

UNU-FLORES Data Management Plan (DMP)

Revised on September 1, 2023

To establish effective management and preservation of institutional project data, UNU-FLORES has developed a comprehensive Data Management Plan (DMP). This plan is designed to facilitate the implementation of data usage processes, procedures, and policies, instilling confidence in the reliability and quality of the data being utilized. The primary objective of the DMP is to ensure that institutional data adheres to the FAIR data principles, namely Findability, Accessibility, Interoperability, and Reusability. By adhering to these principles, the DMP aims to enhance the visibility, transparency, accessibility, security, scalability, and long-term sustainability of UNU-FLORES's data. The DMP will greatly assist UNU-FLORES staff in effectively organizing, managing, storing, backing up, and sharing data. It will ensure that all project data is appropriately archived, thereby addressing knowledge gaps and ensuring continuity, especially during staff transitions. Additionally, the DMP plays a crucial role in ensuring the reproducibility of the produced and collected data. Overall, the DMP aims to enhance data availability and accessibility for a wide range of users, both within and outside of UNU-FLORES. This will increase the visibility of UNU-FLORES's data assets, making it easier for users to quickly and confidently find the right data for their analyses. The DMP aligns with the objectives of UNU-FLORES's Research Programme on Resource Nexus Data, Analytics, and Informatics (AID).

Starting from October 2022, it is mandatory for all projects associated with a Pelikan entry at UNU-FLORES to have a corresponding Data Management Plan (DMP). The project DMP is created by completing a form consisting of multiple tables, which collectively provide a comprehensive plan for managing key project data in accordance with the FAIR principles. The DMP covers various aspects, including project data information, datasets, data backup, security measures, and storage guidelines, ensuring the effective capture and preservation of essential project information. For existing projects with Pelikan entries, it is required to obtain DMP approval from the Head of the Resource Nexus AID Research Programme (or the designated person for DMP approval within the institute) by December 15, 2022. However, this requirement does not apply to existing UNU-FLORES projects that are scheduled to conclude in 2022. As for new projects at UNU-FLORES, their DMPs must be approved within 2 months after their entry into Pelikan. The DMP should be stored in the "Data" subfolder within the project folder on SharePoint. While it is expected that all sections of the DMP are completed accurately, certain information may be subject to updates during the project implementation, except for sections marked with an asterisk "*".

Project Information

Provide background information about the project. Ensure that the information in this section matches the information provided when the project was introduced to Pelikan.

Project title* <i>Ensure that the title matches your Pelikan entry.</i>	
Pelikan entry* <i>Is the data already captured in Pelikan entry? If the answer is YES then copy and paste the information entered to Pelikan here.</i>	
<input type="checkbox"/> Yes; Add the Pelikan Project Link:	<input type="checkbox"/> No; Make a Pelikan entry before filling out this form.
Project manager* <i>Details of the main point of contact/Principal investigator for the project and its data</i>	

Name of the Principal investigator:			
Institutional email address:			
Cell or work telephone number:			
Project team members*			
<i>Identify staff/research team members who will be involved in the project and their expected roles.</i>			
Name:		Role:	
Name:		Role:	
Name:		Role:	
Funding agency/ies (Donor)*			
<i>Identify collaborating/funding agencies and organizations.</i>			
<input type="checkbox"/>	Private	<input type="checkbox"/>	Public
<input type="checkbox"/>		<input type="checkbox"/>	Both
<i>Please provide the name(s) of the funding agency or donor, including any additional sources if applicable.</i>			
Data manager*			
<i>Identify who, at UNU-FLORES, Project Manager, Lead investigator, or Institutional research Office, has the overall data management responsibility for project-related data acquisition, processing, quality control, documentation, and preservation. This could be the Principal Investigators or designated Team Member(s).</i>			
<input type="checkbox"/>	Project Manager	<input type="checkbox"/>	Lead investigator
<input type="checkbox"/>		<input type="checkbox"/>	Institutional Research Office
Start and end dates*			
<i>What are the project start and end dates?</i>			
Start date [dd/mm/yyyy]:			
End date [dd/mm/yyyy]:			
Project summary*			
<i>Please provide a concise description of the project, including the rationale behind the data to be collected/acquired and the intended timeframe for this process.</i>			
Data sharing agreement*			
<i>Is there an official data sharing agreement or contract in place for the project. Outlining the data that can be shared and providing specific guidelines for data usage?</i>			
<input type="checkbox"/>	Yes (please attach the agreement)	<input type="checkbox"/>	No

Data Acquisition, Processing, and Analysis

Describe datasets collected/used and produced by the project. Use a separate table to describe each distinct dataset or product.

Dataset name*
Data description*
<i>Provide a comprehensive description of the information that will be retrieved/compiled (for existing data) or collected (for new data), along with its intended purpose.</i>

Type of data collected*				
<input type="checkbox"/>	Raster	<input type="checkbox"/>	Vector	<input type="checkbox"/>
<input type="checkbox"/>	Other, please specify: _____			
Geographic extent*				
<input type="checkbox"/>	Local	<input type="checkbox"/>	National	<input type="checkbox"/>
<input type="checkbox"/>		<input type="checkbox"/>	Regional	<input type="checkbox"/>
<input type="checkbox"/>				Global
Temporal scale*				
<input type="checkbox"/>	0 to 2 years	<input type="checkbox"/>	3 to 5 years	<input type="checkbox"/>
<input type="checkbox"/>		<input type="checkbox"/>	5 to 10 years	<input type="checkbox"/>
<input type="checkbox"/>				More than 10 years
Refresh rate (updating of data)*				
<i>Is this a dynamic or static dataset?</i>				
<i>If yes, please specify how often the dataset will need to be refreshed or updated:</i>				
<input type="checkbox"/>	Monthly	<input type="checkbox"/>	Seasonally	<input type="checkbox"/>
<input type="checkbox"/>		<input type="checkbox"/>		Yearly
<input type="checkbox"/>	Other, please specify: _____			
Source*				
<i>For existing data, identify the authoritative source; include a link and DOI if available.</i>				
Formats*				
<i>Identify the formats in which the data will be generated and maintained. e.g. csv, txt, etc.</i>				
Procedures / Methods				
<i>Identify standard procedures or methodologies that will be used to collect/gather the data (primary or secondary data), if available e.g., use of questionnaires (citizen science), field sampling. This may consist of providing citations/links, guidelines, policies, or published literature.</i>				
<i>Provide descriptive information for new/un-documented methods utilized during the project.</i>				
Data charges*				
<i>Are there fees/charges associated with acquiring the data (primary or secondary data)?</i>				
<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
<i>Provide an overview of the usefulness and application of the data: to whom will it be useful/ whom will be the target groups.</i>				
Data quality checks*				
<i>Identify the procedural steps for ensuring data quality, including completeness and assessment of usability.</i>				
Ethical aspects / requirements*				
<i>Indicate whether the project data collection would require any ethical clearance (e.g., will questionnaires be used?)</i>				
<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
<input type="checkbox"/>		<input type="checkbox"/>		Not applicable
<i>If yes, has the clearance been requested or completed?</i>				
<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>

Data processing

Provide a brief description of any special analytical procedures (methods) models, or software that will be used for processing and analyzing the data.

Metadata

Describe the tools or processes that will be used to create metadata for the dataset.

Identify the metadata standard that will be used to describe the data.

Who will be responsible for creating metadata files?

Making data openly accessible / data sharing

Describe your plan for making your data FAIR compliant.

Provide information on when the data will be made available for re-use, including any applicable data embargo and its duration, as well as specify which data will be openly available and provide a rationale for keeping certain data closed.

Clearly identify responsibilities for data management in your project.

Describe the potential value of long term preservation.

Specify how the data will be made available including the formats, standards and repository.

Specify the required methods or software tools to access the data and confirm if documentation regarding the software necessary to access the data is provided, including the possibility of including the relevant software as open-source code.

Specify where the data and associated metadata, documentation and code are deposited.

Specify how access will be provided in case there are any restrictions.

Assess the interoperability of your data (access and process data from multiple sources without any loss of meaning). Specify what data and metadata vocabularies, standards or methodologies you will follow to facilitate interoperability.

Specify whether you will be using standard vocabulary for all data types present in your data set, to allow interdisciplinary interoperability? If not, will you provide mapping to more commonly used ontologies?

Specify how the data will be licensed to permit the widest reuse possible by third parties, in particular after the end of the project?

Data Backup/Security and Preservation (storage)

Provide a detailed description of data storage and backup of project-related information.

Data storage (during the project)*			
<i>Describe how project-related data will be stored in the short-term during the project lifecycle.</i>			
<i>Where will non-digital data (e.g., field notebooks, maps, field data collection forms) be stored during the project?</i>			
<i>Where will digital data (e.g., field measurements, questionnaires, photographs, lab sample measurements, model input/output files, working project data files, metadata, manuscripts, and other electronic documents) be stored during the project?</i>			
Data backup and security*			
<i>How frequently will a routine backup of the data be performed?</i>			
<i>Will the data and backups be stored in multiple locations (onsite and offsite) to protect against a single-point failure?</i>			
<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
Final formats			
<i>Identify the final format of the data product. Specify special software needs for data access or use. Will the data format be suitable for long-term preservation?</i>			
Open data formats for approved releases*			
<i>State what open data formats (i.e., comma-separated values (CSV), character delimited text file, Shapefile (vector format), GeoTIFF (raster format), txt) will be used for data provided through approved data releases.</i>			
Data Preservation (Short Term – Repository)*			
<i>Who has the responsibility for ensuring that data preservation is provided for all approved data releases?</i>			
<i>List the UNU-FLORES acceptable digital repository that will be used for approved data releases.</i>			
<i>Briefly describe how software/models and supporting documentation developed during the project will be internally stored and externally released/shared for public access.</i>			
Data Preservation (Long Term – Archive)*			
<i>Who has the responsibility for ensuring that the project files are archived per current UNU-FLORES data management specifications?</i>			
<input type="checkbox"/>	Project manager	<input type="checkbox"/>	Lead investigator
<input type="checkbox"/>	Institutional research office		
<input type="checkbox"/>	Other, please specify: _____		
<i>What is the recommended duration for retaining data beyond the project's duration?</i>			

Data Publishing/Sharing

Identify the project deliverable(s) and data product(s) developed and released. When completing this section, include a document that describes how the data can be used and where necessary reference to this in DMP must be made and clarity must be provided where this data has been stored- including the file name and format used for easy data access, findability and interoperability. However, it is not mandatory to publish or share data but it is highly recommended that data at UNU-FLORES is openly accessible.

Audience*			
<i>Who is the intended audience? Internal to UNU-FLORES only; limited public accessibility; full public accessibility; this will impact resource planning for information dissemination.</i>			
	Decision / policy makers		Academics
	Resource managers		Government departments
			Scientists
			Students
			NGOs
Publication*			
<i>Provide preliminary information for anticipated project publication(s), such as title, description, and list of authors, target journal, and books.</i>			
<i>Describe anticipated publication types (e.g., peer-reviewed journal articles, UNU-FLORES series report, web pages, model output).</i>			
Data release			
<i>Describe data release products that will accompany project publication, if applicable.</i>			
Software release			
<i>Describe software release products. Only required if applicable.</i>			
Publication DOI No.			
<i>Provide DOI number. Cross-reference the publication DOI number in the associated data releases.</i>			
Data release DOI No.			
<i>Provide DOI number when created for approved data release. Cross-reference the data release DOI number in the associated publications.</i>			
Data use and access restrictions*			
<i>Describe the restrictions on access and use, including license requirements, which will have to be placed on the derived data product(s) due to the use of exclusive data inputs, identifiable personal information, and data sharing agreements, copyrights, or other circumstances. If data products are released in a proprietary format, list the unique formats and software requirements that will be required to reproduce and read them.</i>			