Conserving Tropical Forests: An Appreciation of UK Leadership
OVERVIEW

• A brief inventory of the many ways the U.K. has provided global leadership on forests
• An update on the importance of forests for climate stability and development objectives
• Reasons for optimism that we can turn the tide of tropical deforestation
UK leadership in global forestry
Concern about tropical deforestation

Dr. Hugh Cleghorn, author of the Report of the Committee Appointed by the British Association for the Advancement of Science to Consider the Probable Effects in an Economical and Physical Point of View of the Destruction of Tropical Forests, 1852
Excellence in research and teaching

The Oxford Forestry Institute, “...for almost a century arguably the English-speaking world’s leading institution concerned with forestry education, research, information, and advice....”

Jeffery Burley et al, 2009
Leadership in international conservation

“All our efforts should be guided by the people whose lives are so much more intimately intertwined with the forests than our own; the approaches we take should both recognize and protect their rights....”, HRH The Prince of Wales, Paris, 2015
“We are seeing a vast increase in the amount of carbon dioxide reaching the atmosphere . . . At the same time as this is happening, we are seeing the destruction on a vast scale of tropical forests which are uniquely able to remove carbon dioxide from the air”, Margaret Thatcher, UNGA 1989
The G8 meeting in Birmingham launched the Action Programme on Forests, which put the issue of illegal logging on the international agenda, 1998
Procurement of sustainable commodities

Wood products used in London’s Olympic Park certified as legally and sustainably produced, 2012

Sustainable production of palm oil, UK statement
October 2012
Integrating forests into development cooperation
The importance of forests for climate stability and development
WHY FORESTS?
WHY NOW?

The Science, Economics and Politics of Tropical Forests and Climate Change

Frances Seymour
Jonah Busch

WORLD RESOURCES INSTITUTE
The importance of forests for climate and development

• Tropical deforestation is a major contributor to current global climate emissions; forest protection and restoration are an even larger part of the climate solution

• Forests provide many other development benefits in addition to global climate stability

• Rich countries are part of the problem, and can contribute to the solution
If tropical deforestation were a country, its emissions would be greater than those of the European Union.

ANNUAL GREENHOUSE GAS EMISSIONS, 2012

- **China**: Highest emissions
- **United States**
- **Tropical Deforestation**
- **European Union**
- **India**
- **Russia**

Source: CAIT v2.0 (2012); Busch and Engalmb (2015).

Emissions from deforestation refers to gross emissions from tropical forest cover loss and peat conversion.
Deforestation remains a significant contributor to climate change even as emissions from other sectors have grown faster.

Total annual greenhouse gas emissions 1970-2010

Billions of tons of greenhouse gas emissions (GtCO₂eq/yr)

Source: Edenhofer et al. (2014)
Deforestation represents net emissions from gross forest cover loss and degradation less removals by forest regrowth.
Net tropical deforestation produces 8 percent of net emissions, but halting and reversing tropical deforestation could reduce total net emissions by up to 30 percent.

**TOTAL GLOBAL NET EMISSIONS**

- **TOTAL GLOBAL NET EMISSIONS FROM TROPICAL DEFORESTATION**: 8%
- **GROSS EMISSIONS FROM TROPICAL DEFORESTATION AND DEGRADATION**: 16–19%
- **REMOVALS BY TROPICAL FOREST REGROWTH**: 8–11%

**MITIGATION POTENTIAL**

- **POTENTIAL MITIGATION FROM REDUCING GROSS EMISSIONS**: 16–19%
- **POTENTIAL MITIGATION FROM SUSTAINING FOREST REGROWTH**: 8–11%
- **TOTAL POTENTIAL MITIGATION FROM TROPICAL FORESTS**: 24–30%

New science on the importance of forests is accumulating.
The importance of forests for climate and development

- Tropical deforestation is a major contributor to current global climate emissions; forest protection and restoration are an even larger part of the climate solution.

- Forests provide many other development benefits in addition to global climate stability.

- Rich countries are part of the problem, and can contribute to the solution.
Deforestation and climate change drive a vicious cycle that exacerbates poverty.

- **Deforestation**: Lost goods and services, less resilience to disasters.
- **Climate Change**: More natural disasters, lower crop yields.
- **Demand for Resources**: Clearing for agriculture, logging.
- **Fossil Fuel Use**: Greenhouse gas emissions.
- **Greenhouse Gas Emissions from Deforestation**.
- **Fires, Storms, Droughts, Diseases, Pest Outbreaks due to Climate Change**.
Tropical forests’ goods and services contribute to development

- **GOODS & SERVICES**
  - **INCOME**
    - timber
    - non-timber products
    - tourism
  - **FOOD**
    - wild foods, bush meat
    - freshwater and coastal fish
    - forage and fodder
    - erosion control
    - irrigation
    - rainfall patterns
    - pollination
  - **ENERGY**
    - less dam siltation
    - fuelwood and charcoal
  - **GOODS & SERVICES**
    - clean drinking water
    - clean air
    - medicine
    - mosquito control
    - fire control
    - local temperatures
    - recreation
    - landslide prevention
    - flood control
    - tsunami wave attenuation
    - carbon storage
    - biodiversity

- **DEVELOPMENT**

**Logo:** WORLD RESOURCES INSTITUTE
The importance of forests for climate and development

• Tropical deforestation is a major contributor to current global climate emissions; forest protection and restoration is an even larger part of the climate solution

• Forests provide many other development benefits in addition to climate stability

• Rich countries are part of the problem, and can contribute to the solution
Illegal conversion of forests to produce agricultural exports accounted for almost one-quarter of recent tropical deforestation.

**Estimated Share of Tropical Deforestation, 2000-2012**

- Conversion for Commercial Agriculture: 71%
- Illegal Conversion for Commercial Agriculture: 49%
- Illegal Conversion for Agricultural Exports: 24%

Source: Adapted from Lawson, 2014, using gross forest canopy loss greater than 51% based on satellite data (Hansen et al. 2013)
European Union biofuel policy increased demand for palm oil, a driver of deforestation.
Emissions from deforestation are embodied in globally traded commodities.

CO₂ emissions embodied in commodities traded across continents for selected producer countries, 2000-2009:
- 250-400 million tCO₂
- 150-249 million tCO₂
- 100-149 million tCO₂
- 50-100 million tCO₂

- PULP & PAPER
- BEEF
- TIMBER
- PALM OIL
- SOYBEANS

Figure does not depict large flows of emissions embodied in soybeans exported from Paraguay and Bolivia to the rest of Latin America, nor smaller flows embodied in soybeans exported from Paraguay, to the rest of the world and in beef exported from Brazil to the rest of Latin America. "Russia" includes other countries of the former Soviet Union.

Source: Persson et al. (2014).
The problem of subsidizing wood-based energy

Operating and proposed biomass facilities in the US Southeast

Source: Southern Environmental Law Center, 2019
Reasons for optimism on tropical deforestation
Reasons for optimism on tropical deforestation

• We have evidence that reducing deforestation is feasible and affordable

• New tools are enabling transparency and accountability

• Global norms are shifting in ways favorable to forest protection

• We have achieved global consensus on REDD+, but finance remains the missing piece
Brazil reduced deforestation and increased agricultural production at the same time.

Various factors were consistently associated with less or more deforestation.

- **Less Deforestation**
  - Law Enforcement
  - Protected Area
  - Payments (PES)
  - Presence of Indigenous Peoples
  - Greater Poverty
  - Higher Timber Price
  - Community Forestry
  - More Secure Land Tenure
  - Nearer to Roads
  - Nearer to Urban Area
  - Greater Population
  - Rural Income Support
  - Higher Agricultural Price

- **More Deforestation**

- **Not Consistent**

Source: Busch and Ferretti-Gallon (2014).
For example, a ratio of 4x indicates that a variable is associated with less deforestation four times as often as it is associated with more deforestation.
Reasons for optimism on tropical deforestation

• We have evidence that reducing deforestation is feasible and affordable

• New tools are enabling transparency and accountability

• Global norms are shifting in ways favorable to forest protection

• We have achieved global consensus on REDD+, but finance remains the missing piece
Reasons for optimism on tropical deforestation

• We have evidence that reducing deforestation is feasible and affordable

• New tools are enabling transparency and accountability

• Global norms are shifting in ways favorable to forest protection

• We have achieved global consensus on REDD+, but finance remains the missing piece
Decreasing tolerance for illegal logging
Corporations are accepting responsibility
“It was only when the international community started talking about REDD+ that we had the opportunity to show that we do exist”, Mina Setra, AMAN, Indonesia, 2014
Reasons for optimism on tropical deforestation

• We have evidence that reducing deforestation is feasible and affordable

• New tools are enabling transparency and accountability

• Global norms are shifting in ways favorable to forest protection

• We have achieved global consensus on REDD+, but finance remains the missing piece
Reducing emissions from deforestation and forest degradation: REDD+

**GREENHOUSE GAS EMISSIONS (GtCO$_2$e/yr)**

- **HISTORICAL EMISSIONS**
- **REFERENCE LEVEL**
- **EMISSION REDUCTIONS**
- **MONITORED, REPORTED, AND VERIFIED EMISSIONS**

**PAST**  **FUTURE**

*Note: Reference level depicted is an illustrative example; reference levels could be above, equal to, or below historical emissions.*
More than 50 countries have initiated REDD+ programs, but only a few have access to performance-based finance with international funding.

*Countries that have initiated REDD+ programs with international funding* refers to countries that have signed a Preparation Grant with the World Bank Forest Carbon Partnership Facility, have an active, closed or pipeline national programs with the UN-REDD Program, and/or participate in the Forest Investment Program, but did not yet have a payment for performance agreement in place as of December 2015. *Countries with performance-based finance* refers to countries that had a payment for performance agreement in place as of December 2015.

Sources: Forest Carbon Partnership Facility (2016); Forest Investment Program (2016); United Nations Programme on Reducing Emissions from Deforestation and Forest Degradation (2016).
Prospective sources of results-based finance
Looking Ahead

• UN Secretary General’s Climate Summit – September 2019

• 2020 deadlines for national climate ambition (NDCs), and forest-related commitments in the New York Declaration on Forests

• UNFCCC Conferences of the Parties in Chile 2019 (Article 6); UK in 2020?
Available for purchase or free download at www.cgdev.org