

LINDAMITI

OUR FORESTS, OUR FUTURE



LINDAMITI

OUR TEAM



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OUR PAIN POINT

THE BLIND SPOT IN CONSERVATION

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What is the challenge we are facing?

- Kenya has lost 11% of its tree cover since 2000 (Global Forest Watch, 2024). That's 50 football fields of forest disappearing every single day.
- Illegal logging, charcoal burning, and encroachment are accelerating deforestation in critical water towers like the Mau Complex and Mt. Kenya.
- Reporting reliant on Tolls etc. requires a phone call, waiting for an agent, and verbal descriptions of locations. You cannot "call in" a photo of a license plate or a GPS pin.
- Actionable intelligence is lost, response times are slow, and "phantom" crimes go unpunished.
- Millions of Kenyans have smartphones. We need to turn every citizen into a forest ranger.



THE DIGITAL HUMMINGBIRD: LINDA MITI REAL-TIME FOREST WATCH ON WHATSAPP

An AI-powered WhatsApp bot that allows citizens to report environmental crimes instantly, anonymously, and with verified data.

Real-Time: Reports are processed the second they hit the server.

Localized: Uses GPS pins to map threats down to the specific tree block.



THE DIGITAL HUMMINGBIRD: REAL-TIME FOREST WATCH ON WHATSAPP

User Journey: See. Text. Send.

- See illegal activity.
- Text: write a quick text, drop a location pin in WhatsApp.
- Send to Linda Miti. The bot parses the intent ("Logging" vs "Poaching") and alerts the dashboard.



THE ARCHITECTURE

- **Ingestion (WhatsApp + n8n):** Captures user messages, images, and location pins in real-time.
- **The Brain (AI Agent):** Gemini chat model parses unstructured text (e.g., "They are cutting trees near Gate C") into structured JSON data.
- **The Core (Java Backend):** Spring Boot Service handles secure user authentication and persistent storage of reports.
- **The Analytics (Python Middleware):** FastAPI engine cleans data and calculates "Hotspots" for the dashboard.
- **Live Dashboard:** Admin UI showing total alerts, verified incidents, and a heat map of threats



IMPACT & FEASIBILITY

COMMUNITY IMPACT

- 1 Leverages the Green Belt Movement's existing network of 4,000+ community groups.
- 2 Removes the fear of reporting by offering secure, text-based anonymity.
- 3 Assesses the impact of Climate Change on the environment, society, and livelihoods locally and globally.

OPERATIONAL IMPACT

- Reduces forest conservatory communities response time from hours (searching) to minutes (navigating).
- Creates a "Data Trail" for prosecution (photos + timestamps)
- Identifies environmental issues experienced in one's own community

THANK YOU!

It is the little things citizens do. That is what will make the difference."

— Prof. Wangari Maathai



APPENDIX

Data Flow Diagrams

Global Forest Watch. (2024). Kenya: Tree cover loss. World Resources Institute. Retrieved November 23, 2025, from
<https://www.globalforestwatch.org/dashboards/country/KEN>

