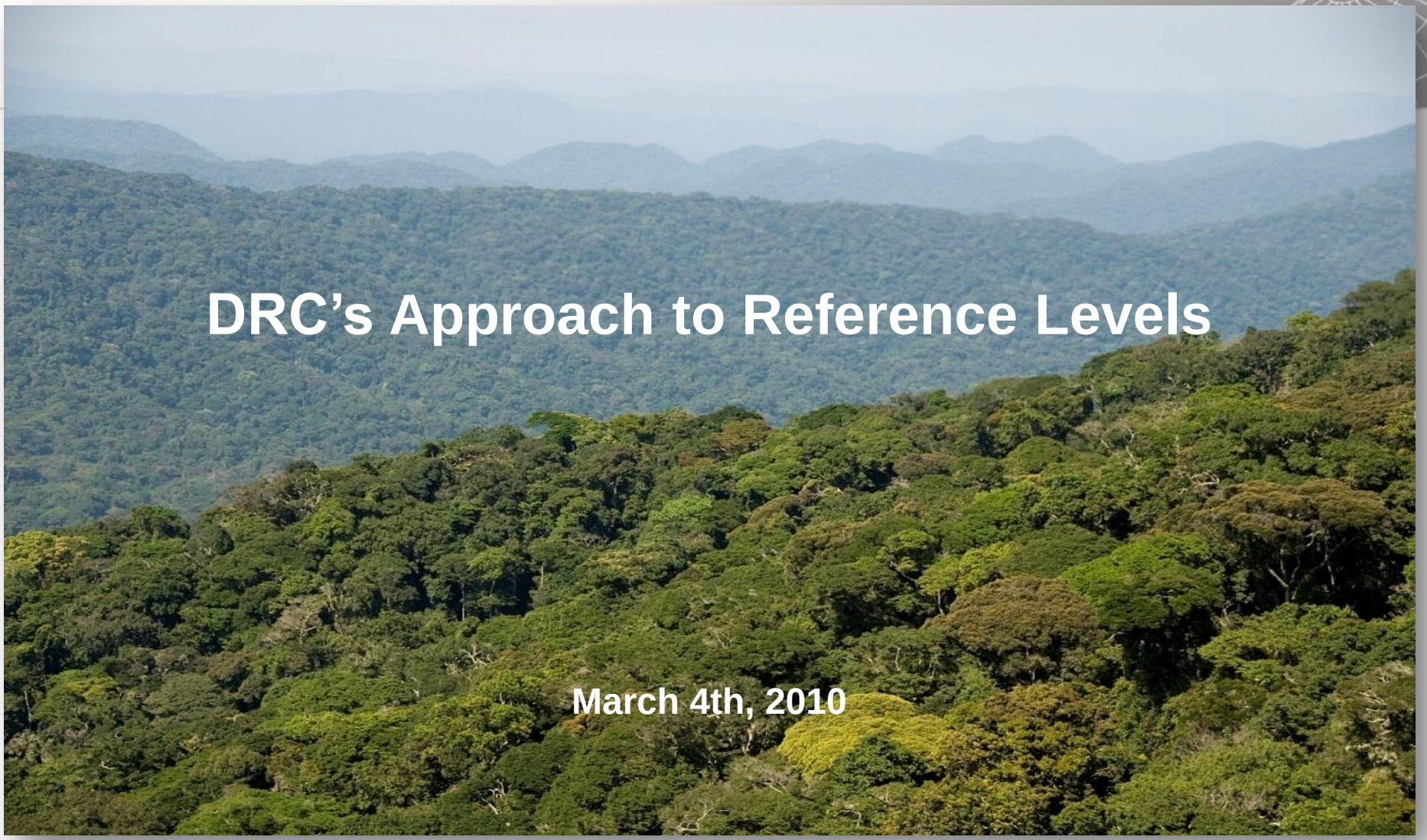

DRC's Approach to Reference Levels

March 4th, 2010

UN-REDD PROGRAMME

FAO UNDP UNEP

COORDINATION NATIONALE
REDD - MECNT

FOREST CARBON
PARTNERSHIP FACILITY

1. Context

2. DRC's approach to Reference Scenario

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Copenhagen outcome

- In Copenhagen, Parties adopted a methodological decision, which *'acknowledge that, when they establish for forests reference levels of emissions and other reference levels, developing countries should do it in a fully transparent manner, taking into consideration chronological data, and making adjustment according to national circumstances…' (§7).*

- Two kinds of reference levels:
  - Reference emissions levels (in case of deforestation / degradation)
  - Referrence levels (in case of a/reforestation and increase in carbon stocks)

→ in DRC :

- REL and RL ou NR according to areas (REDD+ approach)
- Adjusted levels, not only historical
- Adjustment on the basis of « national circumstances », even though the issue is still under work within the SBSTA…

Some key criteria must be respected to build reference scenario with international community approval

- Caution and conservatism:
  - International community won't accept fanciful reference scenario leading to the provision of carbon credit that would not be related to a global deforestation reduction!
- Accuracy / reducing uncertainties…
- Global approach: engaging all activities related to REDD+ and the five pools of carbon
- Transparency and credibility
- Comparability (using agreed methodologies from UNFCCC)
- Coherence (using a methodology determined once and for all and duplicated)
- Feasibility (as regard technical, human, institutionalor financial capacities…)

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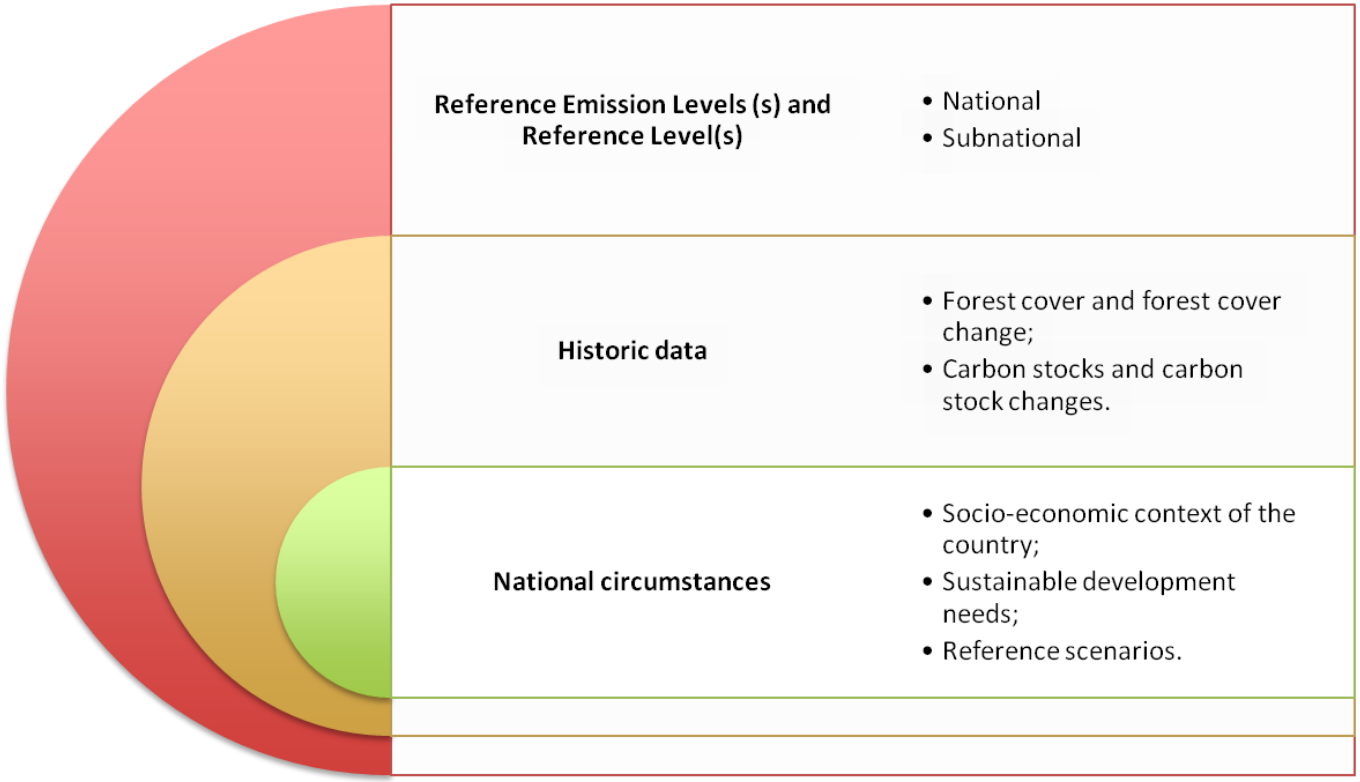
Objective of reference level and framework

- **The reference level will serve:**
  - As a basis for negotiating crediting (political process)
  - A tool to support decison making at the natonal level…
  - and in particular to decide the country's level of commitment in REDD
    - to share effort between sectors and geographical areas
    - evaluate a priori and ex-post the effectiveness of the actions and programs implemented and to make corrections



Proposed work plan

❑ Historical Data (MRV)

❑ National Circumstances :

Comp. 1 : Analysis of the country's socio-economic context

General socio-economic data: employment, education, health…

Valuing data gathered through various projects and participatory mapping exercises.

Comp. 2 : Analysis of future development needs at the national and provincial level

Valuing the prospective work of the Ministère du Plan in collaboration with the World Bank.

What are the country's development choices? What are the emission reduction objectives we want to commit to in DRC?

Comp. 3 : Building the National Reference Scenario

This reference scenario is calibrated on the basis of historical emissions and attempts to make projection on future emissions based on the impact of socio-economic and future development needs on forest cover.

To produce this scenario we use modelling and prospective tools

- Spatial component: support for RGC and IGC, fine tuning of the deforestation risk map of the country done by UC Louvain.
- Quantitative component : impact of development trajectories on deforestation, and comparison with the IIASA model developed at the regional scale.

In the long term, capcity building for modelling and prospective analysis and consolidation of the National Geographical Institute (IGC) to achieve real capacity.

All these data will be put together and harmonised during specific policy workshops at the national and subnational levels (most likely provincial).

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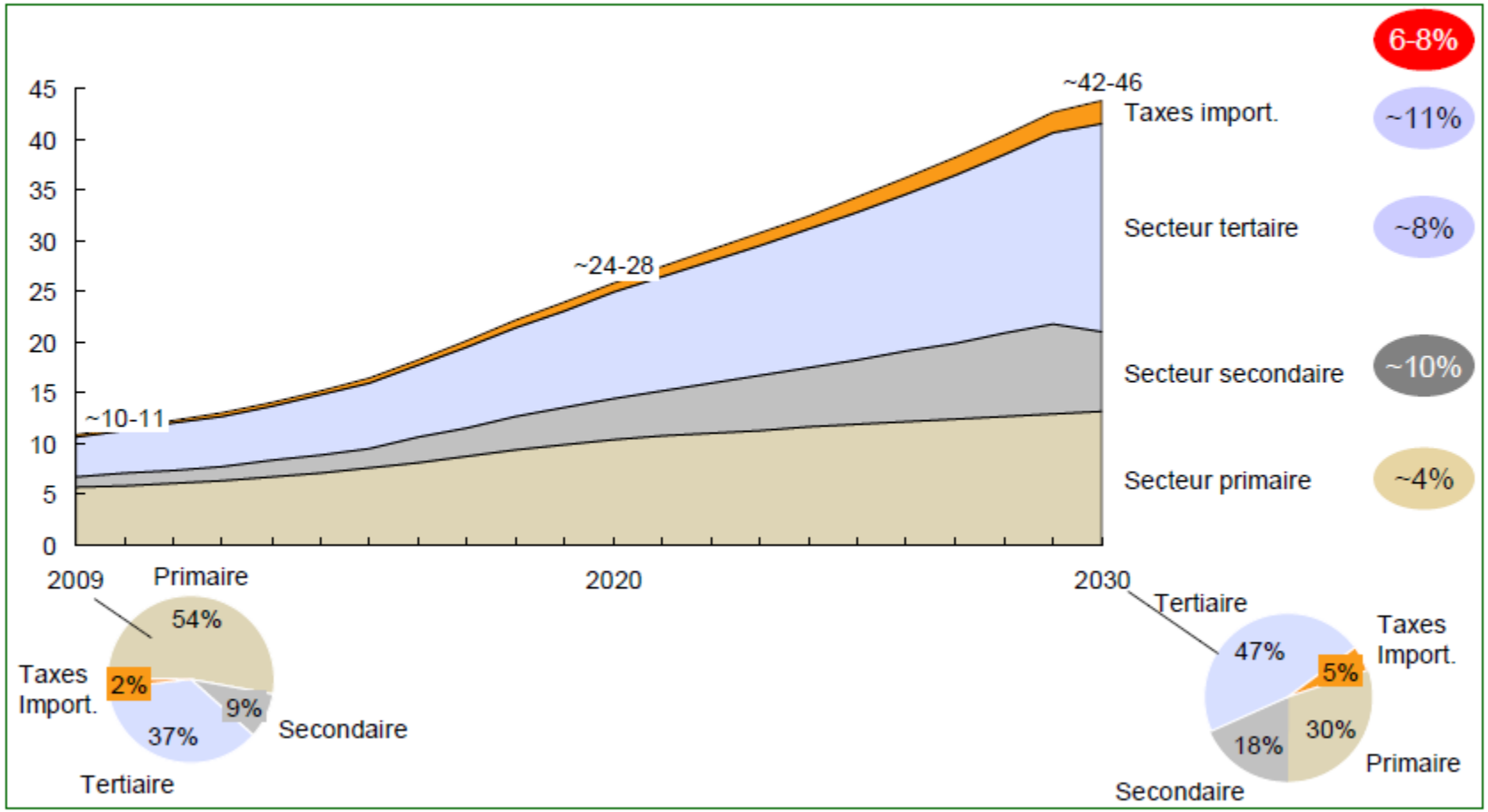
Preliminary study (november 2009) 1/3

La RDC connaîtra une croissance de son PIB réel de 6-8% par an, pour atteindre environ 42-46 milliards USD en 2030

Croissance du PIB réel total et par secteur[2], Milliards USD



1 Taux de croissance annuel moyen (CAGR : Compounded annual growth rate), indiquant la croissance normalisée 2009-2030 du PIB réel

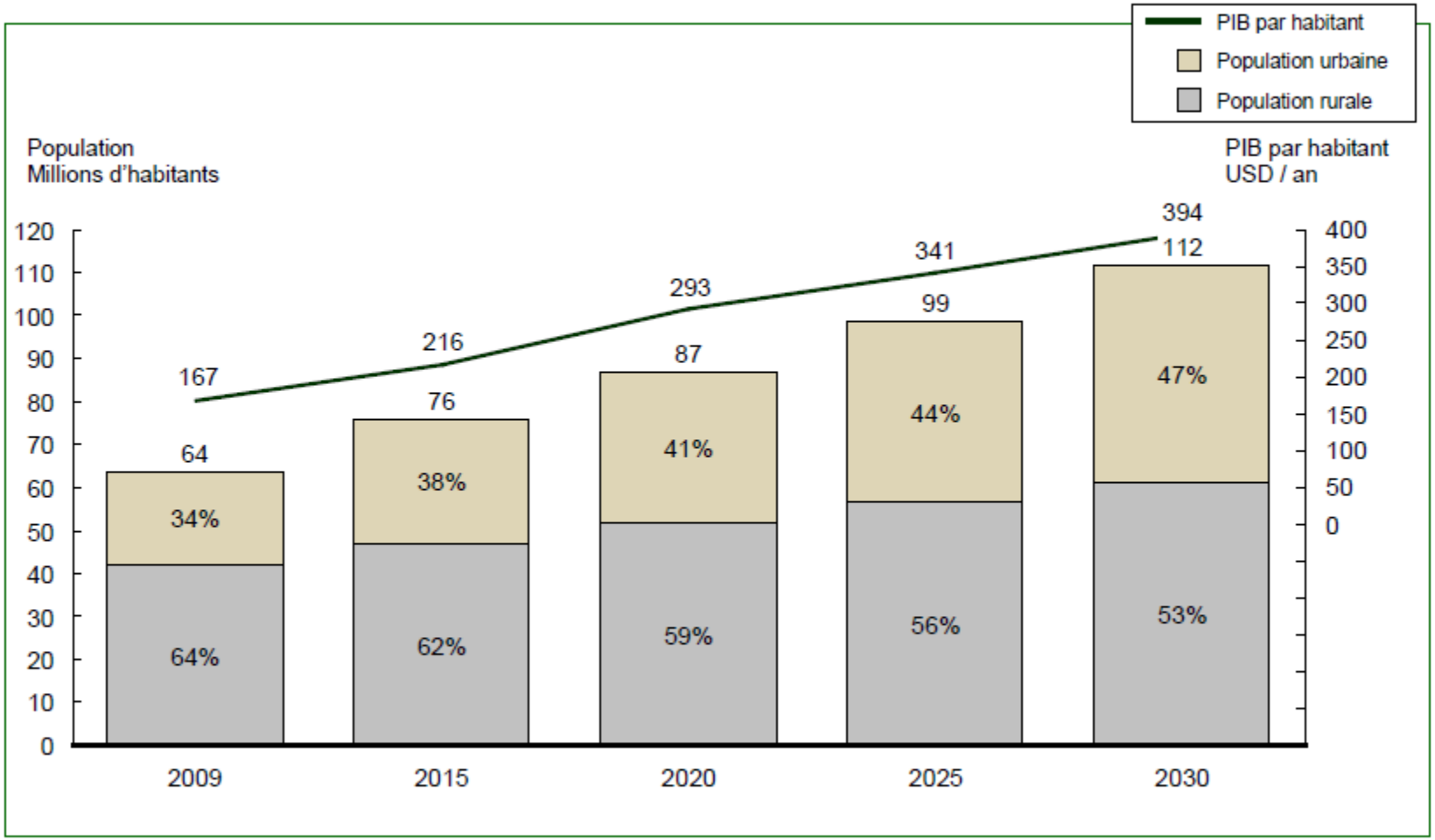
2 Projection du PIB réel basé sur les projections FMI – Banque Mondiale (TCAM de 5,4%) et sur des hypothèses de croissance accélérée des secteurs miniers, pétroliers, agriculture commerciale intensive et développement des infrastructures

Source: Banque Mondiale FMI, FAO, Banque Centrale de la RDC, Ministère de Plan de la RDC

Preliminary study (november 2009) 2/3

Croissance démographique et du PIB par habitant en RDC horizon 2030

2009 - 2030



1 Hypothèse : croissance de la population totale de 3,0% jusqu'en 2015, en ligne avec les prévisions de la Banque Mondiale et de la FAO ; réduction de la croissance à partir de 2016 jusqu'à 2,5% en 2030 ; réduction liée à l'exode rural et à la capacité du gouvernement à ralentir sa croissance démographique

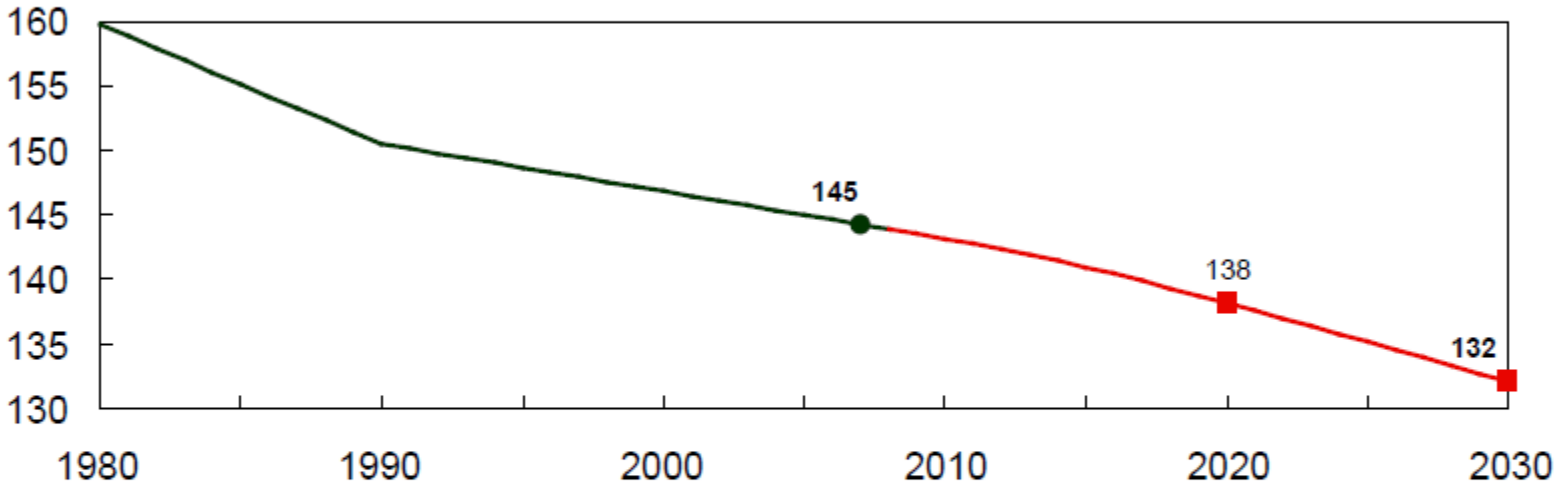
Source: Banque Mondiale, FMI, FAO, PNUD

Preliminary study (november 2009) 3/3

La déforestation devrait réduire le patrimoine forestier de la RDC de 12 à 13 millions Ha à horizon 2030

Scénario de déforestation historique et futur en RDC[1]

Millions Ha de stock de Forêts



- ***Accélération de la déforestation*** en RDC :
  - De 360.000 Ha/an (entre 0,2% et 0,3%) dans la période 1990-2007 à ***+400.000 Ha / an*** (au delà de 0,3% par an) à partir de 2010
  - Impact important de la croissance démographique et socio-économique du pays sur la Forêt
- Cette courbe ne prend pas en compte les effets de la ***dégradation ~21-23 Millions Ha*** *d'ici 2030,* contribuant fortement aux émissions[2]

1 Représente uniquement la déforestation et n'inclut pas la dégradation

2 La superficie totale de forêts dégradées est indicative et comprend un ensemble de types de dégradations (légères, moyennes, sévères)

Source: Banque Mondiale, FAO, OFAC, UCL, South Dakota University, CN-REDD, R-PIN, CIRAD, CIFOR, CTB, MECNT, Ministère de l'Agriculture, Ministère du Plan, Ministère des hydrocarbures, Ministère des énergies, IES, McKinsey, UNEP, PNUD, CSRC, UN-REDD, Greenpeace, WWF, IWG-IFR, CBFP, Rainforest Foundation, FSC, EarthTrends, WRI

Change of forest cover – Illustration from UCL analysis 1/2

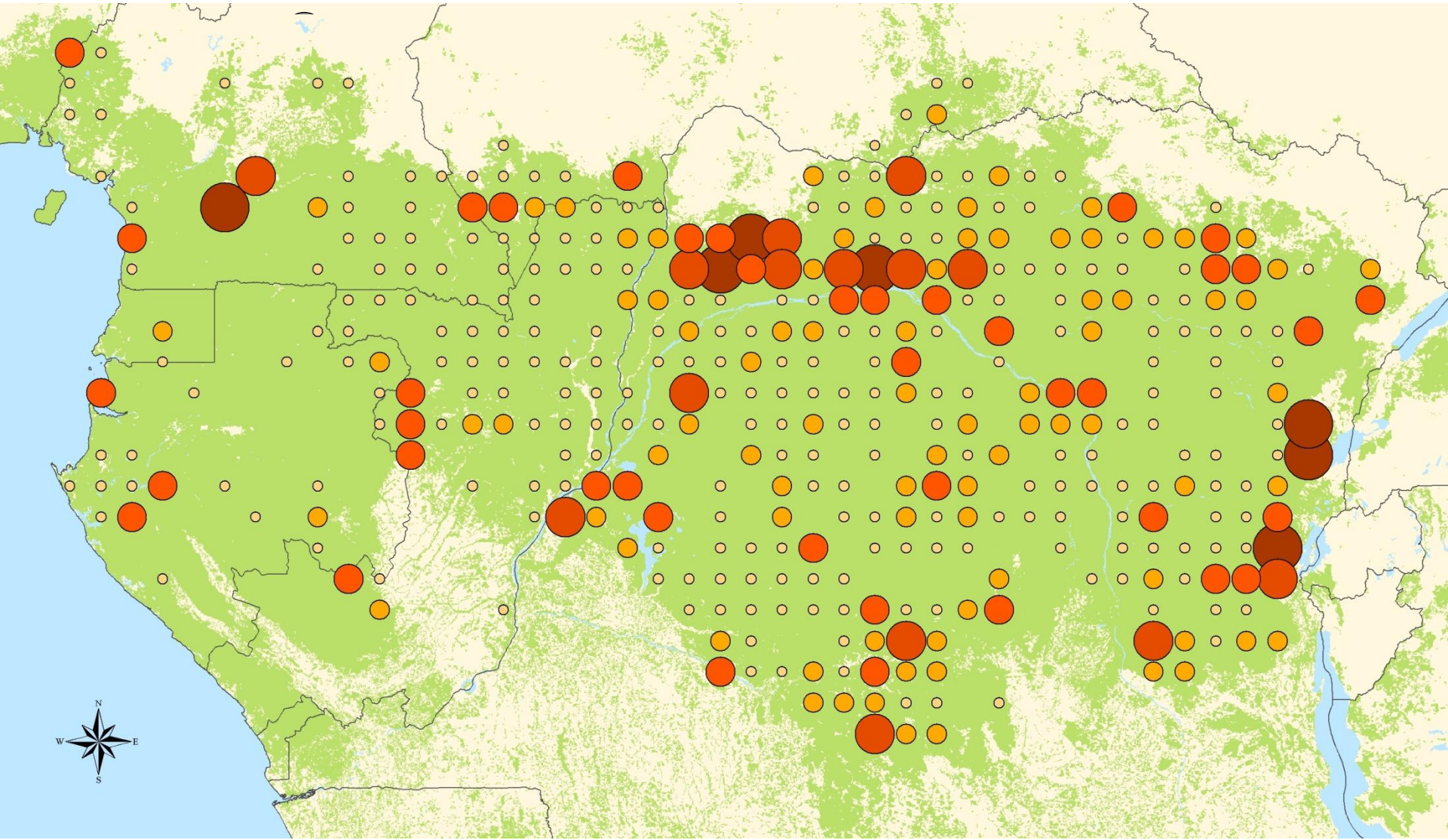
JRC EUROPEAN COMMISSION

UCL Université catholique de Louvain

Changed area per sample [ha]

< 50
50 - 500
500 - 1000
1000 - 2500
2500 - 5000

DEFORESTATION



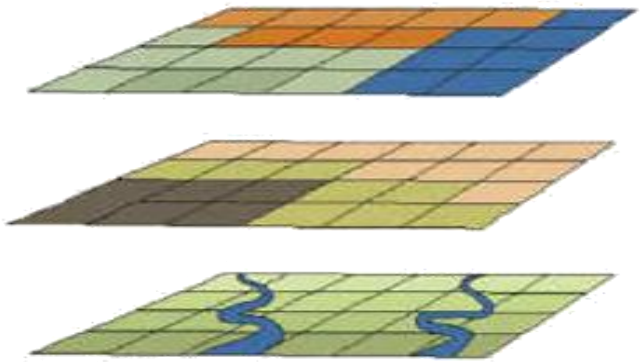
Change of forest cover – Illustration from UCL analysis 2/2

Mapping the risk of deforestation

- Step 1: statistical analysis of relations between the rates of change of forest cover and various related variables (logistic regression)

- Step 2: GIS modelling of deforestation probability

- Related variables :



- population
- accessibility
- density of transport systems
- land planning
- topography
- land use
- proximity to market and urban areas
- type of forest
- insecurity

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- Reference levels are first of all tools to support decision making process, even though they also need to respect criteria to support credit delivery

- Reference levels help to understand where we come from, and to figure out we go, where we want to go, why and how…

- Reference levels and REDD strategy and closely linked!