

National University Corporation Tokyo University of Agriculture and Technology Research Data
Management Policy Explanation

(Established at the March 18, 2024 University Information Committee Meeting)

Amended: September 19, 2024 University Information Committee Meeting

The Tokyo University of Agriculture and Technology (referred to as "University" below) has proclaimed, in our Tokyo University of Agriculture and Technology Charter, that upon the base realized by 20th century society and science technology, TUAT strives toward achieving a society that enables sustainable development, and holds to the fundamental principles of contributing to the advancement of science and technology in harmony with society and the natural environment. TUAT also aims to cultivate human resources that will execute these principles when conducting free thought-based academic research in agriculture, engineering and integrated fields. In order to actualize these fundamental principles and ensure the appropriate management and public release of research data, as well as to promote making it available for use, the University has set forth the following research data management policy (referred to as "Policy" below).

- (1) Concerning the University's fundamental principles, we advocate for MORE SENSE: Mission Oriented Research and Education giving Synergy in Endeavors toward a Sustainable Earth, clarifying our own presence and role, and endeavoring to resolve the issues that mankind faces in the 21st century. These fundamental principles are also shared by the President's Vision, etc.
- (2) When the University and Researchers conduct the appropriate management, storage, and public release of research data related to research, this is both a recognition of the value of research data and an effort to protect it. It is also essential in allowing Researchers themselves to conduct superior research in the future, and for the University to protect future research.
- (3) The research activities conducted at the University are made possible by the diverse research fields and the involvement of Researchers, and are different depending on factors such as the differences in the fields of research and academic departments. Therefore, the specific actions that are necessary to enhance effectiveness are best when performed by the specific academic departments, etc. The University will provide assistance for activities to enhance effectiveness, such as creating templates for tools like guidelines.

(The definition of Research Data)

1. The term Research Data as used in the Policy refers to all information collected or generated in the process of the research activities of the University, and makes no distinction between digital or non-digital formats.

- (1) "Research Data" refers to various kinds of data, etc. necessary to derive externally-presented academic papers and research results based in research (referred to as "Research Results" below),

such as experiment and observation record notes, experiment data, and other research materials. It includes not only data collected or generated as part of the research activity process or as a result of research, but also research data resulting from processing or analyzing such data that is necessary to derive externally-presented academic papers and Research Results that are based in research, and materials which explain such data. Additionally, it includes not only digital data, but also information recorded on non-digital media such as paper (research notes, etc.) and photographs. Research Data is used in reasoning to derive conclusions, the verification of Research Results, and the verification of hypotheses.

- (2) Even if the Research Data was collected or generated at a different organization to which the Researcher previously belonged, as long as the Researcher stores such while registered at the University, the data is covered under the Policy.
- (3) This Research Data must be stored appropriately, pursuant to Article 37 of the Rules Concerning the Prevention of and Measures against Malpractice in Research Activities at the Tokyo University of Agriculture and Technology (Academic Rule No. 23, April 1, 2015).

(Research Data examples)

Research notes

Observation data

Photographs and images

Questionnaires

Specimens and samples

Statistical data files

Derived data and edited data

(Sources)

- National Institute of Informatics Education Materials: Research Data Management in an Open Science Era
- National Institute of Informatics Education Materials: Design and Implementation of Research Data Management Services

(Researcher scope)

2. The term "Researcher" in the Policy refers to an individual who is employed by the University and engages in research activities. However, individuals who do not have an employment relationship with the University (including students) are included, as long as they are conducting research activities at the University.

In the following cases, the individuals fulfill the role of Researcher as set forth in the Policy, as long as they are acting with participation by a faculty member.

- (1) For a student or research student, the management of Research Data shall be conducted under

the guidance of a research academic advisor (or an assistant research academic advisor, if one is present). Checking with the academic advisor is particularly required if the student wishes to publicly release data.

- (2) When a student is involved in research under a faculty member other than a research academic advisor, as a research assistant, etc., the management of data related to that research must be conducted under the guidance of that faculty member.
- (3) Concerning research fellows and visiting researchers (with no employment relationship) accepted based on one of the various academic frameworks, because research environments are not uniform, and there may be issues with whether or not the researcher is able to use systems, etc., the management of Research Data must be conducted with support from the accepting faculty member when necessitated by the various research environments, based in consultation with that faculty member.
- (4) If an individual belongs to another university, etc., but conducts research as a member of a research group for which the research representative is a Researcher who belongs to the University, the question of whether that individual is included in the definition of a Researcher in the Policy is determined by the research representative, considering terms required by the funding body, etc.

(Management of Research Data)

3. As a general rule, the individual who collects or generates the Research Data owns the rights to such and bears the responsibility to manage such. However, that individual must manage such within the scope of the law, the University rules, and any equivalents thereto, and in such a way as to not infringe upon the rights of another person or damage their legal interests.

This refers to the establishment and implementation of handling methods for all Research Data from the commencement to the conclusion of research activities, including organizing, analyzing, processing, sharing, storing, and deleting, and is not limited to only data collected or generated as part of the process of research activities or as a result of research, but also includes Research Data processed from such.

The individual who collected or generated the Research Data is responsible for its management. Concerning the management of Research Data, the Researcher who collected or generated such must manage it appropriately based on their own judgment and decisions within the scope permitted by the law and the University rules. However, if a third party possesses rights or legal interests in the data (for example, if the data includes the copyrighted work of a third party or personal information), the Researcher must not infringe upon such.

(The roles and responsibilities of Researchers)

4. The Researcher shall appropriately store and manage the Research Data, and promote making it available for use, within the scope set forth in the previous clause, and in consideration of the unique characteristics, etc. of the research field. Concerning research conducted via public funding, the Researcher may publicly release the Research Data based on the judgment of the Researcher, if public release is possible, with caution given to the policy of the organization providing the funding, such as any obligations that are imposed.

Concerning the storage, management, public release, and making available for use of the Research Data in the implementation of research, the Researcher must fulfill the following responsibilities. Among the entire array of actions related to Research Data, this clause particularly focuses on returning intellectual achievements to society. Herein, the phrase making available for use refers to arranging the Research Data so that other individuals can use it and increasing the value of the data by allowing even more intellectual achievements to be generated from the publicly released Research Data.

- (1) The Researcher must conduct research activities in compliance with the law, contracts, the University rules, etc., and within a scope that does not infringe upon third party rights or legal interests.
- (2) Before initiating research, the Researcher must establish a system for managing Research Data with clearly defined responsibilities within the research department, etc. and design a Research Data management plan for each individual research project. Also, when conducting joint research with an external body, the Researcher must clearly specify terms for the collecting, processing, quoting, making available for use, and storage of Research Data in a joint research contract, etc.
- (3) While engaged in research, the Researcher must conduct appropriate Research Data management and storage during the research activity period which allows checking of the research activity process history, engage in thorough storage of Research Data that supports the Research Results, conduct storage of Research Data for steady overall academic progress, and implement responsible compliance regarding the handling of sensitive Research Data.
- (4) After completing research, the Researcher must compile the Research Results, and organize and manage all Research Data into the categories of Research Data to be retained (Research Data that is saved and managed even after conclusion of the research) and Research Data to be destroyed (Research Data that is eliminated in an appropriate method after conclusion of the research).
- (5) Concerning Research Data to be retained, the Researcher must store the data appropriately for a set period of time, and when the retention period concludes, the Researcher must process it appropriately through means including destroying, transferring, or publicly releasing.
- (6) The Researcher chooses amongst public release, sharing, or non-public release, taking into consideration the unique characteristics of the research field. When publicly releasing Research

Data, following FAIR Principles (*1) is preferable. Also, if there are any special provisions regarding a specific research field based on legal and ethical requirements, contracts, rules, etc., those conditions must be followed.

Additionally, it is also set forth that Research Data which serves as evidence for academic papers made possible through public funding is released publicly as a general rule, and concerning Research Data that exists as the output of research and development, it is preferable to publicly release the Data within the possible scope. (*2) Furthermore, for those public competitive research funds that will require prompt Open Access starting from the 2025 academic year with new applications, recipients must immediately deposit their peer reviewed academic papers and evidence data in information infrastructure such as institutional repositories after publication in academic journals. (*3) Considering these factors as well, the Researcher must share and publicly release Research Data to the extent possible.

(7) If the research concludes, or if the Researcher ceases research activities at the University due to transfer, retirement, etc., the Researcher must consult with involved individuals and determine how to handle the delegation or retention of Research Data management authority, and implement such appropriately.

*1: FAIR Data Principles

Principles related to the public release and sharing of data that were established based on discussion at FORCE11 in 2014.

FAIR is an acronym of Findable, Accessible, Interoperable, and Reusable.

(Sources)

- Japanese translation of FORCE11 "The FAIR Data Principles":

<https://doi.org/10.18908/a.2019112601>

- FORCE11 "The FAIR Data Principles": <https://force11.org/info/the-fair-data-principles/>

- Guidelines for establishing policy for Research Data at a university: <https://rdm.axies.jp/sig/70/>

*2: From the Principles on Management and Utilization of Publicly Funded Research Data

2-4. Our philosophy about publicly releasing and sharing Research Data

In our philosophy, the public release of Research Data refers to providing Research Data in a format in which it is available for use by general, unspecified individuals. Additionally, the sharing of Research Data refers to providing Research Data in a format in which it is available for use by a limited amount of people who have been granted access rights.

Research Data generated through public funding must be managed and made available for use based on the open and close strategy. Specifically, Research Data which serves as evidence for academic papers made possible through public funding is released publicly as a general rule, and concerning Research Data that exists as the output of research and development, it is preferable to publicly release the Data within the possible scope.

However, in this process, the Researcher must make a decision on whether to publicly release, share, or not publicly release and not share based on considerations about the unique nature of the

research field, etc. and the unique nature of the organization managing the data, such as the university, inter-university research institute corporation, or national research and development agency.

(Source)

- The Principles on Management and Utilization of Publicly Funded Research Data:

https://www.mext.go.jp/content/20210608-mxt_jyohoka01-000015787_06.pdf

*3: From the Basic Policy towards Actualizing Prompt Open Access to Academic Articles, etc.

(1) Implementation of prompt Open Access to academic papers, etc., through public funding

- For those public competitive research funds that will require prompt Open Access starting from the 2025 academic year with new applications, recipients (including corporations) must immediately deposit their academic papers and evidence data in information infrastructure such as institutional repositories after publication in academic journals.

- Competitive funding systems for research subjects to prompt Open Access requirements are those that consider academic papers as their major output, and are determined by the relevant ministries and agencies.

- Prompt Open Access requirements apply to peer reviewed academic papers (peer reviewed research papers appearing in e-journals (including accepted manuscripts)) and evidence data (Research Data that is necessary from the viewpoint of transparency and ensuring reproducibility according to the submission guidelines, publishing rules, etc. of the e-journal it appears in, and for which public release is required).

(Source)

- Basic Policy towards Actualizing Prompt Open Access to Academic Articles, etc.

https://www8.cao.go.jp/cstp/oa_240216.pdf

(The roles and responsibilities of the University)

5. The University provides an environment to assist with the management and public release of Research Data, and with making it available for use.

(1) In accordance with the University's research data management policy, the University provides the following support to enable the Researcher to actualize appropriate management and public release of Research Data.

A) Working in tandem with the relevant departments, the University provides support necessary to the Researcher, such as providing information concerning Research Data management and public release, giving various kinds of advice, including legal and contract related advice, and providing education and training.

B) The University makes sure the Researcher correctly implements this Explanation. The University implements and supports activities to that end.

(2) Individual departments are not obstructed from developing their own rules, etc. pertaining to

Research Data management and public release in line with the unique nature of their respective fields, while of course giving due respect to the spirit of the University's research data management policy and this Explanation.

(Other matters)

6. The University may review and revise this Policy in accordance with changes in the conditions surrounding academics, such as societal conditions.

In the 6th Science, Technology, and Innovation Basic Plan (for the 2021 to 2025 academic years) and the Integrated Innovation Strategy 2023 adopted by Cabinet decision in June 2023, measures are included for making publicly funded Research Data available for use and for promoting it under the idea that Research Results generated through public funding such as academic papers and Research Data are considered items that should be widely returned to society. We have established this Policy based in these national measures. However, concerning the state of management, public release, and availability for use of Research Data, we will review and revise this Policy as needed in accordance with societal conditions, national government policy, revisions of related law, and changes in the conditions surrounding academia.