# Needs Survey Guidance for

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

## 1. Outline of the Program

In recent years global issues that cannot be resolved by one country or region alone have been on the rise around the world, including global warming, energy and biological resource issues, the spread of infectious diseases, and the occurrence of natural disasters.

In FY2008, Japan launched a program called "Science and Technology Research Partnership for Sustainable Development (SATREPS)" as a framework for international cooperation that strives to resolve these global issues. Based upon the needs of and requests by recipient countries, this program aspires to promote international joint research between research institutions in Japan and those in recipient countries in order to obtain new knowledge that is conducive to resolving global issues. It also aims to ensure capacity building of research institutions in developing countries.

## 2. Details of the Program

# (1) Objective

This program is designed to promote international joint research in which both Japanese research institutions and those of recipient countries work together based upon the social needs in recipient countries. Its aims are to obtain new knowledge and to utilize research outcomes to the benefit of the society with a view to resolving global issues such as the environment and energy, biological resources, disaster prevention, and infectious diseases. In conjunction with this, it also aspires to improve the development of human resources and research capabilities in recipient countries by conducting joint research.

#### (2) Eligible Fields of Research

1) Research contributing to the solution to global-scale environmental issues
(Contributing to SDGs - respor se to climate change, conservation of ecosystems and biodiversity, sustainable use of natural resources, and pollution prevention and control)
2) Research on realization of kw carbon society and efficient use of energy (Contributing to SDGs - clean energy and climate action)
3) Research contributing to sustainable production and utilization of bioresources (Contributing to SDGs - food security, health promotion, nutrition improvement, and sustainable agriculture, forestry, and fisheries)
4) Research on disaster prevention and mitigation towards social sustainability (Contributing to SDGs - analys s of disaster mechanisms, prior countermeasures, and disaster occurrence to post-disaster recovery and reconstruction processes)

5) Research on measures to address infectious diseases control attuned to the needs of developing countries

## (3) Cooperation Period

The period of the Joint Research is three to five years.

# (4) Steering structure (Roles of JST/AMED and JICA)

SATREPS is carried out through the collaboration of four Japanese institutions: the Ministry of Foreign Affairs (MOFA) and JICA, as well as the Ministry of Education, Culture, Sports, Science and Technology (MEXT) and the Japan Science and Technology Agency (JST) / the Japan Agency for Medical Research and Development (AMED).

JICA provides technical cooperation for recipient countries that are targeted for projects. JST and AMED provide supports to Japanese research institutions for research costs outside of the targeted countries, including within Japan (information including the project scheme is found in Figure 1). AMED takes care of research projects in the field of infectious diseases. The other fields of research are taken care of by JST.

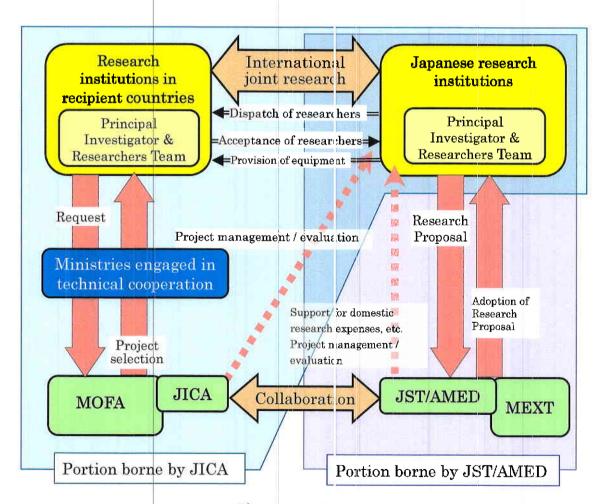


Figure 1. Project Scheme

- (5) Essential Qualifications required for the proposed research project
- 1) A specific joint research structure must be well-prepared between the research institutions in the recipient country concerned and those in Japan that will undertake the joint research.
- 2) The substantive and practicable structure for the operation in the research institutions in the recipient country concerned must be confirmed in order for the joint research to be appropriately carried out.
- 3) There must be a request for assistance through Official Development Assistance (ODA) pertaining to the joint research from the recipient country concerned, and it must be confirmed that the requested project will contribute to the development or restoration of the economy and society in the areas around.
- 4) In conjunction with the ODA request mentioned above in the paragraph 3), research institutions in Japan must submit a research proposal to JST/AMED, and the content of the proposal must be evaluated by JST/AMED as a research worthy of being selected.
- This year (JFY2020)'s open call, in the same way as JFY 2019, will set up a lot for proposals in collaboration especially with Africa and harnessing ICT (except for infectious disease control), reflecting "Recommendations toward TICAD7" by Advisory Panel for the Promotion of Science and Technology Diplomacy. To apply for this lot, applicant needs to mark the checkbox whether the project match with National Development Plan or STI for SDGs Roadmap in application form.
- (6) Content of the Desirable Research Cooperation
  - 1) The requested research must have ideas that will lead to the future utilization of research outcomes to the benefit of society. It should not be a research for the sake of research itself.
- 2) There must be the expectation of improving the scientific and technological standards of both the recipient country and Japan.
- 3) The contents of the research plan must be narrowed down and it must be highly specific. There must also be the expectation that a certain degree of results will be brought about from the research within the cooperation period.
- (7) Organizations for the Joint Research

Organizations of the Joint Research are required to be those which carry out activities with a public nature in the targeted field(s), such as un versities (including private schools), public research institutions, and so on (except military-affiliated research institutions). In addition, they must have structures that are suitable for conducting international joint research.

# (8) Expenses supported by JICA and by JST/AMED

JICA covers the expenses needed for the Japanese research institutions to carry out research cooperation activities (expenses for the dispatch of researchers from Japan, acceptance of invited foreign researchers, provision of equipment and research expenses incurred in recipient countries, etc.). In such cases, outlays management will be handled by JICA or by Japanese research institutions as is the case with ordinary JICA's technical cooperation projects.

JST/AMED furnish the Japanese research institutions with the expenses that they will need in order to conduct research in Japan and the third countries and to set in place structures necessary for research cooperation.

Please note in advance that, as this program is implemented within the ODA framework, it cannot provide support for local costs, such as the personnel costs for researchers from the recipient country, their travel expenses, supply expenses, or the cost of renting an office, etc. in the recipient country.

## (9) Selection process of the research proposals

Under SATREPS, JST/AMED engage in public recruitment for research proposals with a focus on research institutions within Japan at the same time as the ODA needs survey that is conducted by MOFA and JICA. Reviews are then held from scientific and technological perspectives while capitalizing on the knowledge of experts in the fields concerned.

Both the request form for an ODA project applied by the recipient country and the proposal document(s) for research project applied by the Japanese research institutions under JST/AMED programs are to be submitted by the prescribed deadline. In case that the both applied projects are confirmed to be identical (i.e., represent the same subject of research) as candidate projects for SATREPS, those candidate projects will be subject to the selection process. Then, in case that both of them are deerned worthy of being selected as projects for SATREPS, a final decision for the adoption of the projects will be made. Please bear in mind that any ODA request form and/or research proposal document that have not been submitted by the deadline will not be acceptable.

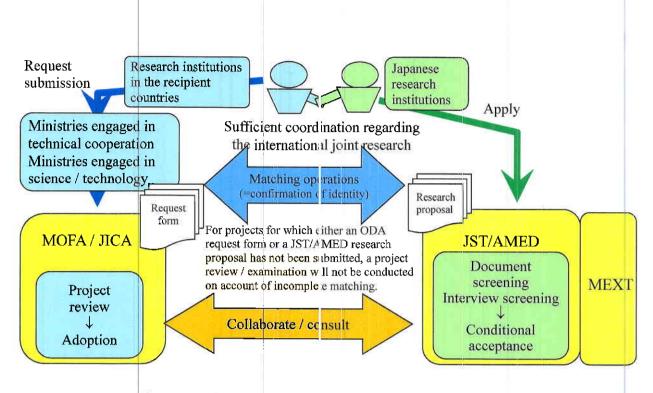


Figure 2. Selection process for the research proposal

#### (10) Considerations

- 1) Under SATREPS, as stated above, projec: examinations will only be carried out on projects for which both the ODA request form and the research proposal by Japanese research institutions have been submitted by the prescribed deadline and of which identity has been confirmed. Please kindly be noted that the required documents are to be submitted to the relevant authorities on the Japanese side (Japanese Embassy or JICA Office) by the submission deadline communicated separately by the Japanese side.
- Please list specific information on the Japanese research institution(s) (the name of the research representative on the Japanese side, the name of their affiliated institution, etc.) that will conduct the international joint research on the ODA application form. With regard to the English project title listed or the ODA application form, you are kindly requested to write the same technical cooperation title (project title) as is described in the written research proposal submitted by the Japanese research institutions to JST/AMED based upon consultations with the said research institutions. The technical cooperation title (project title) should start with a phrase of "the project for". All of these constitute important information in terms of confirming identity in the matching operations.

End



commercial benefits vs common good; fragmented funding mechanisms/strategies and policy environment and lack of human and institutional capacities were pointed as the most important barriers for Open Science.

## Regional perspectives

One member from each of the six electoral groupings presented an overview of the current progress of Open Science in their respective region and provided some **insights on the key challenges**, **opportunities and best practices related to Open Science** at the regional level. Members from the same region complemented the regional presentations with examples of initiatives from their own countries and sub-regions.

Dr Delfim F. Leão, representing Group I, reported that most institutions in the European Union (EU) promote Open Access especially by building infrastructures and recognising FAIR principles for sharing data. He referred to metadata curation and storage infrastructures, raising awareness, training on Open Science skills, tackling societal challenges, links with Sustainable Development Goals (SDGs), and engagement with different stakeholders for developing sustainable Open Science models as new areas that are getting more attention in the region. He emphasized that national and regional specificities should be taken into account in the development of the Recommendation as the implementation of Open Science policies differs from nation to nation. He mentioned that federation of services will allow fast development of a plethora of tools for covering different needs of different countries and avoid duplication of efforts. Mr Leão also acknowledged that EU is promoting Open Science as the new norm of the European way of life and coordinating actions under the European Open Science Cloud (EOSC).

Dr Stanislav Stanislavovich Davydenko, representing Group II, reported that many countries of this group are implementing the European Union policies through Plan S actions and through engagement in the EOSC. He emphasized the urgency to gather further information on the current actions and best practices on Open Science, and to establish more effective national and regional collaborations and communication channels. Mr Davydenko also informed the participants that several Eastern European countries participate in the regional project "National Initiatives for Open Science in Europe" (NI4OS Europe). Dr Alexandra Barac from Serbia also underlined the high Article Processing Charges (APCs) as a key issue in the Balkan area that limits the access to high-impact journals and as a consequence restricts the global recognition of scientific work done in the region.

Dr Fernanda Beigel, representing Group III, highlighted the establishment of shared intellectual space and regional academic and publishing circuits in Latin-America and the Caribbean. She mentioned that the majority of the journals in this region are without APCs and are supported by scholarly-led and publicly-funded portals. The main identified challenges of Open Science are the risk of commercialization, assuring the compatibility with the SDGs, as well as disciplinary diversity and multilingual engagement. She noted that key actions should be taken in funding and training researchers, librarians and editors, reforming the evaluation system, and ensuring fair policies and access to infrastructures. According to Ms Beigel, a comprehensive approach of the Recommendation should address the structural needs of emerging and developing countries and ensure that benefits of Open Science are fairly shared among the nations.

Dr Eun Jung Shin, representing Group IV specified that the opening of science should include the whole research process and not only the access to publications and data. She noted that, Open Science should be acknowledged as an opportunity for an innovative future. In order