



May 19, 2022

Japan Science and Technology Agency (JST)
5-3, Yonbancho, Chiyoda-ku, Tokyo

**JST announces 10 new SATREPS projects for FY2022:
Science and Technology Research Partnership for Sustainable Development program
combines international joint research with Official Development Assistance (ODA)**

The Japan Science and Technology Agency (JST) announced the new projects provisionally selected¹ for the Fiscal Year 2022 Science and Technology Research Partnership for Sustainable Development (SATREPS) program (Appendix 1).

SATREPS is a science and technology diplomacy initiative that promotes international joint research using advanced science and technology from Japan in combination with Official Development Assistance (ODA). The program is a collaboration between JST, the Japan International Cooperation Agency (JICA) and the Japan Agency for Medical Research and Development (AMED) supported by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) and the Ministry of Foreign Affairs (MOFA).

Based on the needs of developing countries, JST and JICA cooperate to promote international joint research targeting global issues with an objective of utilization of research outcomes². Implemented through collaboration with ODA, the aim of the program is to acquire new knowledge and technology that lead to the resolution of global issues and the advancement 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. Also, SATREPS will actively correspond to the Sustainable Development Goals (SDGs)³ and contribute to the international community.

For FY2022, JST called for SATREPS project proposals from researchers in Japan in its 3 research fields—Environment/Energy, Bioresources, and Disaster Prevention and Mitigation—and began to accept proposals on September 7th, 2021. A total of 62 proposals were submitted by the close of applications on November 8th, 2021. The screening committee, composed of external experts, then reviewed the proposal documents and conducted interviews, including review from an ODA perspective, and provisionally selected 10 new projects, comprising 6 projects collaborating with Asian researchers, 1 project with African researchers, 2 projects with South American researchers, and 1 project with Middle Eastern researchers. The total number of countries selected for SATREPS projects is 52 (53 including projects under administration of AMED). In this call for proposals, no Top-Down SATREPS⁴ project was selected.

Support for these projects will commence as soon as the contracts are in place and preparations are complete.

SATREPS projects in the field of Infectious Diseases Control were transferred to AMED on April 1st, 2015, and are now conducted in collaboration between AMED and JICA.

¹ Provisional selection:

Before formally starting a project, an international agreement needs to be concluded between MOFA and the government of the developing country regarding implementation of the project, followed by an agreement on the details of technical cooperation between JICA and the relevant institution in the developing country. However, the project may be unable to start in case that both sides do not reach agreement due to the reasons such as changes to the project name or the research details, shortening the research period or changes in the situation in the counterpart country. For this reason, the selection of these projects at this stage is considered to be provisional selection.

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.

³ The Sustainable Development Goals (SDGs):

At the United Nations Sustainable Development Summit held in September 2015, the outcome document “Transforming our world: the 2030 Agenda for Sustainable Development” with “the Sustainable Development Goals” as a core component was adopted as a new and more comprehensive world action agenda for people, planet and prosperity.

<https://www.un.org/sustainabledevelopment/>

⁴ Top-Down SATREPS:

In order to further promote science, technology and innovation for the achievement of the sustainable development goals (STI for SDGs), a Top-Down SATREPS category has been established. For the new category, eligible regions and research subjects that are important for Japanese diplomatic policy are set out in advance. JST continued inviting and selecting proposals in this category for 2022. Top-Down SATREPS projects are premised on the government of the partner country being specifically aware of the issue involved and on the project forming part of that country's road map or development plan related to STI for SDGs, in the expectation that this will enable smoother progress in both research and implementation. This year (JFY2021)'s call encouraged proposals with either of following themes.

1) Proposal in cooperation with African countries harnessing ICT (except for infectious disease control).

2) Proposal in cooperation with Pacific Island Countries tackling with climate change or focusing disaster prevention and mitigation.

Links

AMED Press Release:

https://www.amed.go.jp/en/news/release_20220519.html

JICA Press Release:

https://www.jica.go.jp/english/news/press/2022/20220519_41.html

Appendices

Appendix 1: Provisionally Selected Projects for FY2022

Appendix 2: Results of the FY2022 Selection Process

Reference: Overview of SATREPS (Science and Technology Research Partnership for Sustainable Development)

Contact

KATO Yuji,

Department of International Affairs (SATREPS Group), JST

K's Gobancho, 7, Gobancho, Chiyoda-ku, Tokyo, 102-0076

Tel: +81-3-5214-8085

E-mail: [global\[at\]jst.go.jp](mailto:global@jst.go.jp)

SATREPS URL: <https://www.jst.go.jp/global/english/>

Provisionally Selected Projects for FY2022

The following projects have been provisionally selected for FY2022. Within each field, projects are listed in alphabetical order of the project title. Project titles are based on the titles submitted by the researchers in the counterpart countries and may be modified as a result of further discussion between JICA and the counterpart country.

*[]: counterpart country

*(): Principal Investigator in Japan; affiliation

Environment and Energy

“Research contributing to the solution to global-scale environmental issues”

“The Project for Development of Easy-operation High-tech Analytical Devices and Human Resource for Food Safety and Environmental Quality Control”

[Socialist Republic of Viet Nam]

(Associate Professor MAWATARI Kazuma; School of Engineering, The University of Tokyo)

“The Project for Development of Palm Oil Mill Effluent (POME) Treatment System for Sustainable Energy Production and Resource Recovery based on Material Innovation”

[Malaysia]

(Associate Professor YOSHIDA Naoko; Graduate School of Engineering, Nagoya Institute of Technology)

“The Project for Establishing Sustainable Water Supply System Resilient to the Contamination of Drinking Water Sources”

[Socialist Republic of Viet Nam]

(Associate Professor FUJIOKA Takahiro; Graduate School of Engineering, Nagasaki University)

Environment and Energy

“Research on the sustainable use of resources and energy with a view to achieving carbon neutrality”

“The Project for Integrated Sustainable Energy and Food Production from Microalgae-based Carbon Capture and Utilization”

[Republic of Indonesia]

(Team Leader MOCHIDA Keiichi; Center for Sustainable Resource Science, RIKEN)

Bioresources

“Research contributing to sustainable production and utilization of bioresources”

“The Project for Breeding Innovation in Chili Pepper and Tomato to Accelerate

Sustainable Vegetable Production in Tropical Regions”

[Republic of Indonesia]

(Associate professor KANG Seung won; Faculty of Life and Environmental Sciences, University of Tsukuba)

“The Project for Recovering High Value Bioproducts for Sustainable Fishery”

[Republic of Chile]

(Professor ONODA Akira; Faculty of Environmental Earth Science, Hokkaido University)

“The Project for the Establishment of an Immediate Rice Variety Development and Dissemination System using the Citizen Science Approach”

[Republic of Zambia]

(Professor KONDO Takumi; Research Faculty of Agriculture, Hokkaido University)

“The Project on Establishment of an Alert System for *Fusarium oxysporum* f. sp. *ubense*, the Banana and Plantain Wilt Pathogen, and Mitigation Strategy of the Pathogen”

[Republic of Peru]

(Professor ARIE Tsutomu; Institute of Agriculture, Tokyo University of Agriculture and Technology)

Disaster Prevention and Mitigation

“Research on disaster prevention and mitigation towards social sustainability”

“Real-Time Lightning 3D Imaging and Forecasting Project for Sustainable Energy Supply and Storm Disaster Early Warning”

[Malaysia]

(Professor MORIMOTO Takeshi; Faculty of Science and Engineering, Kindai University)

“The Project for Establishment of a Research and Education Complex for Developing Disaster-resilient Societies – MARTEST”

[Republic of Turkey]

(Designated Professor, Executive Adviser of President KANEDA Yoshiyuki; Institute of Education, Research and Regional Cooperation for Crisis Management Shikoku, Kagawa University)

Results of the FY2022 Selection Process

Environment and Energy:

- **3 projects** out of 28 proposals for Environment and Energy “Research contributing to the solution to global-scale environmental issues”
- **1 project** out of 10 proposals for Environment and Energy “Research on the sustainable use of resources and energy with a view to achieving carbon neutrality”

Bioresources:

- **4 projects** out of 14 proposals for Bioresources “Research contributing to sustainable production and utilization of bioresources”

Disaster Prevention and Mitigation:

- **2 projects** out of 10 proposals for Disaster Prevention and Mitigation “Research on disaster prevention and mitigation towards social sustainability”

Overview of SATREPS

(Science and Technology Research Partnership for Sustainable Development)

1. Objectives of the program

The Science and Technology Research Partnership for Sustainable Development (SATREPS) program is a collaboration between two Japanese government agencies: the Japan Science and Technology Agency (JST) and the Japan International Cooperation Agency (JICA). Based on the needs of developing countries, JST and JICA cooperate to promote international joint research targeting global issues*¹ with an objective of 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 advancement 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 to create sustainable research systems able to address and resolve issues.

***1 Global issues:**

Issues that are difficult to be resolved 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. Outline of the program

(1) Research Areas and Fields

-Environment and Energy

“Research contributing to the solution to global-scale environmental issues”

-Environment and Energy

“Research on the sustainable use of resources and energy with a view to achieving carbon neutrality”

- Bioresources

“Research contributing to sustainable production and utilization of bioresources”

-Disaster Prevention and Mitigation

“Research on disaster prevention and mitigation towards social sustainability”

(2) Research Period

3-5 years

(3) Expenses Covered

- Research expenses (JST budget)

Approximately 35 million yen per year per project (including indirect expenses)

(Total research expenses covered during a five-year project: maximum of 175 million yen)

- ODA (JICA budget)

(Travel expenses between Japan and developing countries, travel expenses to invite researchers from developing countries, equipment procurement, on-site research activity costs, etc.)

Approximately 60 million yen per year per project

(Total ODA provided during a five-year project: maximum of 300 million yen)

3. Countries and projects to date

A total of 164 international joint research projects in 52 countries (*1) have been conducted as SATREPS projects in Environment and Energy, Bioresources, Disaster Prevention and Mitigation, and Infectious Disease Control (*2) since the project commencement in FY2008.

*1 The numbers of countries and projects do not include research projects in the field of Infectious Disease Control that were selected by the Japan Agency for Medical Research and Development (AMED) for FY2015 and thereafter. Including projects in the field of Infectious Disease Control that were selected by AMED for FY2015 and thereafter, a total of 179 projects have been conducted in 53 countries.

*2 SATREPS projects in the field of Infectious Diseases Control were transferred to AMED when it was established on April 1st, 2015. Projects that had terminated before that date were not transferred.