

Measuring Activity Data in the DRC

Christophe Musampa

Direction des Inventaires et de L'Aménagement Forestier, Ministère de
l'Environnement, Conservation de la Nature et Tourisme

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COORDINATION NATIONALE
REDD - MECNT

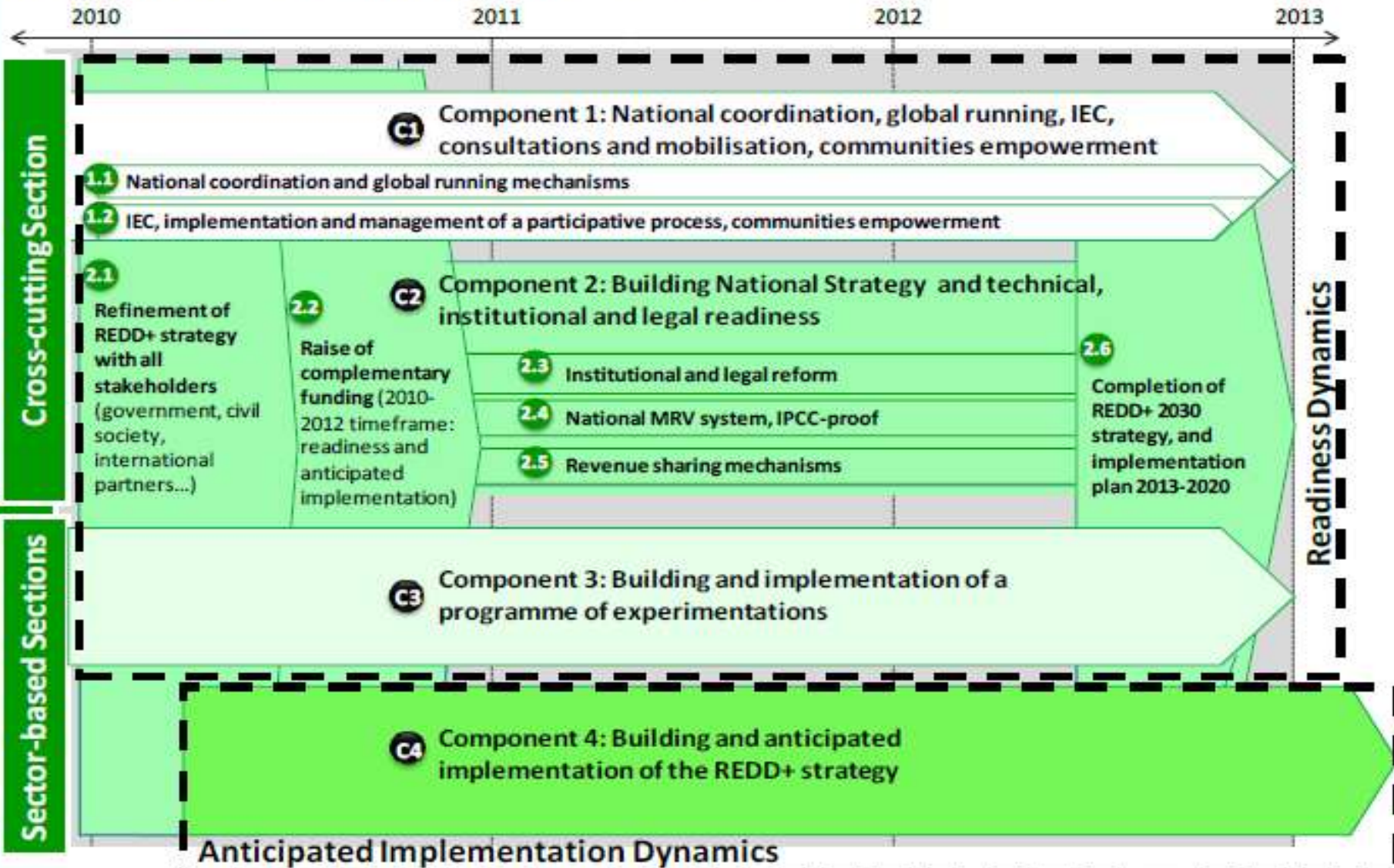


FOREST CARBON
PARTNERSHIP FACILITY

An Ambitious REDD Readiness Process detailed in the R-PP



National process roadmap from 2010 to 2012



The R-PP, a roadmap and a meeting point for partners and stakeholders in a process that has to be coordinated



- **Volet 1: Organisation and consultation**
 - 1a. National arrangements for coordination and management of preparation
 - 1b. Consultation and participation of stakeholders
- **Volet 2: Preparing a REDD strategy**
 - 2a. Quick assessment of land use, forest policy and governance
 - 2b. Strategic options for REDD
 - 2c. REDD implementation framework
 - 2d. Social and environmental impacts
- **Volet 3: Developing a reference scenario (Reference Emissions level)**
- **Volet 4: Developing an MRV system**
- **Volet 5: Calendar and budget**
- **Volet 6: Designing a monitoring and evaluation framework**

The MRV system is a tool to support the implementation of REDD+ in the DRC



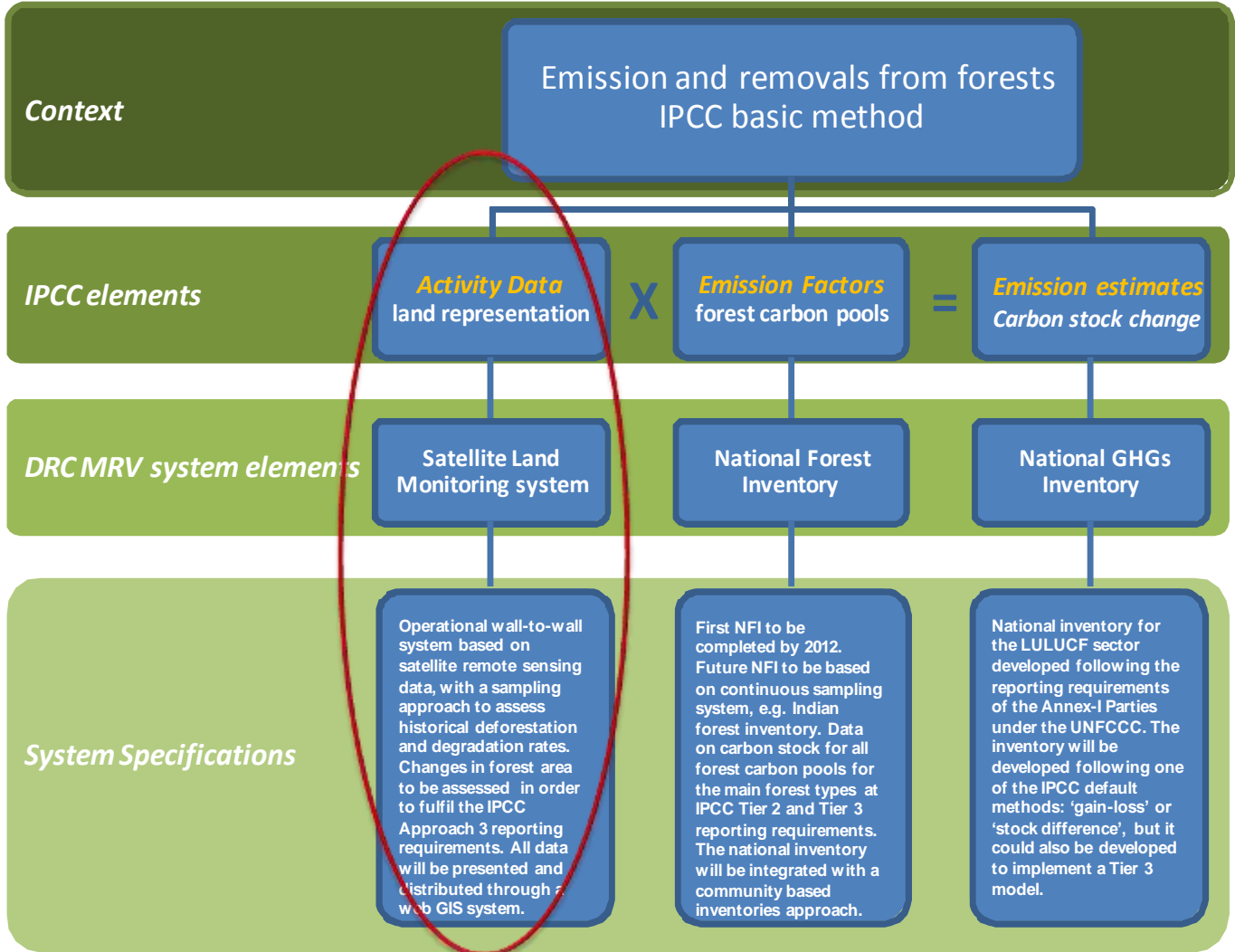
Readiness for an MRV system require new institutional arrangements and capacity building: work already underway

• At the Ministry of Environment:

• Direction de l'Inventaire et de l'Aménagement Forestier (DIAF)

• Direction du Développement Durable (DDD)

• In the Universities of Kisangani et Kinshasa.

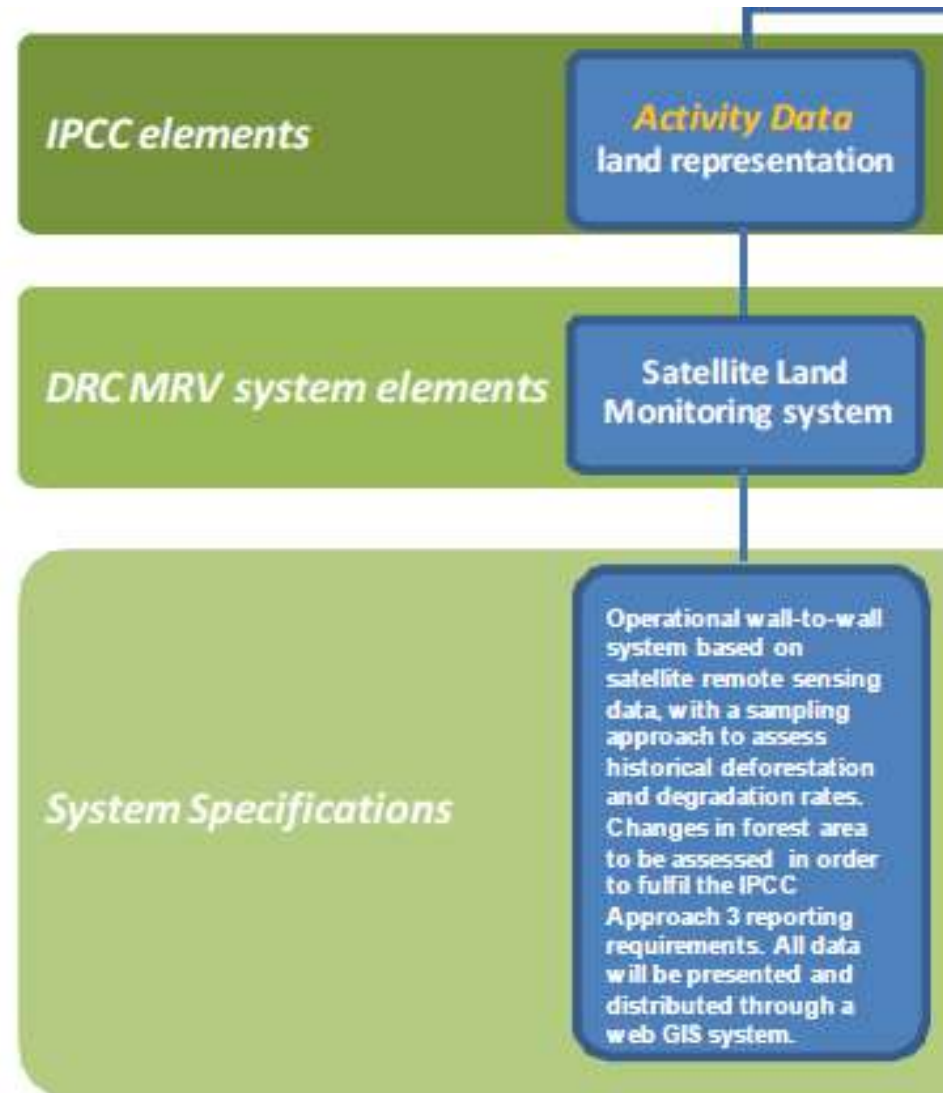


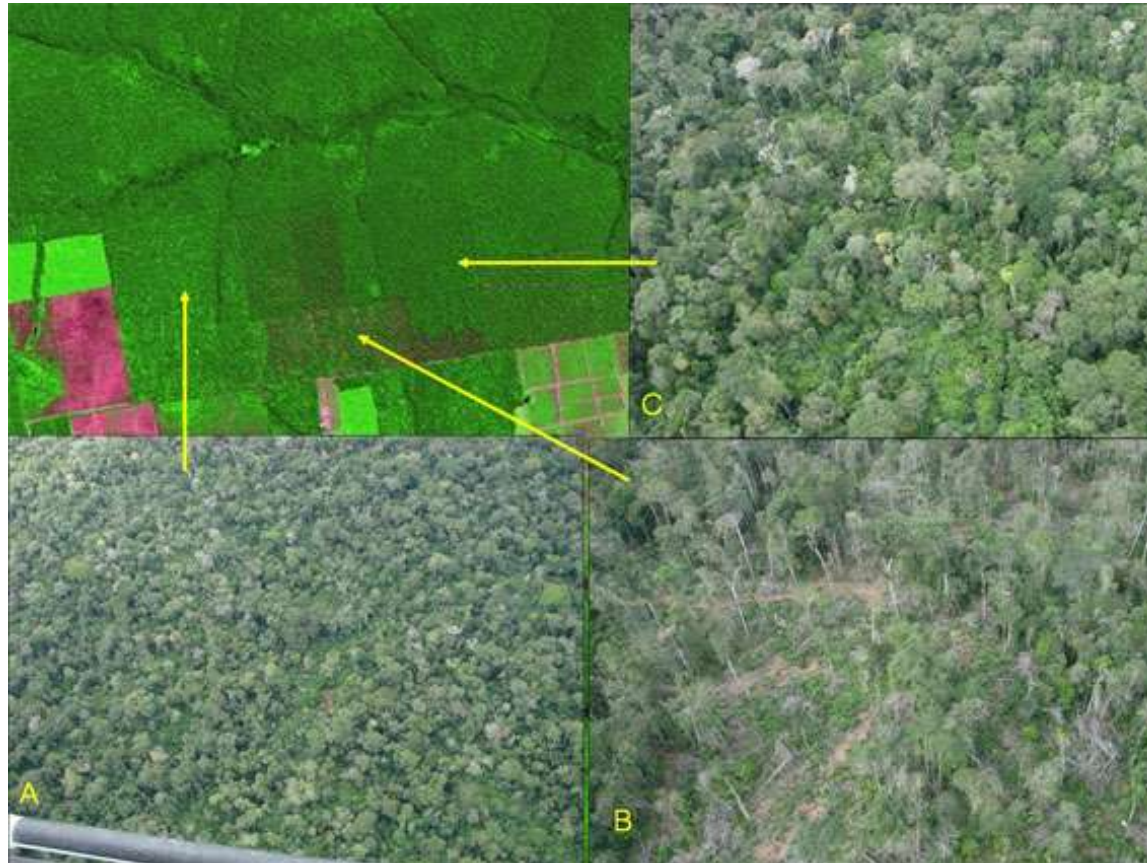
Activity Data : Land representation



The DRC is looking to develop a Satellite Land Monitoring System :

Operational wall-to-wall system based on satellite remote sensing data, with a sampling approach to assess historical deforestation and degradation rates. Changes in forest area to be assessed in order to fulfil the IPCC Approach 3 reporting requirements. All data will be presented and distributed through

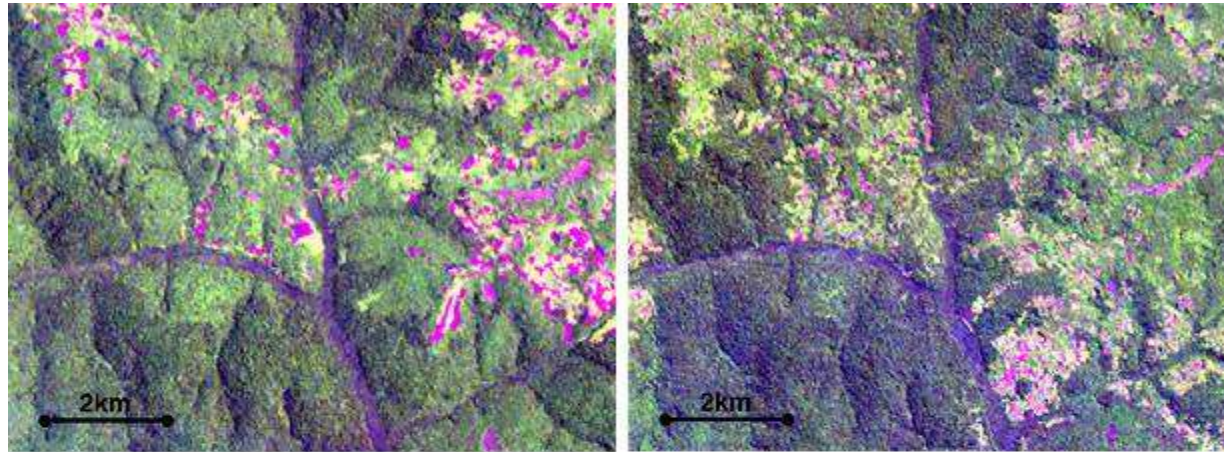




Il est possible de faire le suivi de l'évolution du couvert forestier en analysant des images satellites.

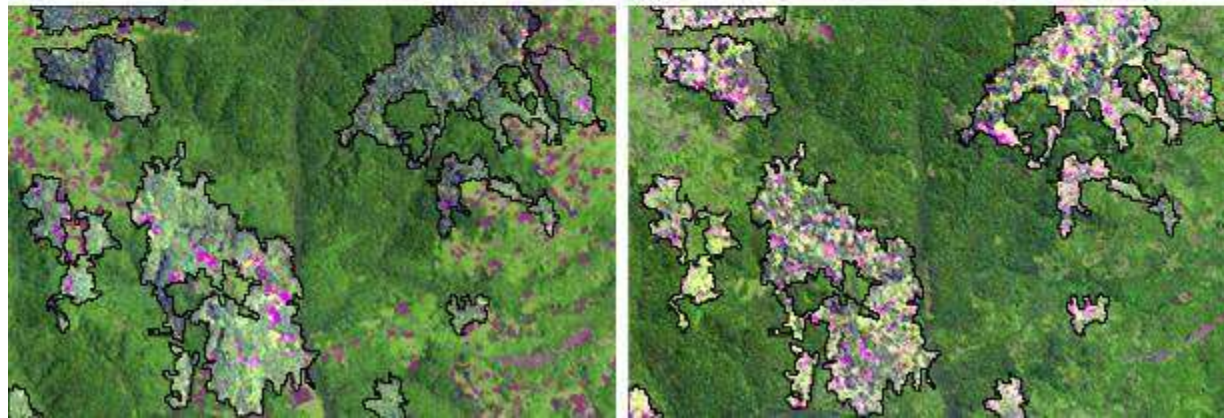


Suivi du Couvert Forestier via télédétection



(c)

(d)



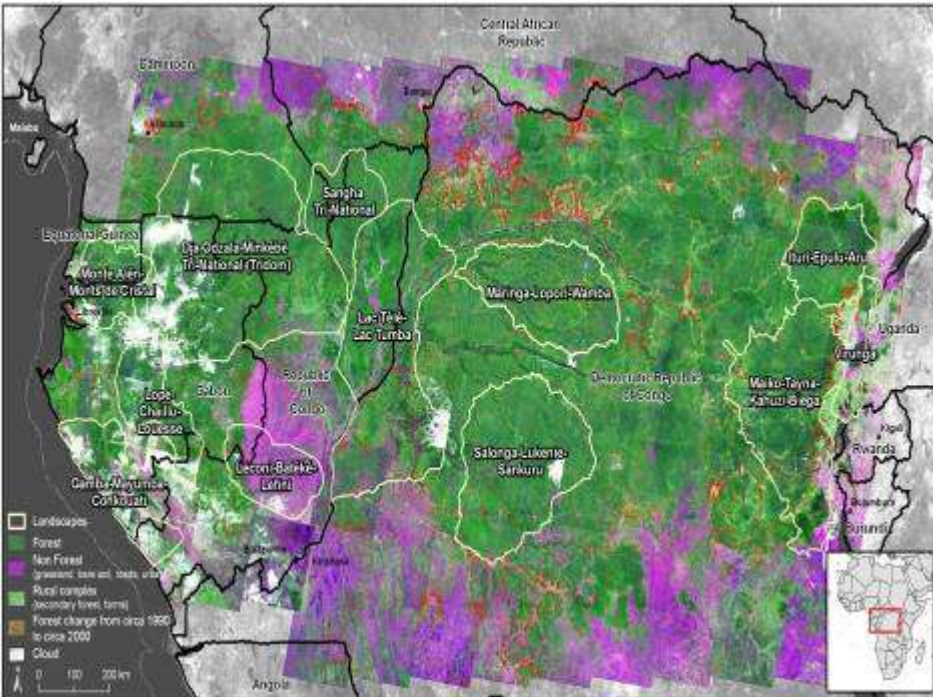
Des logiciels rendent de plus en plus rapide le traitement des images satellite.

Past studies conducted in DRC

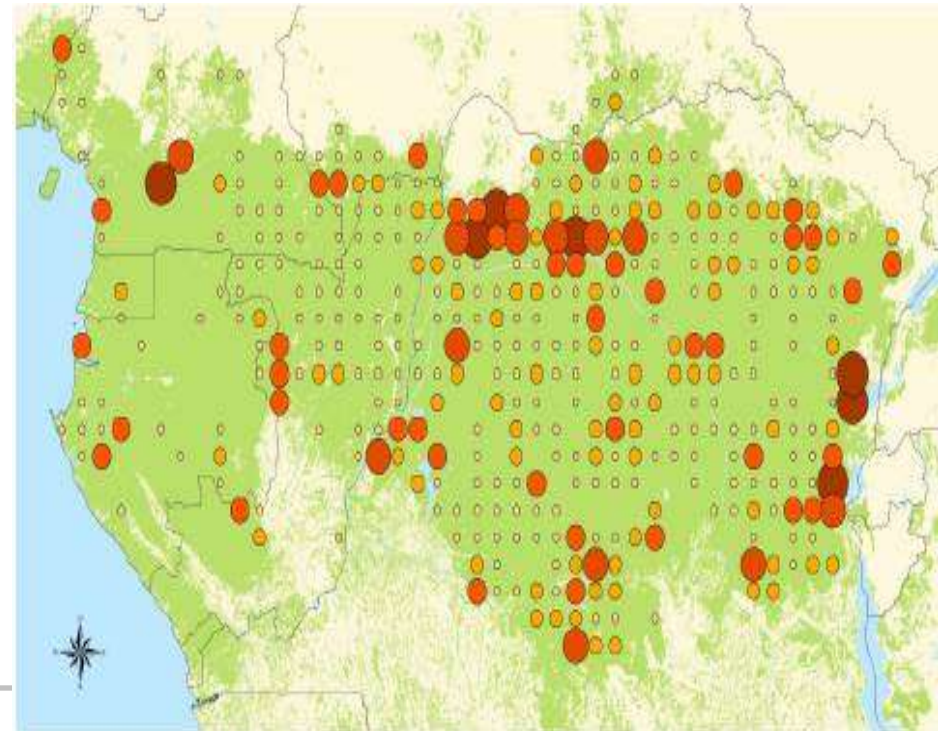


- A number of studies have already been conducted in the region, particularly in the estimating historic deforestation and degradation (CARPE-OSFAC and FORAF-FOCA):
- The Joint Research Center (JRC) and UCL are monitoring of forest cover on the basis of samples for the years 1990-2000-2005. These studies evaluate deforestation, degradation, reforestation and regeneration based on techniques and automated interpretations of predetermined decision rules;
- The CARPE program, in collaboration with its NASA partners (the University of Maryland and University of State of South Dakota) has done the mapping of decadal changes in forest cover in the DRC.
- This is a national assessment of forest cover change between 1990 and 2000 based on Landsat and MODIS imagery using the 'wall-to-wall' approach. A new evaluation of the 'wallto-wall' using Landsat imagery for the years 2005 and 2010 is planned.

La déforestation en RDC (1990-2000)



Méthode par échantillon (OFAC-FORAF)



Méthode Wall-to-Wall (CARPE-OSFAC)

Satellite land monitoring system: technical challenges



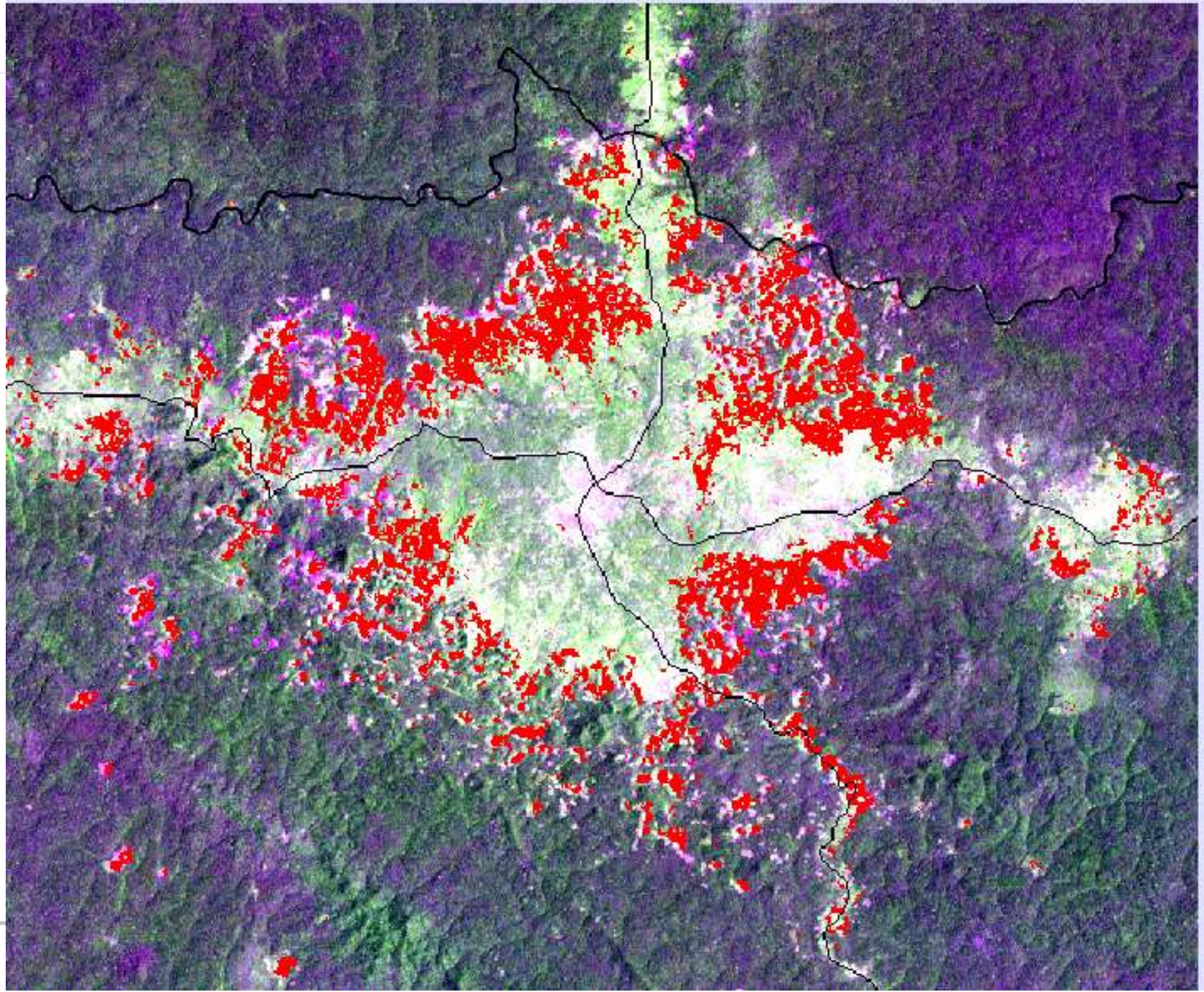
- Use of all sorts of available imagery (mostly optical)
- Image processing software
- GIS software for the production of maps



Satellite land monitoring system: technical challenges

- Adaptation of the Brazilian system for forest cover monitoring (PRODES DETER DEGRAD), and that developed by JRC FAO in the framework of the Forest Resources Assessment (FRA - RS)

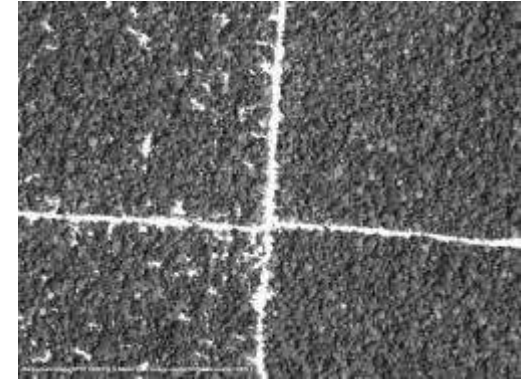
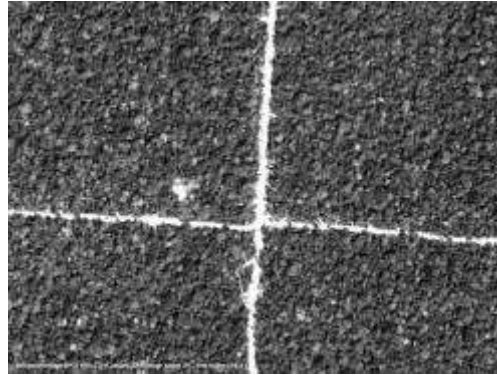
Mambasa, deforestation 1990-2000



Technical Challenges: measuring degradation



Mesuring degradation due to timber extraction is difficult. Here we can see the impact of timber extraction using SPOT (France)



Estimating GHG emissions from fuelwood extraction is very difficult. Impossible to see using satellite imagery. The NFI will have to significantly contribute in this endeavour.





- **Technical training to set up satellite land monitoring system**
 - DIAF has a laboratory with 8 PC with GIS software
 - We will soon have :
 - 10 PC Workstation et 10 GIS software and all necessary accessories.
 - 1 Plotter and 1 Scanner A0...with NFI project/FAO (UN REDD)
 - We hope that our laboratory can benefit from the support of Japan in order to fill the gaps.
- We will need highly qualified personnel which will need to be trained in DRC and abroad!
- Decent salairies will be necessary to attract qualified people to work at DIAF!

Thank you for your kind attention



Christophe Musampa Kamungandu

Chef de Division Géomatique/ Direction des Inventaires et Aménagement Forestiers (DIAF)

Ministère de l'Environnement, Conservation de la Nature et Tourisme.

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Email: christophemusampa@yahoo.fr

Mobile: +243 81 52 60 958