



SECRETARIAT GENERAL

BUREAU NATIONAL DE COORDINATION DES CHANGEMENTS CLIMATIQUES



Application and enhancement of Global Forest Watch in Madagascar

Presented by

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OUTLINE



- Context
- Goal and objective
- Expected Outcomes
- Initiatives with GFW
- International and national institutional partners
- Application and enhancement of GFW in Madagascar
- Medium and long term needs

CONTEXT



- Deforestation and land degradation result from biodiversity loss, greenhouse gas emissions, soil erosion and changes in the micro climate and weather patterns: increasing the risk of desertification and food insecurity.
- Critical barriers to undermine the availability of suitable forest data and information, and hamper forest management: unavailable information, timeliness, inaccurate, inconsistent, high costs, top down, not interactive, technical complexity and dispersed data.
- The Global Forest Watch (GFW) project aims to address all the above barriers, building upon existing resources, and developing innovative and very advanced and user-friendly tools.

GOAL AND OBJECTIVE



- The goal of the GFW project is to reduce deforestation and improve rural livelihoods by transforming forest management and conservation at a global scale.
- The project aims to develop and apply innovative GFW technology that will contribute to reducing deforestation, forest and land degradation, illegal activities and support biodiversity conservation in the pilot countries as well as at a global scale.

EXPECTED OUTCOMES



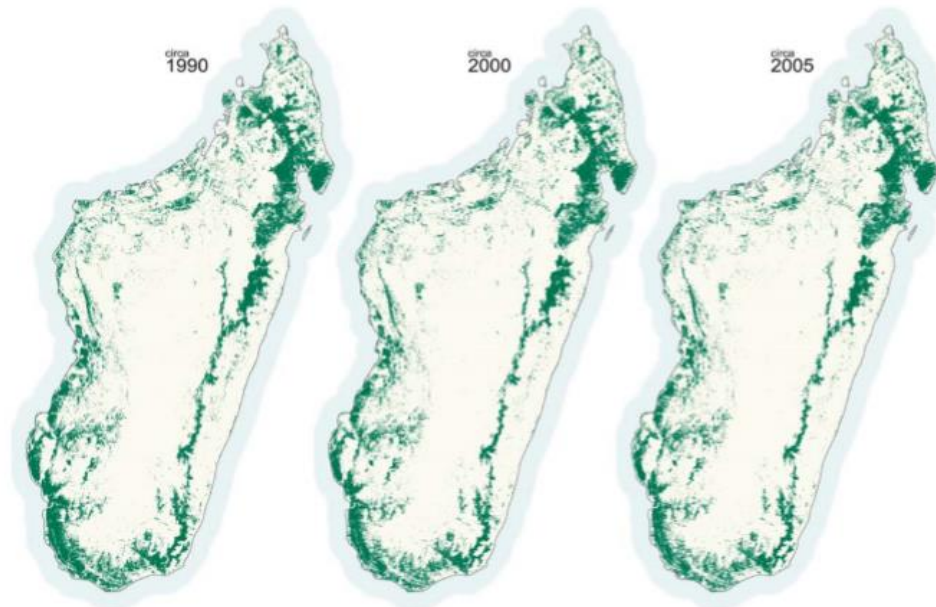
A new GFW near-real time forest monitoring and deforestation alert system is designed and operational and applied supporting:

- Improved management of existing forest areas and conservation of biodiversity;
- Reforestation/afforestation programmes;
- Improved control of deforestation on the ground and monitoring/protection of carbon stocks and;
- Providing the information base for PES schemes (Payment for Ecosystem Services).

INITIATIVES WITH GFW (1/4)



Mapping and classifying all of Madagascar's forests using remote sensing tools

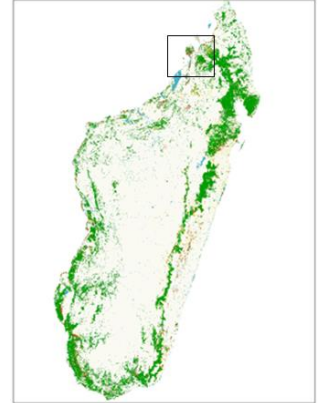


Forest cover (Ha)			Deforestation rate per year (% per year)	
1990	2000	2005	1990-2000	2000-2005
10 650 142	9 678 402	9 413 218	0.83	0.53

INITIATIVES WITH GFW (2/4)



Mapping mangrove forest change and extent in North-west part of Madagascar



INITIATIVES WITH GFW (3/4)



Different initiatives focusing on the use of remote sensing in several sectors such as health, water resources, biodiversity, etc.



INITIATIVES WITH GFW (4/4)



Development of a specific carbon-focused application for GFW



Accounting of the valuation of Ecosystem Services: economic and biophysical values of the natural resources of Madagascar.

INTERNATIONAL AND NATIONAL INSTITUTIONAL PARTNERS

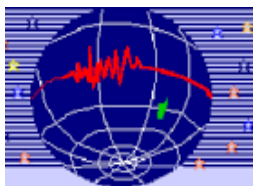


WORLD
RESOURCES
INSTITUTE

World Resources Institute



Ministry of Environment, Ecology and Forests



Geophysical Institute and Observatory



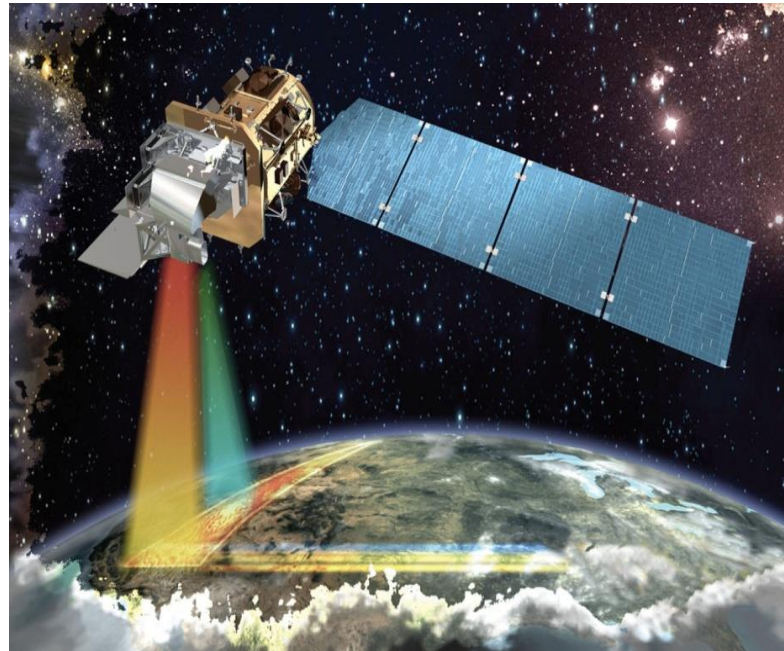
Network of Biodiversity in Madagascar

blue ventures
beyond conservation

Blue Ventures

APPLICATION AND ENHANCEMENT OF GFW IN MADAGASCAR (1/2)

- To build local mapping and data sharing capabilities;
- To enhance the near-real-time prototype system from 500m (MODIS based) to 30m (LandSat based)



APPLICATION AND ENHANCEMENT OF GFW IN MADAGASCAR (2/2)



- To enhance the calibration and validation of the annual LandSat forest cover change analysis and to help to develop the first-of-its-kind near-real-time LandSat-based alert system;
- To support research teams developing their own value-added analysis utilizing the wealth data that will become available through GFW;
- To engage key user groups and stakeholders in the uptake and use of the GFW2.0 and as contributors of information through the crowdsourcing functions.

MEDIUM AND LONG TERM NEEDS



- Computer Park for the processing of satellite images to monitor variability and climate change;
- Capacity building (acquisition and use of satellite data).

Perspective (private initiative)

Set up a Competence Centre on Climate Change and Sustainable Development

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Thank you for your kind attention