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International Collaborative Research Program

Science and Technology Research Partnership for Sustainable Development (SATREPS)

Invitation for Research Proposals

This Application Guideline is prepared for researchers who belong to Japanese research institutions/universities in Japan.
Researchers in other countries should consult their national government agency responsible for Official Development Assistance (ODA) technical cooperation, the Embassy of Japan, or JICA offices in their resident countries.

Application Guideline (Provisional Translation)

Japan Agency for Medical Research and Development (AMED)
Division of International Collaboration
Department of International Affairs
September, 2015

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Notes for FY2016 Research Proposals

This invitation for research proposals is for proposals that will be implemented under the government's FY2016 budget, but submitted and selected before the budget is finalized. Moreover, the SATREPS (Science and Technology Research Partnership for Sustainable Development) program is linked with the official development assistance (ODA) program, and requires time for coordination with institutions in the counterpart country. For these reasons, in order to start the research projects as soon as possible, the process needs to start before the budget is approved. In consequence, when the budget is finally approved, details and amounts may change, which could potentially affect the fields of research, contract research expenses, and number of projects selected. It may also be necessary to request additional documentation following budget approval.

Changes in budget-related information will be posted on the following website, which should be checked occasionally. After proposals have been submitted, applicants can be notified by email when necessary.

http://www.amed.go.jp/koubo/030120150721.html (Japanese)

http://www.amed.go.jp/en/news/program/030120150909.html (English)

1. How to Apply

FY2016 Research Proposals must be submitted via e-Rad, the Cross-ministerial R&D Management System.

To use e-Rad, researchers who are affiliated with a research institution need to check that their institution has been registered on e-Rad, and that the researcher's information has also been registered on e-Rad by the institution's administrative contact. Researchers who are not affiliated with a research institution need to register their researcher information on e-Rad in advance.

Cross-ministerial R&D Management System (e-Rad) Portal Site

http://www.e-rad.go.jp/ (Japanese)

Deadline for submission of research proposals:

12:00 noon (Japan time) on Monday October 26, 2015

2. Submission of request for ODA technical cooperation

The SATREPS program is linked with ODA projects. In addition to submitting a research proposal to AMED, it is necessary to liaise sufficiently with the researchers in the other country on the details of the joint research, and is also necessary that the counterpart research institute submits an official request for ODA technical cooperation to Japan’s Ministry of Foreign Affairs (MOFA) via the ministry or agency in the recipient country responsible for ODA and the local Japanese embassy. The deadline for submitting the official request for ODA technical cooperation is also 12:00 noon (Japan time) on Monday October 26, 2015.

The internal deadline used by the counterpart ministry or agency is normally set earlier than the submission deadline, so please take that into account when liaising with the counterpart research institute. If the counterpart government does not request a technical cooperation project, a research proposal submitted in Japan will be considered incomplete and not go through the selection process.

I. Introduction

Based on the Act on Promotion of Healthcare Policy and Act on the Independent Administrative Agency of Japan Agency for Medical Research and Development passed by parliament in May 2014, Japan's cabinet approved establishment of a 'control tower' function for medical R&D, consolidating in AMED (the Japan Agency for Medical Research and Development) the budgets for research expenses which had previously been allocated from different sources—the Ministry of Education, Culture, Sports, Science and Technology, the Ministry of Health, Labour and Welfare, and the Ministry of Economy, Trade and Industry. AMED was consequently established on April 1, 2015 to provide a system for seamless funding from basic research to practical application, and to construct a system for further creation of innovative drugs and medical devices in Japan.

1. Objective of the research program

The SATREPS (Science and Technology Research Partnership for Sustainable Development) program is based on the needs of developing countries, and promotes international joint research targeting global issues[1] with an objective of future utilization of research outcomes[2]. Implemented through collaboration with Official Development Assistance (ODA), the aim of the program is to acquire new knowledge and technology that lead to the resolution of global issues and the advance of science and technology, and through this process, to create innovations. International joint research under this program also aims to enhance the research and development capabilities of developing countries, and helps create sustainable research systems able to address and resolve issues.

2. General description of the research program

(1) Background to the program

There is a need for joint research and capacity building of research institutions based on the requirements of developing countries, as a means by which the promotion of science & technology and the training and development of human resources can boost each other. Japan recognized this need, and has given it the status of a key part in one of its major policies. ("Toward the Reinforcement of Science and Technology Diplomacy," May 19, 2008)

In this context, Japan's Ministry of Education, Culture, Sports, Science and Technology (MEXT) and Ministry of Foreign Affairs (MOFA) implemented the SATREPS program in 2008 by creating a close tie between science & technology and official development aid, enabling the research institutions of Japan and developing countries to take part in international joint research that can contribute to the resolution of global issues.

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[1] Global issues: Issues that are difficult to resolve by a single country or region acting on its own and that need to be handled by the international community as a whole

[2] Utilization of research outcomes: The research projects should lead to future social and economic benefits, achieved by using newly obtained knowledge and technology to enhance government services or to develop products that can be deployed in the market.

(2) Program status

Japan's Fourth Science and Technology Basic Plan (approved by the Japanese Cabinet in August 2011) includes Japan's aims regarding its role in dealing with global issues. It states how the country will take a leading role in working to resolve critical issues occurring on a global scale, including global warming, large-scale natural disasters, and emerging and re-emerging infectious diseases, and how it will actively work through international coordination and cooperation, making use of its experience and achievements, the intellectual property that it has developed, and its creativity. Specifically, Japan will form partnerships with and cooperate with universities, public research institutions, business, and also with foreign and international organizations to work on research and development to find solutions to global issues. In addition, it needs to encourage the deployment of the research outcomes in Japan and in other areas around the world, and take a lead in securing the agreement of the international community. At the same time as tackling global issues, in order to support self-reliant, sustainable development in developing countries in areas such as Asia and Africa, Japan needs to provide assistance in terms of applying and transferring technology from Japan, and there needs to be collaboration between universities and research institutions in Japan and such developing countries, conducting joint research with the aim of developing and utilizing new technologies, and gaining new knowledge, which will also improve overall capabilities at universities and research institutions in the collaborating country and raise science and technology standards in both countries.

The Fourth Basic Plan states that in order to overcome the serious issues facing Japan or the whole world, the government should promote research and development (R&D) and other activities comprehensively and systematically with the participation of various organizations in industry, academia and government through a cross-sectional approach and by coordinating activities developed by each of these organizations, including basic research, application, development, industrialization, and commercialization, so that such efforts lead to new value creation.

Implementation of the government's basic plan includes strongly promoting career development, and training personnel to ensure the availability of human resources capable of working in a range of fields both in Japan and overseas, of playing a front-line role in the world, and of leading the next generation. Japan states in the plan that it will step up initiatives that will enable the leaders of the next generation to launch themselves into the world of science and technology innovation full of dreams and hopes for the future. Through international collaborative research, Japan is also able to develop its own human resources for dealing with globalization.

The FY2016 invitation for research proposals seeks projects that reflect these policies while meeting the aims of the SATREPS program.

(3) SATREPS program structure

The SATREPS program structure is shown in Figure 1. Run by AMED and by the Japan Science and Technology Agency (JST), both in cooperation with the Japan International Cooperation Agency (JICA), SATREPS promotes international joint research between Japan and developing countries. Through collaboration with research institutions in developing countries, it aims to facilitate the acquisition of

new knowledge and technology that can lead to the resolution of global issues and the advancement of science and technology. Under this program, AMED and JST provide support for research expenses in Japan and elsewhere (but not in the partner country), while JICA bears expenses necessary for the implementation of ODA technical cooperation (including dispatch of experts from Japan, acceptance of foreign researchers, and provision of machinery and equipment). The Invitation for Research Proposals for projects in the Infectious Diseases Control field for FY2016 onwards is handled by AMED. Management of R&D for the international joint research as a whole is conducted cooperatively between JICA, which operates technical cooperation projects in developing countries, and AMED, which provides funding for medical research by research institutions in Japan. It is expected that the promotion of international joint research activities under this program will enable Japanese research institutions to conduct research more effectively in fields and targets where it is advantageous to implement the research in developing countries. Meanwhile, it is hoped that for research institutions in the developing countries (primarily universities and research institutions focusing on activities for public benefit, but excluding those related to military affairs), the establishment of research center facilities and the development of human resources through joint research activities will make it possible to develop self-reliant, sustainable research systems.

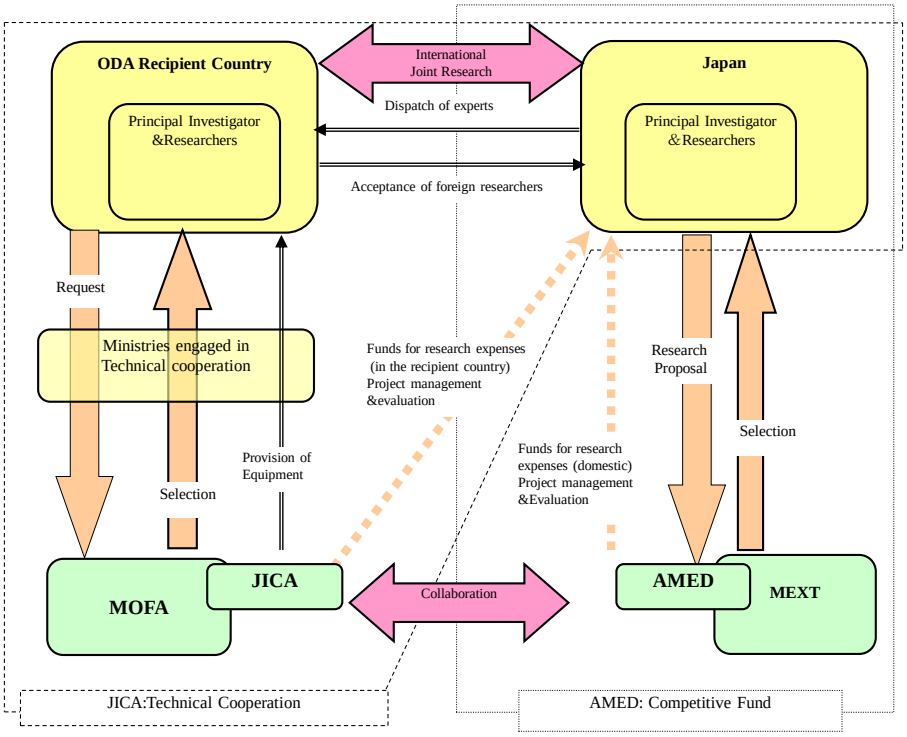

Figure 1. SATREPS Program Structure

3. Management of the research program

(1) Program superviser, program officers

This is a single program consisting of international joint research and development projects in the field

of medicine. AMED appoints a program superviser (PS) to supervise project management and coordination between programs, and also appoints program officers (PO) to work with the PS on the managemement and administration of projects. This approach provides well-adjusted overall management with the aim of achieving efficient and effective management and maximizing the R&D outcomes.

In implementing the program, program officers (POs) attend conferences etc. on the research topics and by means such as field surveys, etc., maintain familiarity with the progress of the research.

(2) Evaluation (ex-ante, mid-term, terminal)

Evaluation by AMED, consisting of research project selection (ex-ante evaluation) and evaluation of projects after selection (mid-term evaluation, terminal evaluation), is handled by a project evaluation committee set up by AMED. For details of evaluation by JICA, please refer to page 31.

4. SATREPS program main flow

(1) Invitation for research proposals

AMED invites researchers at universities and research institutes in Japan to submit research proposals. Decisions on which research projects are to be selected are made by a screening committee comprising POs and external reviewers.

While AMED selects proposals, requests are received from developing countries for ODA technical cooperation for international joint research, and MOFA reviews these requests in conjunction with JICA in Japan. Therefore, it is essential for the principal investigator in Japan to coordinate with researchers in the ODA recipient country in order to confirm the details of the joint research when making an application to AMED. It is a requirement that official requests for ODA technical cooperation be submitted by the research institution in the recipient country to MOFA in Japan by the specified deadline, via the ministry or agency in the recipient country responsible for ODA and the Japanese embassy that handles affairs for the recipient country.

(2) Program flow from invitation to implementation

The selection process for research projects at AMED and the screening process for ODA technical cooperation at MOFA/JICA are interlinked. Both applications, one to AMED by the Japanese principal investigator and one for ODA technical cooperation, have to be approved in order for the research project to be provisionally selected for the program. MOFA notifies the prospective recipient country of this decision. (See Figure 2.)

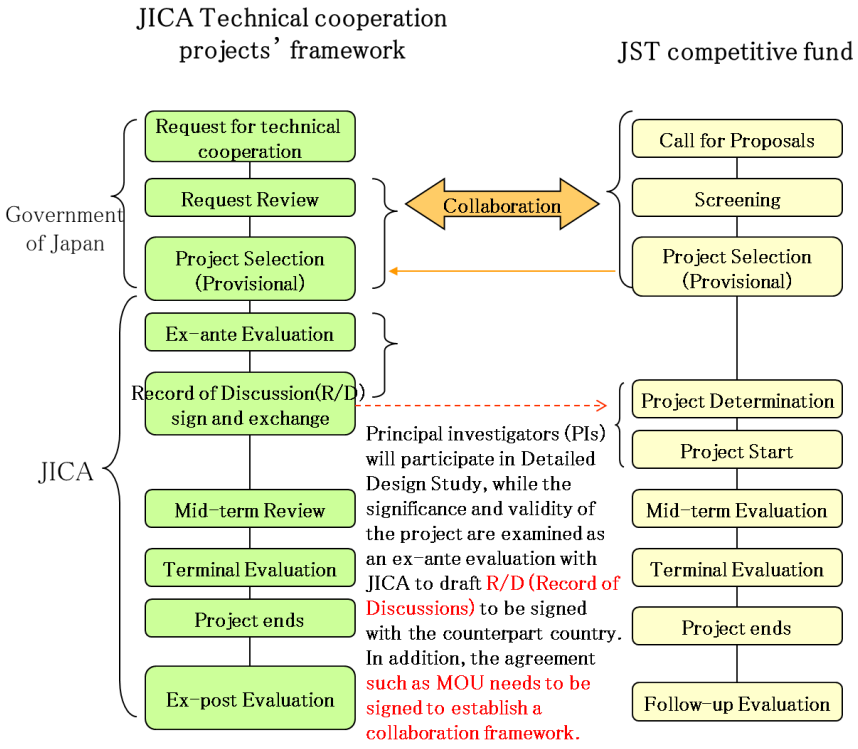

Figure 2. SATREPS Program Flow

(3) Preparations for implementing selected projects

To implement the international joint research, a Record of Discussions (R/D) must be signed by the ODA recipient country and JICA to confirm that they agree on the details of the ODA technical cooperation. In addition, a Memorandum of Understanding (MOU) or similar document about the joint research, of which details shall match the R/D and AMED's Contract Research Agreement, must also be signed between the research institutions (parties concerned). Because of this requirement, after receiving notification of provisional selection, the principal investigator and other researchers are requested to work towards the prompt signing of these documents.

After giving notification that a research project has been provisionally approved, AMED firstly concludes a Provisional Research Expenses Contract with the principal investigator's institution in Japan. This enables AMED to make research funds available to Japanese researchers even before the R/D is signed, in order for international joint research to start as soon as possible after the R/D is signed. Such expenses shall be limited to research expenses incurred in Japan when making preparations for the joint research.

In order to confirm the background and details of the ODA technical cooperation application and discuss details of the joint research, JICA sends an investigation team, comprising of the principal investigator in Japan and other members, to the prospective recipient country. The investigation team performs a Detailed Design (D/D) study and summarizes the results of discussions in a Minutes of Meeting (M/M) document, signed by JICA and the recipient country. JICA shall then create an R/D based on the details of the M/M. Once the R/D is signed by the director of the JICA overseas office and a representative in the developing country, the ODA technical cooperation project can begin.

However, the signing of the R/D can take a long time, and may not even be completed before the end of the year in which the project would be implemented (the end of FY2016). Even if a research project has been selected, if the R/D is not likely to be signed in the near future, or if there are other reasons[3] such as deteriorating public security, preparations for implementing the project may be halted part way through, and circumstances may make it impossible for the research to be implemented. Please note that if it becomes impossible for the R/D to be signed, the selected research project cannot be implemented, and from that point, AMED shall no longer provide research funding.

(4) Implementation of the international joint research

In order to implement the international joint research as a formal SATREPS project, the principal investigator and other researchers shall act in accordance with a contract (Contract Research Agreement) signed with AMED and contracts signed with JICA (Agreement and project contract[4]).

The principal investigator shall be responsible for the research project and for coordinating the running and management of the project as a whole. It is not essential for the Japanese principal investigator to be permanently stationed in the partner country for the period of the joint research, but to ensure that the research proceeds smoothly, it is desirable that at least one member of the Japanese research team be stationed there as permanently as possible as an expert (designated under this program as a "dispatch of overseas researchers (Japanese researchers) for overseas research")[5] [6].

(5) Human resource development

－Human resource development through the Japanese Government (MEXT) Scholarship Program

Since FY2010, MEXT has a “SATREPS Section" within its Japanese government scholarship program (University Recommendation) for SATREPS projects. The aim of this section is to facilitate the development of young researchers with the potential to be future key players in relevant research in their own countries by studying or conducting research as a research student and taking a doctorate at a Japanese institution. Invitation for this Japanese government scholarship program is

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[3] Potential reasons include unavoidable circumstances such as natural disasters or decisions made by the government of the prospective recipient, and circumstances such as improper use of research funds or improper research activities.

[4] The Agreement (Agreement regarding the implementation of technical cooperation under the framework of SATREPS) is a comprehensive document stipulating the rights and obligations of JICA and the principal investigator’s institution. JICA and the principal investigator’s institution shall conclude the Agreement when the R/D for the institute's first project is signed. In addition, JICA and the principal investigator’s institution shall clarify the expenses that JICA will bear, and shall sign an Agreement and project contract containing an estimate of these expenses and details of accounting procedures, for reference by either party. (JICA will only conclude an Agreement with the principal investigator's institution, not with other research institutions involved in the research project.)

[5] An overseas researcher dispatched to the developing country does not necessarily have to be the principal investigator. Other members of the Japanese research team necessary for the joint development are eligible. However, postgraduate and other students are not eligible to be sent under the "dispatch of overseas researchers (Japanese researchers) for overseas research" designation.

[6] In technical cooperation projects, JICA recruits project coordinators through a transparent recruiting process and stations them in the ODA recipient country to provide support to experts and manage local operating expenses or to support procurement of machinery and equipment by the local JICA office. JICA similarly stations local project coordinators for SATREPS projects. Such staff cannot simultaneously participate in research work.

implemented by MEXT, and scholarship is budgeted separately from SATREPS. For more details, please refer to the Japanese government (MEXT) scholarship program website. Please note that this scholarship program may be altered depending on the final budget.

Japanese government (MEXT/Monbukagakusho) scholarship program

http://www.mext.go.jp/a_menu/koutou/ryugaku/06032818.htm (Japanese)

http://www.studyjapan.go.jp/en/toj/toj0302e.html (English)

– Acceptance of foreign researchers

There is also the “acceptance of trainees” system (which is called “acceptance of foreign researchers” in the SATREPS program) for inviting researchers from the ODA recipient country to Japan using the ODA budget. The researchers are invited from the research institution carrying out the international joint research in the developing country to Japan, where they carry out research. It is hoped that such researchers will play a long-term key role at their research institution after their return from Japan. They are considered as indispensable for promoting the joint research. Please note that the acceptance of foreign researchers under this system is normally conditional on the researcher's period of research in Japan terminating within the period for joint research specified in the R/D.

- Helping young post-doctoral researchers to secure varied career paths

When a proposal is selected as a SATREPS project, if young post-doctoral researchers are employed to participate in the project using public funds (competitive funding and other project research funding, education and research funding through open funding schemes for universities), there is a requirement to provide active assistance to such researchers to help them to secure varied career paths. This requirement is based on a policy document issued on December 20, 2011 by the Council for Science and Technology's Committee on Human Resources concerning basic policy for securing varied career paths for young post-doctoral researchers employed using public funds from MEXT.

* Employment of research assistants (RA)

The 4th Science and Technology Basic Plan aims to provide more comprehensive economic support in the form of funding fellowships, teaching assistants (TA), and research assistants (RA) so that bright students can feel secure in aiming for graduate school. This is an attempt to accelerate the 3rd Science and Technology Basic Plan's aim to "enable 20 percent of doctoral students (latter stage) to receive an amount equivalent to their living expenses."

The following considerations apply when employing a research assistant:

- Assumed to be a doctoral student (latter stage).
- Recommended payment is in the order of 2 million yen per year or 170,000 yen per month. Payments of this level can be handled as research expenses. Take care, however to avoid situations that could be interpreted as the payment being charged to SATREPS but used for simply studying or for research work other than that of the SATREPS program, which would be regarded as inappropriate (fraudulent) use of funds.

- Decisions regarding actual payment amounts and payment periods, etc. should be made by the research institution. AMED does not place restrictions on payments above or below the recommended level.
- When research assistants are receiving payments from scholarship loans or other systems, there should be no impediment to the objectives of the scholarship or the research institution that the assistant is affiliated to AMED does not, however, place any systematic restriction on overlapping payments.

It is desirable that the effective use of all of these programs will have a synergistic effect, in terms of developing the skills of key personnel and young researchers promoting research in the developing country and enhancing systems for ongoing international joint research with Japan.

II. Invitation for Research Proposals

1. Research fields and areas in which proposals are invited

(1) Research fields and areas

Infectious Diseases Control field concerning "Research on measures to address infectious diseases control attuned to the needs of developing countries"

(2) Potential research and development projects

HIV/AIDS, Ebola virus disease, malaria, dengue fever, tuberculosis, highly-pathogenic avian influenza, 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. Japan is consequently keen to boost international cooperation regarding infectious diseases that have the potential to enter Japan, in order to accumulate knowledge in advance of any actual outbreak. Several examples are given below of potential research and development projects that target solutions for global issues in the area of infectious diseases control.

- Research and development on Zoonosis such as avian influenza, rabies and others
- Research and development for technology related to diagnostics, vaccines and therapeutics for the detection and control of emerging and re-emerging infectious diseases including HIV/AIDS, Ebola virus disease, malaria, Dengue fever and tuberculosis

※Applications are accepted for research projects covering topics in developing countries for which research and development to resolve an issue is particularly necessary, and for which capacity building of researchers in that country is required. Projects also ought to envisage their outcomes being applied to the benefit of broader society as well as in the developing country, being used towards the resolution of global issues, and bringing scientific and technological progress. A project is not eligible if it consists merely of transfer of Japanese technology without entailing any joint research, or solely of surveys and other simple operations that do not make any contribution to the advancement of science and technology, or if it produces outcomes that can only be of benefit to one particular country.

※One restriction is that clinical trials and medical practice are not eligible for the SATREPS program. Note also that for some research topics, there may be a requirement to take specific ethical perspectives into account.

[See: Q&A (page 49)]

※The security situation and circumstances in parts of the partner country where research will be conducted may be examined as part of the selection process because of the potential for restrictions on travel to the country and on the ability to implement the project.

(3) Countries eligible for the SATREPS program

Please refer to Appendix 1 for the countries that are eligible to request ODA.

[See: Appendix 1]

(4) Considerations for the selection process

- From the perspectives of diplomatic policy and science and technology policy, the selection process takes into account the need to ensure that there is an appropriate regional balance of selected projects among recipient countries (for instance, to prevent projects from clustering in one region), and also a balance in terms of project topics (for instance, to prevent excessive concentration of one particular type of research).
- A proposal (project) will be highly evaluated if the plan involves scientific and technological research of a high standard, is specific rather than general, and has a clear roadmap, including timing and methodology, for utilizing the research outcomes in society.
- Proposals for partnering with countries that have never been selected or rarely been selected are particularly welcome.
- The direction for returning research outcomes to society after the research project terminates is clearer if the entity likely to take on that role participates from the initial stages of research and development. From that perspective, proposals incorporating partnerships with corporations (industry-academia-government collaboration [7]) to work with the outcomes are particularly welcome. When making an application for an industry-academia-government collaboration project, the principal investigator's institution should fill in Form 2 section 1.(3), and the participating corporation should fill in Form 12, with both explaining in detail their ideas for the collaboration. (If the principal investigator's institution is a private sector business, also fill in and submit Form 12.)
- In view of the nature of the program in dealing with issues on a global scale, proposals for conducting international joint research involving Japan and more than one other country are welcome. Research projects extending over several countries need to ensure that the ODA applications from each country are submitted by the deadline. If the documents are not submitted by all countries, the whole application is judged to be incomplete and excluded from selection. It is also necessary to have a signed R/D from all associated countries in order for the project to start.
- Proposals for research projects involving African nations or least developed countries are particularly welcome, especially projects that address the needs of these countries by incorporating initiatives for capacity development, local surveys and data analysis, and the development and application of appropriate technology or technology of direct utility in coping with problems.
- Considering the importance of nurturing young talent, applications are encouraged that propose research teams whose principal investigator is a young researcher under 45 years old or on which more than half of the researchers in the research team in Japan (researchers listed in Form 1

[7] For the purposes of this program, entities participating as "industry" players have businesses incorporated in Japan.

scheduled to engage in the research during the research period) are researchers under 35 years old.

- There are expectations for systematic initiatives based on the partner country's policies and needs, and incorporating the partner country's government agencies and similar entities.
- It is desirable that the institution in the developing country constructs partnerships with private-sector and affiliated government entities during the period of the project, so that when the project comes to an end, the setup remains in place and capabilities continue to be strengthened, enabling the research and development process to continue, and the research outcomes to be utilized in society. Alternatively, it would be desirable for the approach for returning outcomes to society to involve partnerships with private businesses such as BOP (base of pyramid) businesses or Japanese SMEs (small and medium enterprises) expanding internationally, or with NPOs, and other grassroots activities.
- Utilization of research institutions and universities that have previously been developed by Japan's ODA and outstanding research sites in relevant regions is encouraged as a strategy for research to make the utmost use of the features of ODA recipient countries.
- Proposals similar to the projects selected from FY2008 to FY2015 will be reviewed based on viewpoints such as whether essential differences exist in terms of aspects of the research objective, target, approach, region of implementation, etc. or whether a greater contribution to the resolution of global issues can be expected under competitive implementation with existing similar projects.
- It is also important for the institutions where the researchers are affiliated to possess the infrastructure for international research activities necessary to undertake the proposed joint research, as well as having the intention to provide sufficient support and cooperation.
- Proposals involving a corporation or similar entity as the principal investigator's institution need to meet certain conditions to be eligible for selection.

[See: Q&A (page 43)]

- Where necessary, the finances of a corporation or similar entity will be inspected.
- From an ODA viewpoint, selection will take into account the following perspectives.

  – Aligned with ODA principles

  From a diplomatic perspective, is implementation of the project significant or necessary? Does it match with the partner country's development policy and needs? Does it fit in with the Development Cooperation Charter, Country Assistance Policy, or priority areas?

  – Counterpart Institution Implementation Structure

  Does the partner country's implementation structure have budget, staff, and facilities (equipment)? Has a counterpart appropriate for an ODA project been selected? Can capacity development be anticipated? Does the counterpart have an adequate record in terms of research activities and results?

  – Relevance, effectiveness, efficiency, impact and sustainability as a project

  Is the content of the request (proposal) appropriate for resolving the development issues of a developing country? Is the objective achievable by the project? Are machinery and equipment

plans appropriate (obstacles from a procurement perspective, structure for maintenance and management after the project finishes, etc.)? Is it clear how outcomes will be applied to benefit society? (ODA projects are evaluated for five critera, such as relevance.)
(Details of the criteria, see http://www.jica.go.jp/activities/evaluation/about.html)

- Relationship with other projects in the same field funded by Japanese and other donors

What sort of relationship will this project have with other aid projects in the same field? Will there be any overlap or negative effects?

- Project proposal demonstrating awareness of implementation through ODA.

Does the proposer of the research sufficiently appreciate the significance of implementing the joint research using an ODA framework in addition to a competitive funding framework? Does the proposal properly state why ODA is necessary?

In addition to these considerations, the appropriateness of machinery and equipment plans (obstacles from a procurement perspective, structure for maintenance and management after the project finishes) will be taken into account, and projects considered particularly feasible as ODA projects will be given precedence.

2. Schedule for applications

- Applications are accepted from Wednesday September 9, 2015 to 12:00 noon (Japan time) on Monday October 26, 2015.
- Application (submission of research proposal) should be made through the Cross-ministerial R&D Management System (e-Rad).
- Close to the deadline, the load on the e-Rad system is increased, so it may take time to make an application. To avoid the risk of being unable to complete an application by the deadline, make sure to leave plenty of time.
- Similar considerations apply to the submission of an ODA request from the parner country to the Japanese government.

3. Application requirements

(1) Requirements for principal investigator (applicant) and research participants

The principal investigator (PI; applicant) must be affiliated with a Japanese research institution[8], be able to fulfill the duties as principal investigator for the international joint research project, and be able to engage in the international joint research from start to finish. The application should be written by the principal investigator in person.

[8] "Japanese research institutions" refers to universities, independent administrative institutions, public-sector research and development institutes, public-service corporations, or private-sector corporations, etc., each of which must be incorporated in Japan, and also to national institutes that are not incorporated. For incorporated entities, no distinction is made between the forms of incorporation, but the corporation's ability to implement research is scrutinized during the selection process.

Japan side research participants are required to be affiliated with a research institution in Japan.

- If a researcher has posts at both a Japanese research institution and a research institution in the partner country, he or she cannot be included in both institutions' lists of members, so has to choose which one. The principal investigator has to be a Japan side member.
- If a researcher not affiliated with the research institution is required to participate in the project, appropriate procedures need to be taken.
- An institution in a third country (neither Japan nor the partner country) cannot participate in the joint research. Moreover, a researcher whose only affiliation is an institution in a third country cannot participate in the joint research. See the Q&A for details.
- International agencies can participate, but with certain limitations. See the Q&A for details.
- The lists of members should be shared between the Japan side and the partner country side.

(2) Research period

The research period is for 3 to 5 years (after provisional period*)

Mid-term evaluation is conducted in about the 3rd year after the start of international joint research. Depending on the findings of the mid-term evaluation, the project may be reviewed. This may lead to adjustments to research plans or, in some cases, to measures such as termination of the project.

* The provisional period is the period before the R/D and MOU are signed and the project officially starts.

(3) Number of projects expected to be selected

About 2 projects.

The number of projects to be selected will vary according to the Japanese government's FY2016 budget.

4. Screening and selection

(1) Screening process

At the selection stage, AMED/MEXT and JICA/MOFA collaborate to screen applications. AMED /MEXT primarily screen applications from a science and technology viewpoint. In contrast, JICA/MOFA primarily screen applications from an ODA viewpoint. As the research outside Japan is implemented as an ODA project, the research needs to take the form of cooperation, contributing to addressing or resolving issues faced by the partner country and fitting in with the Development Cooperation Charter and the Country Assistance Policy. It must also display a practical approach, showing a roadmap for applying the research outcomes to the benefit of society. Please be aware that AMED will provide submitted documents and the results of documents and interview screenings to MOFA, MEXT, and JICA.

(2) Two-step selection process

The screening committee to conduct ex-ante evaluation will be established by AMED, composed of external experts in their relevant scientific disciplines. The screening committee will conduct the selection in two steps—document screening and interview with the principal investigator.

※ During the selection process, applicants may be requested to revise research plans in accordance with the views etc. of screening committee members.

(3) Avoiding conflict of interest

In accordance with AMED regulations, a person who has a conflict of interest due to his or her relationship with the applicants, etc. will not participate in selection.

5. Evaluation perspectives (ex-ante evaluation criteria)

The basic perspectives for the evaluation are as follows. The project evaluation committee will finalize the details and publish them at the selection stage.

(1) Match with the aims of the project, etc.
(2) Relevance of plans
(3) Technological significance and competitiveness
(4) Implementation framework
(5) Cost

In addition to (1) to (5) above, the following criteria will also be considered in the selection process.

- Direction and feasibility of utilization of research outcomes— The proposed project must envisage future utilization of research outcomes in society, including ideas for what can be applied, when it can be applied, how it can be applied, and when the objectives are likely to be realized. This does not necessarily have to be achieved within the research period; however, the idea to return the outcomes expected in the research plan to society should be clearly defined, such as by outlining the direction for the partner country's future activities, or for deployment to other regions or markets.
- Alignment with ODA policy and appropriateness as ODA project— The proposal must be based a clear need for the ODA recipient country to address a global issue, must be largely in line with Japan's ODA policy with regard to that country, and must be feasible and appropriate as an ODA project aiming to utilize the research outcomes to benefit society.
- Scientific/technological value— The proposal must target the acquisition of new knowledge that can lead to the advancement of science and technology and to the development of new technology for addressing global issues.
- Merits for Japan— The project must have the potential to develop science and technology that could not be achieved by research in Japan alone, to train young Japanese researchers, to make effective use of Japan's science and technology in the developing country and globally, and moreover, to strengthen Japan's presence.
- Setup for research in both countries— There must be a concrete plan for joint research with the developing country, a clear designation of the chief researcher in Japan and in the partner country, and of research institutes or other setups in both countries to undertake the research

activities. Moreover, at the end of the joint research period, the developing country must have prospects for continuing to manage and maintain the machinery and equipment provided and continue with research.

- Efficient & appropriate research plan— There must be a suitable research expenses plan that takes into account research cost performance in the promotion of joint research.
- Competent principal investigator— It is vital for the principal investigator to possess strong resolve and enthusiasm for promoting joint international research as the leader of a joint research team as well as exhibit strong and trustworthy leadership under JICA technical cooperation.

6. Other (supplementary items)

(1) Period of research

The period of international joint research (period to conduct the technical cooperation project set out in the R/D) is three to five years.

As shown in Figure 3, within the limits of the budget for AMED contract research expenses determined at the time of provisional selection, it may be possible to extend the completion date for research activities in Japan funded by AMED contract research expenses up to the end of the fiscal year in the final year of joint international research implementation prescribed under the R/D (in such cases, payment of expenses incurred by the ODA side extending past the period stated in the R/D will not be made).

Following provisional selection of research projects, AMED contract research expenses are available to Japanese research institutions before the signing of R/D and other agreements (MOU, etc.) to ensure swift implementation of the international joint research project after the R/D and other agreements are signed. This coverage only extends to research expenses incurred by the Japanese team for the purpose of preparation for the international joint research activities.

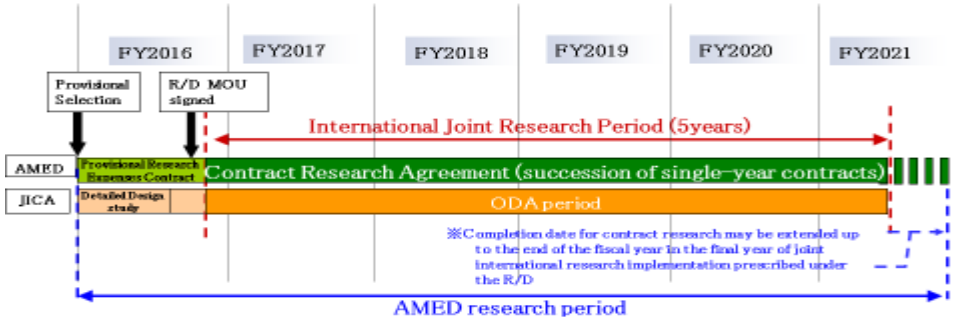

Figure 3. Determination of Research Period (5-year project)

(2) Research expenses (AMED contract research expenses and ODA project expenses)

In this program, AMED will provide financial support to the Japanese research institution for the project activities in Japan and JICA will bear the expenses necessary for the implementation of ODA technical cooperation (including dispatch of experts from Japan, acceptance of foreign researchers, and provision of machinery and equipment) in the partner country, which is the recipient country under the ODA technical cooperation framework.

AMED and JICA together provide funding of about 100 million yen per project per year:

AMED/JICA Funding Approx. 100 million yen per project per year (including indirect expenses)	
AMED (Contract research expenses): Approx. 36 million yen per year (Approx. 180 million yen over 5 years)	JICA (ODA project expenses under the technical cooperation framework): Approx. 60 million yen per year (Max. 300 million yen over 5 years)

[See: III.5.(4) (page 29)]

The overall contract research expenses awarded by AMED per project shall be approximately JPY 36 million per year (and for a five year project, shall not exceed a total of JPY 180 million, disbursed over the six years including the provisional period), including indirect expenses and overhead.

The amount is a rough indication, and assumes the approval of the FY2016 budget. Please be forewarned that changes and adjustments to amounts and (particularly this year) also to particulars may be required according to budgetary considerations.

Cost performance will also be an important factor for consideration during the selection process. Proposals with high expenses, compared to those with lower expenses, will be expected to yield substantially greater research results, and require much greater responsibility. Carefully examine your research expenses.

AMED will distribute the full amount of research funds granted to the research institutions that principal investigator and main research collaborators are affiliated with. The funds should be managed by the institutions. An amount equivalent to up to 30% of the direct cost can be appropriated from within the contract research expenses for indirect research expenses incurred by the research institution in relation to the contract research.

Handling and categorization of expenses for projects are based on cross-ministerial expenses categorization.

For each project, ODA project expenses are approximately JPY 60 million per year, and are limited to a maximum of JPY 300 million yen over a 5-year project. The actual budget is fixed after the Detailed Design (D/D) study of the research project, which does not occur until after provisional selection of the project.

The ODA project expenses provided by JICA are technical cooperation costs, and the project contract is basically an agreement whereby the principal investigator's institution undertakes to provide the technical cooperation services on JICA's behalf. Consequently, the approach to the use of funds and supervision of expenditures is very different from that applying with other research subsidies and grants. Details of expenses that can be met are given in III. "Outline of technical cooperation through ODA".

[See: page 22]

(3) Expenses covered by AMED and JICA

As a rule, research expenses are categorized into those covered by AMED as contract research expenses and those covered by JICA as project expenses, as described below: (See also Table 2.)

A. Research expenses incurred in Japan and other locations outside the developing country will be supported by AMED as contract research expenses.

B. Costs incurred within the developing country (project expenses/on-site machinery and equipment procurement, etc.) are shouldered by JICA (travel expenses to invite researchers to Japan from the developing country shall also be the responsibility of the JICA).

C. As a rule, travel costs and on-ground expenses for researchers from Japan dispatched to the counterpart institutes on official business shall be borne by JICA (for those who are dispatched for more than one year, travel cost for dispatch and return, transfer allowance, other allowances, etc.).[9]

Activities relating to the international joint research undertaken by researchers from Japan within the developing country will be governed by the provisions on tax immunity and permission for activities prescribed in the R/D concluded between JICA and the counterpart institutes.

When SATREPS project team members are dispatched to the ODA recipient country, JICA does not cover supplementary labor costs and overhead costs or in-country salary (paid directly as a fixed monthly amount when the team member is affiliated with an institution but not paid during the dispatch period) incurred by the researcher's institution.

As JICA supports that country with ODA under the technical cooperation framework, the country is required to depend on its own efforts. Consequently, the local institution's costs incurred for the project (labor costs, rent, consumables used by local researchers, operation and maintenance of machinery and equipment supplied, domestic transportation fees for local researchers, daily allowance for attending a meeting, and other miscellaneous costs) should in principle be covered by its own country.

[9] In some exceptional cases, it may be possible for costs relating to official trips to the developing country to be covered by AMED contract research expenses (For example, researchers of the developing country institute employed in Japan as post-doctoral researchers). However, trips covered by AMED contract research expenses 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. Consult with JICA in advance.

Expenses	AMED	JICA
A: Research expenses incurred in Japan	YES	
A: Research expenses incurred outside of partner countries (Travel expenses to third countries, on-site expenses, etc.)	YES (Note 1)	
B: Costs incurred in partner countries	Exceptionally (Note 2)	YES (Note 3)
B: Travel expenses for invitations to Japan from partner countries	Exceptionally (Note 4)	YES
C: Travel expenses between Japan and partner countries	Exceptionally (Note 5)	YES

Table 2. Categories of expenses covered by AMED and JICA

Note 1: Joint projects with research institutions in a third country are not covered.

Note 2: In principle, financial support from AMED is limited to costs that can be covered as research expenses in the partner country, and that cannot be covered by JICA, such as travel costs and on-ground expenses incurred through activities considered to be an extension of research in Japan.

Note 3: Research expenses incurred in the ODA recipient country include equipment, research supplies, and consumables required for the Japanese researchers to conduct international joint research in the partner country. (As JICA supports that country with ODA under the technical cooperation framework, the country is required to depend on its own efforts. Consequently, the local institution's costs incurred for the project (labor costs, rent, consumables used by local researchers, operation and maintenance of machinery and equipment supplied, domestic transportation fees for local researchers, daily allowance for attending a meeting, and other miscellaneous costs) should in principle be covered by its own country.)

Note 4: Limited to external experts, etc. who are not part of the partner country's research team.

Note 5: Limited to students, external experts, etc., and other cases where dispatched to the partner country as JICA experts is not possible.

[See: III.5.(5) (page 29)]

When a private-sector corporation or similar entity submits an application as the research institution, coverage of expenses may differ from the description given above. Consult AMED/JICA in advance for details.

III. Outline of technical cooperation through ODA

Before you apply for this program, please ensure that you fully understand the following since this program is implemented using the ODA framework.

1. What is official development assistance?

Official Development Assistance (ODA) is development cooperation using public funds in the forms of financial support and technical cooperation provided by donor governments or their implementing agencies to recipient countries, aiming to contribute to the promotion of the economic development and welfare of developing countries as well as the stabilization of people's livelihood. Japan joined the Colombo Plan in 1954[12] and at the same time started providing development aids. Japan has been providing economic and technical cooperation to developing countries ever since.

The Japanese government sets forth its philosophy on ODA, the principle of ODA implementation and the framework for planning and implementing its ODA policy in its "Development Cooperation Charter". In the Development Cooperation Charter, having asserted that "global challenges cannot be dealt with by a single country and require united efforts at the regional level or by the international community as a whole," Japan states, "Japan will take the lead in addressing these challenges... Through these efforts, Japan will seek to contribute to building a sustainable and resilient international community."

2. What is technical cooperation?

JICA aims to contribute to the promotion of international development cooperation and sound economic growth of Japan and the international community by contributing to the socioeconomic development, recovery and economic stability of developing countries. JICA's activities include: technical cooperation (acceptance of trainees, expert dispatch, provision of machinery and equipment, etc.), loans and grant aid, the promotion of cooperation activities by Japanese nationals (dispatch of Japan Overseas Cooperation Volunteers, etc.) and international disaster relief.

Technical cooperation provides technical assistance in order for developing countries to develop capacity to address development issues independently and comprehensively through institution building, capacity and institutional development.

A form of technical cooperation is a technical cooperation project, which is key activity to be conducted by choosing the best combination of "acceptance of trainees" "expert dispatch" and "provision of machinery and equipment". JICA pursues best outcomes by engaging in technical cooperation in a planned and comprehensive way from planning through implementation to the assessment of outcomes and by working together with relevant institutions in recipient countries.

The current Science and Technology Research Partnership for Sustainable Development

[12] The Colombo Plan is a regional organization established in January 1950 in a cooperative attempt to strengthen economic and social development of member countries in South Asia, Southeast Asia and the Asia-Pacific region.

(SATREPS) program promotes international joint research between research institutes in Japan and research institutes in ODA recipient countries using the technical cooperation project framework. It is expected to produce promote international joint research projects in the form of ODA projects that aim to utilize research outcomes for the benefit of society.

3. Technical cooperation project flow

(1) From the submission of a request for cooperation to the examination and adoption of a project

JICA's technical cooperation is initiated at the receipt of requests from developing countries.

Japan's ODA involves a process called "request survey", in which a research institute in a developing country wishing to obtain technical cooperation from JICA for a new project to be launched in and after the following fiscal year is invited to submit a request. The actual procedures are as follows: a research institute that wishes to launch a new project under the framework of JICA's technical cooperation prepares a request form, gains approval from competent authority and submits the form through the country's ministry responsible for ODA to the Embassy of Japan in the country. Then, the Embassy of Japan forwards the request form with other documents to the Ministry of Foreign Affairs (MOFA) in Japan.

Upon the receipt of the request, the government of Japan screens the requested project and when it is deemed that the project should proceed, a project selection notice is sent to the recipient country's government and international agreement is made between Japanese government and the recipient country's government (The Embassy of Japan in the recipient country and the recipient country's responsible authority issue a verbal note, etc.)

All requests for cooperation regarding the SATREPS program for fiscal year 2016 must be received by Japan's Ministry of Foreign Affairs (MOFA) in Tokyo no later than 12:00 noon (Japan Time) on Monday October 26, 2015.

Please note that requesting countries' governments usually set an application deadline before the above-mentioned deadline. So please bear that in mind when you coordinate schedules with research institutes in requesting countries. As in the deadline for research proposal through e-Rad system, requests received after the deadline will not be considered.

Regardless of requests submitted for projects up to FY2015, a country wishing to apply for project selection for FY2016 is required to submit a request form again. Please note that requests not received by the deadline will not be considered even if the research proposal has been submitted.

In applying (i.e. submitting a request form), you should share the information before hand with the Embassy of Japan and JICA office in partner country.

(2) Preparing for a Detailed Design study

Based on the above-mentioned international agreement, JICA conducts a Detailed Design

(D/D) study. The D/D study is to examine the current status of possible cooperation field and the background to a request for cooperation. During the process, JICA discusses with the requesting country's related parties on basic project plans, implementation structure and responsibilities of donor and recipient countries, and what was discussed during the meetings is summarized in a Minutes of Meeting (M/M) to be signed by the both parties. The principal investigator who manages the Japan research team (i.e. the project leader) is required to participate in the D/D study. In addition, in the D/D study, the expected outcomes from the planned project are more clearly identified and ex-ante evaluation is performed to examine the appropriateness of the project comprehensively.

If the study discovers significant issues concerning the requesting country's implementation structure or responsibilities, etc. and it is judged that they would make it difficult to implement the project as planned, significant revisions to the plans are required and it may be necessary to consider abandoning the plan altogether.

(3) Signing a Record of Discussions (R/D)

After completing the D/D study, JICA prepares a Record of Discussions (R/D) to be signed by JICA and an implementing agency of the recipient country, while going through the approval process. The R/D is an official agreement on the implementation of a project, specifying the details of project activities and necessary measures.

(4) From the commencement to the end of a project

In accordance with a cooperation period stipulated in the R/D, a project is launched. Based on the R/D, inputs including expert dispatch are provided to meet project objectives.

Furthermore, during the project implementation period, the project is monitored on a regular basis to check progress on expected outcomes. (See Section 7 for details.)

The flow of the above-mentioned processes from (1) to (4) is summarized in Figure 2 on page 8.

(5) Points of note regarding project implementation

A project provisionally accepted may take time before the R/D is signed (please refer to Table 3 for a typical timeframe between the provisional selection of a project and the signing of the R/D.). JICA's expenses may be incurred only after a project contract is signed between JICA and the principal investigator's institution after the signing of the R/D. In addition, please note that JICA's spending shall be based on the R/D signed between JICA and the research institute in the recipient country concerned and JICA cannot fund any expenses associated with a project under this program before an R/D is signed and after the cooperation period specified in the R/D is over.*

* See (3) "Preparations for implementing selected projects" on page 8.

	Typical timeframe[13]
Prepares for a Detailed Design study (meetings, contract with consultant (members responsible for evaluation analysis), formalities for dispatching research group)	About 2.5 months
Conducts the Detailed Design study (local survey), signs M/M and reports on the study in Japan	About 0.5 - 1 month
JICA performs ex-ante evaluation	About 1.5 - 2 months
The R/D is signed (between the head (Resident Representative) of JICA overseas office and competent authority or the head of research institute in the recipient country)	About 0.5 - 2 months
Prepares for launching a project, including procedures for approving project implementation, the Agreement and project contract are signed between JICA and the principal investigator's institution, selection and dispatch of project coordinators[14].	About 2 - 3 months
Project commencement	About 7-10 months after the project is provisionally accepted

Table 3.Timeframe from the provisional selection of projects through the signing of an R/D to the launch of the project

(6) Miscellaneous

For details on project implementation, please refer to the following:

JICA "Science and Technology Research Partnership for Sustainable Development (SATREPS) project Jisshino Tebiki (only in Japanese)"

http://www.jica.go.jp/activities/schemes/science/form/pdf/manual_SATREPS.pdf

4. Framework for implementing a technical cooperation project

(1) Japan's implementation structure

The Embassy of Japan, JICA overseas office and a Japanese research team work together in the recipient country. A research team consists of the project leader (i.e. the principal investigator and the representative of the researchers who leads the research team) and project coordinators* who support the research team and researchers responsible for their respective research fields.

(* See Section 6 for project coordinators.)

(2) Recipient country's implementation structure

[13] Actual time period differs depending on projects.

[14] Project coordinator is explained in detail in Section 6.

Participants from the recipient country will be: ministry and agency responsible for ODA (the ministry of foreign affairs, the ministry of finance, the ministry of planning, etc.), ministry and agency controlling research institutes (the ministry of higher education, the ministry of agriculture, the ministry of health, the ministry of industry, etc.) and research institutes (university, research institute, etc.). The recipient country's team consists of: project director who bears the ultimate responsibility for the project, project manager who has the overall responsibility for managing on-site works and essentially serves as the head of the counterparts, and counterparts, i.e. staff who conduct project activities together with the Japanese team.

(3) Joint implementation structure between Japanese team and recipient country's team

JICA's technical cooperation project is conducted jointly with recipient countries. Recipient country ownership is important in promoting the country's independence and development. Recipient country's principal investigator's responsibility as project manager is as serious as the Japanese principal investigator's responsibility as project leader. (See Figure 5.) Furthermore, Joint Coordinating Committee (JCC) is established and meets on a regular basis to discuss and solve issues so that joint research is conducted smoothly. JCC, as a general rule, consists of related parties from the Japan and recipient country's sides (the Japan side: the Embassy of Japan, the head (Resident Representative) of JICA overseas office, the principal investigator, researchers, project coordinators, etc.; the recipient country's side: ministry and agency responsible for international assistance, ministry and agency controlling research institutes, related authorities, research institutes, etc.). Given that this program is international joint research, JCC shall be operated jointly by the Japan and recipient country's sides.

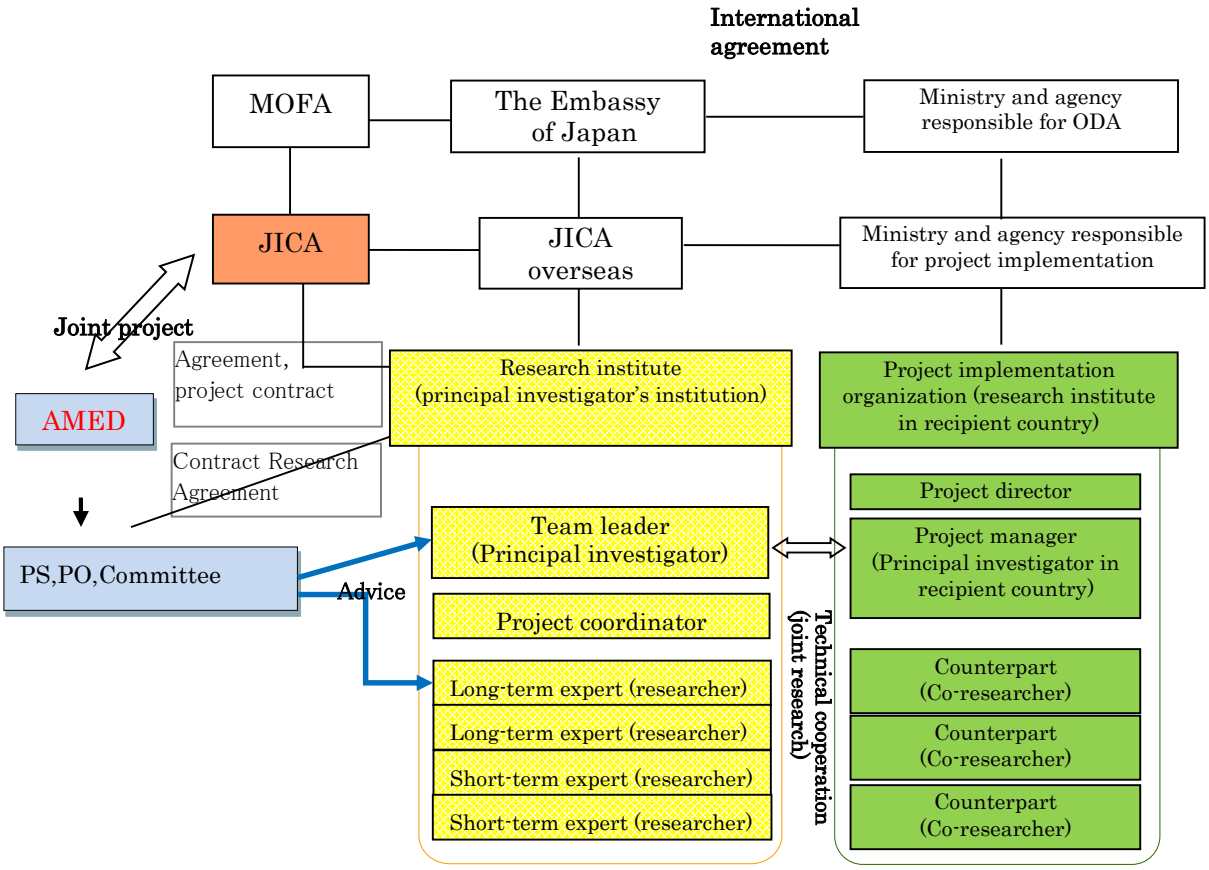

Figure 5. The framework for implementing a technical cooperation project (example)

5. Contract between JICA and the principal investigator's institution

The research institute the principal investigator of the selected project is affiliated with signs a Contract Research Agreement with AMED and is also required to sign an "agreement regarding the implementation of technical cooperation under the framework of SATREPS" (hereinafter referred to as "the Agreement") and a project contract with JICA. The Agreement specifies duties and responsibilities of JICA, the principal investigator and the principal investigator's institution regarding the selected project. The Agreement is intended to help clarify the research institute's roles and responsibilities in conducting joint research in developing countries.

Please note that the Agreement has to be signed per research institute that the principal investigator is affiliated with. The research institute that has already signed the Agreement for other SATREPS project is not required to newly sign the main part of the Agreement, but is required to prepare an appendix that defines the scope of application.

For the forms of the Agreement (the main part), the appendix and project contract, please refer to the following websites (only in Japanese):

The main part of the Agreement: http://www.jica.go.jp/activities/schemes/science/form/pdf/A_1.pdf
Appendix: http://www.jica.go.jp/activities/schemes/science/form/pdf/A_2.pdf
Project contract: http://www.jica.go.jp/activities/schemes//science/form/pdf/B_1.pdf

Here explains the Agreement and project contract.

(1) The Agreement

The Agreement is signed between the principal investigator's institution and JICA to stipulate the both parties' duties and responsibilities, etc. The responsibilities of the principal investigator's institution include: dispatch of Japanese researchers to the recipient country, invitation of the recipient country's researchers to Japan, procurement of machinery and equipment and workplace health and safety promotion. In practice, although consideration is given to the investigator's institution' rules and regulations including those on accounting, where the principal investigator's institution carries out its responsibilities, the organization's rules and regulations apply to such activities. Any intellectual property rights arising from the project shall belong not to JICA but to the research institute concerned.

(2) Preparing a project plan

In launching a project, the both parties discuss to prepare a comprehensive project plan and annual project plan including budget. Based on the annual plan, a review is performed to ascertain the progress of the project in the middle of the project and to revise the plan accordingly. Although it is called "annual" plan, a period covered in the annual plan is not necessarily limited to one fiscal year and can be over several fiscal years. Where a project contract includes the procurement of machinery and equipment, ensure that a proposed delivery date falls within the project period covered in the annual plan.

(3) Project contract

The project contract stipulates the content of a project and who is responsible for expenses and accounting, and is signed for every annual plan between JICA and the principal investigator's institution. Expenses may be incurred only after the project contract is signed. The period to be described in annual plan is not necessarily limited to one fiscal year and the project contract can be signed for a period of several fiscal years.

Based on the Agreement and project contract signed, the principal investigator's institution shall incur expenses and settle them within the project contract period in accordance with the organization's rules and regulations. The research institute can receive advance payments for its estimated expenses from JICA when it is halfway through the contract period (The first advance payment may be up to the half of the contract amount). The principal investigator's institution is responsible for managing and accounting for the advance payments received with documentary evidence (e.g. receipts). The organization is required to submit a report on spending, supporting evidence (e.g. copy or certified copy of original documents, etc.) to JICA. For rules and regulations concerning administration, such as expenditure items, estimation, advance payment based on the

estimate, settlement, etc., see "SATREPS Jigyo Keiyaku Guideline (only in Japanese)" on the JICA's website:
http://www.jica.go.jp/activities/schemes/science/form/pdf/manual_contract.pdf

(4) Project budget limits

ODA project expenses are approximately JPY 60 million per project per year, and are limited to a maximum of JPY 300 million yen over a 5-year project. This includes spending regarding the dispatch of overseas researchers (short and long term), acceptance of foreign researchers, costs associated with the provision of machinery and equipment (e.g. purchase cost, transportation to destination, insurance premium, the procurement of machinery and equipment in the recipient country, etc.), direct administrative cost and costs of local research activities which are managed by project coordinators. Consequently, the total amount managed by the principal investigator's institution under the project contract will be less than JPY 300 million yen (for a 5-year project).

However, costs concerning the dispatch of project coordinators and that of research groups (for the D/D study, operation guidance, mid-term review, terminal evaluation, etc.) are not included in the above-mentioned amount, and JICA directly bears the expenditures as need be.

(*For project coordinator, see Section 6.)

(5) Expenses that may be incurred

JICA project expenses are in principle used to cover expenditures for joint research in the recipient country. Of such expenses, the contract amount as agreed in the project contract may only be used to cover the following costs of activities for the purpose of successful joint research as described in the R/D agreed between JICA and the research institute in the recipient county and the R/D-based comprehensive plan or annual plan: 1) costs of the dispatch of overseas researchers (Japanese researchers) for overseas research15, 2) costs of acceptance of foreign researchers[15] (researchers in the recipient country), 3) costs of supplying machinery and equipment needed for joint research and 4) direct administrative cost in Japan (Table 4).

1. Costs of the dispatch of Japanese researchers for overseas research[15] from Japan to recipient country	Air fare, daily allowance, accommodation cost, sundry expenses, etc. (For those who are dispatched for more than one year, travel cost for dispatch and return, transfer allowance, other allowances, etc.)
2. Costs of acceptance of foreign researchers (researchers in the recipient country)	Air fare, daily allowance, accommodation cost, training expenses, etc. Acceptance period is classified into two: short-term (less than one year) and long term (one year and over).[16]

[15] Undergraduates and postgraduates cannot be dispatched as overseas researchers to a beneficiary country even if he or she is a member of Japanese research team.

[16] Since foreign researchers (on short- and long-term dispatch) shall not be accepted beyond the joint research

3. Costs of supplying machinery and equipment needed for joint research	Purchase cost, transportation cost and cost for set-up and adjustment. Machinery and equipment to be used in Japan are not included, and the costs are covered under the JST's Contract Research Agreement, etc.
4. Administrative cost in Japan	Labor costs of part-time administrative workers, the cost of office supplies, etc. (excluding expenditures on research supplies).

Table 4. Expenditures to be shouldered by JICA

(6) The principles of the recipient country's responsibility to shoulder expenses

With focus on the recipient country's self-help efforts and sustainable development after the project is completed, ODA projects generally require the recipient country to shoulder certain expenditures. Please note that, in line with these practices, JICA does not offer financial support for all expenses in this program, which is conducted as part of international cooperation through ODA, but requires the recipient country to shoulder some expenses to promote its self-help efforts. Examples of expenditures to be shouldered by the recipient country are as follows:

a) Labor costs of the researchers at research institute(s) in the recipient country and the related parties, and staff employed directly by the research institute(s).
b) Rent and utility cost of project office.
c) Transportation fees, travel expenses (daily allowance and accommodation cost) and daily allowance for attending a meeting arising from the domestic business trips required for regular work or research by researchers at the research institute(s) and the related parties in the recipient country.
d) Costs of equipment, office supplies and facilities used for research activities, and costs of the operation and maintenance of machinery and equipment supplied.

Note that JICA requests the recipient country that it should shoulder expenses for facilities and equipment needed for research and utilize existing facilities and equipment, in order to inject resources on key focus areas.

(7) Expense management

With regard to ODA project expenses, except for expenses in the recipient country that JICA directly shoulders, in accordance with the Agreement signed between the Japanese research institute and JICA, costs of execution of the project contract to be shouldered by the Japanese research institute are managed by the principal investigator's institution.

period (i.e. project implementation period as described in the R/D), the principal investigator's institution is kindly requested to carefully prepare acceptance of foreign researchers from the planning phase.

In JICA's ODA technical cooperation projects, no fund is directly given to the recipient country, and no financial assistance is given to such activities by research institutes in the recipient country.

Especially, since there has been some misunderstanding of JICA's policy of not directly giving project funds to research institutes in the recipient country, please ensure that the partner country is given an explanation beforehand.

6. Project coordinator

JICA generally invites the public to apply for the position of project coordinator, and ensure that the selected project coordinators start working at the earliest possible date after the R/D is signed. Project coordinator's responsibilities include: expense management (including budget implementation) in the recipient country as described earlier, arrangements with governments in the recipient country regarding the dispatch of overseas researchers (Japanese researchers) and acceptance of foreign researchers (researchers in the recipient country) and communication with the local JICA office regarding the procurement of machinery and equipment. The project coordinator is a member of the Japanese project team working together with researchers and those engaged in joint research, while playing an important role in managing expenses in the recipient country. JICA requires the project coordinator to share information with a representative of researchers and other team members to ensure that the project is conducted smoothly and properly.

7. Project evaluation

As shown in Figure 2 on page 8, the technical cooperation project is monitored on a regular basis to check the progress and is reviewed jointly with the recipient country's related parties during the project and when the project is completed (i.e. usually three weeks to two months prior to the completion of the project). Project monitoring and evaluation are basically conducted by people from Japan and the partner country involved with the project (although, in some cases, consultants may be sent from Japan in order to conduct an evaluation). As evaluations during the period of a technical cooperation project (mid-term reviews) are performed as part of the overall management of the project, the Japanese research institutions and partner country research institutions etc. are active participants in such evaluations.

For evaluation of other JICA projects, see the following website:

http://www.jica.go.jp/activities/evaluation/guideline/ (Japanese)

8. Contact concerning ODA

(1) JICA headquarters

Office for Science and Technology Cooperation of the JICA headquarters acts as a point of

contact for inquiries concerning this project. For inquiries on framework of ODA technical cooperation, please contact:

Office for Science and Technology Cooperation, Japan International Cooperation Agency (JICA)

E-mail: eigst@jica.go.jp

(2) JICA: domestic and overseas offices

A list of domestic offices

http://www.jica.go.jp/about/structure/domestic/index.html (Japanese)

http://www.jica.go.jp/english/about/organization/domestic/index.html (English)

A list of overseas offices

http://www.jica.go.jp/about/structure/overseas/index.html (Japanese)

http://www.jica.go.jp/english/about/organization/overseas/index.html (English)

Before contacting us, it will be helpful for you to clarify your research concept and plan through discussions with researchers in the beneficiary country, so that we can deal with your query promptly and efficiently. Please note that JICA domestic and overseas offices do not respond to inquiries on the content of public invitations.

(3) Useful websites on ODA and technical cooperation

Ministry of Foreign Affairs of Japan - ODA

http://www.mofa.go.jp/mofaj/gaiko/oda/index.html

"ODA Kunibetsu Chiikibetsu Seisaku/Joho" (policy and information on ODA by country and region) (Only in Japanese)

(The website offers information for you to check whether or not your research field is in line with Japan's ODA policy in the beneficiary country and related region.)

http://www.mofa.go.jp/mofaj/gaiko/oda/region/index.html

"JICA "Technical cooperation project"" (the website explains JICA ODA technical cooperation projects in general.)

http://www.jica.go.jp/project/index.html

"JICA Science and Technology Cooperation on Global Issues" (including SATREPS)

http://www.jica.go.jp/activities/schemes/science/index.html

"JICA Toshokan Zousho Kensaku" (JICA Library search)

(When you search by project name, Adobe PDF documents on SATREPS report publications are returned in the search result.)

http://libopac.jica.go.jp/

Terminology of ODA

Ministry and agency responsible for ODA:

The partner/requesting country's ministry and agency responsible for international assistance. The ministry and agency responsible for ODA differ depending on country, - for instance, the ministry of foreign affairs, the ministry of finance, the ministry of planning, etc.-

Request for technical cooperation:

A request from the government wishing to obtain technical cooperation from JICA (the ministry and agency responsible for ODA) to the government of Japan. The ministry of foreign affairs of Japan and JICA receive requests for technical projects expected to be launched for the next fiscal year onwards. The request for technical cooperation from the requesting country's government is submitted to the ministry of foreign affairs in Japan through the Embassy of Japan in the requesting country.

International agreement:

An agreement that is entered under international law by country or international organization as actor, establishing the respective parties' rights and obligations. The international agreement is classified into two: "a treaty" that has to be ratified by the national Diet and "an administrative arrangement" that is closed only by the government to "manage foreign affairs". In general, the international agreement has to be approved by the cabinet. In addition to the official international agreement mentioned above, those agreed by the ministry of foreign affairs without the cabinet's approval are also considered as a kind of the international agreement in practice, and this is the international agreement referred to in this program.

Technical cooperation project:

Activities that aims to address issues in developing countries and are conducted by combining three cooperation tools, i.e. "expert dispatch", "acceptance of trainees" and "provision of machinery and equipment", as a project within a certain timeframe to achieve objectives set.

Expert dispatch:

Dispatch of personnel from Japan to the recipient country to guide counterparts (administrators, engineers related to technical cooperation project) in the transfer of technology, policy and project management and so forth. In this program, Japanese researchers who conduct research in the recipient country as JICA experts are referred to as "overseas researchers", and those who are dispatched for a period exceeding one year per dispatch (i.e. From departure date to return date) are referred to as "long-term overseas researchers" and those who are dispatched for a period not exceeding one year as "short-term overseas researchers". Procedures concerning the dispatch of short-term overseas researchers are taken by the principal investigator's institution (Expenses for dispatching short-term overseas researcher are included in the contract amount described in the project contract signed between JICA and the research institute). However, procedures for

dispatching long-term overseas researchers are taken directly by JICA (and expenses for their dispatch are not included in the contract amount described in the project contract signed between the parties concerned).

Acceptance of trainees:

A form of capacity development initiative on the transfer of expertise and technology in various fields through acceptance of counterparts from developing countries as trainees in Japan or a third country. In this SATREPS program, researchers invited for joint research from recipient countries are referred to as "foreign researchers", who are accepted as JICA trainees.

Ex-ante evaluation:

Evaluation on the appropriateness of the proposed cooperation, which is conducted to examine priorities and necessities prior to the commencement of cooperation and to specify the content of cooperation and clarify expected outcome. Evaluation indicators set in ex-ante evaluation are used as criteria to measure the progress and effects of the cooperation throughout the life of a project.

Local cost:

Costs to be shouldered by the recipient country in implementing and managing the cooperation project. Specifically, local cost includes, but not limited to, personnel expenses, land acquisition cost, transportation cost concerning machinery and equipment provided, recurrent cost (i.e. the regular cost incurred repeatedly, - for instance, costs of the operation and management of facilities built or machinery and equipment provided in the course of cooperation, or employment costs.)

Capacity development (CD):

Developing countries' efforts to strengthen their abilities (capacity) to address their respective development issues. JICA serves as a facilitator that supports developing countries' capacity development.

http://libopac.jica.go.jp/

For instance, type in "capacity" in the above-mentioned JICA library search, you will get results containing the word, including the "Capacity Assessment handbook" (only in Japanese) as shown below.

http://libopac.jica.go.jp/images/report/P0000245021.html

IV. Proceeding with research and development after selection

1. Responsibilities of principal investigators after selection (provisional selection)

The following responsibilities will take effect for the principal investigator (etc.) upon provisional selection.

(1) Leading and managing the research

- The principal investigator must assume responsibility for the entire international joint research for the full duration of its implementation. The principal investigator, based on his or her own research concept, must be able to form a research team best suited to the implementation of the research subject, and exercise leadership while engaging directly in the research subject. Under this program, research teams may be formed including researchers affiliated with other research institutions in Japan (including private enterprises, etc.) and researchers specializing in other research fields, including the humanities and social sciences, and conduct joint research with research institutions in developing countries.
- The principal investigator must act as the leader of the project under JICA technical cooperation to oversee and liaise with the counterpart and others to coordinate the planning and implementation of Japan's inputs (including experts dispatch, provision of machinery and equipment, acceptance of trainees), reporting regularly to AMED/JICA, submitting to AMED/JICA's joint project appraisal, and appropriately managing the execution of the project, and must manage and control the SATREPS project as a whole. As a rule, unilateral termination of the research activity at the principal investigator's wishes midway through the implementation period will not be allowed.
- After provisional selection, the principal investigator must be able to attend meetings in Japan with AMED/ JICA (three to five times) and to visit the prospective ODA recipient country in a part of JICA's Detailed Design Study (approx. 10 to 14 days during the period between August and October 2016).
- The principal investigator shall be responsible for research, for planning and implementation of inputs, and in the case of a research team being formed in Japan, for that research team. In planning and implementing the dispatch of joint researchers and provision of machinery and equipment, the principal investigator shall take particular care to ensure full communication with the counterpart country, and to secure roles for young researchers from both Japan and the partner country. The principal investigator shall also attend meetings of the Joint Coordinating Committee (JCC) held in the developing country to report on progress of the research and discuss operation and management.

[See: III.4. (page 25)]

- The principal investigator shall submit reports and other materials required by AMED/JICA and submit to project appraisal by AMED/JICA. The principal investigator shall also report

on the progress of research whenever requested by the AMED/JICA.

- The principal investigator shall be responsible for consensus-building, communication and coordination with administrative offices and other entities within the research institution.
- This fund is supported by the Government of Japan. Therefore, the principal investigators are encouraged to actively publicize research outcomes both domestically and internationally while taking into consideration the handling of intellectual property rights.
- If any result achieved through the research project is to be publicized in a paper or other form or presented at a conference or other venue, it should be indicated that the outcome has been achieved with support of the AMED/JICA Science and Technology Research Partnership for Sustainable Development (SATREPS).
- Taking into account that this is an international joint research initiative, the principal investigators are required to actively acquire intellectual property rights where that is not to the disadvantage of the partner. In principle, applications for intellectual property rights shall be conducted by the institution on the basis of the Contract Research Agreement.
- When the principal investigator participates in workshops or symposia organized by AMED/JICA, he or she is expected to make a presentation of research outcomes.

(2) Compliance with research agreement etc.

- Each principal investigator shall comply with the research agreement between AMED and research institutions, other AMED rules and regulations, JICA's Agreement for Technical Cooperation and project contract, the R/D concluded between JICA and counterpart research institutions, and MOU related to the joint research concluded between research institutions.
- The principal investigator has a responsibility to maintain an awareness that the AMED research expenses are provided by taxpayers, and to administer them fairly, appropriately, and efficiently.

(3) Compliance with research ethics

- To prevent misconduct, researchers need to have completed a research ethics course before participating in an AMED project. Details will be provided by AMED (scheduled for mid-FY2015). If researchers have not completed the research ethics course, payment of research expenses may be halted until completion of the course is confirmed.
- After a research proposal has been selected, persons with responsibility for implementing the research (principal investigator and co-researchers) will, via an explanatory meeting held by AMED, confirm compliance with implementing the research fairly and appropriately, and notify AMED in writing that compliance has been confirmed.
- The principal investigator is responsible for drafting and implementing the research plans, and for the whole research team. In addition to submitting required resports and cooperating with evaluations of the project, the principal investigator must also, respond to requests for progress reports as required by the PS or PO, etc.
- The principal investigator must appropriately manage the research expenses for the whole

of the research team (including creating and monitoring progress of spending plans) in conjunction with his or her research institute. Similarly, co-researchers affiliated to a research institute with which AMED has concluded a Contract Research Agreement must appropriately manage the research expenses for their institute (including creating and monitoring progress of spending plans) in conjunction with their institute.

- Principal investigators are required to give consideration to the research environment and the working environment and conditions for research participants in their own group, particularly for researchers and others employed under research expenses. They are also requested to provide active assistance to young post-doctoral researchers under research expenses to help them to secure varied career paths both in Japan and internationally.
- Principal investigators are required to take a proactive approach to "Public Dialogue in Science and Technology" in order to gain understanding and support of the general public for science and technology. Involvement in the "Public Dialogue in Science and Technology" is one of the items evaluated in mid-term evaluation and ex-post evaluation.
- Note that AMED will submit required information, including the title of the research project, participating researchers and research expenses, to the Cross-ministerial R&D Management System (e-Rad) and to the Cabinet Office. The principal investigator etc. will also be required to provide information.
- Principal investigators are required to facilitate project evaluations, surveys of accounting practices by AMED, or government accounting audits, etc.

2. Responsibilities of research institutions after selection (provisional selection)

(1) Responsibilities of the principal investigator's research institution and the institutions to which co-researchers are affiliated

- The research institution must secure a structure for conducting the research. Also, the director of the institution must give maximum consideration to the status of the principal investigator during the term of the research. The director of the institution is considered to be the president or chair of the board or other person with responsibility for the whole of the institution, or in the case of entities such as private-sector corporations, it should be a person in a position of responsibility to ensure the required support and setup throughout the period of research. It does not normally include executives or management at a lower level in the organization, such as general managers, directors of divisions or centers, or heads of departments).

- Management of AMED research expenses and JICA project expenses
  The institute has a responsibility to maintain an awareness that AMED research expenses and JICA project expenses are provided by taxpayers, and to administer them fairly, appropriately, and efficiently (including creating, implementing, and monitoring implementation of spending plans). The institute must also maintain familiarity with and

appropriately manage the research expenses for the whole of the research team. The principal investigator and main research collaborator are required to give consideration to the research environment and the working environment and conditions for research participants who are members of their own group, particularly for researchers and others employed using research expenses provided under this program. Furthermore, the institute is required to facilitate surveys of accounting practices by AMED/JICA, or government accounting audits, etc.

- Research institutions, as the bodies which implement ODA technical cooperation, shall be required to provide support for activities (e.g. procedures to request payment of funds that have been awarded to the principal investigator's institution) in accordance with the Agreement, project contract, and R/D, etc. with JICA. Only the principal investigator's institution will sign the Agreement with JICA; however, other research institutions involved in the research project are required to provide support for activities in accordance with the R/D, etc. The principal investigator's institution, acting as the principal investigator's institution for the Japan side, must oversee the activities of Japan side researchers in the partner country to ensure that they are conducted appropriately, and in addition, concerning the Agreement with JICA, must handle accounting operations appropriately in accordance with the project contract and the project contract guidelines stipulated by JICA (including reporting to JICA as required).

- Apart from the R/D, the principal investigator's institution must sign a Memorandum of Understanding (MOU) with the research institution in the partner country regarding the international research collaboration. The MOU should include the treatment of intellectual property rights, handling of confidential information, publication of research results, warranty and indemnification, and access to and transfer of the partner country's bio-resources.[10] A draft of the document should be checked by AMED before signing. It is best to sign and exchange MOU simultaneously with the signing and exchange of R/D between JICA and the institution(s) of the ODA recipient country in order to match the content with the R/D. All researchers and members in the research team in Japan shall observe the MOU signed by the principal investigator's institution.

- A research institution entering a Contract Research Agreement with AMED wishing to include researcher(s) not affiliated with that institution must exchange appropriate documents between the two institutions in order to ensure compliance with the AMED Contract Research Agreement, Joint Research Agreement and content of R/D. (e.g. When a researcher affiliated with University B is to participate on a research team at University A

[10] "Genetic resources" means genetic material of actual or potential value (any material of plant, animal, microbial or other origin containing functional units of heredity). (Convention on Biological Diversity, Article 2.) Virtually all plant, animal, and microbial life on earth is classified as a genetic resource.

which has entered a Contract Research Agreement with AMED)

(2) Considerations regarding ethics

- When applying for the program, the research institution should have received sufficient explanation and given approval in advance.
- The research institution (institution to which the principal investigator of a selected project or co-researchers are affiliated) must maintain an awareness that the project is implemented using public funds, and must also maintain compliance with the laws etc. of the countries involved, and endeavour to ensure the appropriate and efficient implementation of the project. In particular, the institution is required to take measures to prevent misconduct in research activities or inappropriate accounting practices. As one of the measures to prevent misconduct, AMED requires researchers participating in a project to have completed a research ethics course. Research institutes are expected to provide education in research ethics to researchers. Details will be provided by AMED at a later date (scheduled for mid-FY2015). If such researchers do not complete a designated research ethics course, despite a reminder from AMED, the institution may be instructed to halt payment of part or all of the research expenses. Institutes are required to halt payment of the research expenses as instructed, and not to recommence payment of the research expenses until further instructions are received.
- The research institute is responsible for payment and management of contract research expenses, with consideration for flexible and efficient usage of the research expenses. Notwithstanding, the institute is required to follow rules established specifically for this program in accordance with the Contract Research Agreement and the Contract Research Agreement Administrative Procedures established by AMED. For matters that are not stipulated, it is acceptable for institutions that receive KAKENHI funding to treat such matters as if the research expenses were KAKENHI.
- Research institutes must submit required resports to AMED, and facilitate surveys of accounting practices by AMED or government accounting audits, etc.
- In order for the research to proceed effectively, cooperation is necessary to ensure the smooth progress of procedures for signing the Contract Research Agreement.
- On the basis of the Contract Research Agreement, necessary reports must be made to AMED when applying for and after obtaining intellectual property rights vested in the research institution in accordance with Article 19 of the Industrial Technology Enhancement Act (Japanese version of the Bayh-Dole Act). Prior approval from AMED is necessary for transfer or grant of exclusive license.
- Research institutions must either exchange contracts etc. with researchers participating in contract research to stipulate that intellectual property rights arising in association with the implementation of such research shall be vested in the research institution, or establish staff regulations stipulating the same.
- Before a project is selected or before signing the Contract Research Agreement and during

the period of the agreement, research institutions may be inspected to survey and ascertain the state of their administrative processes and finances. Where considered necessary, this may may result in a requirement for compliance with a particular form of contractual relationship stipulated by AMED. It may also lead to postponing the signing of the contract agreement, or if the agreement period has already commenced, to measures such as reducing the research expenses, discontinuing the research, shortening the agreement period, or termination of the agreement.

- In cases where signing the Contract Research Agreement is not possible, it may not be possible to conduct the research at the proposed research institution. In such a case, there may be a requirement to take action such as reviewing the implementation structure.
- When a national or public research institute concludes a Contract Research Agreement, the institute must take responsibility for completing the procedures for necessary measures etc. before the commencement of the Contract Research Agreement. If, after concluding the Agreement, it is discovered that the measures have not been implemented, it may be necessary to revoke or terminate the Contract Research Agreement and take measures for the return of all or part of any contract research funds disbursed.

3. Treatment of research outcomes

- This fund is supported by the Government of Japan. Therefore, institutes are encouraged to actively publicize research outcomes both domestically and internationally while taking into consideration the handling of intellectual property rights.
- When research outcomes are presented in academic papers etc., it should be indicated that the outcome has been achieved with support of this program.
- When AMED organizes domestic or international workshops or symposia, a presentation of research outcomes may be required.
- The research institution is required to actively acquire intellectual property rights. Based on the Contract Research Agreement and subject to conditions including compliance with Article 19 of the Industrial Technology Enhancement Act (the Japanese equivalent of the Bayh-Dole Act), patents and other intellectual property rights arising from the research can accrue to the research institution. This provision is not applied to research institutes outside Japan.

4. Project evaluation

Evaluation of projects is handled jointly by collaboration between AMED and JICA. AMED project evaluation follows the procedure set out in guidelines that are still to be finalized. JICA mid-term evaluation is performed through periodical monitoring as part of JICA's project management processes. The following types of evaluation are conducted by AMED.

a. Mid-term Evaluation, conducted in or about the middle year of the period of international joint research (the third year of a five-year project)

b. Terminal Evaluation, conducted before the end of the research period

c. Follow-up Evaluation, conducted a certain period after the research period has ended (JICA uses the term "ex-post evaluation" for follow-up evaluations)

The AMED Evaluations are published as reports and made available online. The findings of the Mid-term Evaluation in particular are used as reference for subsequent adjustments to research plans and allocation of resources (including changes to budgets for research expenses and to the composition of the research team). In some cases, this may lead to measures such as adjustment between research projects or termination of a Contract Research Agreement. For research projects of less than five years, the necessity for conducting a Mid-term Evaluation will be decided following discussion between the people and entities involved in the specific project.

For details of evaluation by JICA, see III. Outline of Technical Cooperation through ODA Section 7. Project Evaluation.

- The PS and POs conduct mid-term evaluation to familiarize themselves with the progress of the research and research outcomes. Also, depending on the characteristics of the research and the stage of development, a terminal evaluation is conducted at an appropriate time as soon as possible after the end of the project or before the project ends.
- In addition to these evaluation processes, the progress of the research may be ascertained whenever necessary.
- The findings of the Mid-term Evaluation, Terminal Evaluation etc. are used as reference for subsequent adjustments to research plans and allocation of resources (including changes to budgets for research expenses and to the composition of the research team). In some cases, the findings may lead to early termination (discontinuation).
- A certain period after the research period has ended, Follow-up Evaluation may be conducted regarding the development and application of research outcomes, and ongoing activity by research participants. Based on the findings of the Follow-up Evaluation and other considerations, AMED may appoint external experts to conduct Follow-up Evaluations.

Q&A

For questions about the Cross-ministerial R&D Management System (e-Rad), including registration of affiliated research institutions or researchers, and instructions for use of e-Rad, visit the e-Rad portal site:

http://www.e-rad.go.jp/ (Japanese)

1. Q&A about the SATREPS program objectives and purposes

Q: How many projects have been selected so far, and what sort of projects are they?

A: 12 projects were selected in FY2008, 20 in FY2009, 17 in FY2010, 10 in FY2011, 8 in FY2012, 10 in FY2013, 10 in FY2014, and 12 in FY2015, giving a total of 99 international joint research projects. Details of these projects are given in the SATREPS brochure and at the following website:

http://www.jst.go.jp/global/english/kadai/index.html

Q: How should I gain an understanding of the developing country's needs?

A: Under the SATREPS program, one of the key perspectives applied when selecting projects is whether a research proposal is in line with the needs of the developing country. Proposals are expected to show a proper understanding of the partner country needs, obtained through means such as prior contact and interaction in a research context. One useful reference is the Country Assistance Policy which has been formulated for some countries. Country Assistance Policies are published on the MOFA website:

http://www.mofa.go.jp/policy/oda/assistance/index2.html

Furthermore, in order to conduct international joint research with the aim of future application of outcomes, a systematic approach is expected in the partner country, bringing in partner country government agencies, etc. The selection process takes into account whether the structure is adequate for that purpose. When setting up a project, we also recommend liaising in advance with the Japanese embassy in the partner country and with the local JICA office.

Q: Does having the project linked to ODA mean that the principal investigator needs to be stationed in the partner country (long term overseas dispatch)?

A: The principal investigator does not necessarily need to be stationed in the partner country, but it is considered important for the principal investigator to visit the partner country and manage the project on the ground. Technical cooperation projects allow for flexibility, including dispatch on a short-term shuttle basis. Nevertheless, in order to ensure that the activities in the partner country proceed smoothly and to enhance the effectiveness of the project, it is of course desirable for Japan-side researchers to be either be stationed in the partner country full time or close to full time. When planning the dispatch of researchers to the partner country, take into consideration that the Japan-side researchers are required to contribute through the joint

research to developing the partner country's self-reliant research and capacity development, and that as project director the principal investigator is responsible for the dispatch of researchers overseas as part of the international joint research.

Q: Is it necessary to station Japan-side research participants other than the principal investigator in the partner country?

A: It is not necessarily the case that Japan-side researchers have to be stationed in the partner country, but an appropriate strategy is essential. In order for the joint research to proceed smoothly in the partner country (a developing country), and because the purpose of the project is capacity development of the developing country through joint research, if researchers are not stationed overseas, it is necessary for them to be regularly dispatched to the partner country and that their emphasis is on their research overseas, such as by spending three months in the partner country followed by one month back in Japan. Projects are selected through an overall evaluation that includes consideration of the Japan-side implementation structure described in the proposal.

Q: Can a researcher affiliated with a research institution in a third country (not the partner country) participate in the project?

A: In principle, a researcher affiliated with a research institution located in a third country cannot participate in the project. However, such researchers can be invited to workshops, etc. Moreover it is possible for such a researcher to become affiliated (as a visiting researcher, etc.) with an institution participating in the joint research (including the principal investigator's institution), and participate in the research under the auspices of that institution.

Q: Is there a restriction on the number of SATREPS program applications that can be made per institution?

A: There is no restriction on the number of applications that can be made per institution. If multiple applications are made from a single institution, each set of research proposal documents is required to include a separate written approval from the director of the institution (president or chair of the board, etc.).

2. Q&A about operation of the parts of the program handled mainly by AMED (Q&A mainly about selection and implementation of research within Japan)

(1) Application requirements

Q: What requirements do private-sector companies need to satisfy to apply for the program?

A: The requirements include the company being incorporated in Japan.

Q: Can a private-sector company be a principal investigator's institution?

A: Yes, it can. However, the following point needs to be taken into account.

- A company conducting activities with a public nature can become the principal investigator's institution for a project. Even if the company is not conducting activities with a public nature, it can still become the principal investigator's institution if it makes a joint proposal with a university or similar institution.

Q: What points need to be borne in mind when a private-sector company participates?
A: The following points need to be borne in mind.

- Before AMED can conclude a Contract Research Agreement with a company or similar entity, it screens the company to determine whether the contract is possible and what sort of form the contract should take. As a result of this screening, AMED may require compliance with a particular form of contractual relationship. If the company's state of finances is markedly unstable, the contract may be judged unfeasible, preventing the research project from being conducted at the proposed research institution. In such a case, the proposer may be required to take action such as reviewing the implementation structure.
- The SATREPS program is based on the premise of joint research with a partner country. In addition to implementing the research, there are requirements for publication of outcomes and sharing of intellectual assets, and for outgoing transfer of samples and information, etc. The company is requested to confirm in advance with the partner country side that entering into such a relationship with private-sector affiliated researchers is not a problem.
- Salary etc. for the person in charge of the research (principal investigator/lead joint researcher) cannot be covered as direct expenses.
- If certain conditions are satisfied, it is possible to cover salary etc. for other research participants (members involved with a specific research item).
- When using ODA costs to procure goods, in principle a competitive procurement process should be used (either bidding or comparative quotes), based on specifications that do not require specific brands.

Details are available at the following website under Contract Research and Development Agreement Administrative Procedures.

http://www.amed.go.jp/content/files/jp/youshiki/itaku/00keiyaku/ipwmannual.pdf

(Japanese)

Q: Can a post-doc submit an application as principal investigator?
A: A Post-doc cannot apply as principal investigator or lead joint researcher.

Q: Can post-doc students or graduate school or similar students participate in the research project?
A: Postdoctoral research fellows and graduate students can take on specific roles in the research project, and by being listed as research participants in the research plan documents, can participate as members in the project. Undergraduate students can also participate under similar conditions as part of the process of nurturing excellent researchers in Japan. Because of their

status as students, graduate students and undergraduates cannot be dispatched to the partner country as overseas researchers using ODA costs, but if certain conditions are satisfied (concluding an employment contract with the affiliated institution, traveling together with an overseas researcher, etc.), it is possible to cover travel and the costs of employment of students as research assistants under AMED contract research expenses. See the Contract Research Agreement Administrative Procedures etc. for details.

Q: Can a researcher who is not a Japanese national submit an application as principal investigator?

A: As long as he or she is affiliated with a research institution in Japan, a non-Japanese national researcher can apply as principal investigator.

Q: Can a researcher who is not a Japanese national apply as an overseas researcher?

A: The SATREPS is based on Japan providing technical cooperation and building relationships with the partner country, so in principle, it assumes the dispatch of researchers who are Japanese nationals. Nevertheless, if there are no other researchers with specific skills required and a non-Japanese national is irreplaceable for the project, then that researcher may be dispatched as an overseas researcher as long as the partner country government accepts the dispatch. In such cases, the researcher can be dispatched under ODA costs (and in cases where dispatch as an overseas researcher is not possible, traveling to the partner country under AMED contract research expenses is in principle possible, although the researcher may not be eligible for rights and exemptions applied under agreements with the partner country, including tax exemptions and legal immunity).

Q: Can researchers without a specific affiliation participate?

A: In principle, researchers without a specific affiliation cannot participate in the joint research. However it is possible for a participating institution (including the principal investigator's institution) to give affiliation status (visiting researcher, etc.) to the researcher so that he or she can participate in the research with that institution providing coverage and taking responsibility.

Q: On the premise that research will be implemented at the counterpart institution, can a Japanese national resident outside Japan submit an application as principal investigator?

A: In principle, this is not permitted. The program envisages a principal investigator based in Japan and the institution he or she is affiliated with conducting joint research with a principal investigator based in the partner country and the institution he or she is affiliated with.

Q: Can a part-time staff member (visiting researcher, etc.) submit an application as principal investigator?

A: This is possible if the researcher can provide an implementation structure at a research institution in Japan for the duration of the research period. Whether it is possible to make an agreement and

sign a contract with the research institution for the part-time staff member to be principal investigator depends on the contractual relationship between the research institution and the part-time staff member.

Q: If the principal investigator moves to a different institution partway through the project term, can the research still continue?

A: Under the SATREPS program, in principle, the principal investigator's institution at the time of project selection is responsible for providing a research implementation structure based around the principal investigator for the duration of the research period. If unavoidable circumstances result in the principal investigator moving to a different institution, consideration needs to be given to a replacement of principal investigator within the principal investigator's institution originally selected. It may also be possible to continue with the research if the principal investigator's new institution is capable of continuing the research, including the relationship with the partner country side, without problem, and moreover, if it is possible to sign a Contract Research Agreement with AMED, make the Agreement with JICA, and sign agreements (MOU etc.) with the counterpart institution. If the possibility of the principal investigator moving to a different institution arises, contact AMED and JICA to discuss the issue.

(2) AMED contract research expenses

Q: Are there restrictions on how AMED contract research expenses can be used?

A: Details regarding contract research expenses are available at the following website under Contract Research and Development Agreement Administrative Procedures.
http://www.amed.go.jp/content/files/jp/youshiki/itaku/00keiyaku/ipwmannual.pdf (Japanese)

(3) Implementation structure

Q: Can the implementation structure described in the research proposal documents be changed during interviews or after selection?

A: The selection process is based on the research proposal documents, so the structure should be given careful consideration when writing the research proposal, in order to ensure that no need for unnecessary changes arises. Adjustments etc. may be made if authorized by the program officer (PO), and changes may be requested during the process of JICA signing the R/D with the counterpart institution before commencing the international joint research.

(4) Research contracts

Q: Can the research contract with the lead joint researcher's institution in Japan be structured as subcontracting (see note) via the principal investigator's institution?

Note: Subcontracting in the research contract refers to a situation where only the principal investigator's institution signs a contract with AMED, and a research contract is signed by that affiliated institution and the joint researcher's affiliated institution.

A: Under the SATREPS program, a subcontracting structure is not used for research contracts.

AMED concludes separate research contracts with the research institutions that the principal investigator and lead joint researcher are affiliated with. * JICA only has a contractual relationship with the principal investigator's institution, not with any other institutions involved in the joint research.

3. Q&A about JICA/ODA (mainly Q&A about implementation of research in the partner country)

(1) Countries eligible for international joint research

Q: Is it possible to conduct joint research with multiple research institutions in the partner country?

A: Yes, it is possible to conduct joint research with multiple research institutions in a single partner country. In such cases, the names of all institutions must be listed in the ODA request form, and the main research institution for joint research in the partner country must be specified.

(2) ODA application by the partner country

Q: In addition to the proposal documents submitted to AMED, is it necessary for the government agency handling ODA in the partner country, at the instigation of the counterpart research institution in the partner country, to make a request for the implementation of an ODA technical cooperation project (submit a request for cooperation)?

A: It is essential for the partner country side to submit a request for ODA, in addition to the proposal documents for a research project submitted to AMED. Only projects where both the research proposal and the ODA request have been submitted are screened. If either of these documents is not received by the specified deadline, the project will be automatically excluded from selection.

Q: Is it necessary for the details of the technical cooperation project in the partner country to have already been fixed in the request form at the point that the proposal documents are submitted to AMED?

A: You need to coordinate the content of the request from the partner country before the request form is submitted. In particular, as noted on the proposal forms, there needs to be consensus between the Japan-side and the partner country side regarding the proposed research project title (English), research objectives, research outcome targets, research plans and implementation of plans, implementation structure, approximate amounts and details of machinery and equipment, personnel, etc. to be used, and research period, etc. After provisional selection, JICA will finalize detailed plans for the purpose of signing the R/D with the partner country institution. Please understand that as a result of that process, you may be required to modify the research plans presented in the proposal. The research project title (English) has to be the same as the project name on the ODA technical cooperation project request form. Ensure that there is sufficient coordination with the counterpart institution on this point.

Q: Where can I obtain the ODA request form?

A: A template for the ODA request form is available on the following JICA website, but the actual ODA request form is fixed by the government agency handling ODA in each country. For details, the counterpart institution should contact the government agency that covers it, or the government agency handling ODA.

http://www.jica.go.jp/activities/schemes/science/faq/answer.html#a1-3 (in Japanese)

Q: Has JICA informed each developing country of the purposes and structure of the SATREPS program? Also, does the applicant in Japan need to be able to respond to the partner country's inquiries about procedures, etc.?

A: MOFA/JICA has informed the government agency handling ODA in each of the developing countries eligible for the program. However, due to individual circumstances within each country, that information may not have reached as far as the partner country researchers who are potential research counterparts. The applicant should be aware of that situation and ensure sufficient coordination in advance with the partner country researcher (and his or her affiliated institution).

(3) Eligible counterpart institutions, partner country researchers; relationships

Q: Are companies and NGOs in other countries able to participate in a project?

A: The SATREPS program is implemented as technical cooperation projects on the basis of formal requests from the partner country and international commitments between the partner country and Japan. NGOs and simple private-sector companies without government ownership are not covered by the program. However, this does not prevent the participation of private-sector companies and NGOs in the research as partners collaborating within the partner country when the partner country side research institution is a government entity.

Q: Are international agencies able to participate in a project?

A: Regional international agencies in the developing country are not excluded from participating, but as explained in the Q&A regarding the ODA request form submission process, pre-conditions include submission to the Japanese embassy of an ODA request by the formal route via the partner country government agency handling ODA and the partner country government agency responsible for facilitating operation of the international agencies, providing them with special privileges and immunities, and pledging tax exemptions and other special rights and exemptions for the SATREPS program experts and machinery and equipment, etc. They also include securing the entity's own personnel and costs required to implement the joint research. Handling of intellectual assets also needs to be taken into account.

Q: If the principal investigator's institution in Japan has already signed agreements with the partner country government or research institution, is there any need for JICA to sign a new agreement of some form with the partner country side in order to implement the project?

A: Yes, it is necessary. The SATREPS program is a collaborative program linked with ODA, and projects are implemented as JICA technical cooperation projects based on international

commitments between the two countries. Based on these international commitments, JICA must sign documents such as an R/D with the partner country side.

(4) ODA project expenses, etc.

Q: What level of authority is required for signing the Agreement and project contract between JICA and the principal investigator's institution?

A: For the main Agreement, which only needs to be signed once on the first occasion for each principal investigator's institution, we envisage the Agreement being signed at the institute's top level (president or chair of the board of a university), and by the president of JICA. For the annexes to the Agreement (signed for each project), we envisage them being signed by the head of research at the principal investigator's institution (dean, etc.) and by JICA's director of the department in charge of the project. For the project contract, we envisage it being signed by a director of the principal investigator's institution with authority for contracts, and by JICA's vice-president in charge of finance and accounting.

Q: Why are clinical trials and medical practice not eligible for joint research? (Please give more details.)

A: Refer to the following JICA Policy.

a) Clinical trials/clinical studies/clinical research

Clinical trials with the aim of development, manufacture, or sale of pharmaceuticals or medical devices, or clinical studies/clinical research that is invasive, or infringes privacy are not acceptable as JICA projects. It is however possible for JICA projects to include training, instruction, or counseling of workers (medical staff, etc.) involved in such activities.

b) Handling of medical practices*

Medical practices are not acceptable as JICA projects (the reasons are that researchers are not sent abroad with the aim of conducting medical practices, are not licensed as clinicians in the host country, and it is not appropriate for JICA to take responsibility for medical practice).

* What is considered medical practice differs according to each country's circumstances. Even if something is considered to be medical practice, JICA will give approval (with conditions concerning safety and responsibility) if consulted in advance for practices such as blood sample collection, fecal examination, and measurement of body temperature or blood pressure that are not significantly risky. Ask JICA if clarification is required.

c) Safety measures and ethical considerations for research projects

Research projects must comply with ethical guidelines in Japan and in the partner country. They must be assessed by an ethics committee in the partner country, and the safety of all persons directly or indirectly involved in the project, together with safety for the environment, must be secured before the project commences.

Appendix 1. Countries eligible for the SATREPS program

No.	Region	Name of Country
1	Asia	India
2		Republic of Indonesia
3		Kingdom of Cambodia
4		Democratic Socialist Republic of Sri Lanka
5		Kingdom of Thailand
6		Nepal
7		Islamic Republic of Pakistan
8		People's Republic of Bangladesh
9		The Democratic Republic of Timor-Leste
10		Republic of the Philippines
11		Kingdom of Bhutan
12		Socialist Republic of Viet Nam
13		Malaysia
14		Union of Myanmar
15		Republic of Maldives
16		Mongolia
17		Lao People's Democratic Republic
18	Middle East	Islamic Republic of Afghanistan
19		Republic of Yemen
20		Republic of Iraq
21		Islamic Republic of Iran
22		Republic of Turkey
23		Palestine Liberation Organization
24		Hashemite Kingdom of Jordan
25		Republic of Lebanon
26	Europe	Republic of Azerbaijan
27		Republic of Armenia
28		Republic of Albania
29		Ukraine
30		Republic of Uzbekistan
31		Republic of Kazakhstan
32		Kyrgyz Republic
33		Georgia
34		Republic of Kosovo
35		Republic of Tajikistan
36		Turkmenistan
37		Republic of Serbia
38		Bosnia and Herzegovina
39		Former Yugoslav Republic of Macedonia
40		Republic of Moldova
41		Montenegro

No.	Region	Name of Country
42	Africa	Republic of Angola
43		People's Democratic Republic of Algeria
44		Republic of Uganda
45		Arab Republic of Egypt
46		Federal Democratic Republic of Ethiopia
47		State of Eritrea
48		Republic of Ghana
49		Republic of Cape Verde
50		Gabonese Republic
51		Republic of Cameroon
52		Republic of The Gambia
53		Republic of The Guinea
54		Republic of Guinea-Bissau
55		Republic of Kenya
56		Republic of Cote d'Ivoire
57		Union of Comoros
58		Republic of Congo
59		Democratic Republic of the Congo
60		Democratic Republic of Sao Tome and Principe
61		Republic of Zambia
62		Republic of Sierra Leone
63		Republic of Djibouti
64		Republic of Zimbabwe
65		The Republic of the Sudan
66		Kingdom of Swaziland
67		Republic of Seychelles
68		Republic of Equatorial Guinea
69		Republic of Senegal
70		United Republic of Tanzania
71		Republic of Chad
72		Republic of Tunisia
73		Republic of Togo
74		Federal Republic of Nigeria
75		Republic of Namibia
76		Republic of Niger
77		Burkina Faso
78		Republic of Burundi
79		Republic of Benin
80		Republic of Botswana
81		Republic of Madagascar
82		Republic of Malawi
83		Republic of Mali
84		Republic of South Africa
85		Republic of South Sudan
86		Republic of Mauritius
87		Islamic Republic of Mauritania
88		Republic of Mozambique
89		Kingdom of Morocco
90		Republic of Liberia
91		Republic of Rwanda
92		Kingdom of Lesotho

No.	Region	Name of Country
93	Latin America	Argentine Republic
94		Antigua and Barbuda
95		Oriental Republic of Uruguay
96		Republic of Ecuador
97		Republic of El Salvador
98		Republic of Guyana
99		Republic of Cuba
100		Republic of Guatemala
101		Grenada
102		Republic of Costa Rica
103		Republic of Colombia
104		Jamaica
105		Republic of Suriname
106		Saint Vincent and the Grenadines
107		Saint Lucia
108		Republic of Chile
109		Commonwealth of Dominica
110		Dominican Republic
111		Republic of Nicaragua
112		Republic of Haiti
113		Republic of Panama
114		Republic of Paraguay
115		Federative Republic of Brazil
116		Bolivarian Republic of Venezuela
117		Belize
118		Republic of Peru
119		Republic of Bolivia
120		Republic of Honduras
121		United Mexican States
122	Pacific	Republic of Kiribati
123		Cook Islands
124		Independent State of Samoa
125		Solomon Islands
126		Tuvalu
127		Kingdom of Tonga
128		Republic of Nauru
129		Niue
130		Republic of Vanuatu
131		Independent State of Papua New Guinea
132		Republic of Palau
133		Republic of the Fiji Islands
134		Republic of the Marshall Islands
135		Federated States of Micronesia

Note1: This table is subject to change depending on a country's situation.

Note2: The security situation and circumstances in parts of the partner country where research will be conducted may be examined as part of the selection process for proposals where they may result in restrictions on travel to the country and on the ability to implement the project.

Inquiries should preferably be made by email, except when urgent.

Updated information will be posted on AMED research proposal website.

http://www.amed.go.jp/en/news/program/030120150909.html (English)

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