Managing and Sharing your PEER Data and Publications
Meeting and exceeding USAID's Public Access Plan
Public Access to Research

USAID research programs **strive to:**

- Support best practices for managing publications and scientific research data
- Increase public access to results of scientific research
- Facilitate the use of research

**Why?** To enhance scientific discovery and improve development outcomes
Pathway for Data and Publications

- **Research data**
  - Metadata
    - Data
    - **Structured data**
    - **Unstructured data**
  - **Sector-specific repository**
    - USAID’s Development Data Library (DDL)
    - USAID’s Development Experience Clearinghouse (DEC)
Data Management

- Manage data responsibly throughout lifecycle
- Produce high-quality, usable data
- Include necessary information for reuse
- Protect data and make sure you get credit
Sharing Research Data

Goal

• Open Data is the idea that data should be freely available for everyone to use whenever possible
• Makes science more efficient and more adaptive - faster learning from project results across wider audiences
• Preserve access to your data with a persistent identifier

Research context

• Public Access mandates mean that research funded by the US government should be accessible
• The data is the research product, not the journal article
• Many repositories exist for housing data in perpetuity
Sharing Research Data

How to share:

• Release with journal article

• Peer-reviewed data paper

• Citizen science

Why share?

- More exposure for your work
- Practitioners can apply your findings
- Higher citation rates
- Your research can influence policy
- The public can access your findings
- Compliant with grant rules
- Taxpayers get value for money
- Researchers in developing countries can see your work
Example: Snapshot Serengeti

Motion activated cameras

Source: dx.doi.org/10.1038/sdata.2015.26
Example: Snapshot Serengeti

Source: www.snapshotserengeti.org
Example: Snapshot Serengeti

Article metrics for:

Snapshot Serengeti, high-frequency annotated camera trap images of 40 mammalian species in an African savanna

Online attention

This Altmetric score means that the article is:
- in the 99th percentile (ranked 348th) of the 222,467 tracked articles of a similar age in all journals

Tweeted by 111
Blogged by 15
On 13 Facebook pages
Mentioned in 6 Google+ posts
Picked up by 45 news outlets
109 readers on Mendeley
1 readers on Citeulike

One of the most popular articles from 2015 on Altmetric
Importance for PEER

- Prepare PEER awardees for latest academic research trends
- Increase the visibility of research of PEER Principal Investigators
- Expand networks and enable new opportunities for funding
PEER Award Agreement

Article VIII - Data Rights and Publications

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(c) Electronic Program Deliverables: Subawardee shall provide the Senior Program Officer with an electronic copy of all deliverables and any publications produced with project funds.

(d) Submission of Datasets to the Development Data Library: Subawardee shall submit data under this Subaward to the Development Data Library in accordance to Section M23 of the Standard Provisions for Non-U.S. Nongovernmental Organizations, Attachment C.
Data Management for the PEER Program

1. Choose a repository for your data

2. Create a short data management plan

1st year of your PEER project
Data and Publication Sharing for the PEER Program

3. Submit data to a repository and link to USAID’s Development Data Library (DDL)

4. Submit any publication author’s manuscripts to USAID’s document platform - the Development Experience Clearinghouse (DEC)

Year 2-3 of your PEER project
Step 1: Choose a Repository

Choose a data repository where your data will be seen

- General Data: dataverse.harvard.edu
- General Data: datadryad.org
- Earth Science: www.pangaea.de
Step 1: Choose a Repository

How do I know if a repository is good?
1. Has a long term data management plan
2. Has a commitment to preserving your data or preservation plan (in mission statement or terms of service)
3. Provides a persistent identifier (ideally DOI) and a URL to the data
4. Has data citation guidelines to ensure you get credit for your work.
5. Makes data widely available and free for public use with clear licensing and use terms, **CC-0** or **CC-BY** licenses recommended
6. Allows wide sharing of metadata

For further guidance, see the [Development Data Overview](#)
Step 1: Choose a Repository

A good opportunity to work with your US partner colleagues
Step 2: Data Management Plan

Draft a data management plan

1 or 2 page document:
• how you will handle your data as it is collected
• how you handle data after research project ends

Submitted with PEER year 1 annual report

Data management plan instructions
Step 2: Data Management Plan

The DMP in Foundant covers:

1. Types of data produced
2. Metadata
3. Data storage and preservation
4. Policies for access and sharing

It is a living document that you can update over life of project!
Step 2: Data Management Plan

Example Question: Metadata Standard

Which metadata standards will you use and why have you chosen them?*

For many types of data, there are standards/guidelines for what metadata to use. To choose a metadata standard, it is helpful to consider the repositories where you would like to upload your data. Many repositories recommend metadata standards. Some recommended tools are:

- **DDI** - for Social, Behavioral, and Economic Sciences - You can use Wesstar Publisher to manage the data
- **EML** - for Earth, Environmental, and Ecological Sciences - You can use Morpho to manage the data

To answer this question, do one of the following:

- Choose a metadata standard that is popular in your field and say why you chose it; or
- Explain that you were unable to find an appropriate standard.

Samples:

- **The biological and ecological data will be structured in Ecological Metadata Language (EML).**
- **All physical and chemical time series data will be formatted to follow the standard operating procedures for ocean acidification research as described by Riebesell et al. (2010)**
Step 2: Data Management Plan

• Ideally all data can be shared immediately, but this may not be possible in all cases

• You will be asked to identify privacy concerns
  – May need to remove personally identifiable information (e.g. human subjects)
  – May need permission to share certain country data (e.g. water quality or river flow)

• Data can be private for up to 12 months under embargo if data is sensitive or there are publishing concerns
General Resources

- **PEER Data Management Webpage**
- **Development Data Overview**
  - E.g.: Metadata Standards, Persistent Identifiers, Data Anonymization, etc.
- **USAID’s Development Data Library (DDL)**
- **USAID’s publication library, the Development Experience Clearinghouse (DEC)**
Repository Resources

● Social science and public health research
  ○ USAID Development Data Library (DDL): https://www.usaid.gov/data
  ○ Inter-university Consortium for Political and Social Research (ICPSR) https://www.icpsr.umich.edu/icpsrweb/deposit/index.jsp

● Natural Sciences:
  ○ http://www.sciencemag.org/authors/science-editorial-policies#data-deposition
  ○ https://www.nature.com/sdata/policies/repositories

● Repository registries:
  ○ https://www.coretrustseal.org/why-certification/certified-repositories/
  ○ Registry of research data repositories https://www.re3data.org/
  ○ Fairsharing.org
  ○ Tips for selecting a data repository from PLOS ONE
Conclusion

In the 1st year of your PEER project, you will need to:

1. Choose a repository for your data
2. Create a short data management plan

Questions?
Extra Slides
Example: Quakemap Nepal

QUAKEMAP

A deployment to help match those affected by Nepal’s earthquake with ongoing relief efforts being conducted by various government, non-government and volunteer groups.
Example: Quakemap Nepal

Trustworthy, usable data unlocked rapid response to earthquake
Example: Quakemap Nepal

Tents needed for 600 people of Bhumidada, Panauti

Urgent help needed, in kavre. I really don’t know if I get any help. We need a tent for 600 people of the whole village in Bhumidada, Panauti (kavre) including food and water. If anyone who can help with a tent, sleeping bags, food, water, or few money to buy tent, please help. There’s no food to eat, no water to drink, no place to sleep, it’s getting hard, few people died already, and it’s raining from yesterday. Please inbox me or call +9779851054742 (bishal) asap.

Location: (kathmandu to panauti) Thank you. (there is no one to help yet) (I’m trying my best from my side)

_##_nepalearthquake_ #kavre