

# Regional Capacity Building Training Seminars on the Development and Implementation of Climate Mitigation Actions

Courtyard Marriott, Paramaribo  
Suriname  
23 – 24 June 2016

*Sharing success stories and main barriers during preparation and implementation of mitigation actions such as CDM projects & programs, NAMAs etc. in the country ?*



# Mitigation Actions in the Forest Sector

Sustainable forest Management

Forest Conservation

Enhancement of forest carbon stocks ?

(Renewable) energy ?



# INDC Suriname

## RENEWABLE ENERGY

### FORESTRY, including REDD +

- Reduce emission from deforestation
- Reduce emission from forest degradation
- *The role of Sustainable Forest Management*
- *The role of Forest Conservation*
- Enhancement of Forest Carbon stocks

Within the REDD+ project (REDD-Readiness phase 2014-2018 ) the SBB is responsible for

- Pillar II : REDD+ Bussenis model and Strategy
  - Drivers of deforestation and forest degradation
- Pillar III: REDD+ implementing framework and tools
  - National Forest Monitoring System (NFMS)
  - Forest reference emission level (FREL)

***Main goal SBB: PROMOTE SUSTAINABLE FOREST MANAGEMENT***



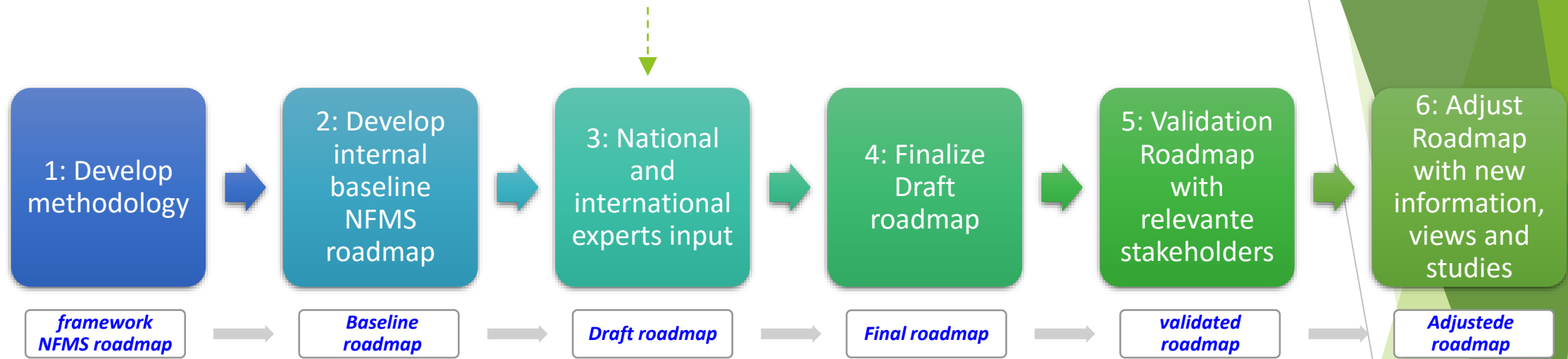
# Milestones 2016

1. National Forest Monitoring System (NFMS) roadmap
2. Activity Data - 3rd party review deforestation maps
3. Emission Factors - best possible carbon stock estimation
4. Deforestation map 2014-2015
5. Drivers of deforestation (DDFDB+) study
6. Forest Reference (Emissions) Level (FREL/FRL)
7. National Forest Inventory (NFI) proposal
8. NFMS Database & Geoportal

SBB is responsible for part pillar II and pillar III



# Milestone 1: NFMS Roadmap



Some of the topics covered:

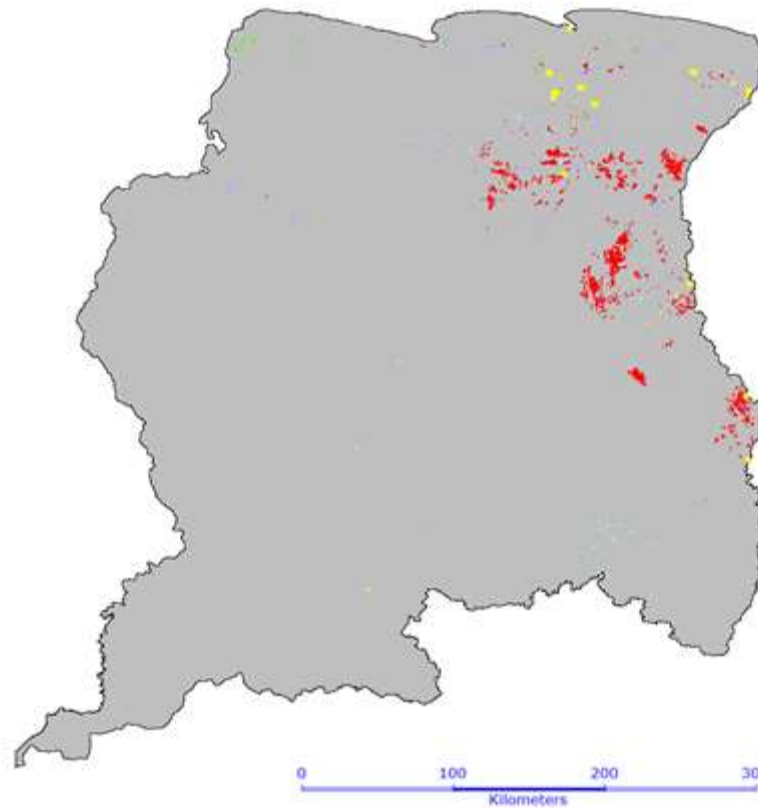
- Cross-cutting: definition of classes, data management
- Technical components: LMS, NFI, GHG inventory and reporting, ...
- Capacity building and engagement





# Milestone 2: Activity Data

Land use map  
+  
3rd party review  
Existing maps



Legend:

- Urban
- Agriculture
- Pasture
- Mining
- Infrastructure
- Secondary vegetation
- Hydrology
- Others
- Not observed

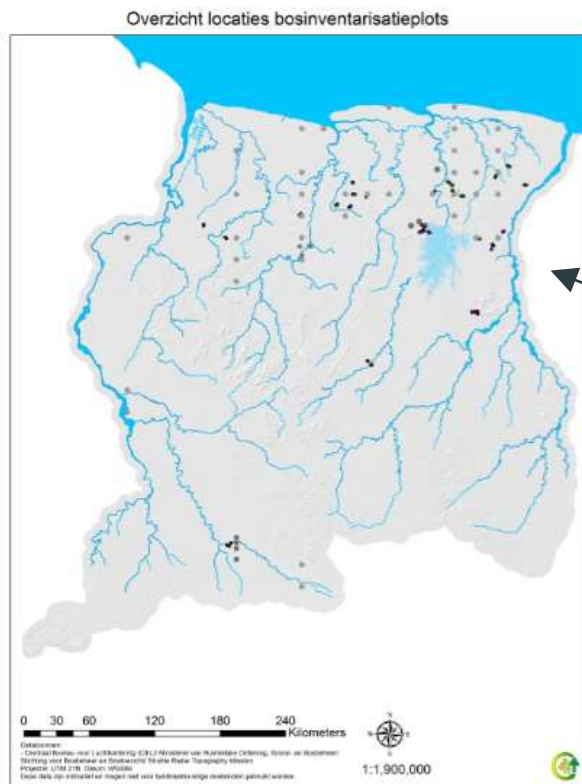
**Kaart geproduceerd door:**

FCMU, CELOS, MI-GLIS, GMD, MAS,  
Ministerie van HI, Ministerie van LVV,  
Ministerie van NH, Ministerie van OW,  
Ministerie van RO, Ministerie van RGB en  
SPS





# Milestone 3: Emission Factors



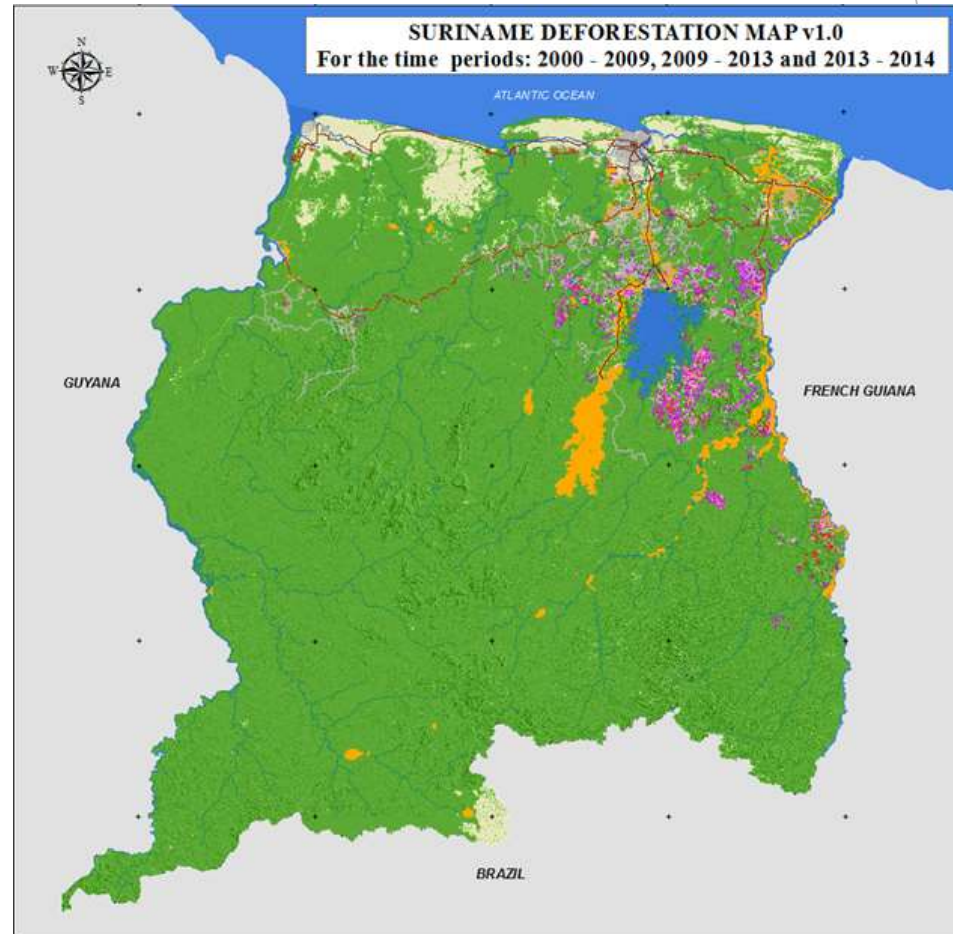
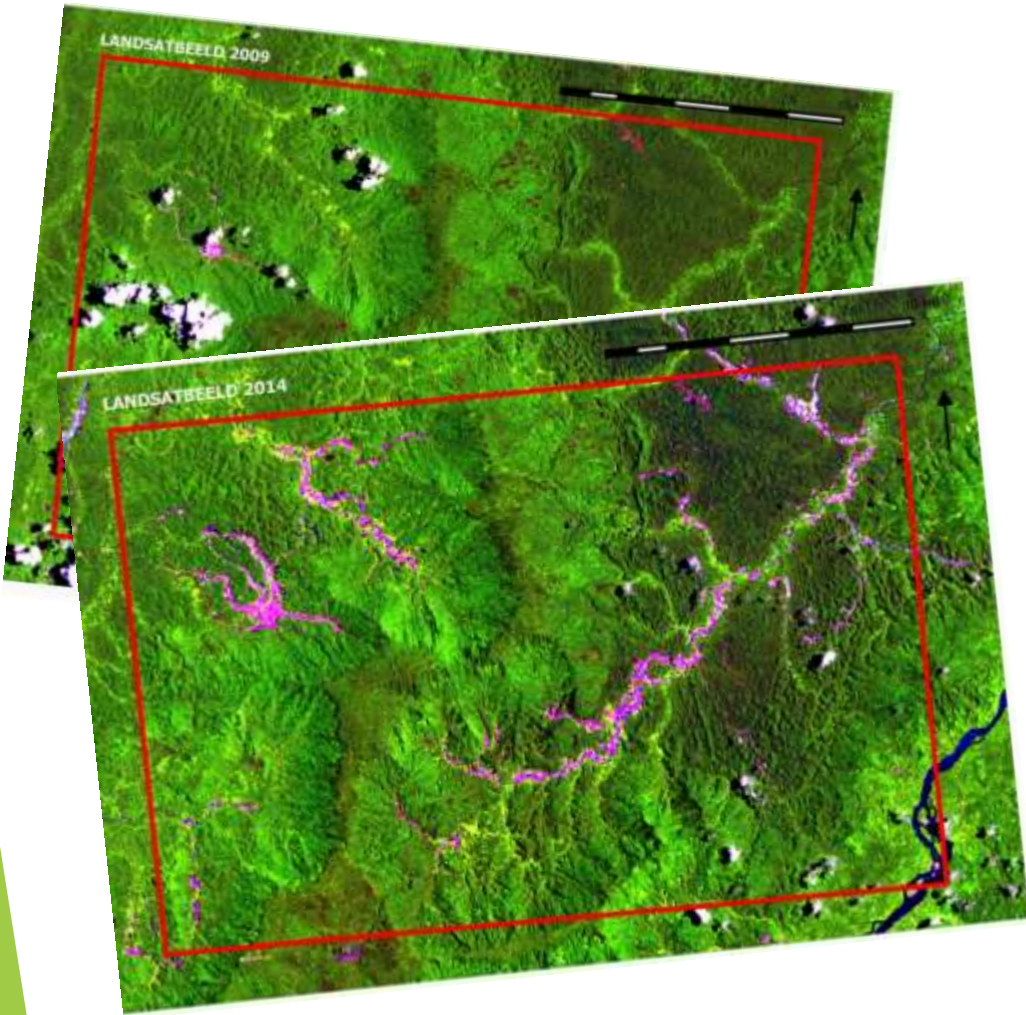
Activities	Timeline and deadlines					
	April	May	June	July	August	September
Preliminary work plan	April 22 <sup>nd</sup>					
Exploratory trip by CATIE in Suriname	April 25 <sup>th</sup> - 29 <sup>th</sup>					
Description of REDD+ context			June 15 <sup>th</sup>			
Data base synthesis						
An assessment of options to choose the most suitable emissions factor						
National experts from Suriname trained at CATIE in Costa Rica			Between 13 to 25 June			
First draft report including statistical estimates and recommendations on the future NFI design based on the available information					August 22 <sup>nd</sup>	
Presentation and training workshop by CATIE at the SBB Office in Suriname					August 29 <sup>th</sup> - September 2 <sup>nd</sup>	
Final report <i>"State-of-the-art study: Best estimates for emission factors and carbon stocks for Suriname"</i> .						September 15 <sup>th</sup>

**WE ZIJN HET BOS**





# Milestone 4: Deforestation map 2014-2015

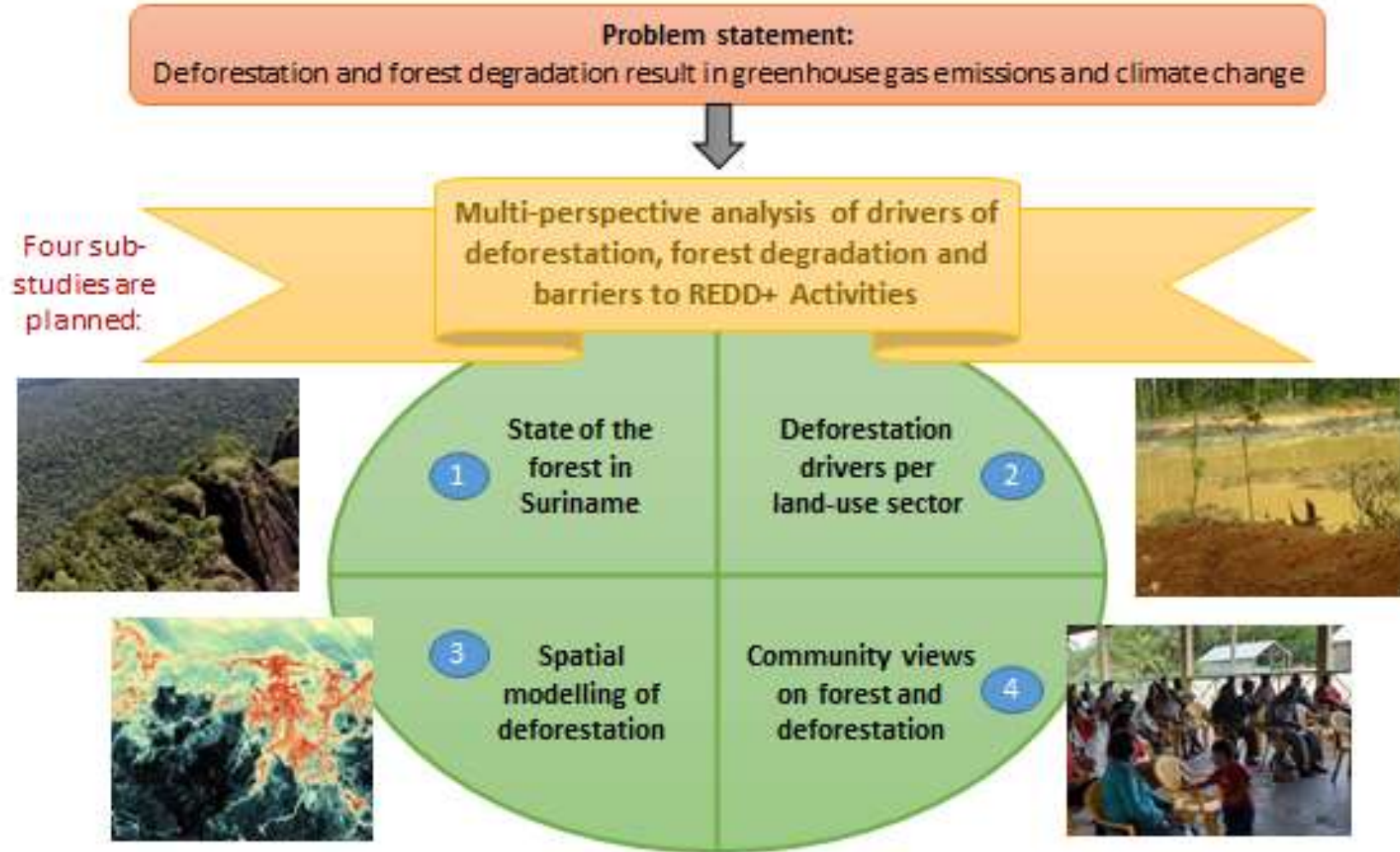


Map of 2014-2015  
Will be added  
In Q4





# Milestone 5: Drivers of deforestation study

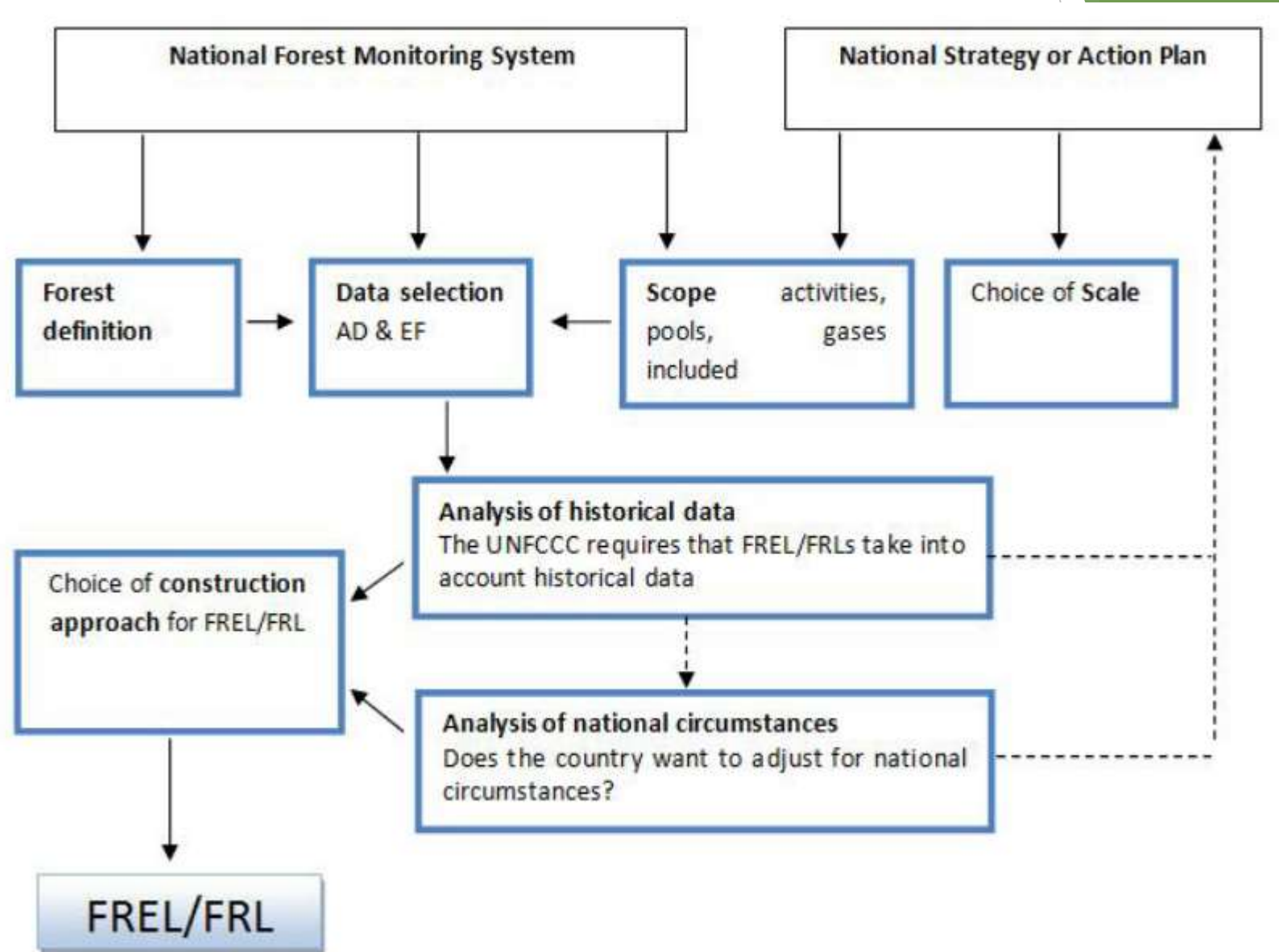




# Milestone 6: Forest Reference Level

**FREL/FRL**  
= **Baseline** for possible future results-based payments

First steps:  
Definition of forest  
Other strategic national decisions







# Milestone 7: NFI proposal

Third party review of NFI pilot report ?



**WE ZIJN HET BOS**





# Milestone 8: NFMS Database and Geoportal

UN-REDD  
PROGRAMME

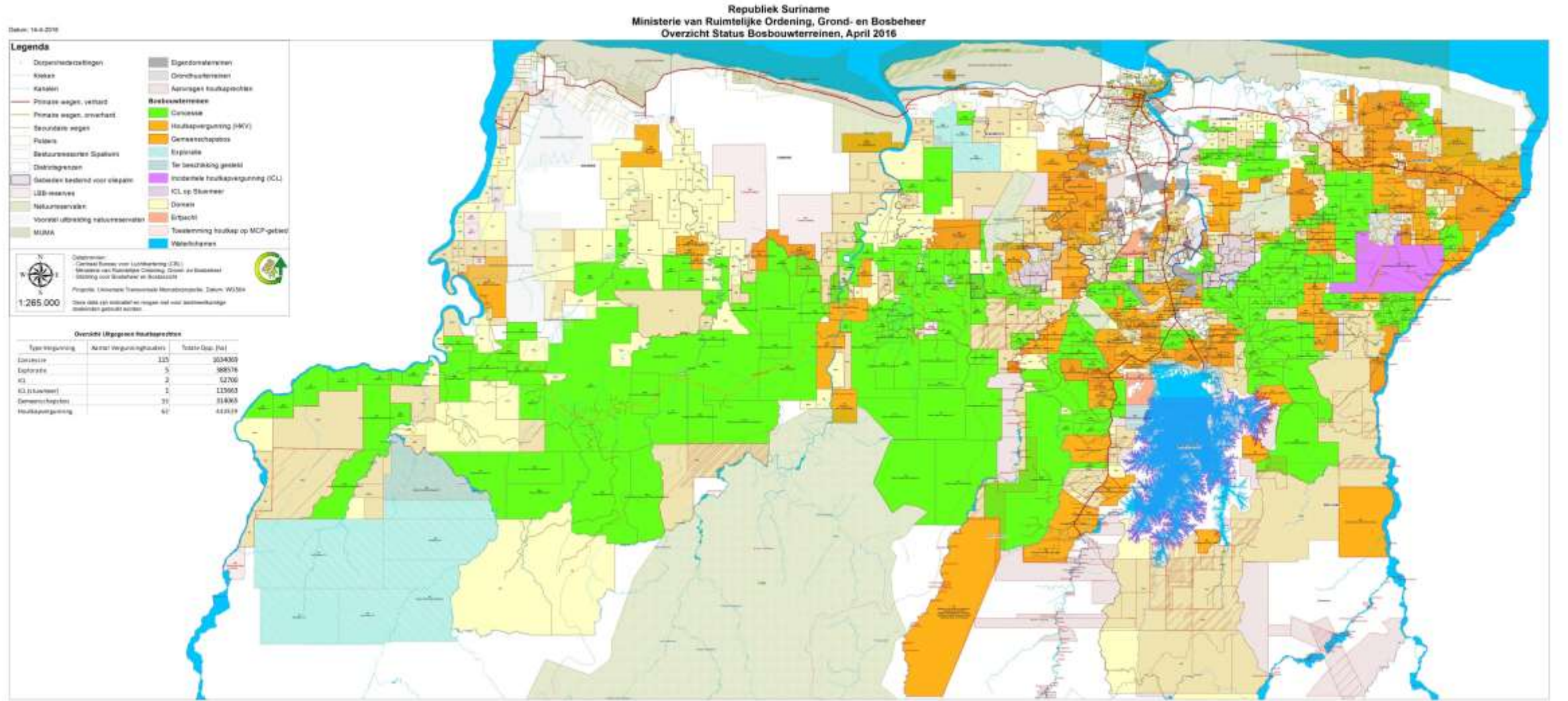


The screenshot shows the National Forest Monitoring System (NFMS) Geoportal for the Democratic Republic of the Congo. The interface includes a header with the title and a year selector set to 2010. A left-hand menu lists various layers: Base Layers, Administrative Areas, REDD+ Initiatives, REDD+ Registry, Forest area and forest area change, and Other. The 'Other' layer is expanded, showing options for Plots, Protected Areas (checked), Logging Concessions, Hydrography, Ecoregions, Roads, and Settlements. The main map area displays a satellite-style map of the Democratic Republic of the Congo with a green outline of the country and red patches indicating logging concessions. The bottom of the screen features a navigation bar with links for Information, Satisfaction survey, Stakeholder, and NFMS mailing list, along with a scale indicator.





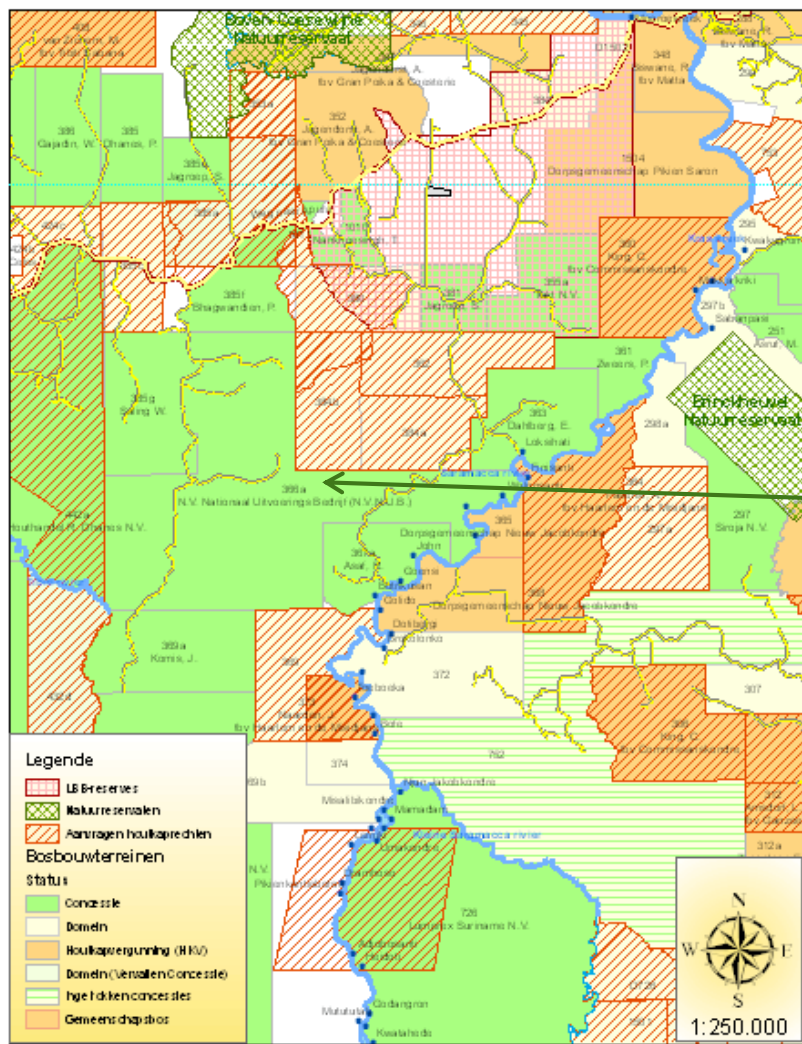
# Sustainable Forest Management and production control (data management) Map of timber licenses.



**Information available for the public and updated regularly:**  
[file:///C:/Users/SBB-Administrator/Desktop/Bosbouwlegger\\_A0\\_20160113.pdf](file:///C:/Users/SBB-Administrator/Desktop/Bosbouwlegger_A0_20160113.pdf)



# Data management (License information)



**Vergunningen**

Vergunning# 2620

Bedrijf SBB ID# 10748

Bedrijfsnaam N.V. Nationaal Uitvoerings Bedrijf

Ten Behoeve van

Terrein nummer 366a

Bureau no 1236-08

D\_no

Datum van uitgifte 8/05/2008

Datum van verval 8/05/2015

Datum van registratie 28/05/2008

Straatregisternummer 120/2852

H-registernummer H8/836

A-registernummer 239/526

Soort vergunning Concessie

Export

Gegevens

Gegevens

Close

1205 van 2726 records

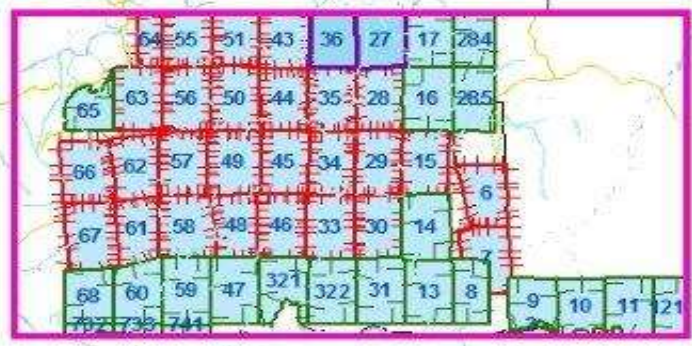
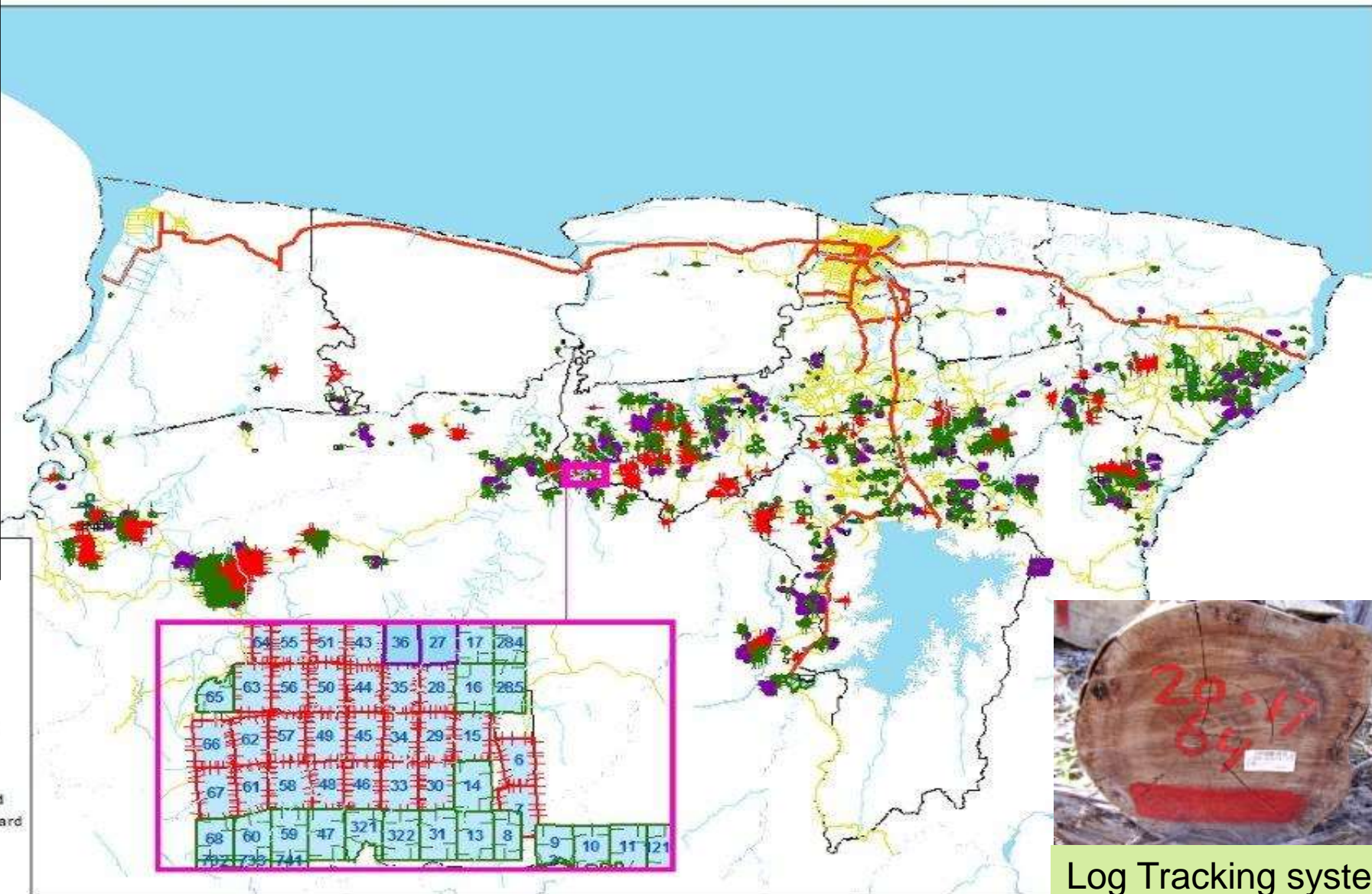
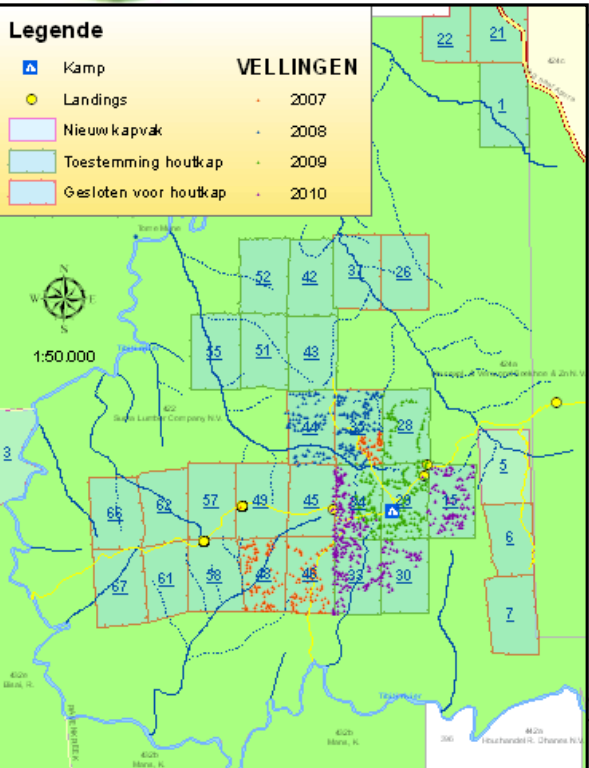




# Overview of logging activities

Datum: 13-5-2014

## Overzichtskaart Spreiding kapvakken in Suriname



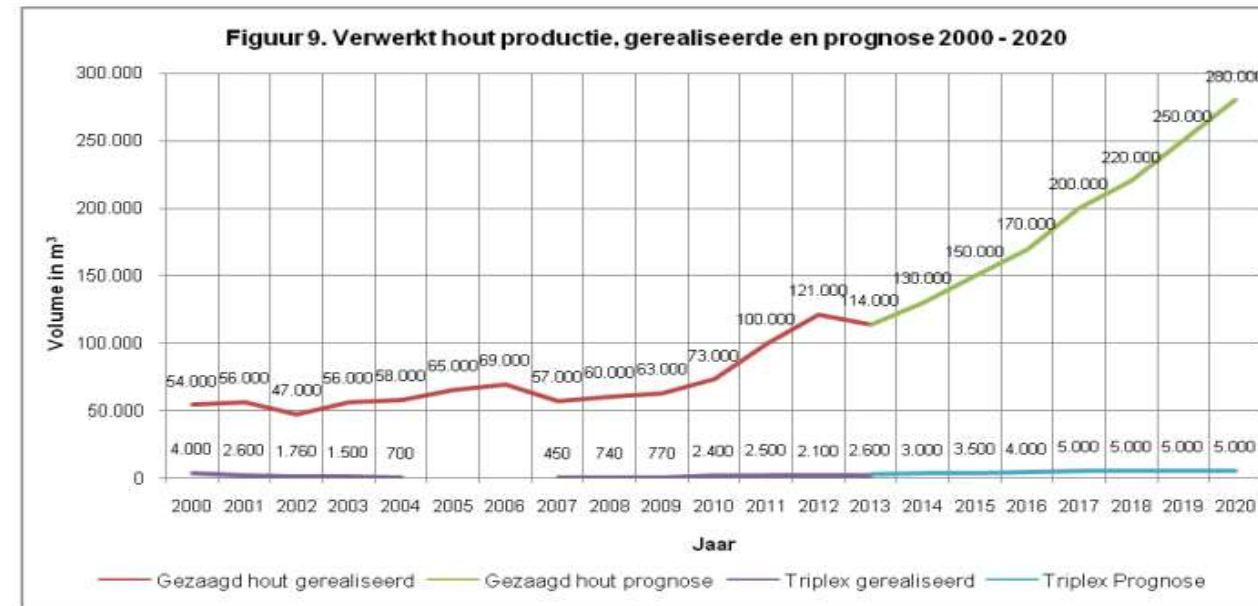
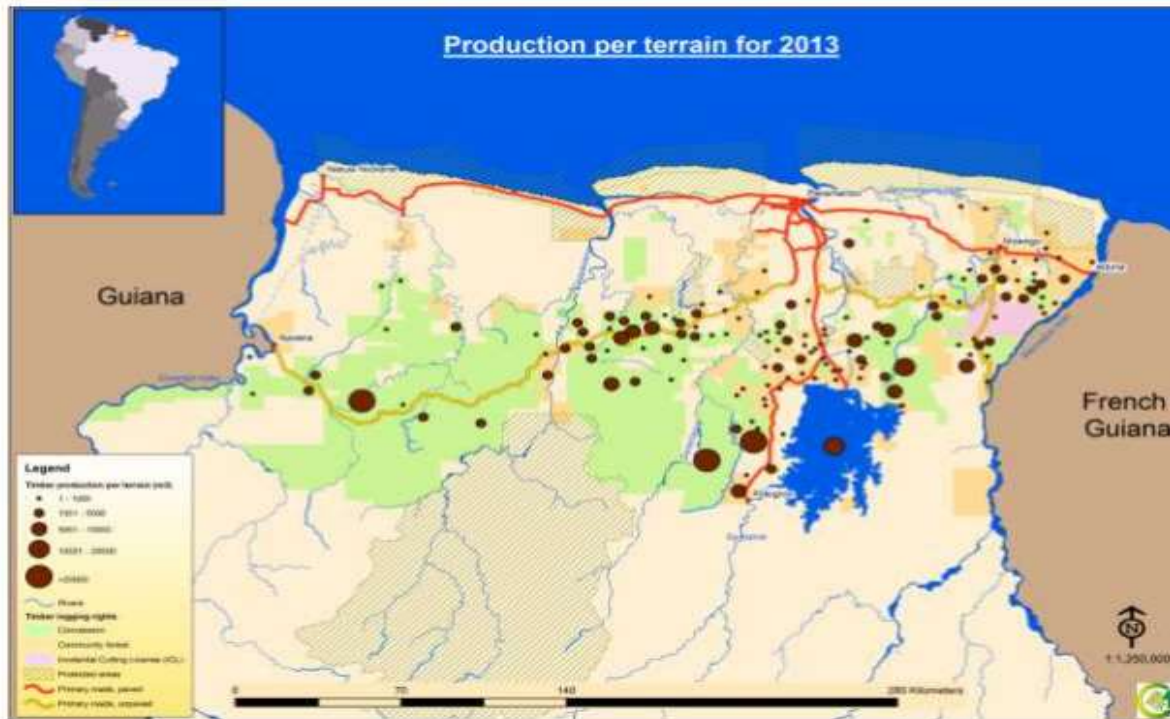
Log Tracking system





# Technical spatial analysis of drivers

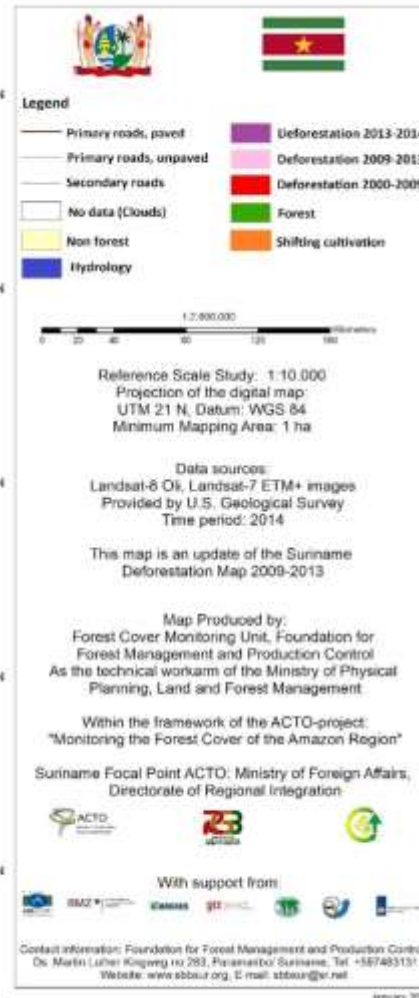
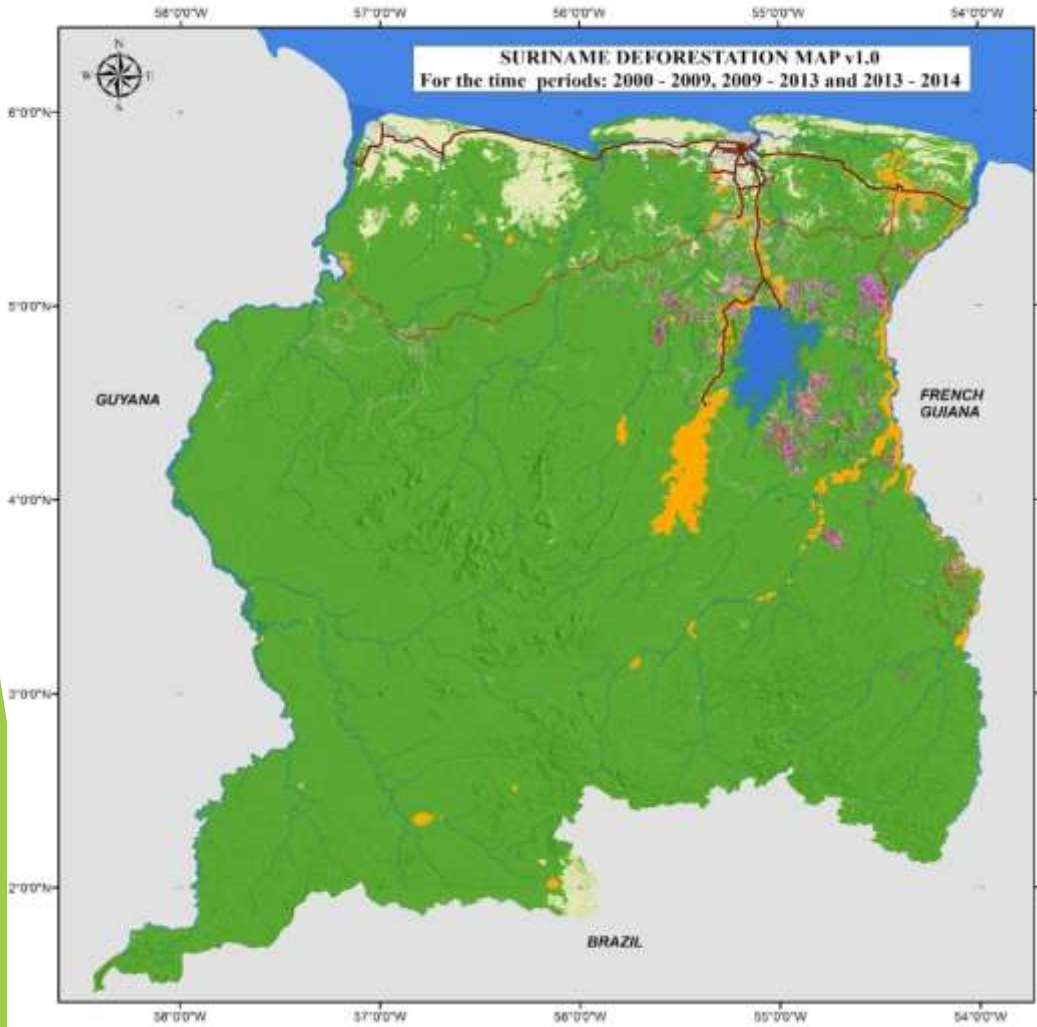
Logging: all recorded timber production is geographically linked with the compartment where it was extracted from







# Deforestation maps (ACTO regional project )



## Deforested area (ha)

\*to be validated

<b>2000-2009</b>	<b>ca. 23.000</b>
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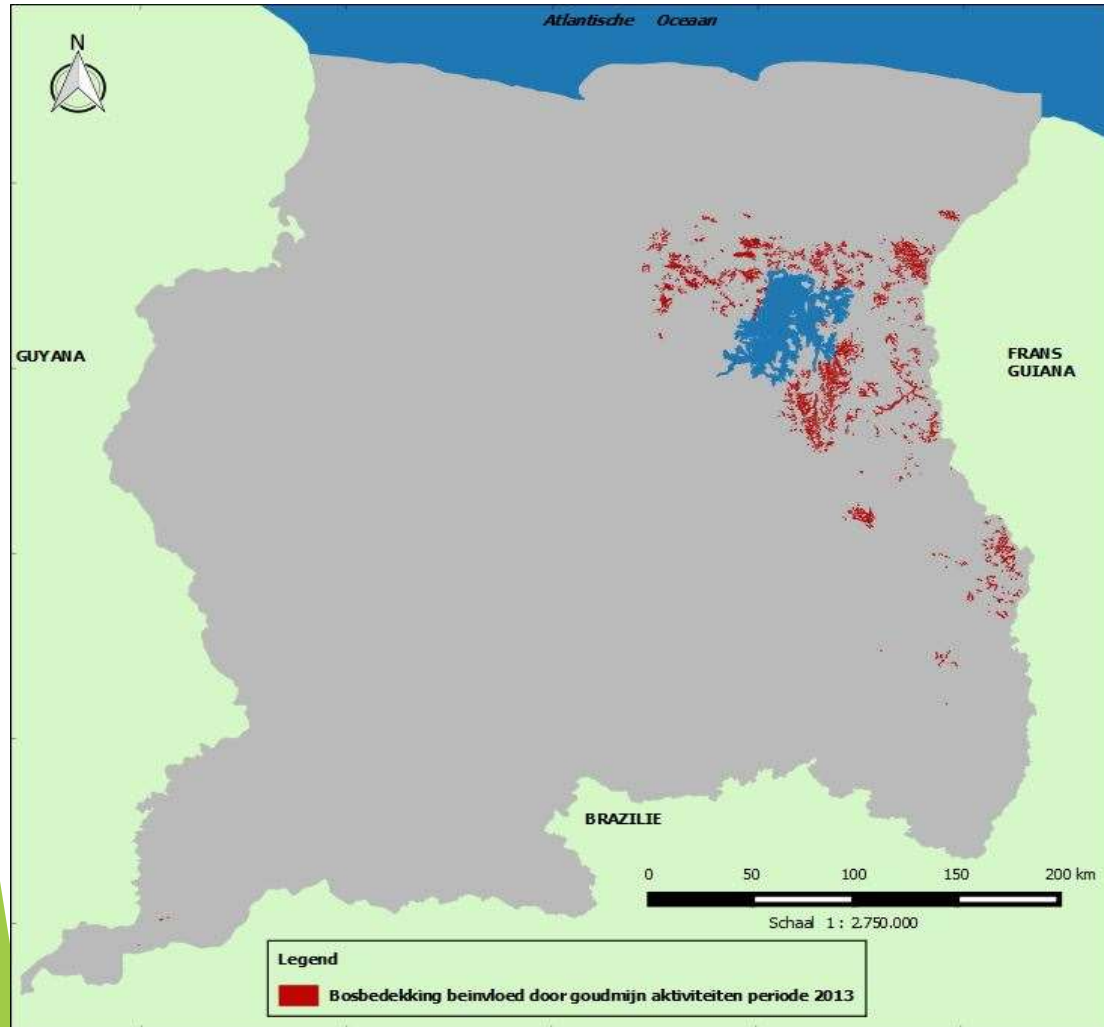
<b>2009-2013</b>	<b>ca. 30.000</b>
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<b>2013-2014</b>	<b>ca. 18.000*</b>
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**Total forest area ca.15.3 million ha  
> 90% of land area**



## Impact of goldmining in the forest cover (REDD+ for the Guiana shield project)

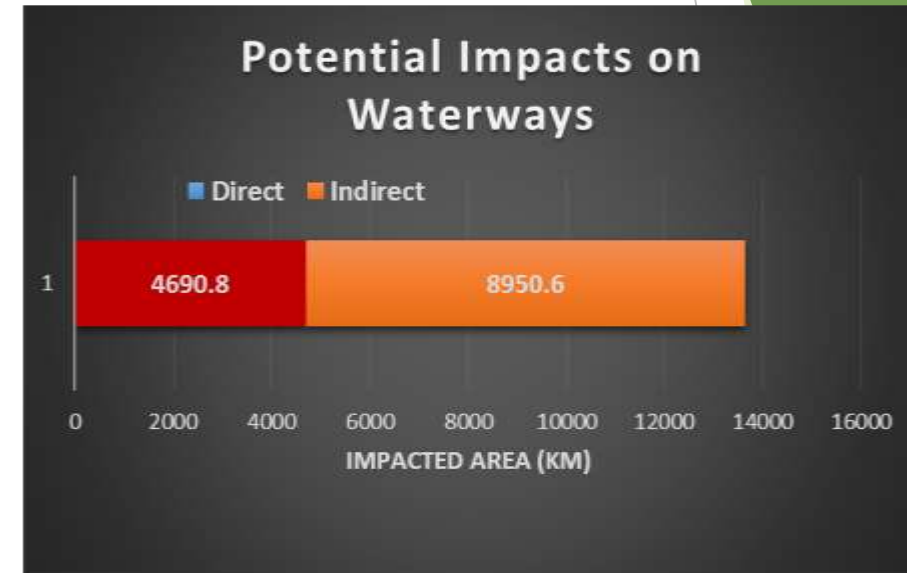
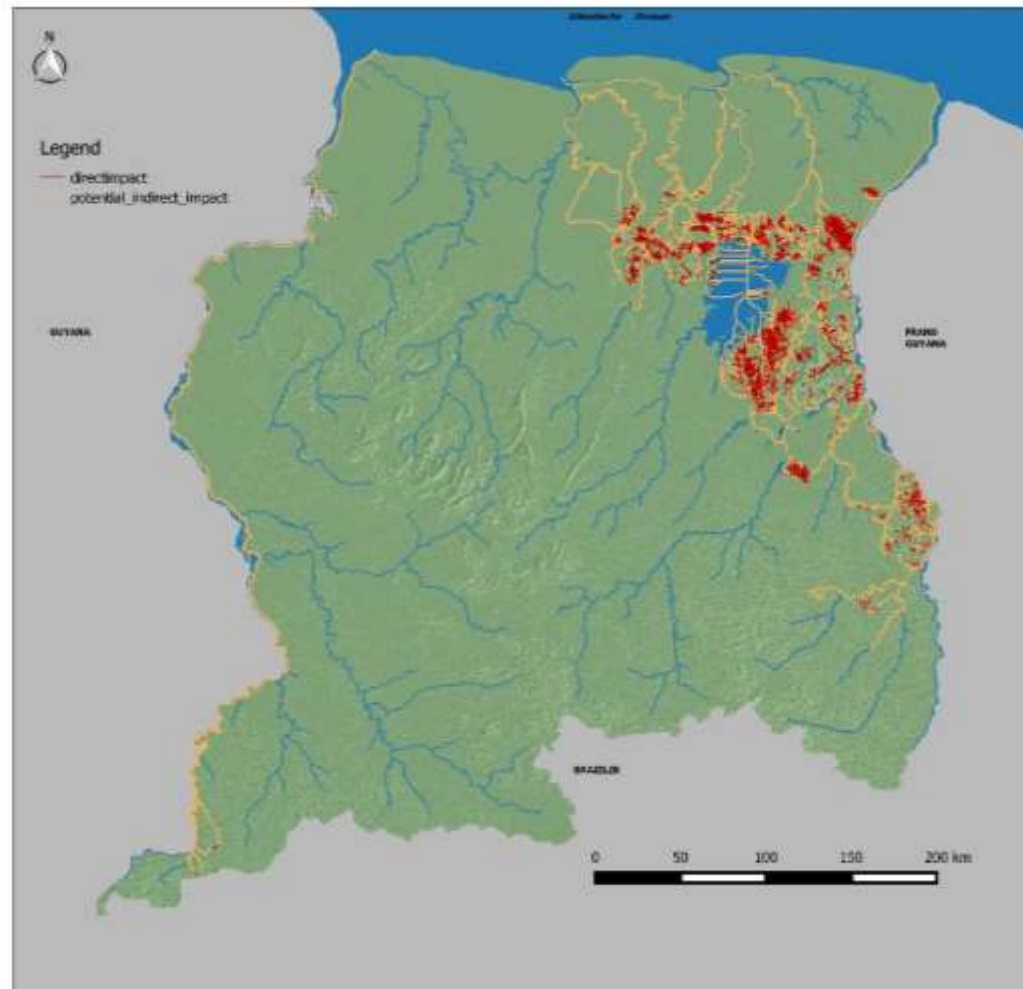


Deforestation caused by mining  
percentage total land area  
percentage total deforestation

53668.9 Ha  
0.33%  
73%



# Potential Impact on waterways Gold mining



- REDD +for the Guiana shield
- ACTO: Monitoring forest cover change of the Amazon region



# ENERGY : Key indicators Wood energy Suriname

- per capita wood consumption: 0,25 m<sup>3</sup>
- Per capita industrial wood consumption: 0,31 m<sup>3</sup>
- Per capita total round wood consumption: 0,56 m<sup>3</sup>
- Number of persons depending on energy wood for cooking: 76.000
- Average energy consumption per year Per households in A cluster districts: 13 m<sup>3</sup>
- Average energy consumption per year Per households in B cluster districts: 3 m<sup>3</sup>
- Highest energy wood consumption districts: Sipaliwini en Wanica
- Source of energy wood from forest 56%
- Source of energy wood from outside the forest: 19%
- Source of energy wood from industrial waste: 25%
- Direct energy wood: 69%
- Indirect energy wood: 26%
- Recovered energy wood 5%
- Households who use energy wood for cooking every day:
  - Of all households in Suriname 0,3%
  - Of households that use energy wood for cooking 2%
- Important cooking facilities: Tripod and Chula
- Potential of cooking facilities per year: 1.180.000 m<sup>3</sup>
- Carbon dioxide emission per year by using energy wood: 213.000 ton CO<sub>2</sub>
- Annual savings of gas by the use of energy wood (febr 2015): SRD 200 miljoen
- Turnover per year by production and use of energy wood: SRD 13 miljoen

## Wood production per year 2013

Activity	Roundwood volume m <sup>3</sup>	Wood waste volume in m <sup>3</sup>
Roundlogsproduction	400.000	
Waste from logging 50%		400.000
Roundwood input saw mill	300.000	
Waste from saw mill		180.000
<b>Total</b>		<b>580.000</b>

## Total round wood production 2003-2015

Year	Industrial round logs	Energy wood	Totaal Roundlogs
2003	155.000	116.500	271.500
2004	159.000	113.100	272.100
2005	181.000	109.800	290.800
2006	193.000	107.200	300.200
2007	166.000	104.600	270.600
2008	197.000	102.000	299.000
2009	207.000	99.500	306.500
2010	246.000	97.100	343.100
2011	366.000	94.700	460.700
2012	436.000	92.400	528.400
2013	394.000	90.200	484.200
2014			520.000
2014			560.000

Source : SBB Forest economic Service, 2015





## Some succes stories.

- ▶ Capacity building: GIS, RS, Forest Inventory, Carbon Assessment, Project Management, New Technologies ,Data, Researchs, Maps e.g Forest Cover Monitoring Unit, Forest Cover Monitoring Plan
- ▶ Setting up Resource Group. National,regional and international Platform(s) of cooperation (Guyana shield, ACTO )
- ▶ Increased Data gathering, Data Sharing
- ▶ South -South , North - South (regional cooperation) cooperation
- ▶ Increased Awereness about Climate changes, Mitigation and Adaptation actions



## Challenges, (main) barriers

- ▶ Need to consolidate or enhance commitment on all level
- ▶ Increase capacity on all level : personnel, technology, institutional , legal  
Fundraising, project formulation and implementation, project management , in country based international entity.
- ▶ Confusion between Funding entities and project management, high requirement and conditions to access funds if available . Green Climate Fund.
- ▶ Access to Funds -Forestry
- ▶ More Pro active and increase capacity of the DNA
- ▶ Enhance Awareness about Climate changes, Mitigation and adaptation actions
- ▶ CDM not applicable for the forest sector (even though 95%land area is still forest)
- ▶ Potential of forest still acknowledged
- ▶ Land tenure, Land use map
- ▶ ENERGY: Energy from wood waste was more expensive than Energy from fossil fuel, integration to the national grid.





THANK YOU

