REDD+ and iLUC Mitigation

Dr. Danae Maniatis, UNDP Consultant, UN-REDD Programme

IEA Bioenergy - Brussels, 23 October

REDD+ and iLUC ?

- Identifying DDFD is at the core of REDD+
- Step-wise, iterative process
- Many countries are still at the initial p
- What is 'indirect' for one is 'direct' for the other
- Addressing iLUC may not be an immediate key priority for a country
- Disconnect between 'communities' working on REDD + and Bioenergy

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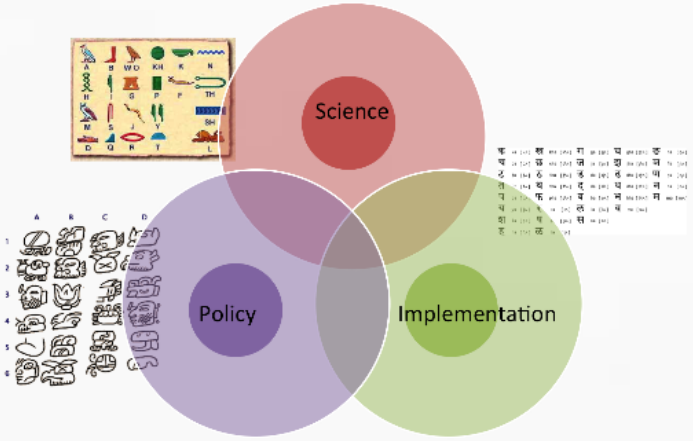
UN-REDD PROGRAMME

The **UN-REDD Programme** was launched in 2008 and builds on the convening role and technical expertise of the UN Development Programme (UNDP), the UN Environment Programme (UNEP) and the UN Food and Agriculture Organization (FAO).



56 partner countries across Africa, Asia-Pacific and Latin America and the Caribbean

21 partner countries with approved funding for UN-REDD National Programmes

US$215.2 million in donor contributions from Denmark, the European Union, Japan, Luxembourg, Norway and Spain

91% of donor contributions already allocated to support partner countries through UN-REDD National and Global Programmes

3,300+ REDD+ practitioners trained since 2010 in UN-REDD Programme regional and global capacity building events on MRV, governance, gender, transparency and accountability, stakeholder engagement, multiple benefits and green economy scenario analysis

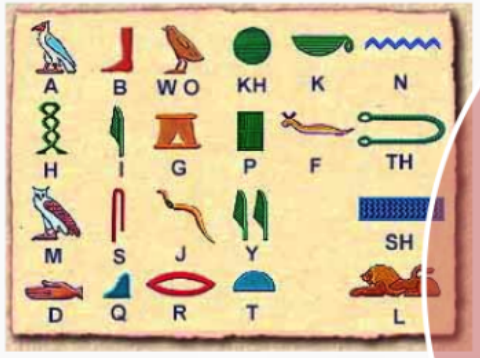
34% of the world's forests | **56%** of the world's tropical forests

located in UN-REDD Programme partner countries

1 million+ monthly website hits on un-redd.org

950+ members of unredd.net, the UN-REDD Programme's online community of practice

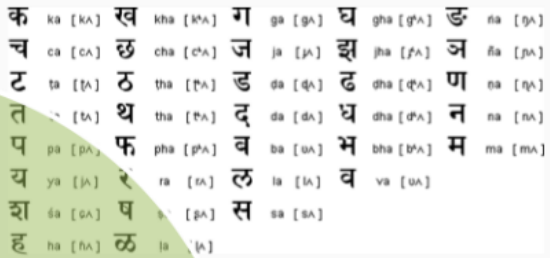
As of August 2014



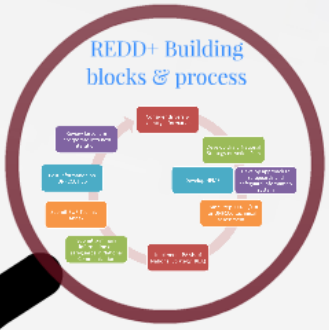
Science

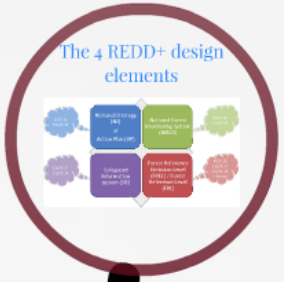
Policy

Implementation



Introduction to REDD+

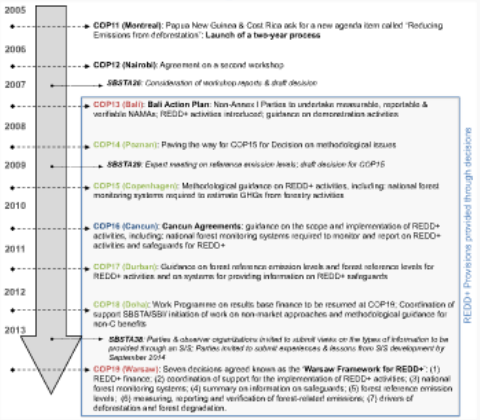


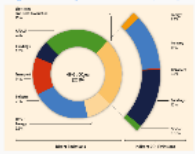


REDD+

United Nations
Framework Convention on
Climate Change

The decision making process: 196 parties

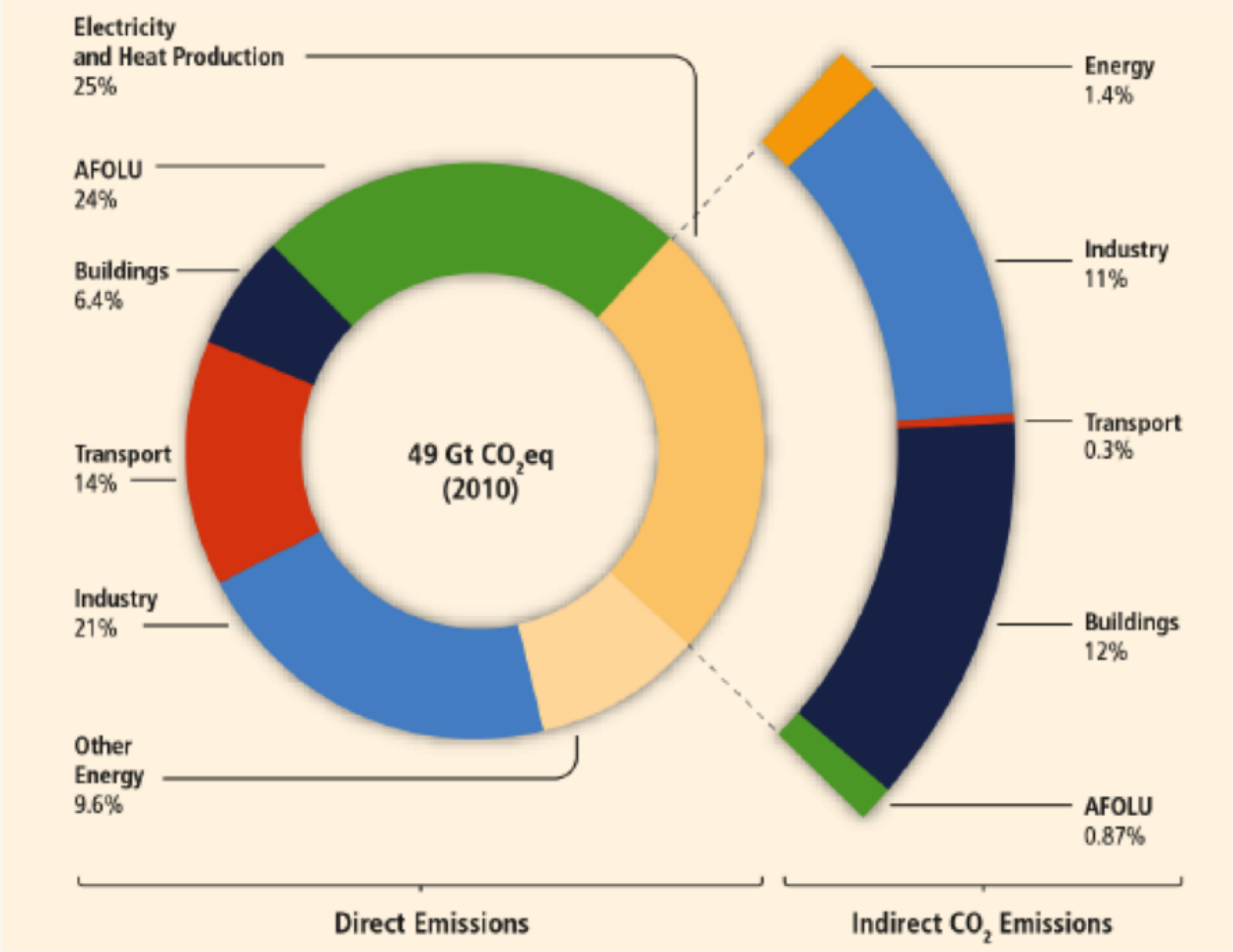




The five REDD+ activities

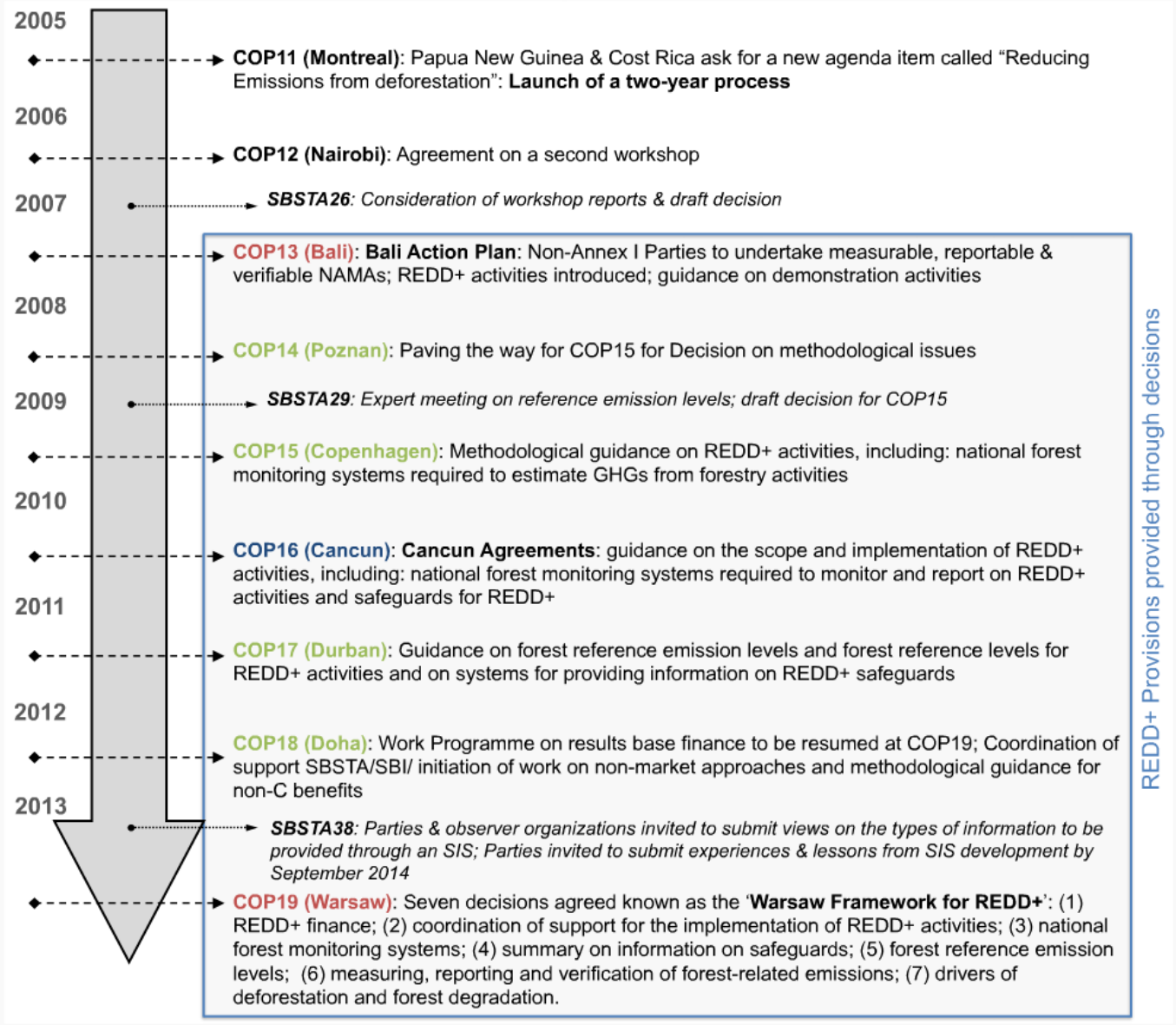
The scope of REDD+ was agreed in Cancun. Developing countries are encouraged to contribute to mitigation actions in the forest sector by undertaking the following activities:	I. Reducing emissions from deforestation	II. Reducing emissions from forest degradation
III. Conservation of forest carbon stocks	IV. Sustainable management of forests	V. Enhancement of forest carbon stocks

Contributions from Agriculture, Forestry and Other Land Uses (AFOLU)



Working Group III contribution to PCC AR5

The decision making process: 196 parties



COP16 CMP6 México2010

COP17/CMP7 UNITED NATIONS CLIMATE CHANGE CONFERENCE 2011 DURBAN, SOUTH AFRICA

DOHA 2012 UN CLIMATE CHANGE CONFERENCE COP18·CMP8

COP19/CMP9 UNITED NATIONS CLIMATE CHANGE CONFERENCE WARSAW 2013

The five REDD+ activities

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I. Reducing emissions from deforestation

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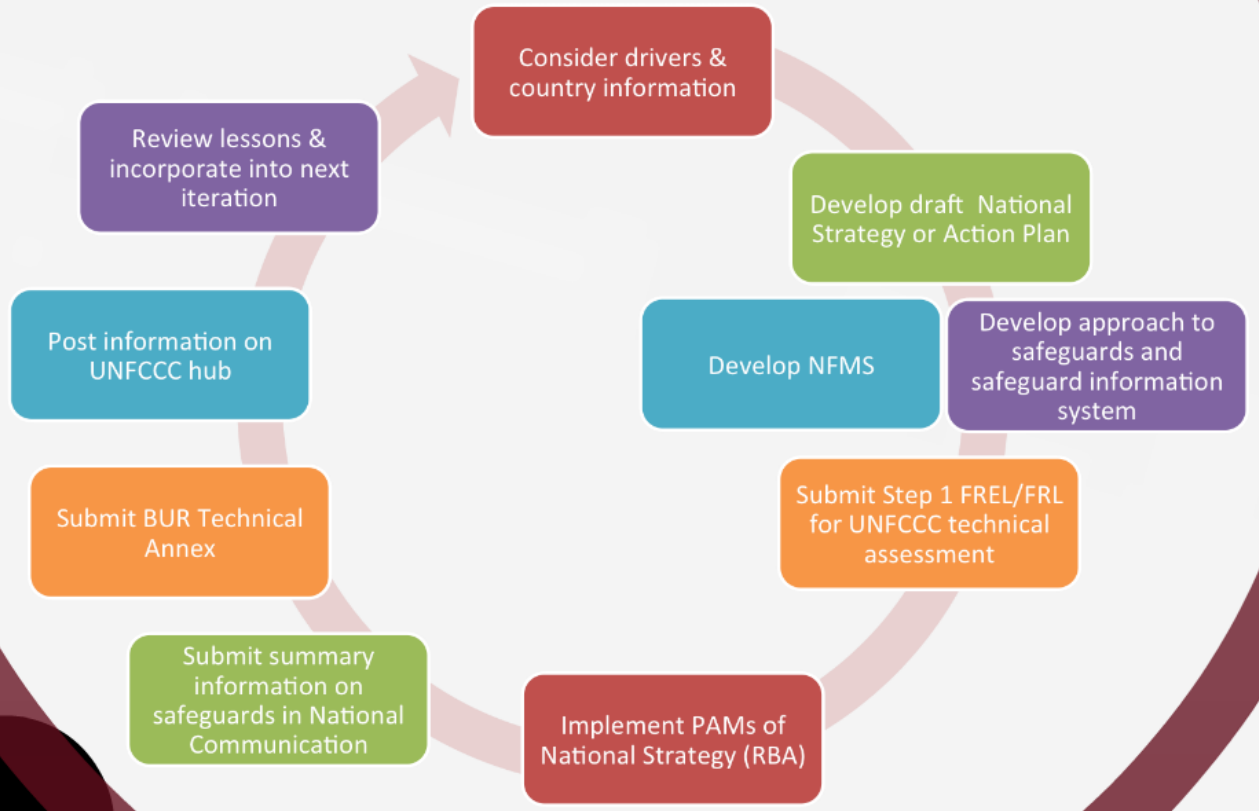
III. Conservation of forest carbon stocks

IV. Sustainable management of forests

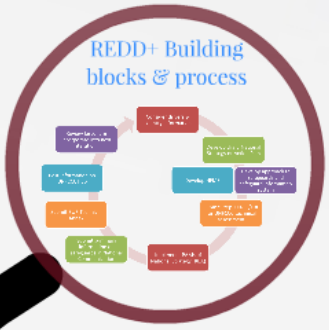
V. Enhancement of forest carbon stocks

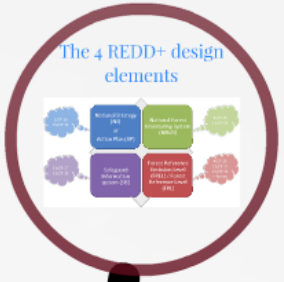
The 4 REDD+ design elements

REDD+ Building blocks & process

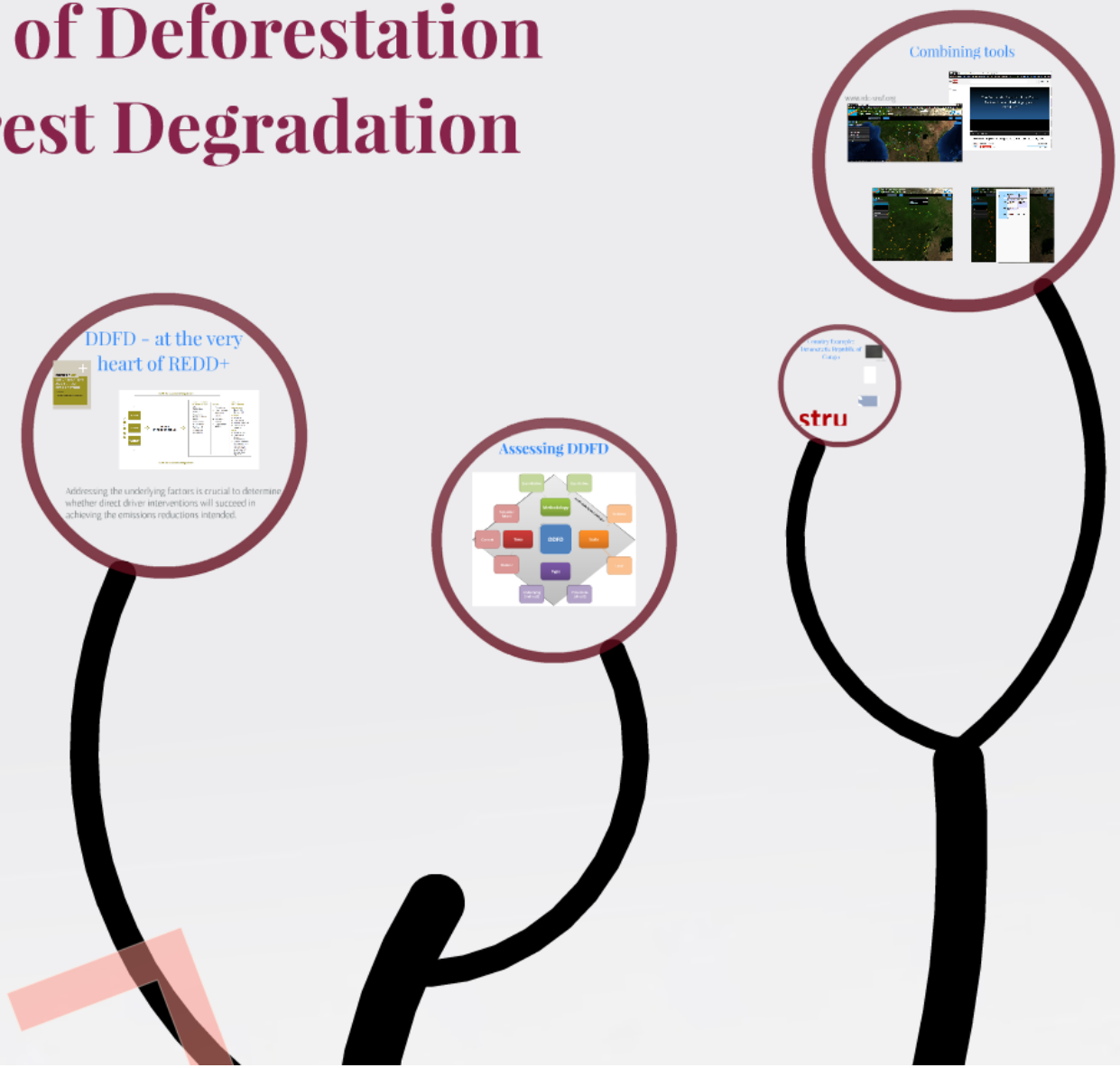


Introduction to REDD+

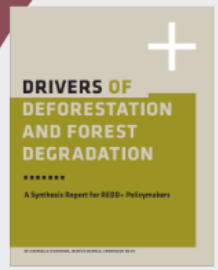


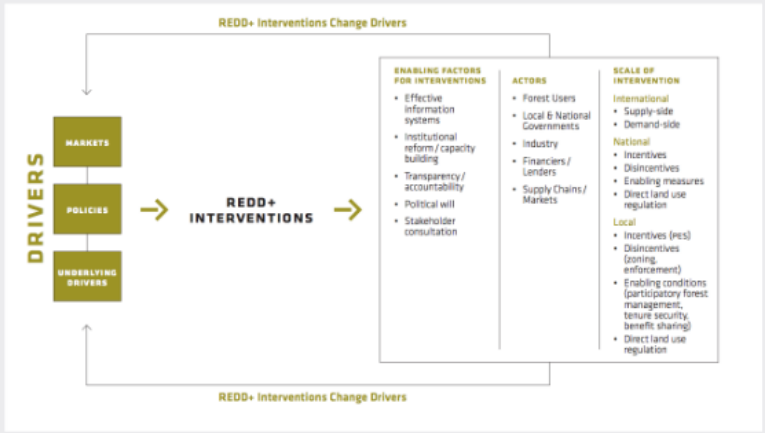


Drivers of Deforestation and Forest Degradation

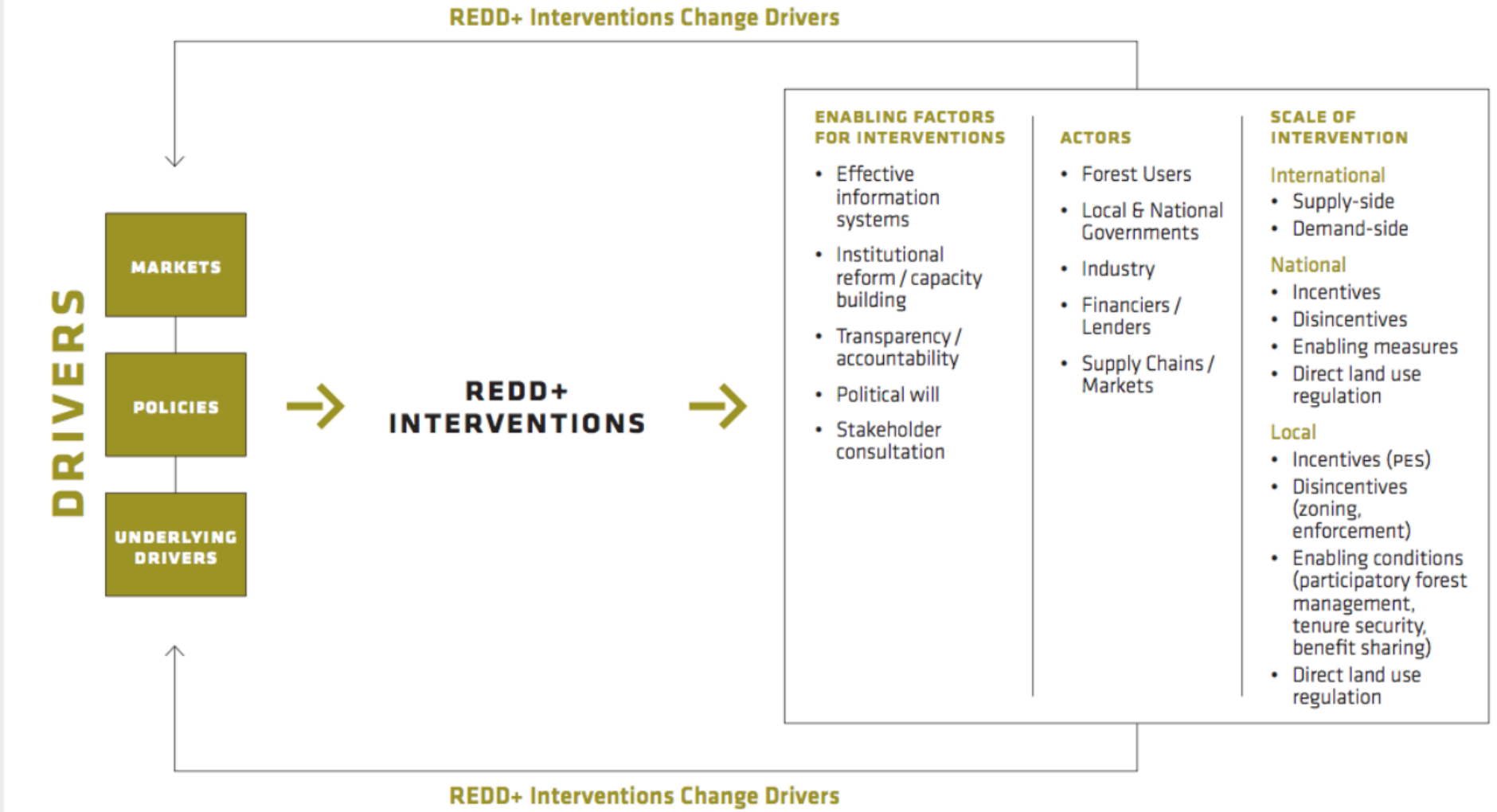


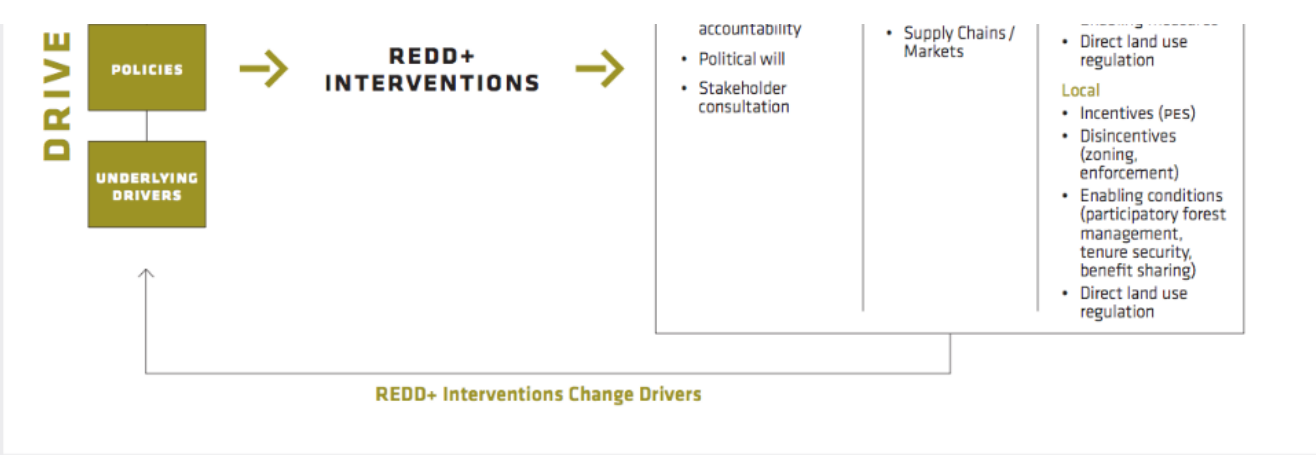
DDFD – at the very heart of REDD+





Addressing the underlying factors is crucial to determine whether direct driver interventions will succeed in achieving the emissions reductions intended.


REDD+ Interventions Change Drivers
DRIVERS
MARKETS
POLICIES
UNDERLYING DRIVERS
REDD+ INTERVENTIONS
ENABLING FACTORS FOR INTERVENTIONS
Effective information systems
Institutional reform / capacity building
Transparency / accountability
Political will
Stakeholder consultation
ACTORS
Forest Users
Local & National Governments
Industry
Financiers / Lenders
Supply Chains / Markets
SCALE OF INTERVENTION
International
Supply-side
Demand-side
National
Incentives
Disincentives
Enabling measures
Direct land use regulation
Local
Incentives (PES)
Disincentives (zoning, enforcement)
Enabling conditions (participatory forest management, tenure security, benefit sharing)
Direct land use regulation
REDD+ Interventions Change Drivers



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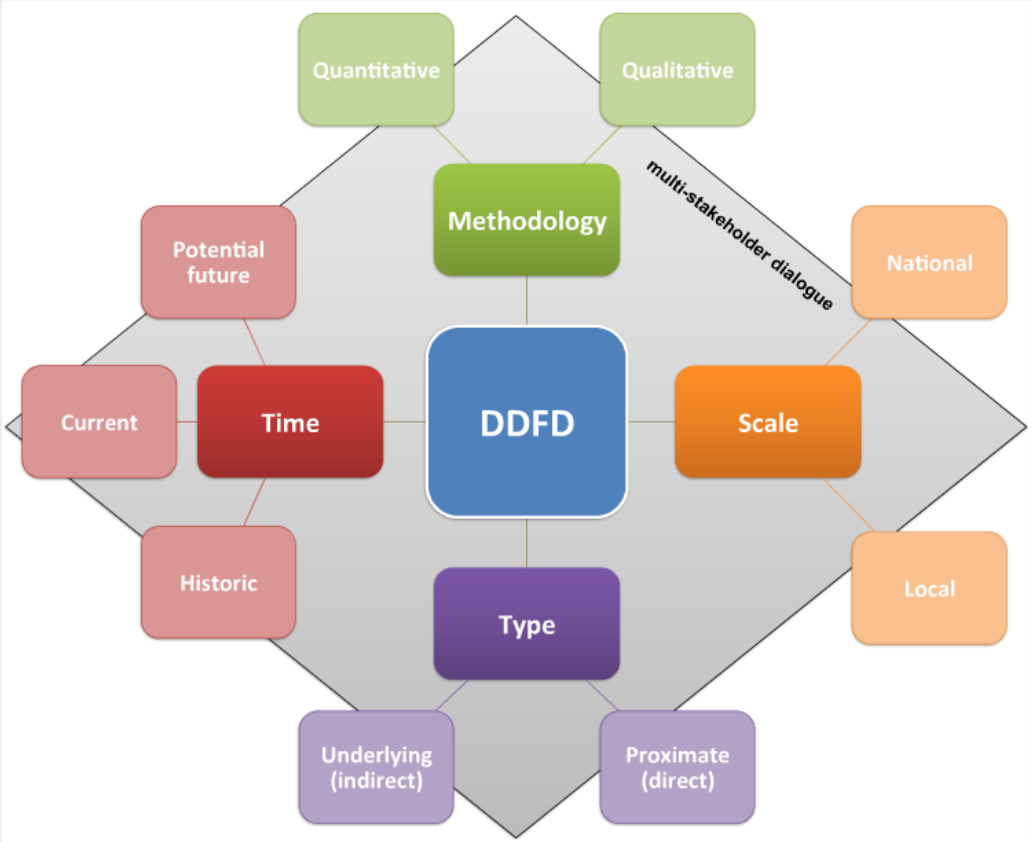
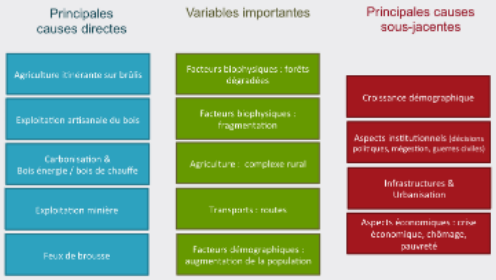
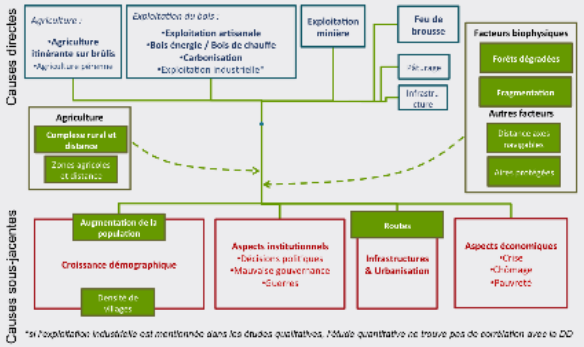
Assessing DDFD



Country Example: Democratic Republic of Congo

linkoleyacongo.wordpress.com





Plus la cause est perçue comme importante, plus la taille du rectangle est grande

Backyard Processing of Palm Oil by an Ikengo Household

Principales causes directes

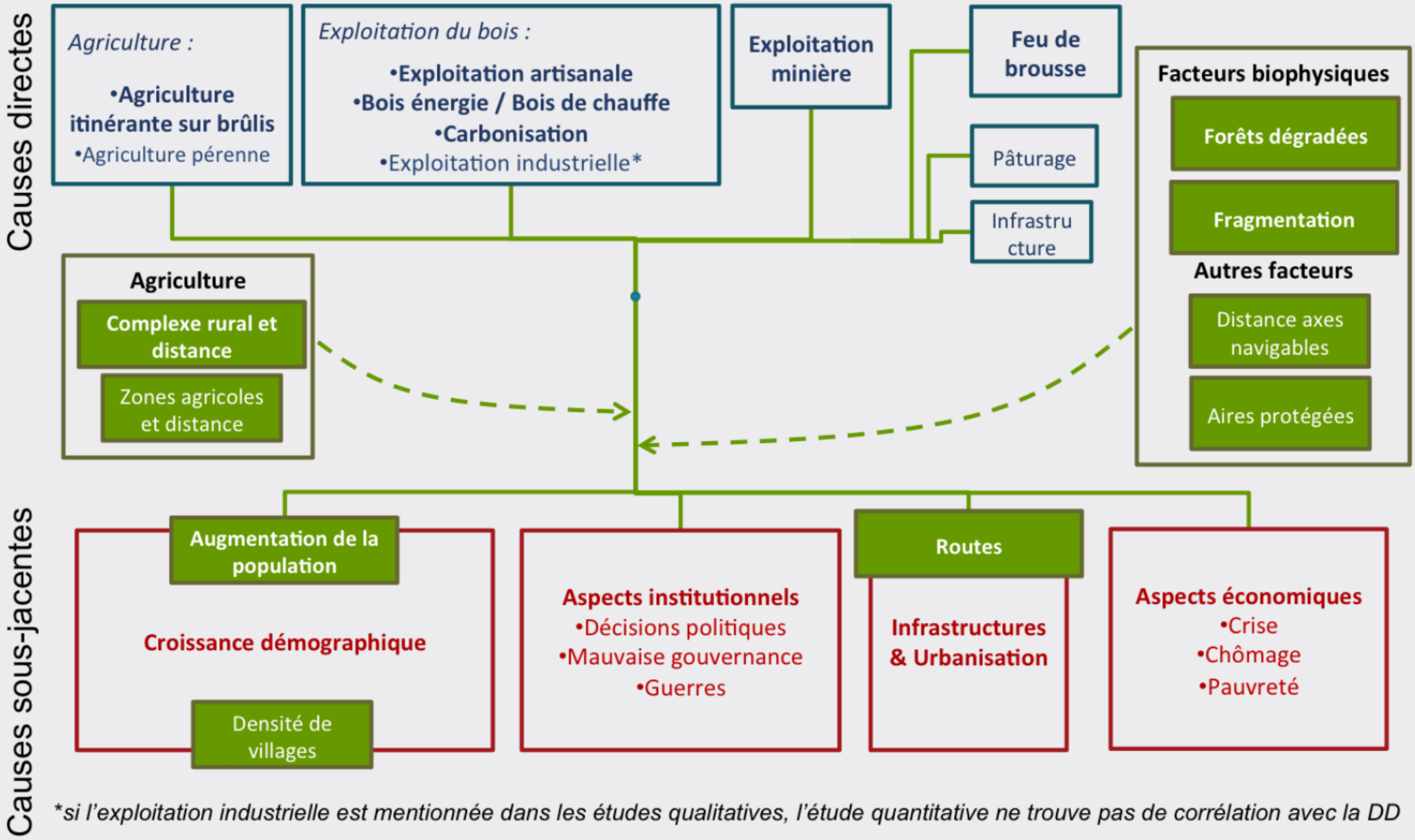
- Agriculture itinérante sur brûlis
- Exploitation artisanale du bois
- Carbonisation & Bois énergie / bois de chauffe
- Exploitation minière
- Feux de brousse

Variables importantes

- Facteurs biophysiques : forêts dégradées
- Facteurs biophysiques : fragmentation
- Agriculture : complexe rural
- Transports : routes
- Facteurs démographiques : augmentation de la population

Principales causes sous-jacentes

- Croissance démographique
- Aspects institutionnels (décisions politiques, mégestion, guerres civiles)
- Infrastructures & Urbanisation
- Aspects économiques : crise économique, chômage, pauvreté



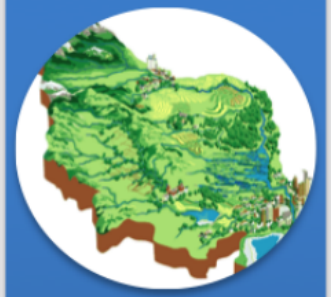
*si l'exploitation industrielle est mentionnée dans les études qualitatives, l'étude quantitative ne trouve pas de corrélation avec la DD

Plus la cause est perçue comme importante, plus la taille du rectangle est grande

Need for a cross-sectoral approach

Ministry of Forestry / Environment

Lead in implementing REDD+ at national level



Ministry of Planning

Multiple benefits/ spatial planning

Ministry of Finance

Finance sector regulation; deforestation from financial supply chains;

Office of Statistics

e.g. Scenarios for RBA leading to RBP; National/corporate natural capital accounting

Ministry of mining

Embed ecosystem compensation as part of mining development; smart planning

Ministry of Agriculture

e.g. Strip deforestation from agricultural supply chains

Identify how REDD+ can be integrated & accepted across ministries

Stratégie-cadre nationale REDD

de la République Démocratique du Congo

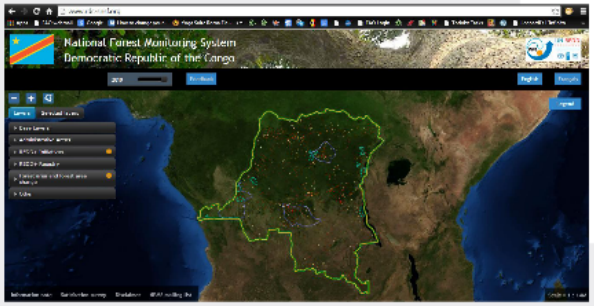
Version 3

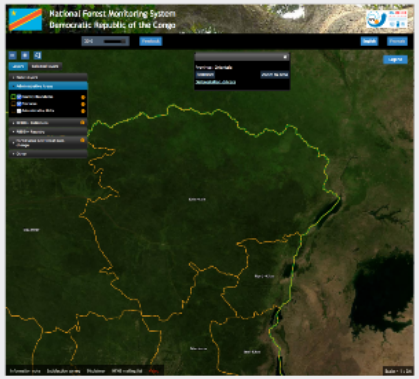
FOREST CARBON PARTNERSHIP FACILITY

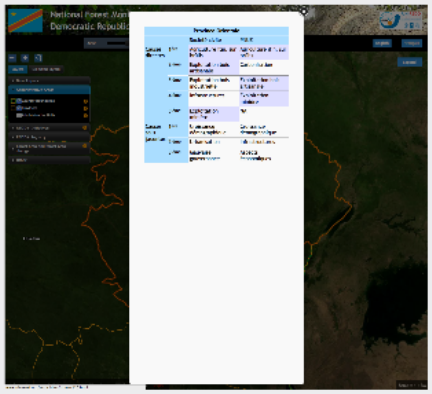
PROGRAMME ONU-REDD

Combining tools

www.rdc-snsf.org







Combining tools

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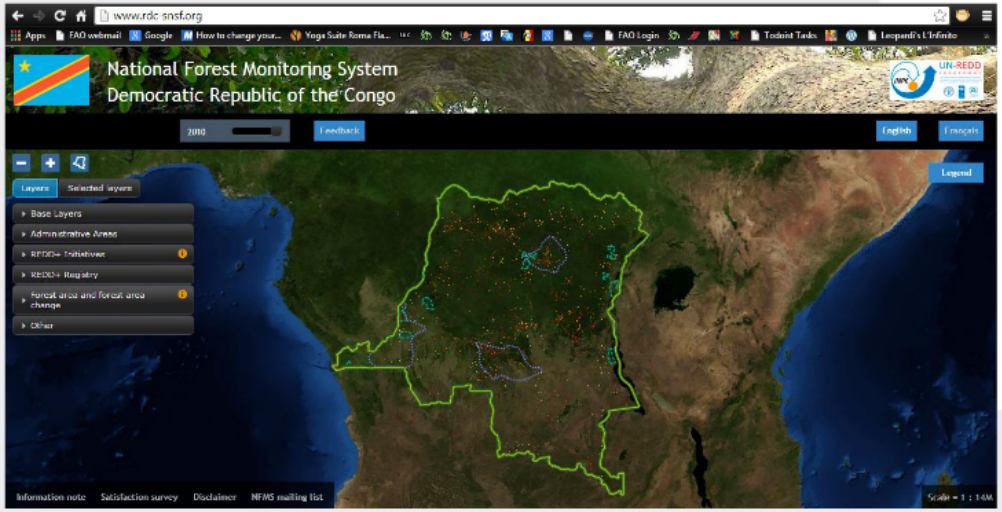
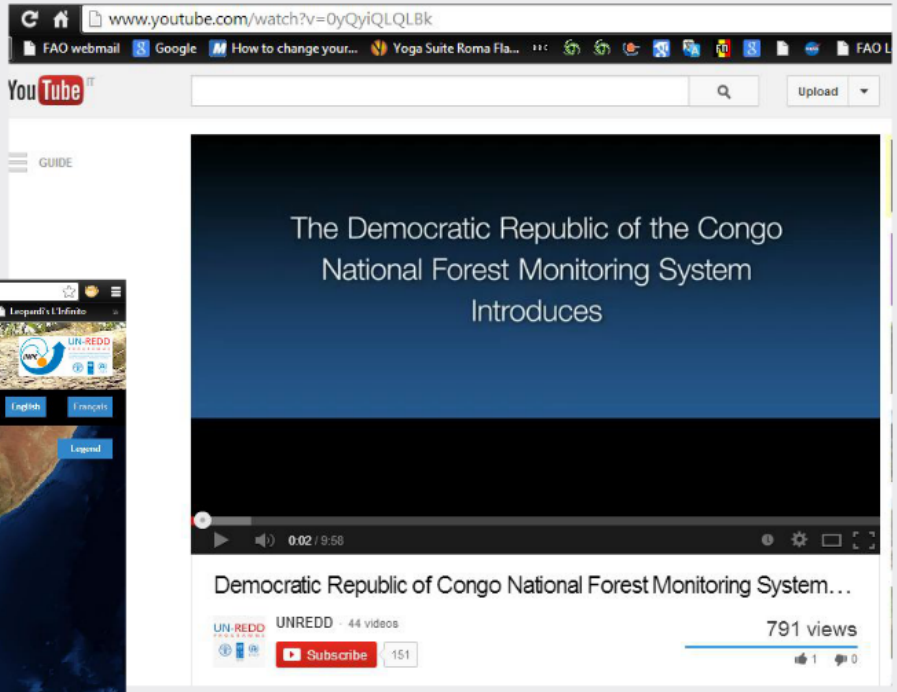
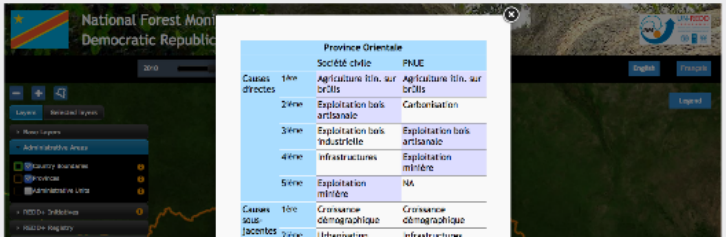
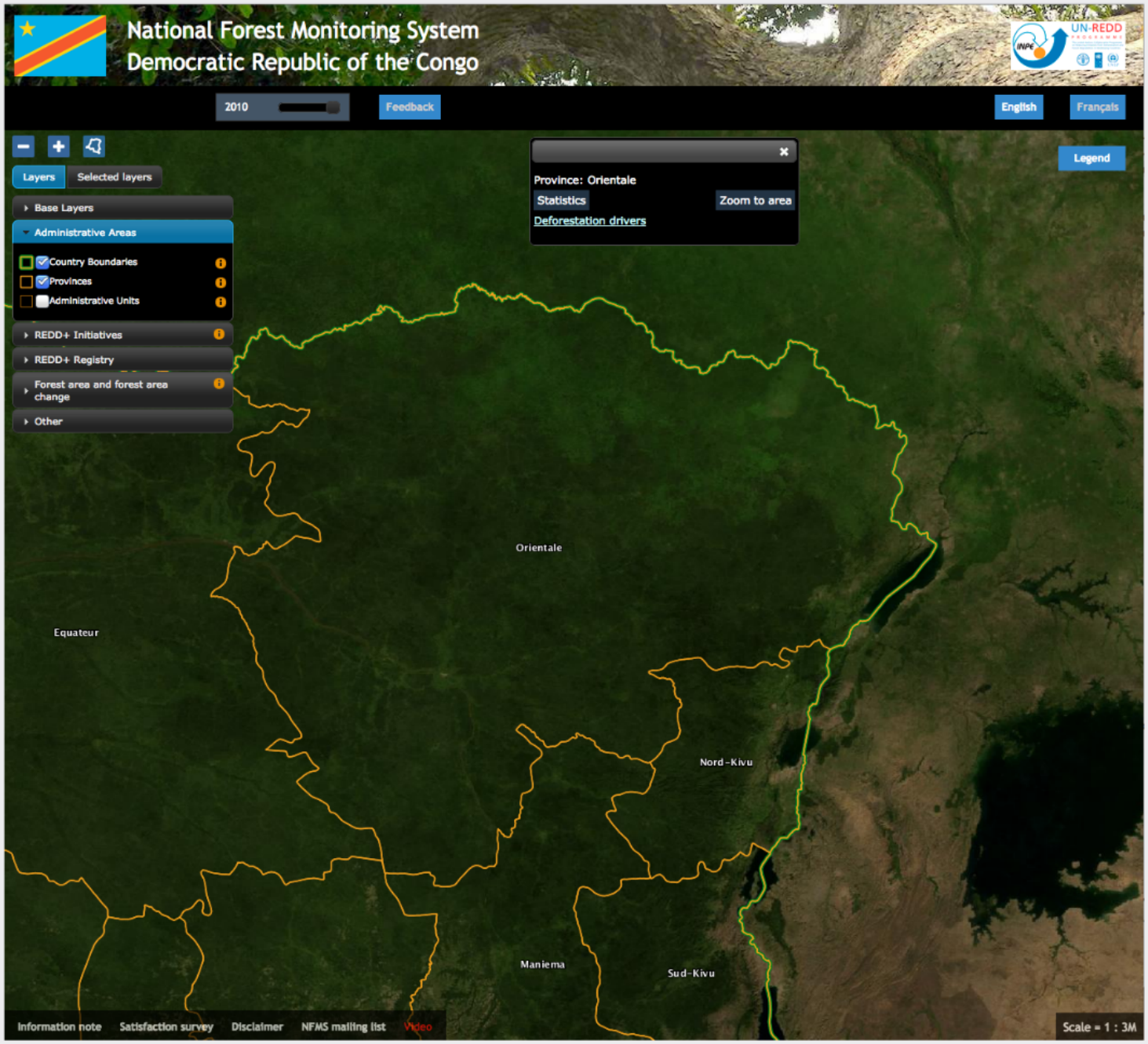
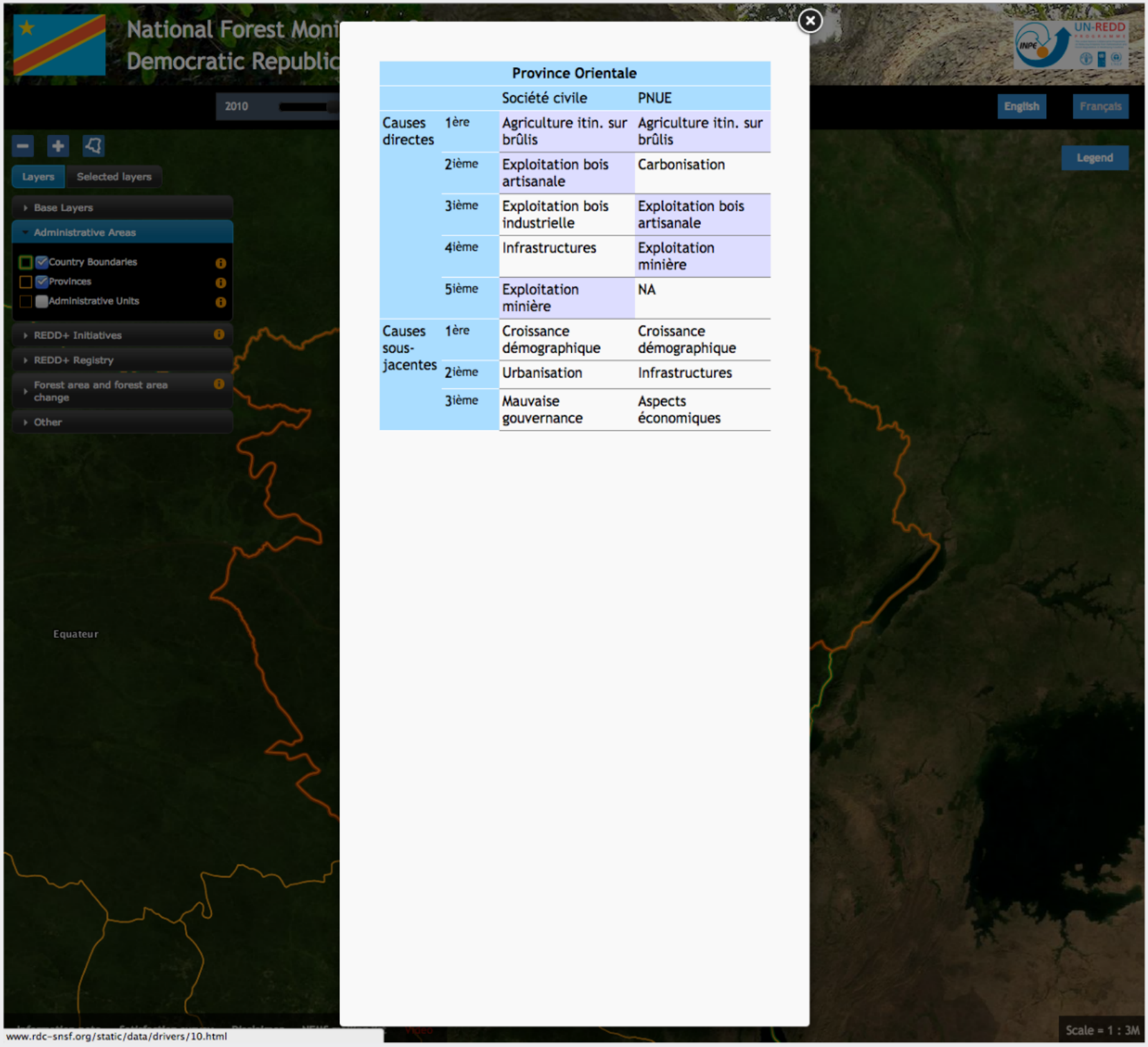




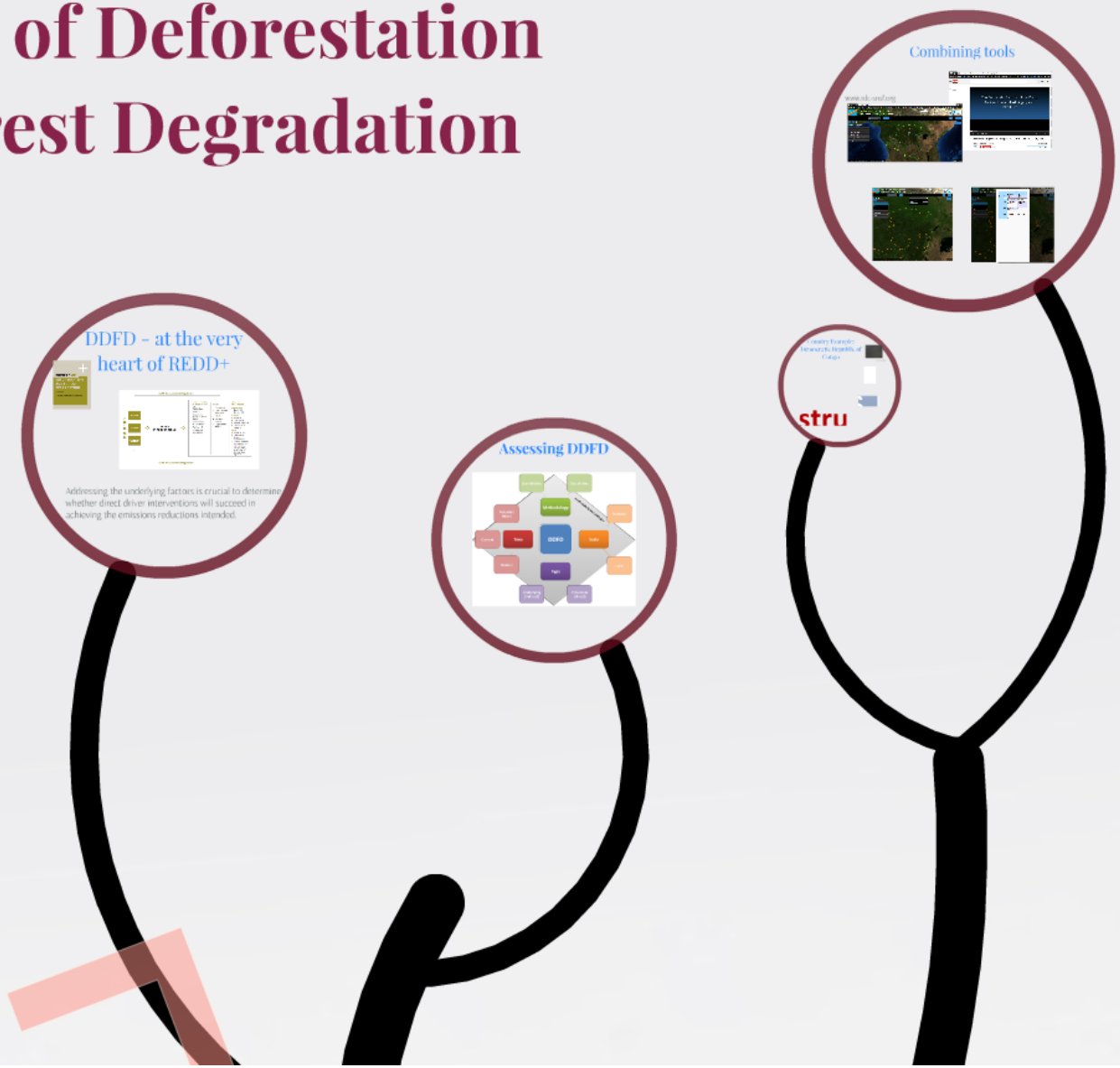



National Forest Monitoring System
Democratic Republic of the Congo
2010
Feedback
English
Français
Legend
Layers
Selected layers
Base Layers
Administrative Areas
Country Boundaries
Provinces
Administrative Units
REDD+ Initiatives
REDD+ Registry
Forest area and forest area change
Other
Province: Orientale
Statistics
Zoom to area
Deforestation drivers
Orientale
Equateur
Nord-Kivu
Maniema
Sud-Kivu
Information note
Satisfaction survey
Disclaimer
NFMS mailing list
Video
Scale = 1 : 3M



Province Orientale			
		Société civile	PNUE
Causes directes	1ère	Agriculture itin. sur brûlis	Agriculture itin. sur brûlis
	2ième	Exploitation bois artisanale	Carbonisation
	3ième	Exploitation bois industrielle	Exploitation bois artisanale
	4ième	Infrastructures	Exploitation minière
	5ième	Exploitation minière	NA
Causes sous-jacentes	1ère	Croissance démographique	Croissance démographique
	2ième	Urbanisation	Infrastructures
	3ième	Mauvaise gouvernance	Aspects économiques

Drivers of Deforestation and Forest Degradation



Assessing Land-use Change

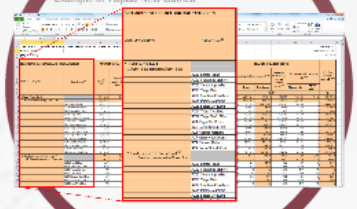
Managed & Un-managed land

'affected by human activity'

Land-use categories & reporting

Reporting LUC

Example of Papua New Guinea



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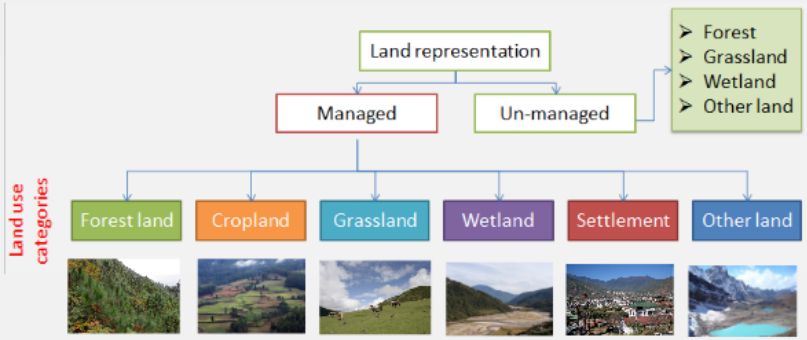
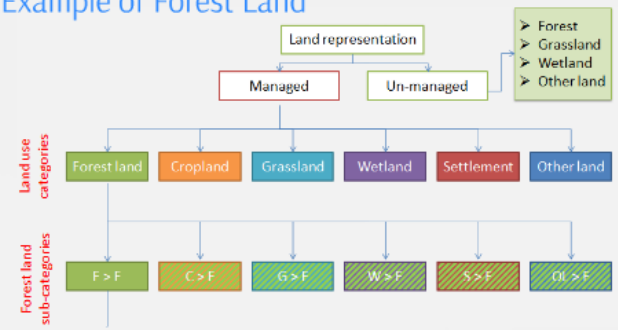


Example of Forest Land



Land use categories

Land representation

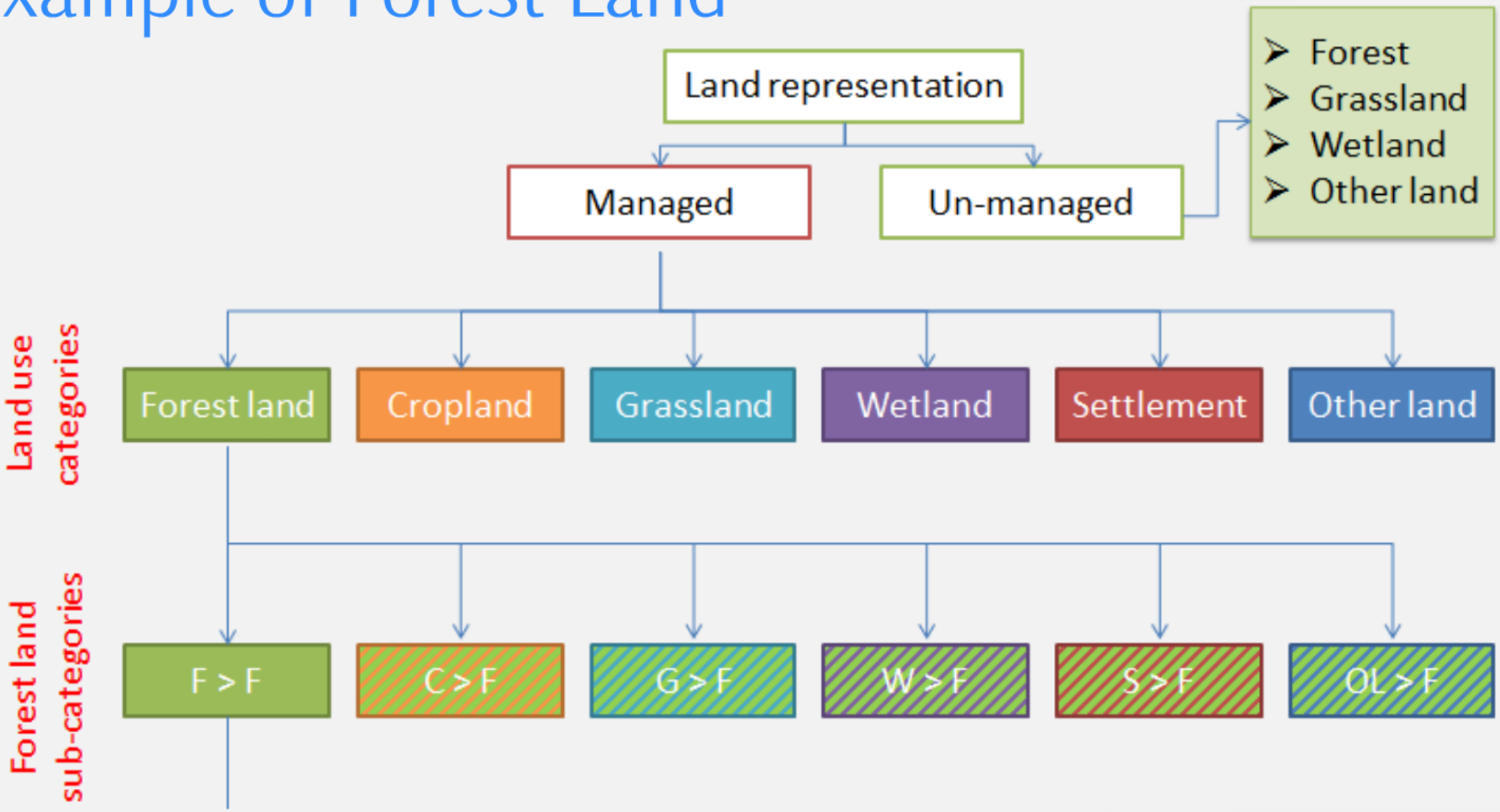
Managed

Un-managed

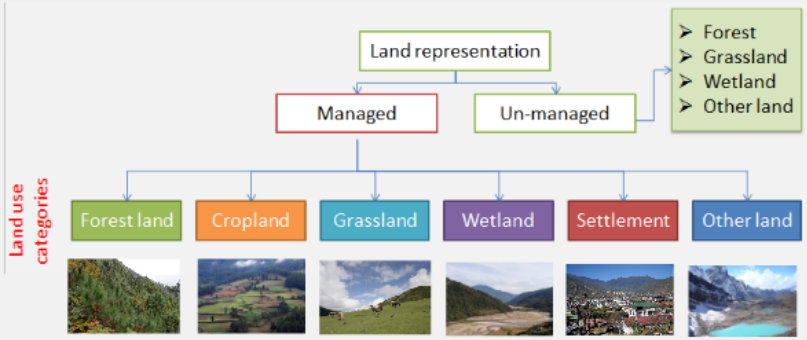
- Forest
- Grassland
- Wetland
- Other land

Forest land | Cropland | Grassland | Wetland | Settlement | Other land

Example of Forest Land



Land-use categories & reporting



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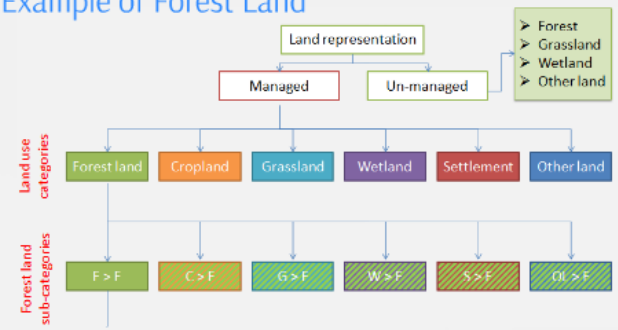

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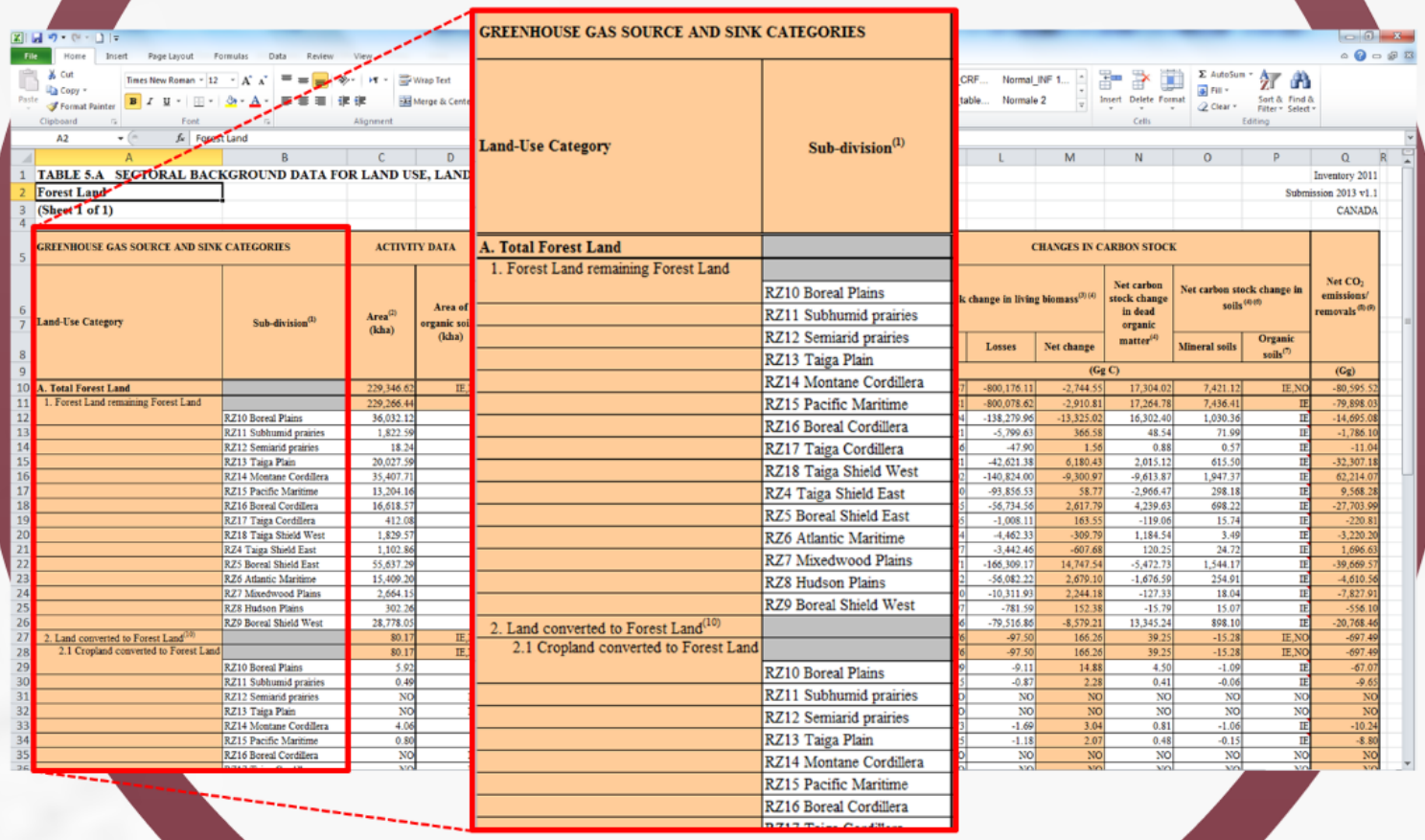


TABLE 5.A SECTORAL BACKGROUND DATA FOR LAND USE, LAND

Forest Land

(Sheet 1 of 1)

Inventory 2011

Submission 2013 v1.1

CANADA

GREENHOUSE GAS SOURCE AND SINK CATEGORIES		ACTIVITY DATA	
Land-Use Category	Sub-division[1]	Area[2] (kha)	Area of organic soi (kha)
A. Total Forest Land		229,346.62	IE
1. Forest Land remaining Forest Land		229,266.44	
	RZ10 Boreal Plains	36,032.12	
	RZ11 Subhumid prairies	1,822.59	
	RZ12 Semiarid prairies	18.24	
	RZ13 Taiga Plain	20,027.59	
	RZ14 Montane Cordillera	35,407.71	
	RZ15 Pacific Maritime	13,204.16	
	RZ16 Boreal Cordillera	16,618.57	
	RZ17 Taiga Cordillera	412.08	
	RZ18 Taiga Shield West	1,829.57	
	RZ4 Taiga Shield East	1,102.86	
	RZ5 Boreal Shield East	55,637.29	
	RZ6 Atlantic Maritime	15,409.20	
	RZ7 Mixedwood Plains	2,664.15	
	RZ8 Hudson Plains	302.26	
	RZ9 Boreal Shield West	28,778.05	
2. Land converted to Forest Land[10]		80.17	IE
2.1 Cropland converted to Forest Land		80.17	IE
	RZ10 Boreal Plains	5.92	
	RZ11 Subhumid prairies	0.49	
	RZ12 Semiarid prairies	NO	
	RZ13 Taiga Plain	NO	
	RZ14 Montane Cordillera	4.06	
	RZ15 Pacific Maritime	0.80	
	RZ16 Boreal Cordillera	NO	

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	
Land-Use Category	Sub-division[1]
A. Total Forest Land	
1. Forest Land remaining Forest Land	
	RZ10 Boreal Plains
	RZ11 Subhumid prairies
	RZ12 Semiarid prairies
	RZ13 Taiga Plain
	RZ14 Montane Cordillera
	RZ15 Pacific Maritime
	RZ16 Boreal Cordillera
	RZ17 Taiga Cordillera
	RZ18 Taiga Shield West
	RZ4 Taiga Shield East
	RZ5 Boreal Shield East
	RZ6 Atlantic Maritime
	RZ7 Mixedwood Plains
	RZ8 Hudson Plains
	RZ9 Boreal Shield West
2. Land converted to Forest Land[10]	
2.1 Cropland converted to Forest Land	
	RZ10 Boreal Plains
	RZ11 Subhumid prairies
	RZ12 Semiarid prairies
	RZ13 Taiga Plain
	RZ14 Montane Cordillera
	RZ15 Pacific Maritime
	RZ16 Boreal Cordillera

CHANGES IN CARBON STOCK						Net CO_2 emissions/ removals[8] [9]
k change in living biomass[3] [4]		Net carbon stock change in dead organic matter[4]	Net carbon stock change in soils[4] [5]			
	Losses	Net change		Mineral soils	Organic soils[7]	
	(Gg C)					(Gg)
7	-800,176.11	-2,744.55	17,304.02	7,421.12	IE,NO	-80,595.52
1	-800,078.62	-2,910.81	17,264.78	7,436.41	IE	-79,898.03
4	-138,279.96	-13,325.02	16,302.40	1,030.36	IE	-14,695.08
1	-5,799.63	366.58	48.54	71.99	IE	-1,786.10
6	-47.90	1.56	0.88	0.57	IE	-11.04
1	-42,621.38	6,180.43	2,015.12	615.50	IE	-32,307.18
2	-140,824.00	-9,300.97	-9,613.87	1,947.37	IE	62,214.07
0	-93,856.53	58.77	-2,966.47	298.18	IE	9,568.28
5	-56,734.56	2,617.79	4,239.63	698.22	IE	-27,703.99
5	-1,008.11	163.55	-119.06	15.74	IE	-220.81
4	-4,462.33	-309.79	1,184.54	3.49	IE	-3,220.20
7	-3,442.46	-607.68	120.25	24.72	IE	1,696.63
1	-166,309.17	14,747.54	-5,472.73	1,544.17	IE	-39,669.57
2	-56,082.22	2,679.10	-1,676.59	254.91	IE	-4,610.56
0	-10,311.93	2,244.18	-127.33	18.04	IE	-7,827.91
7	-781.59	152.38	-15.79	15.07	IE	-556.10
6	-79,516.86	-8,579.21	13,345.24	898.10	IE	-20,768.46
6	-97.50	166.26	39.25	-15.28	IE,NO	-697.49
6	-97.50	166.26	39.25	-15.28	IE,NO	-697.49
9	-9.11	14.88	4.50	-1.09	IE	-67.07
3	-0.87	2.28	0.41	-0.06	IE	-9.65
0	NO	NO	NO	NO	NO	NO
0	NO	NO	NO	NO	NO	NO
3	-1.69	3.04	0.81	-1.06	IE	-10.24
5	-1.18	2.07	0.48	-0.15	IE	-8.80
0	NO	NO	NO	NO	NO	NO

Assessing Land-use Change

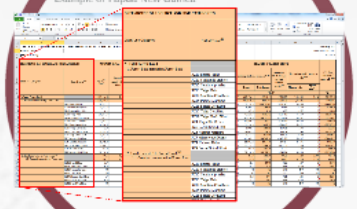
Managed & Un-managed land

'affected by human activity'

Land-use categories & reporting

Reporting LUC

Example of Papua New Guinea



REDD+ and iLUC ?

- Identifying DDFD is at the core of REDD+
- Step-wise, iterative process
- Many countries are still at the initial p
- What is 'indirect' for one is 'direct' for the other
- Addressing iLUC may not be an immediate key priority for a country
- Disconnect between 'communities' working on REDD + and Bioenergy

REDD+ and iLUC Mitigation

Dr. Danae Maniatis, UNDP Consultant, UN-REDD Programme

IEA Bioenergy - Brussels, 23 October

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