

Empowering the Borari Tribe



Project Brief

Community-Led
Environmental
Monitoring and
Restoration Project in
Brazil

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Understanding Through Imagery

Introduction to Neila Borari and Her Tribe

Brazil's Amazon region, particularly in the Pará state, encompasses both rainforest and mangrove ecosystems that are essential for biodiversity, carbon sequestration, and sustaining local livelihoods. However, these ecosystems are under pressure from deforestation, agriculture, climate change, and illegal activities, threatening the unique services they provide. The Borari Tribe, located in the Alter do Chão area, has demonstrated a strong commitment to environmental stewardship, aiming to preserve their natural heritage while fostering sustainable development for future generations.

About Distant Imagery Solutions

At Distant Imagery, we're pioneering a community-first approach to environmental restoration and monitoring. Our mission is to democratize climate technology by equipping communities with the tools, knowledge, and skills they need to build, operate, and adapt drones and aerial technology for various conservation and monitoring efforts. This model enables sustainable, large-scale environmental impact at a fraction of traditional costs and ensures that local communities retain ownership and control over their restoration and monitoring projects.

Our mission is to democratize climate technology by providing communities with the tools and training to independently carry out, monitor, adapt, and sustain environmental restoration projects. This model supports local resilience by ensuring community members have the skills and resources to lead projects, scale restoration efforts, and create sustainable livelihoods without ongoing external dependencies.

Once licensed and trained, communities retain 100% of project revenue generated, fostering environmental stewardship and economic self-sufficiency.

In 2024, we successfully partnered with ADNOC, ENGIE, and Mubadala Energy to plant 5.5 million mangroves using our custom drone technology, demonstrating the scalability and speed of our approach. Beyond restoration, we support communities in essential Monitoring, Reporting, and Verification (MRV) tasks, empowering them to monitor illegal fishing, poaching, land encroachment, and resource use within their territories.

Through the collaborative platform we are building, communities will also share their innovations, modifications, and methodologies, creating a dynamic exchange of best practices and continuously improving restoration outcomes across regions.

Project Overview for Brazil

In collaboration with the Borari Tribe and their leadership in the Alter do Chão region, this initiative focuses on community-led climate monitoring, environmental protection, and forest restoration. By equipping the Borari with specialized drones and training, we enable them to independently monitor, conserve, and restore their land and resources, while aligning with traditional practices and environmental stewardship goals.



Alter do Chão region

Primary Project Activities

1. Climate and Territory Monitoring Using Aerial Technology

To support sustainable forest conservation and territorial protection, Borari community members will receive training to build and operate drones for MRV activities. These drones will enable them to track illegal fishing, poaching, forest health, and land use in real time, providing crucial data for protecting their ecosystem and resources. This technology empowers the Borari to actively manage and protect their land with the latest tools and data, reinforcing their capacity for self-sustained conservation.

2. Drone-Based Forest and Medicinal Plant Restoration

Community members will be trained to assemble, operate, and maintain drones for seed dispersal, enabling independent expansion of reforestation efforts. This approach enhances ecosystem services, biodiversity, and resilience, aligning with both local needs and environmental goals.

3. Sustainable Agriculture and Bee Production Enhancement through Drone-Assisted Planning

To improve agricultural productivity and support bee production, drones equipped with multispectral cameras which they have built will be used to identify optimal health areas to increase bee production. Through soil analysis, crop monitoring, and mapping of ideal locations for bee-friendly flora, the community will gain insights to enhance crop yields and support sustainable beekeeping practices. Training sessions will provide community members with the knowledge and skills to adjust and manage these applications independently, fostering resilient agricultural practices and supporting local livelihoods.

Collaborative Platform for Community Innovation

This project is integrated with Distant Imagery's collaborative platform for knowledge sharing and continuous improvement. Through this platform, Borari community members will document and

share modifications they make to drones and restoration techniques, creating a resource for other communities within Distant Imagery projects. This feedback loop fosters continuous innovation, providing all communities access to an evolving toolkit of technologies and best practices for monitoring and restoration.



Example Community Exchange between Brazil and Kenya

Support and Collaboration

The Borari Tribe's leadership and commitment to environmental preservation align with this project's goals. By working in partnership with the tribe, this project ensures that community-led conservation efforts are grounded in scientific rigor, respect for cultural practices, and alignment with long-term sustainability objectives.

Expected Outcomes

- **Enhanced Environmental and Territorial Monitoring:** Equipped with custom aerial tools, the Borari can monitor illegal activities, forest health, and ecosystem changes, supporting informed conservation actions.
- **Scalable Restoration Techniques:** Drone-based reforestation enables the community to restore degraded areas efficiently, strengthening ecosystem services and biodiversity.
- **Sustainable Agriculture and Bee Production:** Drone mapping supports optimized agricultural planning and beekeeping, benefiting soil quality, crop health, and pollinator populations.
- **Collaborative Knowledge Sharing:** The shared platform encourages the exchange of innovations and methodologies, allowing communities to adapt and improve restoration practices continuously.



Example of DIS Community Built Drone for Habitat Restoration

Conclusion

This project exemplifies Distant Imagery's mission to democratize climate technology, promoting self-sufficiency and resilience within indigenous communities. By partnering with the Borari Tribe, we reinforce Brazil's efforts in forest conservation, while enabling sustainable economic growth and environmental stewardship. This collaboration represents a unified commitment to protecting Brazil's unique ecosystems and preserving the cultural heritage of its indigenous communities.