

Inclusive Climate Datasets for Machine Learning

Climate & Forests Applicant Webinar

30 March 2023

Speakers

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Meeting Objectives



CLIMATE & FORESTS

- Provide potential applicants with an understanding of Lacuna Fund and proposal requirements.
- Provide time for applicant questions about the Request for Proposals (RFP).

Agenda

- 00:00** Welcome, Introduction, Agenda Review
- 00:10** Presentation: Lacuna Fund Overview and Requirements for RFPs
- 00:40** Presentation: Mentorship Opportunity
- 00:50** Question and Answer
- 01:25** Next Steps
- 01:30** Adjourn



A lacuna is a gap, or a missing portion of a manuscript

Lacuna Fund supports the creation, expansion, and maintenance of equitable training and evaluation datasets that enable machine learning tools to better tackle urgent problems in low- and middle-income contexts globally.

Principles that guide Lacuna Fund:

- Accessibility
- Equity
- Ethics
- Participatory Approach
- Quality
- Transformational Impact



Founding Funders



Additional Funders



Lacuna Fund Governance Structure

Steering Committee

Strategic guidance and overall governance of the Fund

Funder Collaborative

Provides input on key priorities to the Steering Committee and provides a forum for deeper funder collaboration

Technical Advisory Panels

Scope funding processes and select proposals, provide input on domain specific strategies and needs

Secretariat

Manages grants and reporting, provides facilitation, communications, and operational support



Domains for Datasets

Lacuna Fund provides resources for dataset creation, expansion, or maintenance.

Current calls for proposals in these domains:

- **Climate & Forests**
- Sexual, Reproductive, and Maternal Health and Rights

Prior calls for proposals in these domains:

- Agriculture
- Language
- Health
- Climate

Future calls for proposals:

- Other areas where the Steering Committee identifies a need

Funder for Climate & Forests

The Climate & Forests call for proposals is made possible with generous support from GIZ's FAIR Forward Programme on behalf of the German Federal Ministry of Economic Cooperation and Development (BMZ).

FAIR FORWARD
Artificial Intelligence for all.



Federal Ministry
for Economic Cooperation
and Development



Requirements for RFP

Climate & Forests



Climate & Forests RFP - Purpose

Stated Purpose:

The purpose of this call for proposals is to support efforts to develop open and accessible datasets for machine learning applications that will help communities better understand and address the relationship between climate change and forests in Africa, South and Southeast Asia, and Latin America.

Climate change disproportionately affects people in low- and middle-income contexts who have done the least to contribute to it.

Machine learning (ML) holds great promise to advance efforts across the forestry domain to understand, mitigate, and adapt to climate change.

Climate & Forests RFP – Need

We see a need for training and evaluation datasets that will help us better understand the impacts of climate change on forests and interventions that could mitigate these impacts, demonstrating how to unlock forests as natural climate solutions.

- **Land cover / land use change**
- **Afforestation**
- **Non-extractive forest ecosystem services and products**
- **Indigenous knowledge of biodiversity**
- **Supply chain interventions**
- **Environmental/nature crimes (illegal logging, illegal mining, and conflict timber)**
- **Wildfires**
- **Carbon sequestration (biomass estimation, species dominance)**
- **Invasive species**
- **Animal species movements / human-wildlife conflict**
- **Forest health linked to climate change**



What We Are Looking For

- Collecting and annotating new data
- Annotating and releasing existing data
- Expanding and/or maintaining existing datasets and increasing usability
- Linking and harmonizing existing datasets



Proposal Components

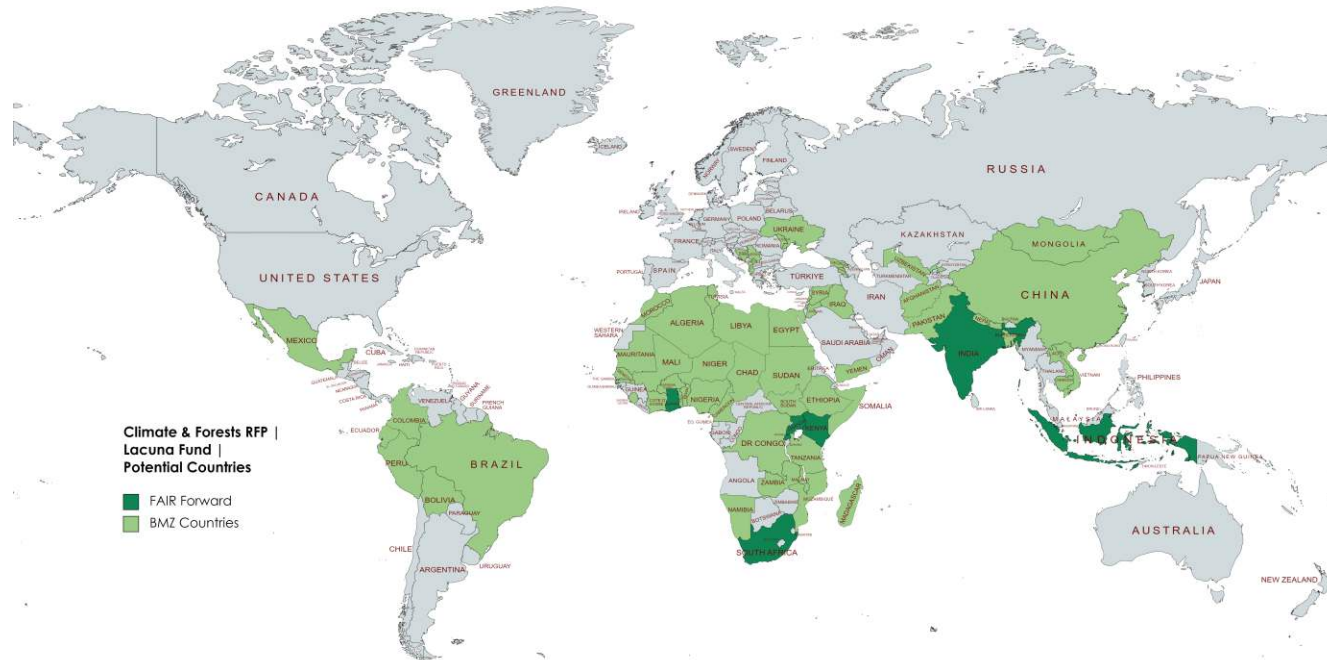
- Applicant information
- Proposal narrative
- Project timeline
- Budget and budget narrative
- Due diligence self-reporting form





Special Eligibility Requirements

- Lead applicants must be headquartered in or have a substantial partnership in **Africa, Latin America, or South or Southeast Asia** in nations that are on the [BMZ Country List](#).
- Proposals originating from [FAIR Forward](#) partner countries (Ghana, Rwanda, Uganda, Kenya, South Africa, India, and Indonesia) are of particular interest.



Special Eligibility Requirements

- **Types of Organizations:**

Please note that for the Climate & Forests RFP, non-profit entities or research institutions are more likely to be selected.

- **UN Organizations:**

Special conditions apply for UN organizations. We welcome UN country offices to share this opportunity with partners and encourage them to apply. If a UN country office is best positioned to apply as the lead institution or part of a team, please contact Lacuna Fund Secretariat at secretariat@lacunafund.org to discuss.

- **Procurement Requirements:**

Teams selected for funding will be required to follow specific record keeping, reporting, and procurement terms. For example, teams will be required to obtain at least three offers for comparison for subcontractors or consultants for awards between EUR 1,000 and 200,000 and conduct a public tender for contracts over EUR 200,000. Detailed guidance will be provided to finalists.

Key Dates

7 March 2023: Request for Proposals Open

11 April 2023: Questions deadline

Please submit questions to secretariat@lacunafund.org

21 April 2023: Answers posted

1 June 2023: Full proposals due

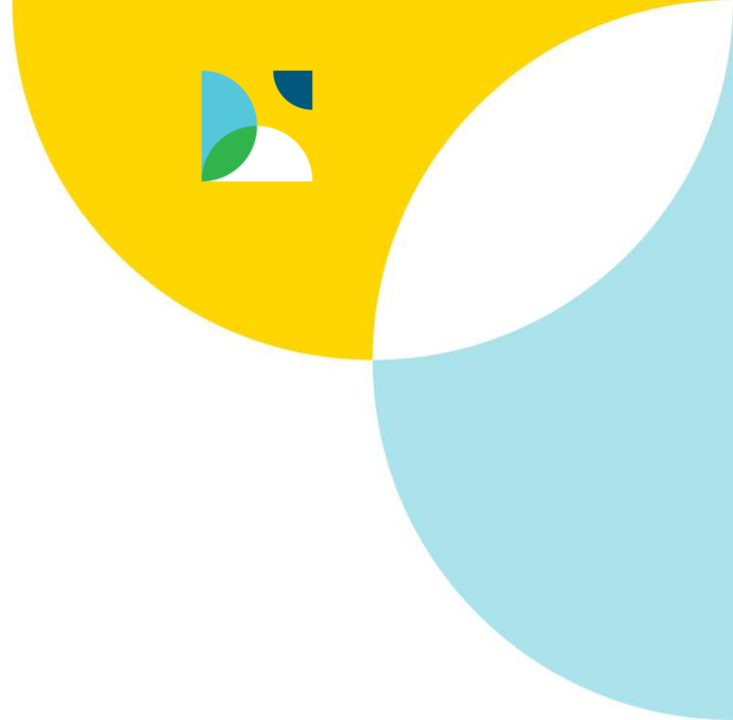
August: Technical Advisory Panel makes decisions on grant awards

September: Grant Awardees are notified

December: Award Announcements



Elements of Strong Proposals



Elements of Strong Proposals

- **Multi-disciplinary team** - experience in data science, climate, and forests
- **Use cases and community engagement**
- Clear **problem statement** and how the proposed dataset or aggregation will help solve the problem
- Specificity about dataset size – should be of **sufficient size and quality** to be useful in future applications
- **Budget** is appropriate for the size of the dataset produced



Elements of Strong Proposals

- **Equity** considerations (gender, socio-economic status, ethnicity, etc.)
- Consideration and plan for potential **privacy and ethics** issues
- Plan for **data management and licensing**
- Working across areas where possible and relevant: time, regions, climate events
- **Budget** is appropriate for the size of the dataset produced



Community Engagement

- Describe previous consultation and/or proposed collaboration with intended beneficiaries.
 - When and where you have met/ will meet with partners
 - How partners will be involved in:
 - Identifying data needs
 - Data collection, labeling
 - Data governance
 - Dataset use
 - How partners will benefit from the new/expanded dataset



Privacy and Ethics

Explain how your team will address:

- a) privacy concerns,
- b) potential for downstream misuse,
- c) possible discrimination vectors (e.g., gender), and
- d) fair and equitable working conditions, if paid labelers are involved in the project.

Describe the process you will use to screen for potential ethical issues (e.g., an institutional review board, etc.).



Data Standards and Sharing



- **F**indable - easy to find on a public, widely used platform
- **A**ccessible - open format (CCBY 4.0)
- **I**nteroperable - data format
- **R**eusable - metadata

- Sustainable - plan for maintenance
- Shared – engaged community of users & plan for sharing dataset once complete

<https://www.go-fair.org/fair-principles/>

Budget and Allowed Costs

- Must be submitted in the Excel template.
- When in doubt, explain!
- Allowed costs include:
 - Training/capacity building;
 - Data collection; labeling; QA/QC or verification; and post-processing;
 - Licensing
 - Dataset hosting;
 - Open access publication of results;
 - Metadata or data statement;
 - Crowd-sourcing efforts, such as label-a-thons.



Mentorship Opportunity: The Indaba Mentorship Programme

The Deep Learning Indaba



DEEP LEARNING
INDABA

The Indaba Mentorship Programme

- Mission: to strengthen Machine Learning and Artificial Intelligence in Africa and works towards the goal of Africans being not only observers and receivers of the ongoing advances in AI, but active shapers and owners of these technological advances.
- On a **one-time basis** for this Lacuna Fund call, offering applicants a special opportunity to **join the Deep Learning Indaba community** and match those who are interested with a **mentor who will review your draft proposal** and discuss avenues for strengthening it.



The Indaba Mentorship Programme

- Apply on **Deep Learning Indaba website**
<https://deeplearningindaba.com/mentorship>
- Select to participate **“As a mentee” > “Writing a research proposal”**
 - In the field “Please tell us more about your draft proposal” type **LACUNA FUND**, and a **detailed description of your proposed dataset**.
- We encourage you to prepare a detailed outline or draft proposal before applying for mentorship
- Apply **at least 4 weeks before the due date**.
- Mentors will be assigned on a **first come, first-served** basis.
- All applicants are expected to **read and abide by the mentorship programme’s code of ethics and conduct**.





Please find more information at:

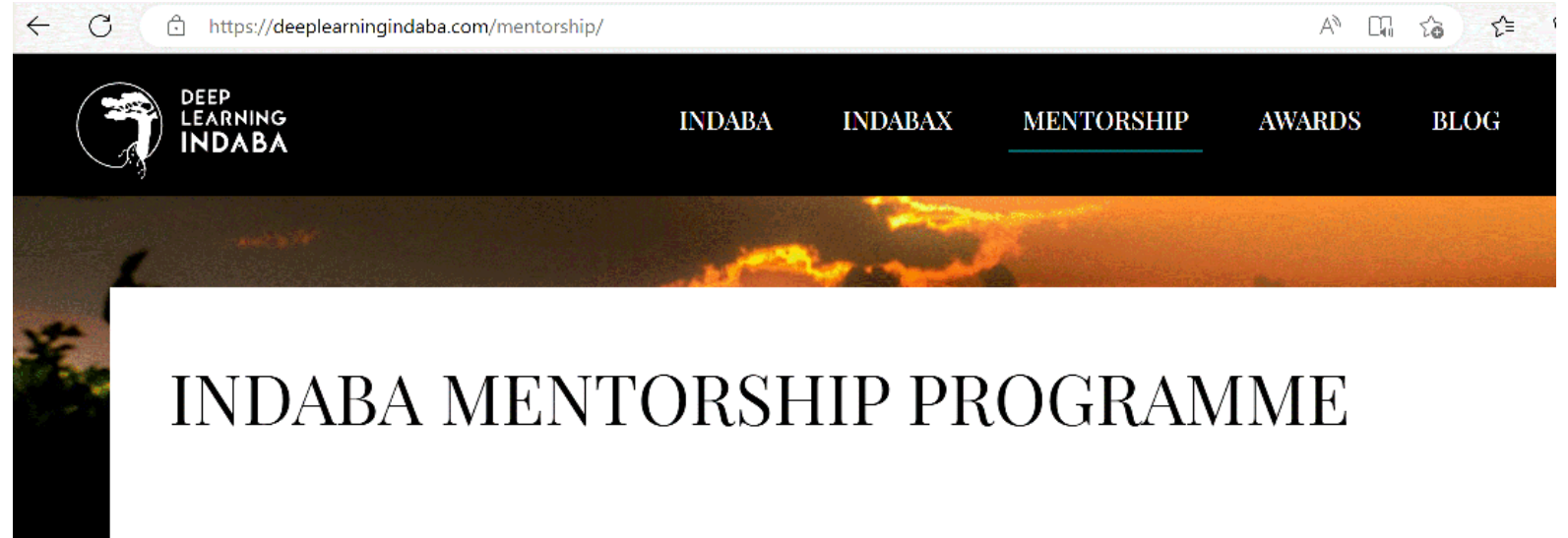
<https://lacunafund.org/apply/>

and

<https://deeplearningindaba.com/mentorship/>

Questions? Email:

mentorship@deeplearningindaba.com



INDABA MENTORSHIP PROGRAMME

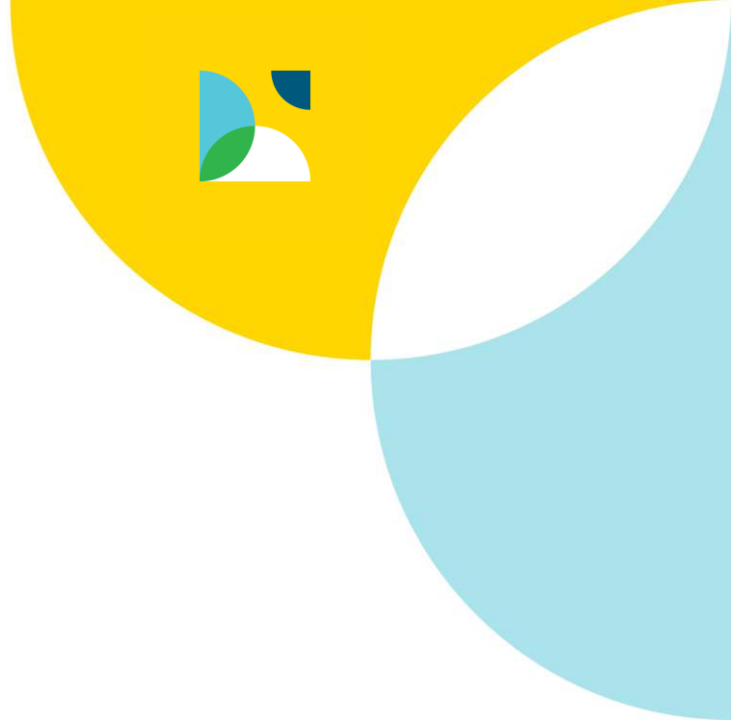
The **Deep Learning Indaba Mentorship Programme** aims to strengthen the African Machine Learning (ML) community via the development of fundamental skills. The Programme matches community members with mentors for short-term personalised interactions across a wide range of topic areas.

Mentees

A **mentee** is an individual who is looking to *grow their personal or professional skills* by engaging in *meaningful discussions with a mentor*.

As a **mentee**, you will gain access to world-class researchers, industry professionals and academics who will provide you with personalised feedback on your work. The Programme gives you the opportunity to share and discuss your ideas, plan your future and improve your professional stance to ensure you achieve your goals.

Questions?



Next Steps

- **Submit additional questions to secretariat@lacunafund.org by 11 April 2023**
- **Answers posted** publicly on Lacuna Fund Apply page on **21 April 2023**
- **Proposals due on 1 June 2023**