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

## **JST announces 10 new SATREPS projects for FY2024: Science and Technology Research Partnership for Sustainable Development program combines international joint research with ODA**

The Japan Science and Technology Agency (JST) announced the new projects provisionally selected<sup>1</sup> for the Fiscal Year 2024 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 outcomes<sup>2</sup>. 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 systems able to address and resolve issues. Also, SATREPS will actively correspond to the Sustainable Development Goals (SDGs)<sup>3</sup> and contribute to the international community.

For FY2024, JST called for SATREPS project proposals from researchers in Japan in its three research fields—Environment/Energy<sup>4</sup>, Bioresources, and Disaster Prevention and Mitigation—and began to accept proposals on August 22nd, 2023. A total of 64 proposals were submitted by the close of applications on October 23rd, 2023. 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 five projects collaborating with Asian researchers, three projects with African researchers, and two projects with European researchers. Projects involving the Republic of Kazakhstan and the Kyrgyz Republic were selected for the first time, bringing the total number of countries selected for SATREPS projects to 57 (58 including projects under administration of AMED). In this call for proposals, one proposal was selected as the SATREPS Projects Promoting Focused Themes<sup>5</sup>.

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.

<sup>1</sup> Provisional selection:

Before formally starting a project, an international agreement needs to be concluded between MOFA and the government of the counterpart country regarding implementation of the project, followed by an agreement on the details of technical cooperation between JICA and the relevant institution in the 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.

<sup>2</sup> 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.

<sup>3</sup> 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/>

<sup>4</sup> Environment and Energy:

After the submission deadline, research proposals in the Environment and Energy research field will be allocated to one of two research areas (“Research contributing to the solution to global-scale environmental issues” or “Research on the sustainable use of resources and energy with a view to achieving carbon neutrality”) for screening. In principle, this allocation will be based on the proposer’s wishes, but depending on the content of a proposal it may be screened in a research area different from that requested by the proposer.

<sup>5</sup> The SATREPS Projects Promoting Focused Themes:

In order to further promote science, technology and innovation for the achievement of the sustainable development goals (STI for SDGs), the SATREPS Projects Promoting Focused Themes 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 2024. The SATREPS Projects Promoting Focused Themes 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 (FY2024)’s call encouraged proposals with either of following themes.

- (a) In Africa, subjects that are expected to contribute to the promotion of energy/resource utilization with a view to decarbonization or to decarbonization/recycling in the waste field.

(b) In small island states, subjects that are expected to contribute to adaptation to climate change or to disaster prevention and mitigation.

### **Links**

AMED Press Release:

[https://www.amed.go.jp/en/news/release\\_20240418.html](https://www.amed.go.jp/en/news/release_20240418.html)

JICA Press Release:

[https://www.jica.go.jp/english/information/press/2024/20240418\\_41.html](https://www.jica.go.jp/english/information/press/2024/20240418_41.html)

### **Appendices**

Appendix 1: Provisionally Selected Projects for FY2024

Appendix 2: Results of the FY2024 Selection Process

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

### **Contact**

Department of International Affairs (SATREPS Group), JST

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

KATO Yuji

Tel: +81-3-5214-8085

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

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

## Provisionally Selected Projects for FY2024

The following projects have been provisionally selected for FY2024. 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 a Satellite Data- and a Regional Chemical Transport Modeling-based Air Pollution Assessment System and Formation of a Research Center for Air Pollution Studies”**

[Kyrgyz Republic]

(Associate Professor NAWA Nobutoshi; Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University)

##### **“The Project for Next-generation Smart Mining Plus for Sustainable Resources Development”**

[Republic of Kazakhstan]

(Professor KAWAMURA Yohei(Youhei); Faculty of Engineering, Hokkaido University)

##### **“The Project for Utilization of Agricultural Wastes for Plastic Alternative Productions to Establish a Circular Economy”**

[Arab Republic of Egypt]

(Professor YAMAMOTO Mitsuo; Graduate School of Agricultural and Life Sciences, The University of Tokyo)

### Environment and Energy

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

##### **“Project for Transforming the Cassava Production System in Vietnam by Establishing Regenerative Farming and Smart Starch Supply Chain Management”**

[Socialist Republic of Viet Nam]

(Professor SHINANO Takuro; Graduate School of Agriculture, Hokkaido University)

##### **“The Project for Data Driven Dynamic Transport Management in Emerging Metropolis for Climate Change Mitigation”**

[Kingdom of Thailand]

*(Professor FUKUDA Daisuke; Graduate School of Engineering, The University of Tokyo)*

**“The Project for Valorization of Disposal Biomass for Chemical Production Based on Biorefinery Concept”**

[Kingdom of Thailand]

*(Associate Professor YOKOI Toshiyuki; Institute of Innovative Research, Tokyo Institute of Technology)*

**Bioresources**

**“Research contributing to sustainable production and utilization of bioresources”**

**“Project for Creating Sustainable and Diversified Rice Farming System that Simultaneously Achieves Zero-hunger and Zero-emission”**

[Republic of Madagascar]

*(Project leader TSUJIMOTO Yasuhiro; Crop, Livestock and Environment Division, Japan International Research Center for Agricultural Sciences)*

**“The Project for Establishment of Research and Disease Control Systems for Eradication of Dourine”**

[Mongolia]

*(Director General, Professor INOUE Noboru; National Research Center for Protozoan Diseases, Obihiro University of Agriculture and Veterinary Medicine)*

**Disaster Prevention and Mitigation**

**“Research on disaster prevention and mitigation towards social sustainability”**

**“Research Project for Development of End-to-End Earthquake Early Warning and Response System”**

[Republic of Indonesia]

*(Researcher INOUE Hiroshi; Disaster Prevention Research Institute, Kyoto University)*

**“The Project for Development of Integrated Sediment and Environmental Management towards Sustainable Conservation, Disaster Risk Reduction, and Livelihood Improvements in Coastal Areas”**

[Republic of Ghana]

*(Professor TAJIMA Yoshimitsu; Department of Civil Engineering, Graduate School of Engineering, The University of Tokyo)*

## Results of the FY2024 Selection Process

### **Environment and Energy:**

- **3 projects** out of 21 proposals (after screening) for Environment and Energy “Research contributing to the solution to global-scale environmental issues”
- **3 projects** out of 11 proposals (after screening) for Environment and Energy “Research on the sustainable use of resources and energy with a view to achieving carbon neutrality”

### **Bioresources:**

- **2 projects** out of 21 proposals for Bioresources “Research contributing to sustainable production and utilization of bioresources”

### **Disaster Prevention and Mitigation:**

- **2 projects** out of 11 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\*<sup>1</sup> with an objective of utilization of research outcomes\*<sup>2</sup>. Implemented through collaboration with Official Development Assistance (ODA), the objectives of the program are 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 counterpart countries, travel expenses to invite researchers from counterpart 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 183 international joint research projects in 57 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 202 projects have been conducted in 58 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.