

February 17, 2021

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

JST is to fund four research projects for the AJ-CORE (Africa-Japan Collaborative Research) in the fields of “Environmental Science”

The Japan Science and Technology Agency (JST) decided to start new international projects within the framework of the AJ-CORE *1 (Appendix 1).

The joint call for proposals in “Environmental Science” was held by JST of Japan, National Research Foundation (NRF) of South Africa, and organizations from member countries of the Science Granting Councils Initiative (SGCI) (see Appendix 2).

A total of 12 proposals were submitted in response to the joint call. Based on joint panel review and an expert evaluation conducted in each country (Appendix 3), JST and the other participating funding agencies jointly decided to adopt four projects.

The research period is scheduled to be three years.

*1) AJ-CORE (Africa-Japan Collaborative Research)

AJ-CORE aims to resolve issues important to both Africa and the world, including the SDGs. It is designed to support international collaborative research conducted by researchers from Japan, South Africa, and at least one African country which are participating in Africa’s Science Granting Councils Initiative (SGCI).

URL : https://www.jst.go.jp/inter/english/program_e/multilateral_e/aj-core.html

Appendix 1: Abstracts of the new projects

Appendix 2: The participating countries and organizations which joined the call

Appendix 3: Experts for evaluation (JST)

Annex: Abstract of the joint call for proposals

Contact

SATO Masaki,

Department of International Affairs, JST

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

Tel: +81-3-5214-7375

E-mail: jointza[at]jst.go.jp

Appendix 1: Abstracts of the new projects

Project Title	Principal Investigators	Position and Institution	Abstract of Research Project
Field and mechanism-based toxicity research on pesticides in Africa (ToRePs)	ISHIZUKA Mayumi (Japan)	Professor, Faculty of Veterinary Medicine, Hokkaido University	This study focuses on pesticides, which have become an urgent issue in Africa. The ToRePs project will collect human / animal / environmental samples from South Africa, Zambia and Ghana, to elucidate the toxicities of pesticides at the field on mechanism-bases. This is the first international survey, which provides a systematic picture of toxicological effects of pesticides in Africa.
	Victor Wepener (South Africa)	Professor, School of Biological Sciences, North-West University	
	Osei Akoto (Ghana)	Lecturer, College of Science, Kwame Nkrumah University of Science and Technology	
	John YABE (Zambia)	Lecturer, Samora Machel School of Veterinary Medicine, University of Zambia	

Project Title	Principal Investigators	Position and Institution	Abstract of Research Project
Assessing the Lake Kariba Catchment Environment for Sustainable Water, Energy, Livelihoods and Ecosystem health (WELCOME)	UCHIDA Yoshitaka (Japan)	Associate Professor, Research Faculty of Agriculture, Hokkaido University	The WELCOME project targets a Core Kariba Catchment (CKC) environment, centered on Lake Kariba, which is in southern Africa. This interdisciplinary study focuses on the complex use of water resources, the health of ecosystems, and the impact of them on the lives of residents in CKC. Through this study, we aim to achieve the sustainable use of energy, the stable life of the residents, and the sustainability of the ecosystem, regarding CKC.
	Luke Chimuka (South Africa)	Professor, Department of Chemistry, University of the Witwatersrand	
	Imasiku Nyambe (Zambia)	Professor, Department of Geology, University of Zambia	

Project Title	Principal Investigators	Position and Institution	Abstract of Research Project
Food and Livelihood Resilience from Neglected and Underutilized Plant Species in Western Africa (FORENS)	Alexandros GASPARATOS (Japan)	Associate Professor, Institute for Future Initiatives, The University of Tokyo	Ensuring sustainable livelihoods, adequate nutrition and food security in the face of climate change and environmental degradation in Africa would require the sustainable utilisation of very diverse sources of food and materials. The FORENS project will explore the potential of neglected and underutilised plant species to meet multiple human needs in Western Africa in a manner that is climate-resilient and supports agrobiodiversity conservation.
	Cheikh Mbow (South Africa)	Professor and Director, Future Africa, University of Pretoria	
	Adjima Thiombiano (Burkina Faso)	Professor, Department of Plant Biology and Plant Physiology, University of Ouagadougou	
	Mame Samba Mbaye (Senegal)	Professor and Head of Department, Department of Plant Biology, Cheikh Anta Diop University	

Project Title	Principal Investigators	Position and Institution	Abstract of Research Project
Development of Resilient E-farming for agro-climate risk management in African Multi-environments (DREAM)	TSUBO Mitsuru (Japan)	Professor, Arid Land Research Center, Tottori University	Interdisciplinary research will be undertaken to understand crop responses to the seasonality of current and future climates in drylands. The main envisaged output is a decision support system for climate risk management together with drought mitigation strategy that is based on farm vulnerability assessment and climate change impact assessment.
	Mokhele Moeletsi (South Africa)	Research Team Manager: Agrometeorology, Agricultural Research Council - Soil, Climate and Water	
	Gualbert Dorego (Senegal)	Head of Agrobioclimatology Laboratory, National Centre for Agronomic Research, Senegalese Institute for Agricultural Research	

Appendix 2: The participating countries and organizations which joined the call

Participating countries are Japan, South Africa and Science Granting Councils Initiative (SGCI) African countries (Botswana, Burkina Faso, Côte d'Ivoire, Ethiopia, Ghana, Kenya, Malawi, Mozambique, Namibia, Rwanda, Senegal, Tanzania, Uganda, Zambia and Zimbabwe).

Organizations of Japan, South Africa, Burkina Faso and Senegal have declared their funding to the call.

Country Name	Funding Agency Name
Japan	Japan Science and Technology Agency (JST)
South Africa	National Research Foundation (NRF)
Burkina Faso	Fonds National de la Recherche et de l'Innovation pour le Développement (FONRID)
Senegal	Direction du financement de la Recherche scientifique et du Développement Technologique (DFRSDT)

National Research Foundation (NRF), South Africa

URL: <https://www.nrf.ac.za/>

Fonds National de la Recherche et de l'Innovation pour le Développement (FONRID), Burkina Faso

URL: <http://www.fonrid.bf/>

Direction du financement de la Recherche scientifique et du Développement Technologique (DFRSDT), Senegal

URL:

<http://mesr.gouv.sn/index.php/la-direction-du-financement-de-la-recherche-scientifique-et-du-developpement-technologique/>

Appendix 3: Experts for evaluation (JST)

Member Name	Position and Institution	Note
UMETSU Chieko	Professor, Graduate School of Agriculture, Kyoto University	Program Officer
ARAKI Shigeru	Professor Emeritus, Kyoto University	Advisor
ITO Kasumi	Associate Professor, International Center for Research and Education in Agriculture, Nagoya University	Advisor
KOHARA Satoshi	CEO, Ecotribute, Inc.	Advisor
SATO Chizuko	Research Fellow, African Studies Group, Area Studies Center, Institute of Developing Economies, JETRO	Advisor
SHIMADA Shuhei	Professor, Department of Global Governance and Collaboration, Nagoya University of Foreign Studies	Advisor
TSUBAKI Susumu	CEO, AAIC Holdings, Pte. Ltd.	Advisor
FUNAKAWA Shinya	Professor, Graduate School of Global Environmental Studies, Kyoto University	Advisor
FUNAMIZU Naoyuki	Vice President, Muroran Institute of Technology	Advisor
MATSUMURA Yukihiro	Professor, Graduate School of Advanced Science and Engineering, Hiroshima University	Advisor
MOJI Kazuhiko	Professor, Graduate School of Tropical Medicine and Global Health, Nagasaki University,	Advisor
YATAGAI Akiyo	Professor, Graduate School of Science and Technology, Hirosaki University	Advisor

Annex: Abstract of the joint call for proposals

(1) Application requirements:

A multilateral research project composed by three (or more) countries: Japan, South Africa, and at least one African country.

(2) Applicant eligibility (Japan side):

Any independent researcher personally affiliated with (and actively conducting research at) a domestic Japanese research institution, regardless of nationality, is eligible to apply.

(3) Research period:

The scheduled research period is 3 years from April 2021.

(4) Amount of funding (JST):

Up to 18 million yen from JST to the researchers (Japan-based team) per project, inclusive of overhead costs (30 percent of direct costs).

(5) Evaluation methods:

Based on evaluation outcomes by experts from each country which declared their funding to the call, including Japan, and discussion by JST and other participating funding agencies.

(6) Evaluation criteria (JST):

The following were among the general criteria considered in the evaluation process:

- 1) Conformity with the designated research fields
- 2) Expected research/development result
- 3) Collaborative interaction and complementarity of project partners
- 4) Expected exploitation and dissemination of results
- 5) Potential of research collaboration continuation
- 6) Feasibility of work plan (schedule, participants, funds, facilities, framework for cooperation, budget allocation)