Drones, Data and Al Solutions Platform for Climate & Disaster Resilience



Our goal: Providing local stakeholders and frontline communities with the most comprehensive public solutions platform. The platform supports them with all they need to integrate drones, data and AI into their work and create their own geospatial/aerial data to support decision-making for their climate and disaster resilience activities.



Initial focus area: Addressing community resilience towards floods and other water-related disasters, which are increasingly prevalent and pose significant threats to vulnerable communities globally.



Why drones, data & AI: Drones offer unique advantages over traditional remote sensing (satellites, airplanes) as they are more accessible to local stakeholders. This empowers them to create their own geospatial/aerial data for their climate and disaster resilience efforts.

Al supports data analysis and the creation of fast, more accurate, accessible insights crucial for informed decision-making in climate and disaster resilience and management.

Initial Locations

While 30+ countries of the Flying Labs Network are already actively implementing drone, data and AI solutions for climate action and disaster resilience the Solutions Platform will initially be co-developed with Flying Labs of following countries:



Key countries: South Africa, Tanzania, Nigeria, Nepal, Sierra Leone, Peru

Supporting countries: Kenya, Jamaica, India





The implementation and scale of the Solutions Platform is feasible with a short timeline as it builds on the strong base created by WeRobotics & Flying Labs over the past 8 years, including:

- 20+ replicable use cases
- A growing Network of local drone, data, and AI experts, already present in 40+ countries in Africa, Latin America, the Caribbean & Asia-Pacific
- A growing ecosystem of drone, GIS and AI technology partners
- A successful track record of conferences, workshops and trainings organized

Implementation Timeline

November 2024

Southern African Drones, AI, and GIS Disaster Risk Management Conference & Workshop

- Test new conference and training format
- Launch Solutions Platform prototype
- Gather feedback from potential future platform users

December 2024

- Iterate prototype based on stakeholder feedback

2025

- Iterate from prototype to actual solutions platform
- Expand resources and toolkit with existing resources
- Fundraise (see "How to invest")
- Promote solutions platform to increase use & crowdsourcing

2026+

Build on 2025 expansion for scale (see scaling plan)

Scaling Plan

Geographic scale

Phase 1: Expand platform resources and replication of solutions to more countries in Africa, Latin America, the Caribbean, and Asia/Pacific (the Flying Labs Network is already present in 40+ countries)

Phase 2: Expand Platform resources and replication of solutions created and led by the Global South to the Global North seen the growing frequency of floods and water-related disasters in the North (South-North learning transfer)



Sector scale: Expand the platform's sector focus to additional climate and disaster resilience & management applications (food security, other types of disasters, etc.)



Stakeholder scale: New sector applications will allow to scale to new stakeholder groups



Resource scale: The Solution Platform will be open to crowdsourcing, allowing local stakeholders (civil society organizations, community-based organizations, government departments, technology providers, etc.), to upload and share their local solutions on a global level.

Impact

Providing local climate and disaster resilience practitioners with all they need to create their own geospatial data for more informed decision making will achieve:

Outcomes



- Greater collaboration, dialogues, & knowledge sharing among stakeholders at local, national, and global levels
- More efficient and effective use of resources (time, financial, and human) in climate and disaster resilience and management through use case replications, shared experience and knowledge

How to join and invest in the solution

Become part of unlocking the immense potential of the Climate and Disaster Resilience Solutions Platform by contributing with financial support, in-kind technology, or pro-bono professional services to one or several of the following parts of the Climate and **Disaster Resilience Solutions Platform:**

- communities



- Improved local capacity and technical knowledge to ethically and sustainability integrate locally produced geospatial data into informed decision-making
- Increased access to drones, data, and AI-informed solutions and know-how tailored to local needs, including for Multi-Hazard Early Warning System (MHEWS)
- Better informed decisions for climate action and disaster management strategies

Impact

- Increased community ownership and inclusivity in climate and disaster resilience and management activities
- Enhanced locally adapted policies and financial strategies for better disaster risk management and climate change adaptation
- Reduced effects of disasters on vulnerable communities
- Improved sustainability & resilience of infrastructure & ecosystems



Drones for Disaster Management: Impact Stories from South Africa and Senegal Flying Labs

Watch Videos

More stories available in our concept note

1. Invest into creating new replicable drone/data use cases and workflows. All use cases will be locally-led. They will support flood and other water-related disaster challenges identified by local stakeholders and frontline

2. Invest into the adoption, improvement and inclusion of existing AI algorithms to accelerate data analysis and decision-making processes.

- 3. Invest into strengthening capacity and expanding collaboration between stakeholders on a national and regional level by supporting regional conferences, training workshops, creation of online training, and other formats requested by the local stakeholders.
- 4. Invest into promoting the Solutions Platform and scaling it to new geographies, sectors, and stakeholder groups.

Contact us to discuss your contribution and for any additional information.



Sonja Betschart sonia@werobotics.org



Kenneth Ramah kenneth@werobotics.org



