Lacuna Fund: Our Voice on Data

Resources for Proposals in Agriculture

This document represents a collection of resources from the Technical Advisory Panel as an addition to those referenced in the RFP document. These are intended to provide assistance in obtaining relevant background information, preparing a competitive proposal, and completing quality work.

These resources are not intended to be exhaustive nor authoritative. This document does not represent an endorsement of work by the Lacuna Fund Secretariat, the TAP, or individual members.

PREVIOUS WORK AND RELEVANT BACKGROUND

Relevant recent challenges and other efforts:

- Papers from the recent International Conference on Learning Representations (ICLR) Computer Vision 4 Agriculture (CV4A) workshop.
- IIASA Earth Challenge 2020 (press release).

PRIVACY AND ETHICS

- See Overseas Development Institute’s (ODI) Data Ethics Canvas as a helpful resource to consider ethical issues in a proposed project.
- ODI’s privacy and openness principles for personal data.

OTHER RESOURCES ON OPEN DATA INCLUDE:

- The Beijing Declaration on Research Data
- The Big Secret in the Academy Is That Most Research Is Secret: The dangerous rift between open and classified research, Spring 2020
- “Legal and Ethical Issues around Incorporating Traditional Knowledge in Polar Data Infrastructures” Data Science Journal 16(1)pp1-14.
• The work of Africa Digital Rights Hub.

Although U.S.-oriented, recent work by Trust in Food highlights farmer perspectives related to ground data collection.

DATA QUALITY
See the following references for considerations related to data quality:

- See also a guide for best practices for ground reference data collection and cataloguing.

Note, these are only a few of many resources in this domain.

LABELING TOOLS
The following tools are open source or free to use:

- LACO-Wiki
- Google Earth Engine Apps
- Label-Maker

There are many other available annotation tools, both free and paid, for a variety of purposes.

CATALOGING TOOLS
The following tools are designed to make it easy to create SpatioTemporal Asset Catalog (STAC) metadata:

- PySTAC – Catalog generation to the latest STAC specification.
- Stac-Browser – Python package to browse created STAC catalogs.

DATA SHARING
Global Open Data for Agriculture and Nutrition network (GODAN) resources on data standards:
• https://www.godan.info/documents/ownership-open-data-governance-options-agriculture-and-nutrition-0
• https://www.godan.info/documents/responsible-data-agriculture
• http://openupguideforag.info/