proposal/request to the corresponding agencies in their countries.

The deadline for submitting the request of the ODA technical cooperation to the Government of Japan is November 2nd 2010. Please be notified that **government agency in each counterpart country may set a different deadline before November 2nd, 2010.**

3. Submission of the consent letter from your organization

The consent letter from your organization is required to be submitted with the research proposal through e-Rad system. JST will NOT accept the research proposal without the consent letter.

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I. Outline of Program

1. Objective of Research Program

Based on the needs of developing countries, Japan Science and Technology Agency (JST) cooperates with Japan International Cooperation Agency (JICA) to entail promotion of international joint research targeting global issues^{*1} and envisaging future utilization of research outcomes^{*2}. Implemented through collaboration with Official Development Assistance (ODA), the aim of the program is to acquire new knowledge leading to resolution of global issues and advancement of science and technology. Such international joint research under the program will also address the research and development of capacity and contribute to the sustained research activities in developing countries.

^{*1} Global issues: Issues for which resolution by one discrete country or region is problematic and which demand common engagement by the international community

^{*2} Utilization of research outcomes: contributing the research results to the benefit of society

2. General Description of the Research Program

(1) Program status and aims

There are rising expectations for Japan's science and technology resources as well as the green innovation, life innovation, and etc. to be utilized in international cooperation targeting developing countries, to address global issues in areas such as climate change, water and food, natural resources, energy, and etc. (cf. "New Growth Strategy (Basic Guidelines)", December 30, 2009, and Council for Science and Technology Policy, "Current Critical Issues on the Science and Technology Policy," March 4, 2010). In order to advance efforts to address these global issues and to support self-reliant and sustained growth in developing countries, Japan's conventional approach of technology transfer must be supplemented with a new approach of international joint research initiatives with developing countries. In other words, universities and research institutions in Japan and those in developing countries need to work together for development and application of new technology and acquisition of new knowledge. Such international joint research must also enable advancement of science and technology and comprehensive capacity development in the developing countries' universities and research institutions.

In order to promote such seamless international cooperation with developing countries in a strategic manner, it is essential to harmonize research collaboration with development assistance, to develop the research collaboration based on the established regional centers of excellence, to coordinate networking of researchers, and innovation collaboration along with research collaboration (cf. Council for Science and Technology Policy, "Strategic Taskforce for Science and Technology Diplomacy," February, 2010.).

JST, in cooperation with JICA, launched "Science and Technology Research Partnership for Sustainable Development (SATREPS)" program to promote international joint research between Japan and developing countries targeting global issues described above. Under this program, JST provides support for research expenses in Japan, while JICA bears the costs^{*3} of the counterpart developing country under a framework of ODA technical

cooperation. Management of research and development (R&D) for the international joint research as a whole is conducted cooperatively between JICA (which operates technical cooperation to developing countries) and JST (which possesses expertise in operation of funding projects for research institutions in Japan). It is foreseen that such international joint research activities under this program will enable Japanese research institutions to conduct research involving fields and targets located in developing countries more effectively; meanwhile, for research institutions in the developing countries (primarily research institutions focusing on public benefit, but excluding those related to the military affairs), establishment of research center facilities and development of human resources through joint research activity will make it possible to develop self-reliant, sustained research systems. This program also aims to acquire, in collaboration with research institutions in developing countries, new knowledge that can lead to resolution of global issues and advancement of science and technology.

^{*3} Because JICA bears costs of the counterpart country under the technical cooperation framework, the local costs required for a project (labor costs, fuel costs, transportation fees, utilities, rent, all types of repair costs, wear-and-tear costs, communication fees, and other miscellaneous costs) and costs related to building and refurbishing/expansion (including value-added taxes) should be covered by the counterpart countries themselves, as their self-help endeavor. The existing equipments and supplies should be utilized as much as possible for the project as well. The cost of the counterpart country will be determined after the ex-ante evaluation conducted by JICA.

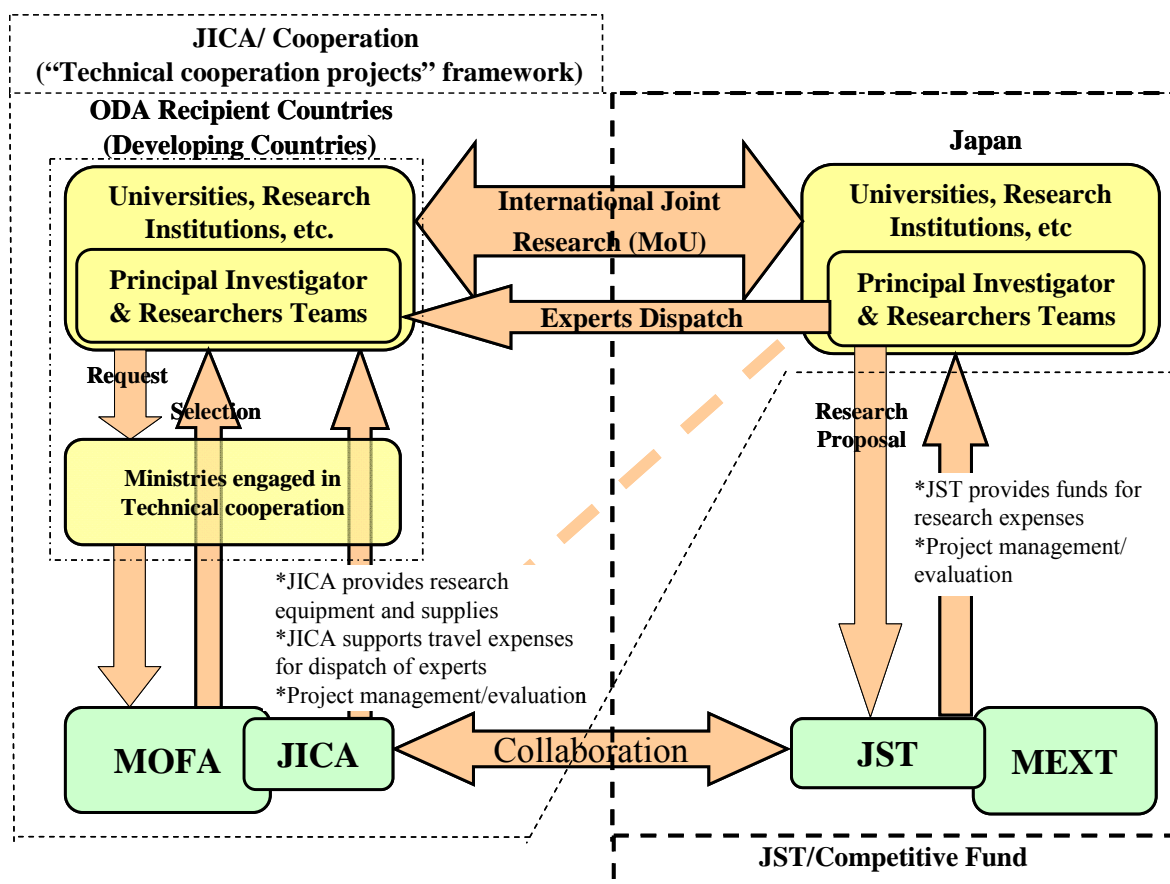


Diagram 1; SATREPS Project Scheme

(2) Roles of JST and JICA

a. JST selects research projects in Japan whereas the Ministry of Foreign Affairs (MOFA) / JICA review the request for ODA technical cooperation, respectively.

In Japan, JST calls for research proposals from Japanese research institutions. At the same timing, MOFA accepts requests from developing countries regarding ODA technical cooperation involving international joint research, reviews the contents of these requests at headquarters in Japan.

JST implements screening of these proposals and selects research projects. (For details please refer to “II Guidelines for Application and Selection”) In this process, results of MOFA/JICA review are incorporated. MOFA communicates the results to the countries which made the requests. (Refer to Diagram 2)

An international joint research project is selected only when both the research proposal examined by JST and the ODA request reviewed by MOFA/JICA are adjudged worthy of selection. It is thus essential for Principle Investigator (PI) applying from Japan to coordinate the details of the proposed joint research project in advance with counterpart researchers in developing country. It is a minimum requirement that request for implementation of ODA technical cooperation must be submitted by each counterpart country to MOFA, via the ministry or agency responsible for ODA technical cooperation in the developing country*⁴.

*⁴ Deadline for request of ODA technical cooperation to the Government of Japan may vary in country to country. Please consult to the ministries or agencies responsible for the technical cooperation in each country.

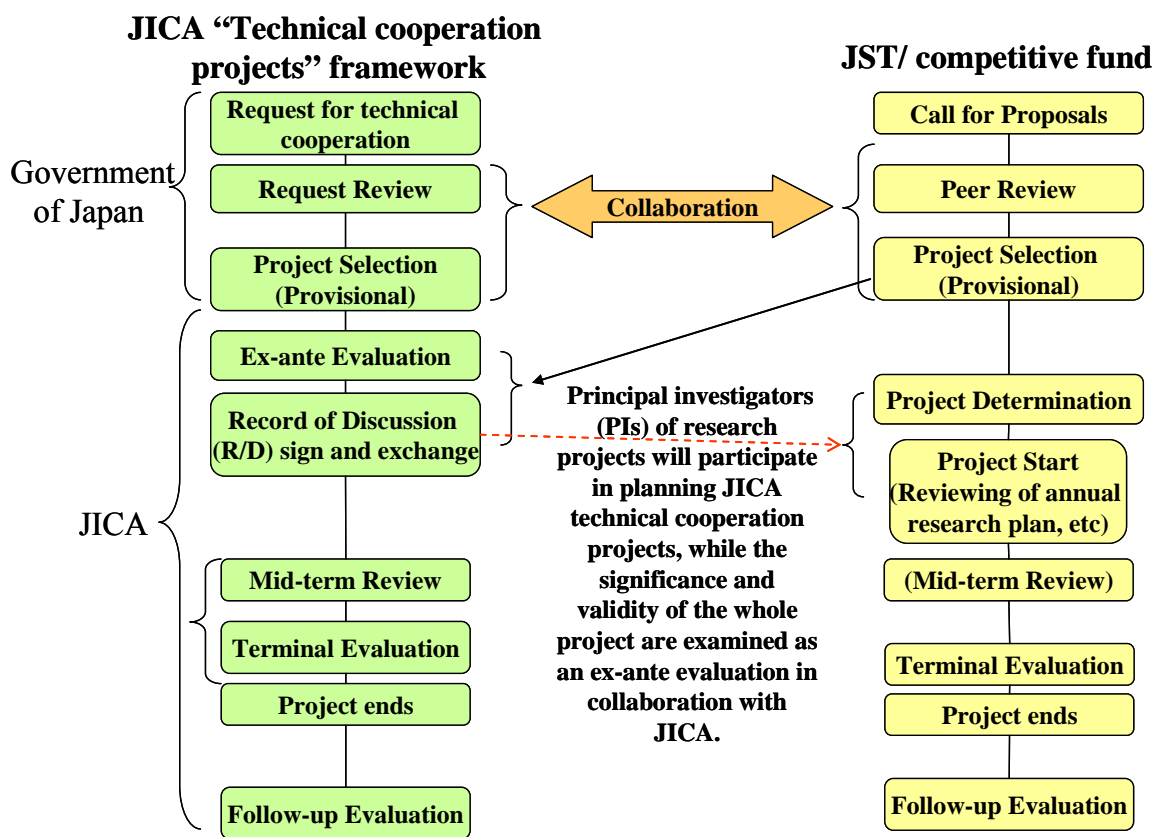


Diagram 2; SATREPS Project Flow

b. Preparation for implementing the selected project

To implement the international joint research under SATREPS, a **“Record of Discussions (R/D)” must be signed to confirm agreement between the counterpart developing country and JICA** on the details of implementation of the ODA technical cooperation. However, considerable amount of time may be required for the signing of this R/D, and in some unfortunate cases, signing may fail to take place. Applicants should be prepared for any eventuality and be aware that selected research projects may not be started or may be terminated midway because of security or any other reasons.

c. Implementation of the international joint research

The Japanese PI will function both as the leader of the international joint research project selected under SATREPS and as the leader of the ODA technical cooperation undertaken as part of the international joint research.

JST will provide fund in the form of Commitment Research Expenses for necessary research costs incurred in Japan and other countries outside the counterpart nation. The Japanese PI will be obliged to undertake responsibilities as a leader of the research project, producing documents including research plans and progress reports, and cooperating with evaluation activities and so on as required by JST.

JICA will support project implementation in the developing countries, such as dispatch of Japanese experts (researchers), provision of equipment and training of counterpart personnel (visiting counterpart researchers), and other supports related to the project in the developing countries. In principle, such supports incurred within the counterpart can be disbursed as project expenses only in cases where a researcher from Japan is posted to the counterpart institutes as a “JICA expert”^{*5}. A posting of researchers from Japan as a JICA expert will be accorded the same treatment in terms of tax immunity etc. as applied to regular ODA technical cooperation. In implementing ODA technical cooperation, the researcher posted will be obliged to act in accordance with an agreement^{*6} with JICA regarding production of documents (i.e. operational plans and progress reports), cooperation to evaluation activities and other matters relating to the project; additionally, the PI will be required to assume official responsibility for these matters as the leader.

Please be advised that the Japanese institution with which the PI is affiliated will be asked to conclude a Commitment Research Agreement with JST as well as an agreement on technical cooperation with JICA. For details on ODA technical cooperation, please consult to the ministries or agencies responsible for the ODA in each country.

^{*5} JICA experts may be members of research team instead of the Japanese PI of the selected project. Graduate students are not dispatched as JICA experts.

Please note, however, that even in cases where a member of the research team other than the PI has been posted to the counterpart country while the PI remains in Japan, the PI will still be the “leader of the research team” and thus be officially responsible for the activities done by the posted researcher. It is highly recommended that more than one particular member of the research team will be posted to the counterpart in an arrangement approximating to permanent stationing, thereby facilitating smooth operation of international joint research activities.

^{*6} Please consult to JICA headquarters for details of an agreement between JICA and Japanese research institute PI belongs to. The institutions to which participants in research projects selected under this program are affiliated will enter into the following forms of

relationship with JST and JICA.

(3) Outline of JST project implementation/management

The government of Japan (Ministry of Education, Culture, Sports, Science and Technology: MEXT) identifies research fields that are of particular importance for the purposes of resolving global issues and designates them as targets for research promotion under this program. Based on these designations, JST appoints a “Program Director (PD)” with overall responsibility for all research fields and “Program Officers (POs)” each responsible for one particular research field, and determines more specific research areas within each field.

JST invites researchers affiliated with universities and research institutions etc. in Japan to submit research proposals in each research area, and a screening committee composed of POs and expert reviewers select research projects. Principal Investigators (PIs) selected in each research area engage in international joint research with research institutions in developing countries. Research teams should be formed appropriately to advance the international joint research activities, and thus can be composed of researchers affiliated with other research institutions (including private enterprises, etc.) in Japan and researchers in other academic domains including humanities and social sciences.

As stated in the above section, when applying for the program, the PI needs to coordinate the details of the proposed joint research project in advance with counterpart researchers. For technical cooperation to be implemented by JICA, the request for implementation must be submitted by a research institution in the developing countries to MOFA via the ministry or agency responsible for technical cooperation in the developing country. (Please be notified that deadline for the submission of the request may vary in country to country.)

In addition, after a proposal has been selected, depending on the counterpart(s) involved, it may take some time before the R/D is signed. In such cases, JST Commitment Research Expenses can be made available even before the R/D is signed in order to ensure swift implementation of the international joint research after the R/D signing. The Expenses would be limited to research costs incurred within Japan for the purposes of preparation for the international joint research. In some cases, however, signing of the R/D may ultimately become impossible for some reasons, that leads to render the implementation of the selected research project itself unviable. Please be aware that, in such cases, access to the JST Commitment Research Expenses will be terminated as soon as the signing is aborted or even when the R/D is not signed by the end of February 2012 nor has no prospect to be signed soon after the deadline.

(4) Human resource development by Japanese Government (MEXT) Scholarship

From FY 2010, MEXT establishes the “Global-Issue Section” within Japanese government scholarship program (University Recommendation) for SATREPS projects. The aim of “Global-Issue Section” is to develop youth researcher as the future key player in relevant research in his/her own country by taking a doctorate at Japanese institution. Invitation for Japanese government scholarship program is implemented by MEXT, and scholarship is budgeted separately from SATREPS; however, a doctoral degree needs to be received within a term of SATREPS project. For more details, please refer to the Japanese Government (MEXT) Scholarship Program website. Please note that this scholarship program

can be altered depending on the final budget.

The Japanese Government (MEXT) Scholarship Program website
http://www.mext.go.jp/a_menu/koutou/ryugaku/06032818.htm

(5) Invitation of foreign researchers

Foreign researchers can also be invited with ODA budget. Researchers are invited from collaborated institutions and enforce the research while being on the doctoral or master's course in Japan. Such researchers are expected to play a key role over a long period of time at their institutions in the future and indispensable personnel in SATREPS project.

II. Guidance for Application and Selection

1. Research Areas

Proposals for FY 2011 are invited in the following 4 research fields and 5 research areas.

Research Fields	Request from Collaborated Countries	Number to be Selected	Research Period	Research Budget from JST
Environment/Energy (2 research areas)	Essential	8 to 10 in total	3 to 5 years	Approx. 38,000,000 yen/year (including indirect cost) (Approx. 1.9 million yen in total for 5 years project)
Bioresources Utilization (1 research area)				
Natural Disaster Prevention (1 research area)				
Infectious Diseases Control (1 research area)				

2. Countries covered by partnership

Please refer to Appendix 1. Countries covered by partnership (page 24 are the developing countries that are subject to ODA technical cooperation (with emphasis on Asian and African countries).

- * For China, please be advised to use programs conducted under equal partnership (e.g. JST Strategic International Cooperation Program).
- *With regards to international joint research among Japan and multiple countries, the whole process, from submission of the ODA technical cooperation request to sign and exchange of R/D, must be completed with all of the multiple countries involved. Such process takes considerable amount of time and may not be completed at the same timing. If PI in Japan would like to propose such multi research partnership, it is required to set one of the developing countries as a leading counterpart. In such case, research partnership may initiate as a bilateral partnership and add other counterpart countries one by one. Please be notified that such multi research partnership project ends at the same date regardless of the date to sign R/D between JICA and counterpart country. Budget for such multi research partnership may be reduced depending on the number of the countries that sign R/D with JICA.

3. Schedule of application and selection

The schedule until the selection period is as follows:

***These dates are tentative. They may change without any notification. Please see the latest schedule at the portal site: <http://www.jst.go.jp/global/index.html>**

Start accepting research proposals	<u>September 1 (Wed) 2010</u>
Application deadline (Deadline for applications through the e-Rad)	<u>November 2 (Tue) 2010 at 12:00 noon</u> <u>(No delay accepted)</u>
Document screening period	End of November 2010 - End of January 2011
Notification of document screening results	February 2011
Interview period	Mid February - Mid March 2011
Selection of research projects	End of March 2011 ^{*7}
Research begins	After April 2011 ^{*7}

^{*7} Around the same time as the selection of research projects in Japan, notification regarding selections for the corresponding ODA technical cooperation will be made to governments of developing countries. Subsequently, when the R/D is signed between JICA and the counterpart, the research project will be formally approved for awarding, and international joint research will begin. Selection of the research projects in Japan will be announced to the public at the appropriate time.

JICA conducts an ex-ante evaluation in order to coordinate the international joint research in the counterpart country. PIs of the selected research projects and the institutions with which they are affiliated may be requested by JICA to cooperate for the ex-ante evaluation. Depending on the counterpart(s), however, it may take some time before the R/D is signed. In such cases, a part of JST Commitment Research Expenses can be made available even before the R/D is signed in order to enable swift implementation of the international joint research after the R/D signing. The Expenses would be limited to research costs incurred in Japan for the purposes of preparation for the international joint research.

In some cases, signing of the R/D may ultimately become impossible, that leads to render the implementation of the selected research project itself unviable. Please be aware that in such cases access to JST Commitment Research Expenses will be terminated as soon as the signing is aborted or even when the R/D is not signed by or may not be signed soon after the end of February 2012.

Ultimately the R/D will be signed between the counterpart and JICA, and the period specified in this R/D shall be the period in which the international joint research is conducted.

4. Application method

The research proposals for FY2011 will be made using the Electronic system for Research and Development (e-Rad)*. For details application method through e-Rad, please

consult to the corresponding offices at Japanese research institutions.

It is seen that some applicants are not able to complete the application through e-Rad due to the wrong operation and/or imperfection of documents when applying at the last moment of deadline. Application after the deadline is unacceptable; thus, it is strongly recommended to complete the application by the day before deadline.

*The Electronic system for Research and Development (e-Rad) is a cross-ministerial system to online the process relating to R&D management (invitation for application → selection → adoption → management of adopted subject → research achievements report), centering on competitive funding.

Electronic system for Research and Development (e-Rad) Portal Site
<http://www.e-rad.go.jp/> (in Japanese only now)

In case the application of proposal through e-Rad is troublesome due to the difficulties on registration for e-Rad system and etc., please contact JST's inquiry counter noted at the end of this guideline.

5. Research fields and areas to be invited

Proposals are invited in the following research fields and areas.

Each applicant can file only one research proposal for this program across all the research areas outlined below.

Research Fields	Research Areas
Environment/Energy	1. "Research contributing to the resolution of global-scale environmental issues"
	2. "Research contributing to energy systems for low carbon society"
Bioresources Utilization	3. "Research contributing to sustainable utilization of bioresources"
Natural Disaster Prevention	4. "Research on natural disaster prevention measures attuned to the needs of developing countries"
Infectious Diseases Control	5. "Research on measures to address infectious diseases control attuned to the needs of developing countries"

1) Environment and Energy

Target for selection is the research projects in which there is a high degree of demand for implementation in developing countries and capacity building of researchers in those countries. Projects also ought to envisage their outcomes being applied to the benefit of society including those in counterpart developing country and towards the resolution of global issues. A project is not eligible if it consists merely of transfer of Japanese technology without entailing any joint research, and of simple operations that do not make any contribution to the advancement of science and technology.

Research Area 1: "Research contributing to the resolution of global-scale environmental issues"

Development of technologies and dissemination of research results are extremely important to solve the global-scale environment and energy issues due to the population increase, population overconcentration in large cities, overproduction, overconsumption, and etc. “Intergovernmental Panel on Climate Change (IPCC), Fourth Assessment Report” points out that the climate change can cause the severe adverse effects on water cycle, ecosystem, food production, health, and etc.

It is essential not only on-going alleviation plans but also to strengthen those plans for corresponding to the future climate change. Moreover, because the augmentation of these adverse effects is estimated, on-going alleviation plans are not enough to tackle the climate change. Combination of the countermeasure and alleviation plans is needed to soothe the climate change and its risk.

Thus, the target for selection for FY 2011 is the global-scale research projects that meet the social needs of developing countries and evolve Japan’s Science and Technology. Examples of research subjects are listed below; however, other subject is also acceptable if it matches the gist described above. Research proposals relating to the biological diversity are especially anticipated due to the increase of interest on the biological diversity due to the 10th Conference of the Parties to the Convention on Biological Diversity (COP10) in this year. Research proposals relating to the energy systems for low carbon society, including biomass and energy from waste, ought to be applied to Research Area 2.

- Research on adaptation to the climate change
- Research on alleviation of the climate change
- Research on maintenance and process of the water
- Research on maintaining risks of chemical substances
- Research on establishing the recycling society
- Research on preservation and restoration of ecosystem and biological diversity, including bioremediation

Research Area 2: “Research contributing to energy systems for low carbon society”

At G8 L’Aquila Summit in July 2009, G8 nations recognized that “We need to keep the average global temperatures from rising more than 2 degrees, and to achieve that, we need to undertake quantifiable actions to reach a global reduction of 50% in the greenhouse gas emissions”, and leaders agreed to seek an 80% cut in their greenhouse gas emissions by 2050 as the long-term target. Japan also established “Action Target for Building the Low-Carbon Society” in July 2008 and is implementing the measures for actualizing the low-carbon society.

Propulsion of measures for cutting world-wide greenhouse gas emissions is essential with participation of not only advanced nations but also developing countries. Moreover, energy system for actualizing the low-carbon society leads to the reduction of fossil energy resources, and development and dissemination of its outcome is extremely beneficial for the relevant countries as well as the whole world.

Based on above concerns, research subjects, which Japan’s improvement on science and technology and its outcome are believed to be remarkable in response to the needs of developing countries, listed below are eligible for FY 2011. Research projects listed below are just examples and are not intended to limit the scope of eligibility.

- Research contributing to the utilization of natural energy and/or new energy, including the biomass energy
- Research contributing to the basic technologies such as advanced utilization of energy, energy-saving, technologies for carbon dioxide capture and storage, systematization, simulation, and etc.
- Research contributing to the optimization and streamlining of energy system related to the industries, transportation, public welfare, and etc. in counterpart countries

2) Bioresources Utilization

Research area 3: “Research contributing to sustainable utilization of bioresources”

Human beings have been procuring food, fiber, and etc. as its living base from various bioresources. Yet, sustainable production of bioresources is being threatened by the desertification and nutrient accumulation on cultivated lands, spread of pest, and etc. from the population increase as well as the climate change. Issues such as the increase of world-wide food demand, illegal development of natural resources, and etc. were pointed out at Muskoka 2010 G-8 summit. To resolve those issues, acceleration of R&D on production, utilization and management of bioresources and access improvement to its outcomes are being required. For sustaining the benefit from bioresources to the future, sustainable development and utilization plans need to be presented.

Applications are acceptable for research projects, in which there is a high demand for research implementation and capacity building in developing countries. Projects should also be the kinds which both the counterpart developing country and Japan can hope that collaboration between the two countries would bring about further advancements of bioresources production and utilization.

Proposed research projects must envisage the outcomes of the project contributing to the resolution of global issues in the developing country. Projects that consist merely of technology transfer and provision of knowledge from Japan without entailing any joint research, as well as research whose contribution to bioresources production and utilization is limited to only either of the countries involved, will not be eligible.

Examples of eligible research projects for FY 2011 are listed below. These are just examples and are not intended to limit the scope of eligibility.

- Research contributing to sustainable production of bioresources: breeding and cultivation methods for bioresources, resource management of marine bioresources
- Research contributing to utilization and evaluation of bioresources, including the utilization of biodiversity

However, the following research topics are excluded:

- Research contributing to the conservation and adaptation of bio-ecosystem and biodiversity (research field 1, research area 1 above)
- Research contributing to the utilization of biomass energy (research field 1, research area 2 above)
- Research activities that lead to resolve environment and energy (research field 1, research area 1 and 2 above)

3) Natural Disaster Prevention

Research area 4: “Research on natural disaster prevention measures attuned to the needs of developing countries”

Natural disasters in developing countries have many aspects in common with those experienced in Japan in the past. Japan is a leader in the field of natural disaster prevention, and there are many possibilities for application of the knowledge accumulated in Japan up to now. For the purposes of natural disaster prevention in Japan, too, it is hoped that further advancements will be made in technology such as earthquake and tsunami early warning systems and high-precision weather forecasting. To achieve this, it will be important not only

to gather observation data of Japan and apply it to research and development here, but to adopt an integrated and organized approach to advancement of research and development within a broader global framework.

The United Nations World Conference on Disaster Reduction held in January 2005 produced the “Hyogo Framework for Action”, a worldwide strategy for natural disaster prevention for the next ten years. This framework underlines the need for each country to engage in focused efforts toward natural disaster prevention, and the importance of providing technical assistance to developing countries.

This background has led the decision to invite applications for research projects related to natural disaster prevention. Applications will be accepted for research projects, in which there is a high degree of demand for implementation in developing countries and capacity building of researchers in those countries. Projects should be ones that are shared by both a developing country and Japan, and in which collaboration between the two countries can be expected to yield even greater advancements.

Proposed research projects must envisage the outcomes of joint research being returned to the society towards the resolution of global issues including those in the developing country. Projects that consist merely of transfer of technology and provision of knowledge from Japan without entailing any joint research, and research whose contribution to natural disaster prevention/ mitigation is limited to only one of the countries involved, will not be eligible. On the basis of these considerations, several examples are given below of the types of research projects that will be eligible. These are some of examples and other subjects are also eligible.

- Research related to explication of natural disaster mechanisms through measurement of natural phenomena associated with earthquakes, volcanic eruptions, etc.
- Research and development for the purpose of collection, organization, effective provision and utilization of natural disaster-related information
- Research and development relating to technology for damage mitigation in natural disasters such as earthquakes, tsunami and floods
- Research and development relating to technology for damage mitigation in vast disasters such as floods and fire in large cities

4) Infectious Diseases Control

Research area 5: “Research on measures to address infectious diseases control attuned to the needs of developing countries”

H1N1, highly pathogenic avian influenza, HIV/AIDS, malaria, dengue fever, tuberculosis and other emerging and re-emerging infectious diseases not only pose a threat to health in developing countries, but act as a major impediment to social and economic development. The frequency with which people and goods are now moving across national borders means that these problems are not confined to developing countries. By contributing to efforts to address infectious disease issues in developing countries, we can in turn play a part in protecting the health of individuals from Japan who reside in or travel to those countries, and in curbing the entry of infectious diseases into Japan itself, and as the result, such efforts will improve the world-wide hygiene. For these reasons, Japan needs to work in cooperation with developing countries on research to address infectious diseases control on a global scale.

In light of these conditions, in FY2011, applications are invited for projects involving research on prevention, diagnosis and treatment, etc. of infectious diseases, implemented through joint research with research institutions in a developing country and thereby contributing to the enhancement of public health, science and technology in the developing country and Japan. Applications must involve projects in which, founded on the conditions of and needs relating to infectious diseases control in developing countries, there is a high

degree of demand for research implementation in developing countries and capacity building of researchers in those countries.

Proposed research projects must envisage outcomes of joint research being returned to the society towards the resolution of global issues including those in the developing country. Projects that consist merely of transfer of Japanese technology without entailing any joint research, and simple operations that do not make any contribution to the advancement of science and technology will not be eligible.

Also, in case research proposals contain the drug development and development of new treatment methods, clinical trial or medical activity is not the subject of collaborative research.

On the basis of these considerations, several examples are given below of the types of research projects that will be eligible for FY 2011. These are some of examples and other subjects are also eligible.

- Research and development on Zoonosis such as avian influenza, swine flu, and etc.
- Research and development on technology of diagnostics, vaccines and therapeutics necessary to detect and control infectious diseases such as highly pathogenic avian influenza, HIV/AIDS, malaria, Dengue fever, Tuberculosis and other emerging and re-emerging infectious diseases

(Complementary explanation)

Examples described above shall not be understood that comprehensive proposals covering all aspects of diagnostics, vaccines and therapeutics are recommended. Rather, it is highly requested to sharply target the subject of proposals based on research results obtained so far, supported by existing cooperative activities and thereby expected to smooth operation of joint activities.

As for proposals relating to the 'Japan Initiative for Global Research Network on Infectious Diseases', by MEXT in 2010, it is expected that proposals based on needs of counterpart countries, including future plan for utilizing research outcomes to the society such as an improvement of research capability and enhancement of public health of counterpart countries will be submitted, rather than proposals which are merely extension of research activities, that is, identical activities from aspects of objectives, target diseases, approaches and PIs of research in the centers. Also, it is expected that proposals which include research activities in regional center of excellences cooperating with neighboring countries will be submitted.

6. Review criteria and notes for selection process

(1) Review criteria

- The proposal must be congruent with the objective of this program and its research fields and areas
- The proposal must be based on the needs in the developing countries
- The proposal must involve research and development that will be evaluated highly in international society and that will lead to the advancement of science and technology
- The proposed project must envisage future utilization of research outcomes to the society (This does not have to be achieved within the research period but the logic to return the estimated outcomes in the research plan to the society is clearly-defined)
- There must be a concrete plan for joint research with researchers in the

counterpart, and clear designation of the chief researcher in the counterpart country

- The institution(s) where PI (and research collaborators in Japan) are affiliated must possess infrastructure for international research activities necessary to undertake the proposed joint research as well as intention to enforce sufficient support and cooperation
- There must be a suitable research expense plan that takes into account research cost performance in the promotion of joint research with the counterpart country
- Development on science and technology in Japan, encouragement of youth researchers in Japan, effectiveness for counterpart countries and the whole world are anticipated
- The PI must possess strong resolve and enthusiasm for promoting international joint research as the leader of a research team as well as exhibit strong leadership with the trust under a JICA technical cooperation.
- There must be a good prospect of the request for cooperation from the counterpart being selected under JICA technical cooperation.

(2) Notes for review

- The proposal will be highly evaluated if its plan is specific, sustains high standard, of scientific and technological knowledge, and well-defines the process including timing for utilizing the research outcomes to the society. The evaluation is also proceeded with attention to the long span and wide points of views such as maintaining the biological diversity
- For the Africa related projects, the selection will also be done from the view of whether the project plan enhances the capacity building, is based on investigation and analysis of local data, and is designed to develop and apply the appropriate technology or the technology directly coping with problems.
- Utilization of research institutions and universities that have previously been developed by Japan's ODA and outstanding research sites at relevant regions is anticipated.
- Organized activities from relevant administrative organ are anticipated in terms of development strategic policies and etc. in counterpart countries as the ODA coordination.
- The proposal will be reviewed in terms of contribution and impact to diplomacy and science and technology strategic policies such as in terms of a balance within the counterpart countries and regions (i.e. in order to avoid excessive concentration).
- The proposal similar to the projects selected from FY 2008 to FY 2010 will be reviewed based on the scientific merit such as whether essential scientific differences are existing from aspects of research objective, target approach, region of implementation, etc or whether greater outcomes can be expected under competitive implementation with existing similar projects.
- In principle, this collaboration research is enforced with one country; however, the proposal that can produce effects to neighboring countries is welcomed. The synergistic effect is highly anticipated if research is enforced within multiple countries.

7. Selection process

(1) Two-steps Selection

The peer review committee composed of those who are expertise in relevant scientific disciplines appointed by JST will conduct the selection in two steps – document screening and interview. Please note that review will NOT be conducted, despite of the submission of proposal to JST, in case when the request from counterpart country for an ODA project as technical cooperation has not made.

(2) Exclusion of Stakeholders

In accordance with the JST rules, stakeholders of the applicants will not participate in the peer review (free of bias).

(3) Number of proposals to be awarded

A total of around 8 to 10 proposals will be awarded from among all research areas listed in “1 Research Areas” on page 7. (This may vary depending on the budgetary situation of the program and contents and expenses of the proposed application.) Some proposals may be awarded as the Special Project Formation Investigation.*

*Special Project Formation Investigation is either 1) Proposal that can not be reviewed because ODA demand is not submitted by counterpart country or 2) Proposal that is highly reviewed by JST while the cooperation request from the research institution in counterpart country seems to be unselected by JICA, yet the review committee judges that it is worth investigating for forming new subject in next year and funding the investigation fees such as travel fees and fees for holding the science meeting. However, such proposals are not prioritized at the selection in next year.

(4) Cooperation with MOFA, MEXT and JICA in the selection process

JST will cooperate with following agencies in the process of selection through receiving information from MOFA and JICA via MEXT on ODA request as technical cooperation project. Please also be notified in advance that JST will provide submitted documents itself, results of document screening and interview to MOFA, MEXT and JICA.

(5) Use of information supplied in Research Proposal application to JICA

Please be aware that information supplied in the application will be used for limited purposes as basic source for the purpose of cooperation with the screening process in JST, and as a statistical data in MOFA and JICA the following fiscal year. In the absence of advance permission from the applicant, information contained in the submitted documents will not be used for any purposes other than those described above and those given in “V. Notes for Application” (in Japanese Only).

8. Applicant requirements

The applicants to be PIs affiliated with Japanese research institutions or universities must submit proposals in person.

Under this program, research teams may be formed involving researchers affiliated with other research institutions in Japan (including private enterprises, etc.) and researchers specializing in other research fields including humanities and social sciences to implement research projects on the basis of joint research with research institutions in developing countries. In such cases, the following applicant requirements of (4) and (5) below will be added.

The application requirements are as follows:

- (1) PI affiliated with Japanese research institutions or universities must be able to engage in international joint research, discharging duties both as PI under the international joint research and as the leader of the research team under the JICA technical cooperation. In addition, PI arranges his/her schedule with high priority to attend study meetings (three to five times for two months after the selection process) and to visit the counterpart developing country in a part of JICA's ex-ante evaluation (10 to 14 days during summer season in 2011).
- (2) PI must be affiliated with a Japanese research institution^{*8} and conduct research there.
- (3) PI must be a researcher who is able to assume responsibility for the entire international joint research for the full duration of its implementation. (PI will be required to engage in international joint research as the leader of a research team under a JICA technical cooperation; as a rule, unilateral termination of the research activity at the PI's wish midway through the implementation period will not be allowed in principle.)
- (4) PI must, based on his/her own research concept, be able to form a research team best suited to the implementation of the research subject, and exercise leadership at the same time as engaging directly in the research subject.
- (5) PI must be a researcher who is able to assume responsibility for the entire research subject as the person in charge of the research team for the full duration of the research subject's implementation.

^{*8} "Japanese research institutions" refers to universities, national and public research institutions, and public-service corporation that conduct research activities related to public affairs and satisfy predetermined requirements. For details, please refer to "9 Responsibilities of Principal Investigators (PIs)" on page 16 to 17.

(Note) Any individual who satisfies any of the following conditions is also eligible to apply as PI to JST.

- A researcher who is not currently affiliated with a particular research institution, but who will be affiliated with a domestic research institution and able to conduct research there if selected as a PI.
- A Japanese researcher currently residing overseas who will be affiliated with a domestic research institution and able to conduct research there if selected as a PI.

9. Responsibilities of Principal Investigators (PIs)

The following information mainly concerns responsibilities from the perspective of the role as PI. These responsibilities will take effect upon provisional selection.

In addition to the responsibilities below, each PI who is affiliated with Japanese research institutions or universities shall assume duties as the leader of a research team for an ODA technical cooperation.

- (1) Leading and managing the research
 - a. PI shall be responsible for the entire research team, including proposals for research plans and matters relevant to the implementation.
 - b. PI shall submit required research reports and other materials to JST (including Program Officer: PO) and correspond to the research evaluation. The PI shall report the research progress whenever requested by the PO.
 - c. PI shall function to communicate with his/her administrative offices and related offices of the affiliation.
- (2) In cooperation with the administrative offices of his/her affiliation, PI shall manage the research expense for the entire research team appropriately (planning and monitoring the spending, ensuring appropriate administration of research expenses by research institutions, etc.) PI and the Main Research Collaborator shall care for the research members of their own group and, in particular, the research and work environment and conditions of the researchers and other members who are employed using JST research expense. Also, PI shall correspond to accounting investigation of JST and audit of government, etc.
- (3) Treatment of research achievements
 - a. This fund is supported by the Government of Japan. Therefore, PI is encouraged to actively publicize research achievements both domestically and internationally while taking into account the acquisition of intellectual property rights^{*9}.
 - b. If any result achieved through the research project is to be publicized in a paper or other form, please indicate that the achievement has been made with support of the JST/JICA Science and Technology Research Partnership for Sustainable Development (SATREPS).
 - c. Taking into account that this is an international joint research initiative, please take positive steps to acquire intellectual property rights to the extent that the counterpart is not disadvantaged. In principle, applications for intellectual property rights shall be conducted by the institution which PI is affiliated with on the basis of the Commitment Research Agreement.
 - d. Each PI shall comply with the research agreement between JST and research institutions and other JST rules and regulations, as well as the memorandum of agreement with JICA, and the R/D concluded between the counterpart and JICA.
 - e. PI shall be participating in workshops and symposia sponsored by JST inside and outside Japan with researchers in the research team and present the research achievements.
- (4) Please positively communicate with the citizen about Science and Technology to obtain understanding and support from citizen^{*10}
- (5) Each PI shall comply with the research agreement between JST and research institutions and other JST rules and regulations, as well as the memorandum of agreement with JICA, and the R/D concluded between the counterpart and JICA.

- (6) JST will provide necessary information such as the titles of research projects, team members and the amount of research expense to the Electronic system for Research and Development (e-Rad), and the Government Research and Development Database. JST might also request that PI or other members provide different types of information.
- (7) PI shall correspond to the evaluation and accounting inquiry by JST as well as the account auditing by Japanese government.
- (8) PI shall also correspond to various information offers or interviews on the occasion of the follow-up evaluation after a fixed period from the research termination.

*⁹: Please be advised that it will be necessary to observe special conditions for handling intellectual property rights, etc. in accordance with the memorandum of agreement with counterpart and one with JICA as well as the R/D concluded between the counterpart and JICA.

*¹⁰: For details about ‘Promotion for the Positive Communication about Science and Technology,’ please refer to the “Propulsion of Positive Communication about Science and Technology with the Public (Basic Policy),” Council for Science and Technology Policy, June 19, 2010.

“Propulsion of Positive Communication about Science and Technology with the Public, (Basic Policy)”:
<http://www8.cao.go.jp/cstp/output/20100619taiwa.pdf>

10. Requirements and responsibilities of research institutions

The requirements and responsibilities of Japanese research institutions (institutions to which the PI and Main Research Collaborators of selected research projects belong) are as described below.

Based on considerations written below, it is required to submit the consent letter from PI’s organization.

In order for PI to assume responsibility as the leader, in addition to the matters described below, research institutions shall be charged with responsibility as institutions to which ODA technical cooperation experts are affiliated. For details, please consult to JICA headquarter in Japan.

- (1) Research institutions, as the bodies which implement the ODA technical cooperation, shall be required to provide support for activities in accordance with the R/D and memorandum of agreement with JICA. As a rule, only the research institution which PI of the proposal is affiliated with will exchange a memorandum with JICA, but other research institutions will similarly be required to provide support for activities in accordance with the R/D. If the R/D between JICA and the counterpart cannot be signed, it becomes impossible at that point to implement the international joint research. Any research institution which the PI is affiliated with might not be able to carry out the research, in case it cannot be concluded agreement with JICA.
- (2) All research expense will be administered by the research institutions as contract research expense in accordance with the Contract Research Agreement. Any research institution with which a Contract Research Agreement cannot be concluded might not be able to carry out the research. Please cooperate with JST in facilitating the establishment of the Contract Research Agreement for the effective promotion of the research.

- A) An institution must prepare a management / audit organization for research expenses based on “Guideline on management and audit of the public research expenses in research institutions (Practical standard)” (Feb. 15, 2007, Decision by MEXT). Moreover, the institution shall report its enforcement status, and correspond to site investigation related to situations such as organization preparation. See the website below for “Guideline on management and audit of the public research expenses in research institutions (Practical standard)”
http://www.mext.go.jp/b_menu/shingi/chousa/gijyutu/008/houkoku/07020815.htm
- B) Please carry out a proper accounting process according to the Contract Research Agreement and the instruction manual for administration of the Contract Research Agreement provided by JST, while considering flexible and efficient use of research expense. PI shall cooperate in the required reports to JST, accounting investigation by JST, government audit, etc.
- C) Please make necessary reports to JST when applying for and after obtaining intellectual property rights vested in the research institutions under the Contract Research Agreement in accordance with Article 19 of the Industrial Technology Enhancement Law (Japanese version of the Bayh-Dole Act).
- D) JST will examine the propriety and methods of commission in advance of a research contract with profit organizations (private enterprises and institutions specified by JST). This examination result might ask them to follow a commission method particularly specified by JST. It might be considered unreliable for commissions and unable to do research when the financial status of an institution is remarkably unstable. In such a case, the research team organization might undergo reorganization.
- (3) Research institution which PI is affiliated with must sign the Memorandum of Understanding (MoU) with the counterpart(s) for the international research collaboration. MoU should include treatment of intellectual property rights, the secret information and publication of the research results; warranty and indemnification; and access and removal of the bio-resources in developing countries. It is highly recommended to sign and exchange MoU at the timing of sign and exchange of R/D between JICA and the counterpart(s). The other researchers participating in the project need to obey the signed MoU.

As described above, the commitment as the research institution is required. For that reason, the consent letter from PI's organization is required to be submitted from FY 2011.

11. Research period/duration of research

The period of international joint research is **three to five (3-5) years**.

Following conditional selection, however, the research period shall be finalized by an R/D between the counterpart and JICA, and the period specified in this R/D shall be the period in which the international joint research is conducted. Within the limits of the budget

for JST Commitment Research Expenses determined at the time of conditional selection, it may be possible to extend the completion date for research activities in Japan funded by JST Commitment Research Expenses up to the end of the fiscal year in the final year of international joint research implementation prescribed under the R/D.

Following conditional selection of research projects, depending on the counterpart, it may take some time before the R/D is signed. In such cases, JST Commitment Research Expenses can be available to Japanese research institutions where PI is affiliated with even before the R/D is signed in order to ensure swift implementation of the international joint research activities after the R/D signing. Application would be limited to research expenses incurred within Japan for the purposes of preparation for the international joint research activities.

12. Research expenses (JST Commitment Research Expenses)

JST will support the Japanese research institutions/researchers for the project activities in Japan. JICA will support project implementation in the developing countries, such as dispatch of Japanese experts (researchers), provision of equipment and training of personnel, and other supports related to the project in the developing countries.

Please note the following points (1) to (4) in regards to research expenses administered by JST. For information on costs covered by JICA, please consult to JICA headquarters.

- (1) The overall “Research Expenses” awarded by JST to the Japanese research institutions will be about 0.38 Million US dollars per year for one research project, (amounting to approximately 1.9 Million US dollars for its entire research period, if it is a 5-year project) including 30% of the indirect costs/overhead. Proposals will be accepted even the research expenses will be beyond those described above. Total research expense proposed is an important factor for consideration of selection. Proposals with high expenses, compared to those with less expense, are expected to yield to substantially greater research results and, simultaneously, require a much greater responsibility; therefore, please carefully examine your settings on research expense and research structure.
- (2) The research expenses shall be received and administered as Contract Research Expenses by the research institutions which PI and Main Research Collaborators are affiliated with.
- (3) The Research Expenses (direct costs) shall be used for the following purposes.

(a) Cost of goods and supplies:

To purchase research equipment and consumables etc.

(b) Travel expenses:

Travel expenses incurred by the PI and research participants (research team members), and other expenses such as travel expenses for inviting individuals who are essential in carrying out the selected research subject.

(c) Labor and rewards:

• Labor costs: In principle, researchers, engineers, research assistants, etc. , who are newly employed on an annual salary basis to engage in the selected research project. Those who work full-time for the research are subject to payment.

- Rewards: Engineers, assistants, data processing staff, etc. , who are employed for a fixed period. Guest lecture fees and other rewards might be included.

(d) Other:

In addition to the purposes specified above needed to carry out the research, the following expenses, for example, might also be covered.

- Cost for holding meetings and seminars
- Cost for printing papers and reports
- Cost for communications and transportations of equipments and samples

- (4) The indirect costs (overhead costs) paid to Japanese research institutions by JST will be a maximum of 30% of direct costs appropriated by JST. Japanese research institutions appropriating the indirect costs from JST need to keep any documents to prove the disbursement from indirect costs for five years after the expiration of the relevant research Commissioned Research Contract.
- (5) Please refer to the guideline for the JST Commitment Research Expenses uploaded on the following website;
URL: <http://www.jst.go.jp/global/itaku.html> (in Japanese Only)

13. Expenses supported by JST and by JICA

As a rule, research expenses will be categorized into those administered by JST as Commitment Research Expenses and those payable by JICA as project costs, as follows.

- a. Research expenses incurred in Japan and other locations outside the counterpart will be supported by JST as Commitment Research Expenses.
- b. Costs incurred within the counterpart such as research equipments and supplies will be born by JICA including the travel cost for counterpart researchers to visit Japan.
- c. As a rule, travel costs and on-ground expenses for researchers from Japan traveling to the counterpart institutes on official business will be born by JICA. Activities relating to the international joint research undertaken by researchers from Japan within the counterpart will be governed by the provisions on tax immunity and permission for activities prescribed in the R/D (for implementation of the international joint research) concluded between JICA and the counterpart. For details, please consult to JICA headquarter.

* In some exceptional cases, it may be possible for costs relating to official trips to the counterpart to be covered by JST research expenses. However, trips covered by JST funds will not be considered activities as prescribed by the R/D for the international joint research in question: tax immunity provisions may not apply, and permission for on-ground activities may not be granted. Please be sure to consult with JICA in advance.

* Salaries, overhead costs, and etc. to the Japanese research institutions for experts dispatched to the counterpart countries are not supported by JICA

* It is highly recommended to post an administrative staff at the counterpart institution for the awarded project.

Expenses	JST	JICA
a. Research expenses incurred in Japan	X	

a. Research expenses incurred in the third countries (neither Japan nor counterpart)	X	
b. Research expenses incurred in the counterpart	X(*1)	X(*2)
b. Travel expenses to invite researchers from the counterpart		X
c. Travel expenses between Japan and the counterpart		X

*1: In principle, financial support from JST is limited to research expenses that are not born by JICA.

*2: Research expenses incurred in the counterpart include any research expenses, which Japanese researchers need in implementing the international joint research in the counterpart institutes, such as research supplies and consumables. Please be notified that JICA supports research activities in the counterpart developing country in a form of in-kind aid, indicating that personnel, office space, consumables and domestic travel costs at the counterpart institutions must be supported by the counterpart country.

14. Filling out a research proposal application forms

Please prepare your research proposal with close consultation with the counterpart institution. Application forms will be at e-Rad portal site. If the application forms in English are required, please contact JST staff for SATREPS.

III. References

1. Overview of the ODA Technical Cooperation

Technical cooperation is a form of assistance for human resource development in developing countries and is implemented in various ways, e.g. training, dispatching experts and volunteers, providing equipment and material, conducting development studies and “Technical Cooperation Projects”, or a combination of these components. Today, Technical cooperation projects are one of JICA's main types of overseas activities. They are results-oriented, with Japan and a developing country pooling their knowledge, experience, and skills to resolve specific issues within a certain timeframe. The projects may involve the dispatching of experts from Japan to provide technical support, invitation of personnel from developing countries for training, and the provision of necessary equipment.

For further information about ODA technical cooperation, please visit the JICA’s portal site.

<http://www.jica.go.jp/english/>

2. JICA Headquarters in Japan and JICA offices in the developing countries

For detailed information about ODA technical cooperation, please contact to the JICA Shinjuku headquarters in Tokyo Japan or JICA overseas offices in the developing countries.

- JICA Headquarters

URL; <http://www.jica.go.jp/english/contact/>

- JICA overseas Offices in developing countries

URL; <http://www.jica.go.jp/english/contact/overseas/>

Appendix 1 Countries Targeted for ODA Technical Cooperation

No.	Region	Name of Country	No.	Region	Name of Country	No.	Region	Name of Country
1		Republic of Azerbaijan	41		Republic of Angola	85		Argentine Republic
2		Republic of Armenia	42		Republic of Uganda	86		Antigua and Barbuda
3		India	43		Federal Democratic Republic of Ethiopia	87		Oriental Republic of Uruguay
4		Republic of Indonesia	44		State of Eritrea	88		Republic of Ecuador
5		Republic of Uzbekistan	45		Republic of Ghana	89		Republic of El Salvador
6		Republic of Kazakhstan	46		Republic of Cape Verde	90		Republic of Guyana
7		Kingdom of Cambodia	47		Gabonese Republic	91		Republic of Cuba
8		Kyrgyz Republic	48		Republic of Cameroon	92		Republic of Guatemala
9		Georgia	49		Republic of The Gambia	93		Grenada
10		Democratic Socialist Republic of Sri Lanka	50		Republic of Guinea-Bissau	94		Republic of Costa Rica
11		Kingdom of Thailand	51		Republic of Kenya	95	L	Republic of Colombia
12	A	Republic of Tajikistan	52		Republic of Cote d'Ivoire	96	a	Jamaica
13	s	People's Republic of China (*)	53		Union of Comoros	97	t	Republic of Suriname
14	i	Turkmenistan	54		Republic of Congo	98	i	Saint Christopher and Nevis
15	a	Nepal	55		Democratic Republic of the Congo	99	n	Saint Vincent and the Grenadines
16		Islamic Republic of Pakistan	56		Democratic Republic of Sao Tome and Principe	100	A	Saint Lucia
17		People's Republic of Bangladesh	57		Republic of Zambia	101	m	Republic of Chile
18		The Democratic Republic of Timor-Leste	58		Republic of Sierra Leone	102	e	Commonwealth of Dominica
19		Republic of the Philippines	59		Republic of Djibouti	103	r	Dominican Republic
20		Kingdom of Bhutan	60		Republic of Zimbabwe	104	i	Republic of Trinidad and Tobago
21		Socialist Republic of Viet Nam	61	A	The Republic of the Sudan	105	c	Republic of Nicaragua
22		Malaysia	62	f	Kingdom of Swaziland	106	a	Republic of Haiti
23		Union of Myanmar	63	r	Republic of Seychelles	107		Republic of Panama
24		Republic of Maldives	64	i	Republic of Equatorial Guinea	108		Republic of Paraguay
25		Mongolia	65	c	Republic of Senegal	109		Barbados
26		Lao People's Democratic Republic	66	a	United Republic of Tanzania	110		Federative Republic of Brazil
27		Islamic Republic of Afghanistan	67		Republic of Chad	111		Bolivarian Republic of Venezuela
28		People's Democratic Republic of Algeria	68		Central African Republic	112		Belize
29	M	Republic of Yemen	69		Republic of Togo	113		Republic of Peru
30	i	Republic of Iraq	70		Federal Republic of Nigeria	114		Republic of Bolivia
31	d	Islamic Republic of Iran	71		Republic of Namibia	115		Republic of Honduras
32	d	Arab Republic of Egypt	72		Burkina Faso	116		United Mexican States
33	e	Sultanate of Oman	73		Republic of Burundi	117	E	Republic of Albania
34		Syrian Arab Republic	74		Republic of Benin	118	u	Ukraine
35	E	Republic of Tunisia	75		Republic of Botswana	119	r	Republic of Croatia
36	a	Republic of Turkey	76		Republic of Malawi	120	o	Republic of Kosovo
37	s	Palestine Liberation Organization	77		Republic of Mali	121	p	Republic of Serbia
38	t	Kingdom of Morocco	78		Republic of South Africa	122	e	Bosnia and Herzegovina
39		Hashemite Kingdom of Jordan	79		Republic of Mauritius	123		Former Yugoslav Republic of Macedonia
40		Republic of Lebanon	80		Islamic Republic of Mauritania	124		Republic of Moldova
			81		Republic of Mozambique	125		Montenegro
			82		Republic of Liberia	126		Republic of Kiribati
			83		Republic of Rwanda	127		Cook Islands
			84		Kingdom of Lesotho	128		Independent State of Samoa
						129	P	Solomon Islands
						130	a	Tuvalu
						131	c	Kingdom of Tonga
						132	i	Republic of Nauru
						133	f	Niue
						134	i	Republic of Vanuatu
						135	c	Independent State of Papua New Guinea
						136		Republic of Palau
						137		Republic of the Fiji Islands
						138		Republic of the Marshall Islands
						139		Federated States of Micronesia

* For People's Republic of China, please to be advised to use programs conducted under equal partnership (e.g. JST Strategic International Cooperation Program).

* Targeted countries listed above are subject to change depending on the state of affairs.

[Inquiry Counter]

Any inquiry is preferable to be made by e-mail, except the case of urgency.

- Please note that the updated information will appear in the homepage for Application of Research Proposals to which you can refer.

<http://www.jst.go.jp/global/koubo.html>

Japan Science and Technology Agency (JST)
Research Partnership for Sustainable Development Division

102-8666 5-3, Yon-bancho, Chiyoda-ku, Tokyo

E-mail: [global<AT>jst.go.jp](mailto:global@jst.go.jp) [Application only] Please replace <AT> to @.

Tel: 03-5214-8085 (Mon. – Fri. 10:00–12:00 / 13:00–17:00*)

*Except for public holidays