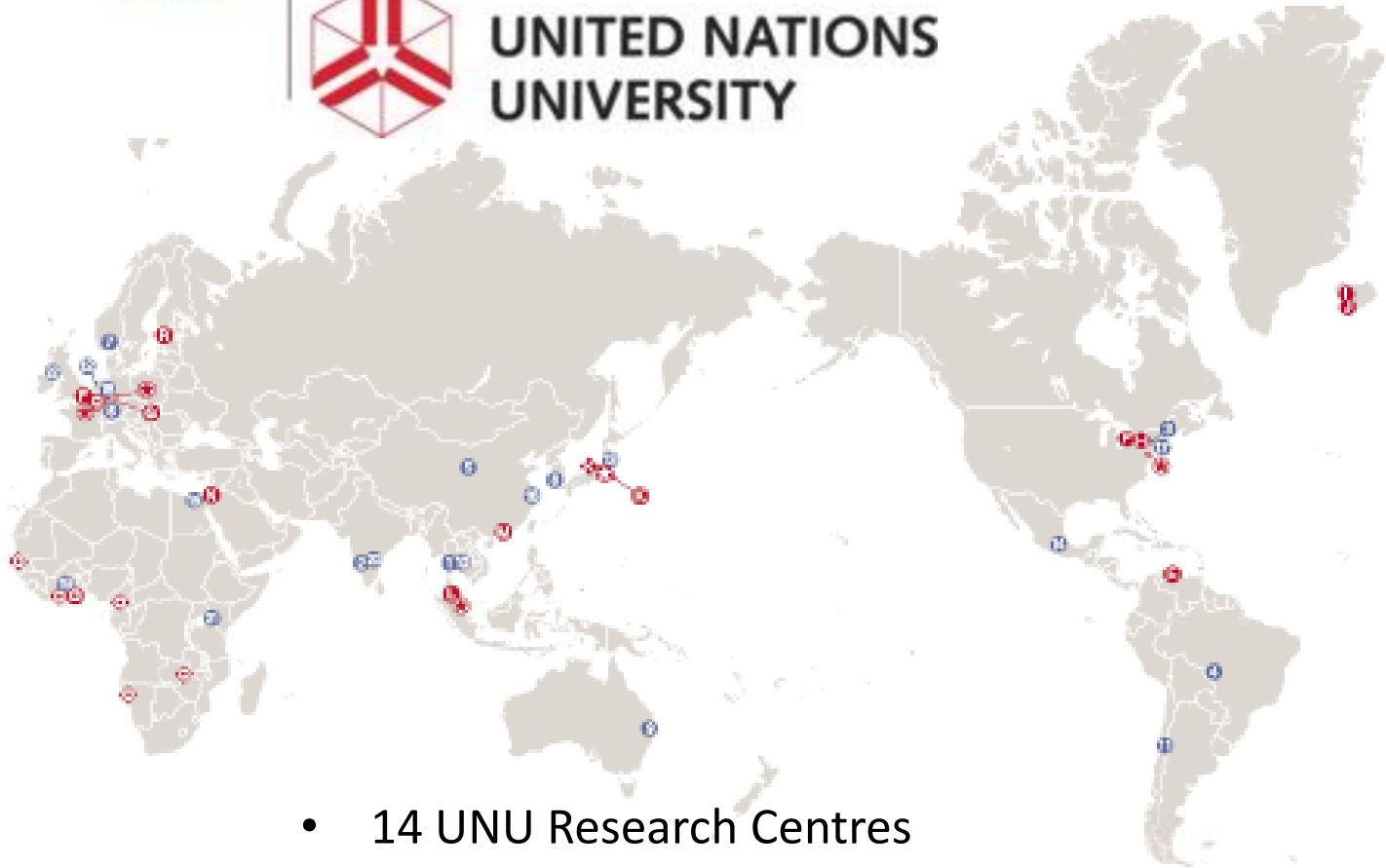


The Use of Indigenous Knowledge in Climate Change

Sam Johnston
United Nations University
Indigenous Knowledge and Biodiversity in India and
Australia Forum
2 August 2012



UNITED NATIONS
UNIVERSITY



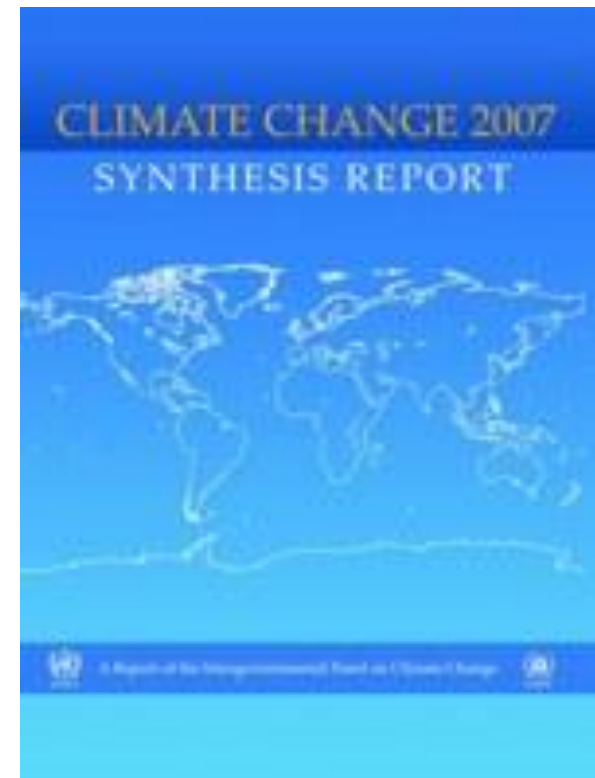
- 14 UNU Research Centres
- UN think tank
- Autonomous, impartial and independent

Indigenous Peoples & Climate Change

- Internationally – UNFCCC – and nationally climate change policy has been slow to recognise the important role
 - COP 13 in 2007
 - Domestically post 2000
- Main areas
 - Understanding and measuring climate change
 - Adaptation strategies
 - Mitigation strategies

- Peak international scientific body on climate change
- Published four comprehensive Assessment Reports (ARs) - 1990, 1995, 2001 and 2007
- Fifth Assessment Report: Climate Change 2014
- Report generally regarded as authoritative

- AR4 noted that Indigenous knowledge is “an invaluable basis for developing adaptation and natural resource management strategies in response to environmental and other forms of change.”
 - Inaccessible to the IPCC process mostly due to language barriers and the requirement that it be published in scientific journals



Climate Change

- A review of 1000+ projects, case studies and research relating to climate change and indigenous peoples
- Describes 400 of the best
- An analysis of the changes, local observations and impacts being felt by communities
- Outlines various adaptation and mitigation strategies that are being implemented



Adaptation

Mexico City July 2011

- TK as a foundation for decision-making
 - TK, TK and science, observations from IPs
- Resilience and Vulnerabilities
 - IP & Vulnerability, enhancing diversity, relationship with place, governance,
- Indigenous Livelihoods
 - Pastoralism, small islands, agriculture
- Adaptation planning and policy
 - Adaptive capacity, knowledge co-production, ICTs, data management
- Americas
- Polar regions
- Small island states



Mitigation



Cairns, March 2012

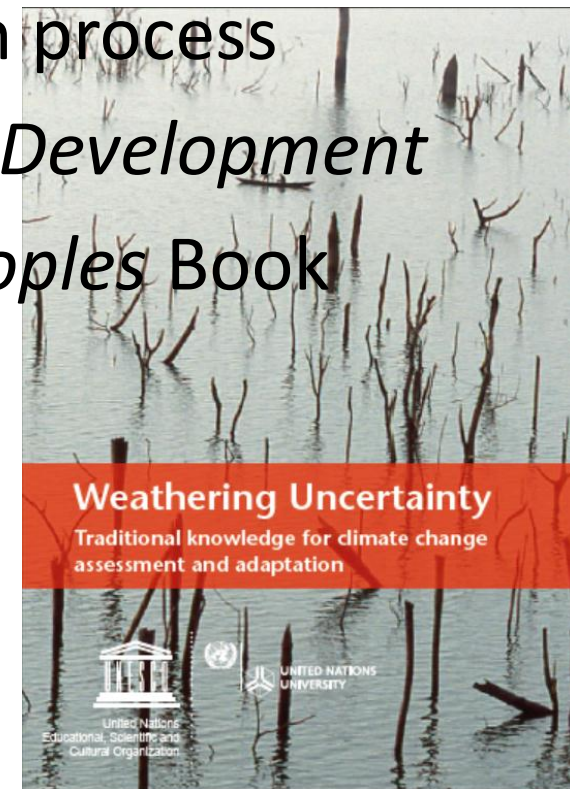
- Agriculture and Land Use Systems
- Livelihoods/culture
- REDD+ Mitigation
- Renewable Energies and Energy Supply
- Forestry
- Carbon Abatement
- Governance
- Mitigation for Sustainable Development

Observations

- Commonality of the challenges
 - Securing property rights
 - Raising awareness
 - Obtain informed decisions from communities – FPIC
 - Participating in state and national policy processes
- Australian indigenous people leading the way
- Opportunities to exchange knowledge and experiences

Outputs

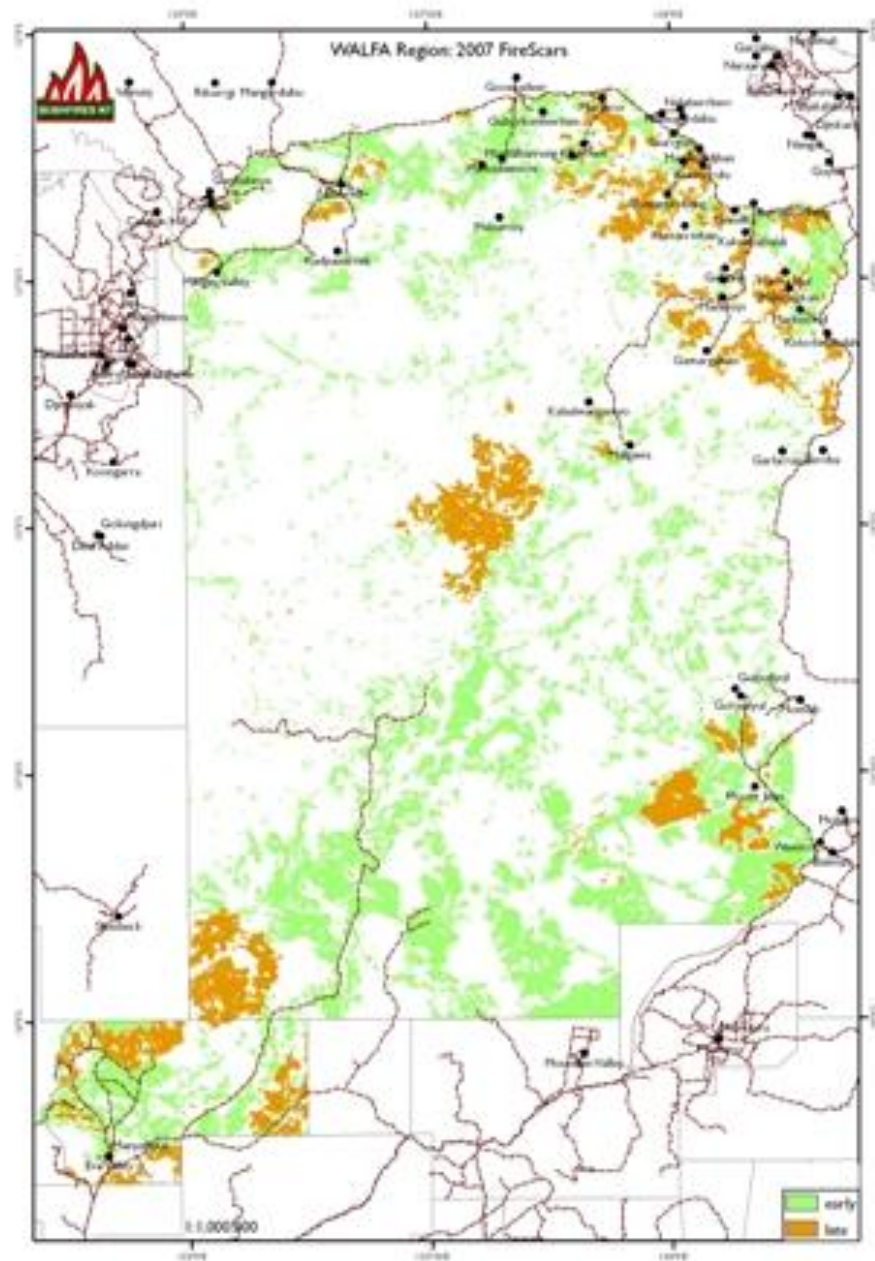
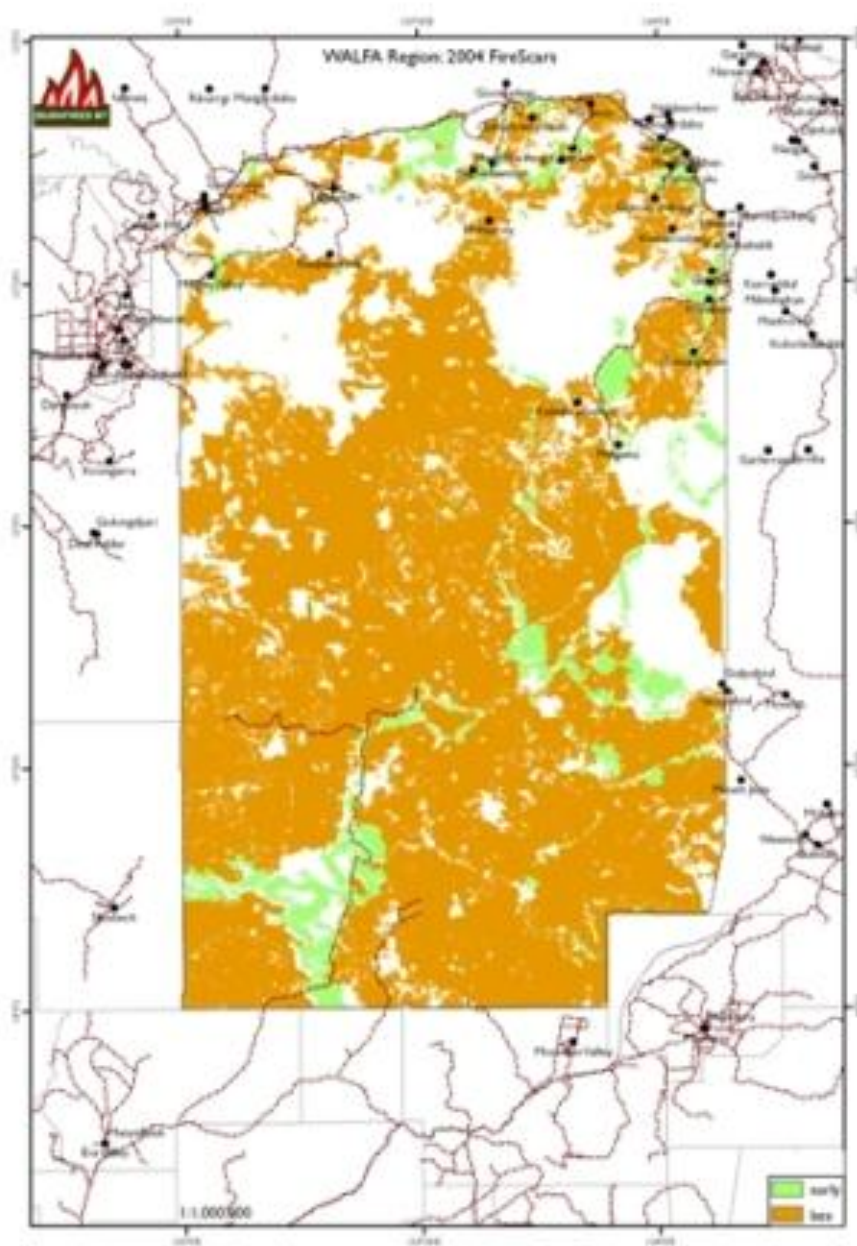
- Workshop Reports
- Technical Report
- Participating in the IPCC production process
- Special journal issue – *Climate and Development*
- *Climate Change and Indigenous Peoples Book*
- Database
- Community materials
- Videos



Fire Abatement

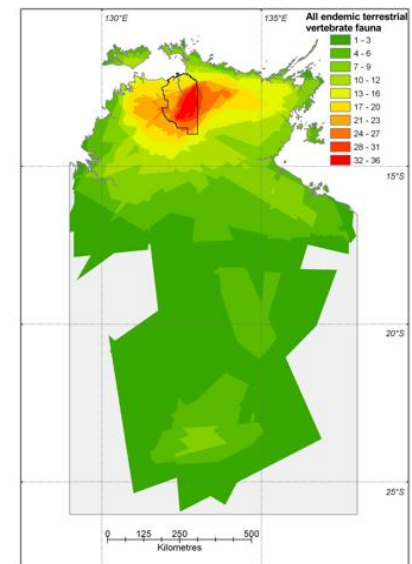
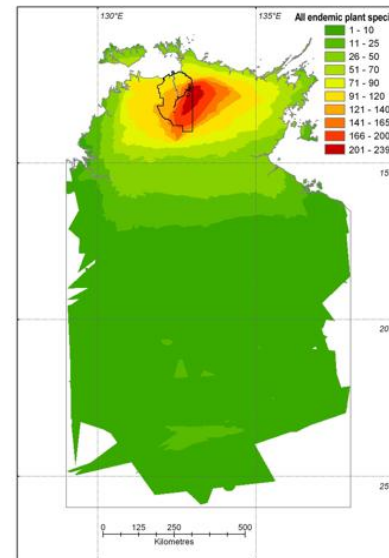
- West Arnhem Land Fire Abatement Project
- Parties
 - Darwin Liquefied Natural Gas ('DLNG')
 - Northern Territory Government
 - Northern Land Council ('NLC')
 - TOs
- 24 August 2006
- NTG contract the NLC and TOs to implement the fire management strategy
- DLNG will provide about \$1 million per year for 17 years
- Monitored by scientists



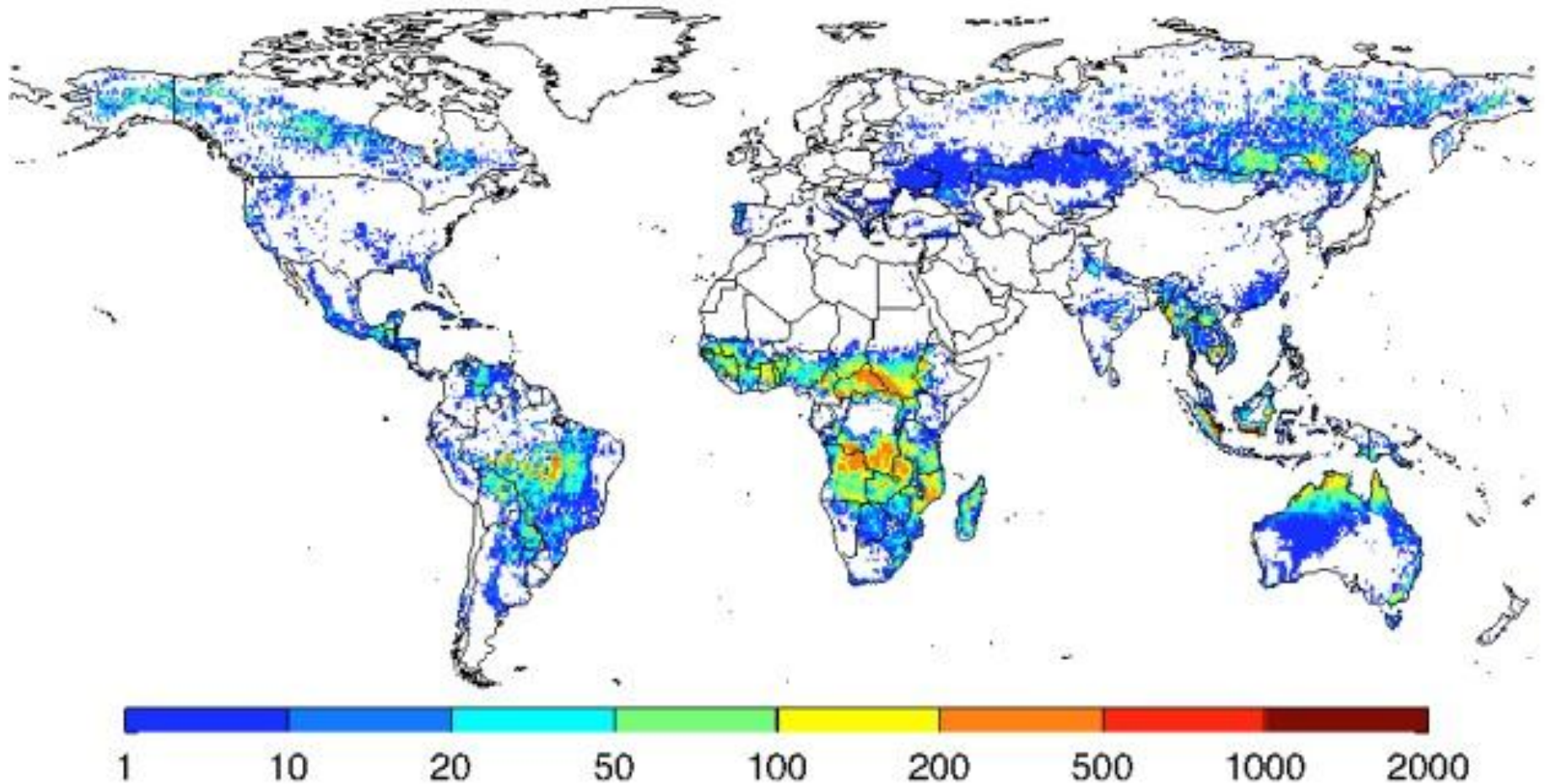


Fire Abatement

- Reduce carbon emissions by 140,000 tonnes per year
- Revive cultural heritage and landscape of global importance
- Maintain biodiversity
- Benefits for the community
 - Employment for the rangers
 - Transfer of TK between generations
 - Re-establish contact with traditional lands
 - Building English skills and cross-cultural confidence essential to economic activities such as tourist enterprises
 - Improved health incomes



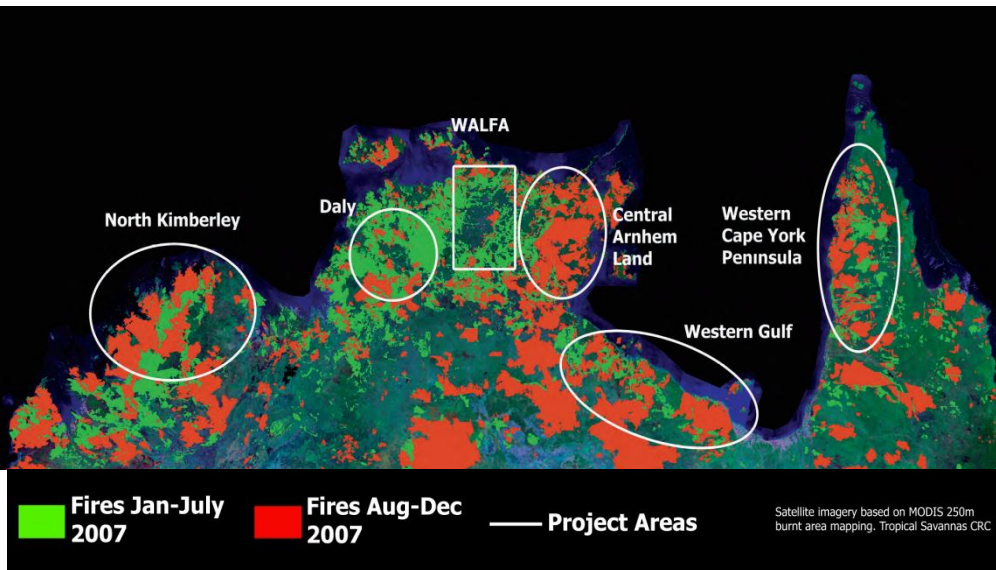
Fire Abatement



van der Werf et al (2010) *Global fire emissions and the contribution of deforestation, savanna, forest, agricultural and peat fires (1997-2009)* Atmos. Chem. Phys., 10, 11707-11735

Fire Abatement

- Estimated by CSIRO to have the potential to reduce emissions by 13 million tonnes per year
- Credits recognised in the Australian Carbon Farming Initiative and Clean Energy Legislation
- NAILSMA aims to produce 1m tonnes in the five regions
 - 200 new jobs

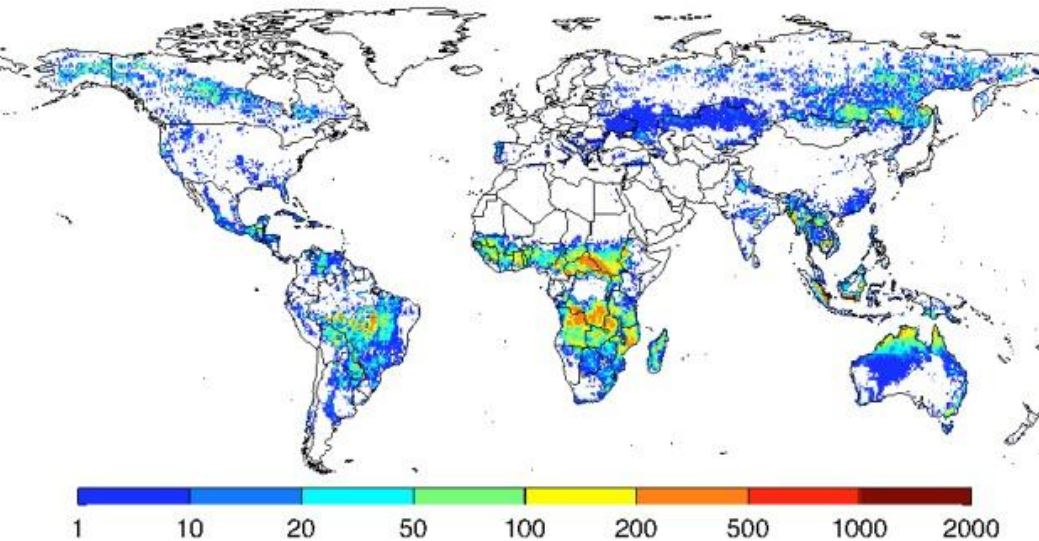


New Projects	Area (km ²)	Current emission from fires (ktCO ₂ -e pa)	Possible Credit (ktCO ₂ -e pa) through 25% fire-management reduction
North Kimberley	84,000	1,169	292
Central Arnhem	45,800	723	181
Gulf of Carpentaria	70,900	667	167
Western Cape York	56,100	899	225
Daly/Wagait	43,700	592	85
Total	300,500	4,052	1,013

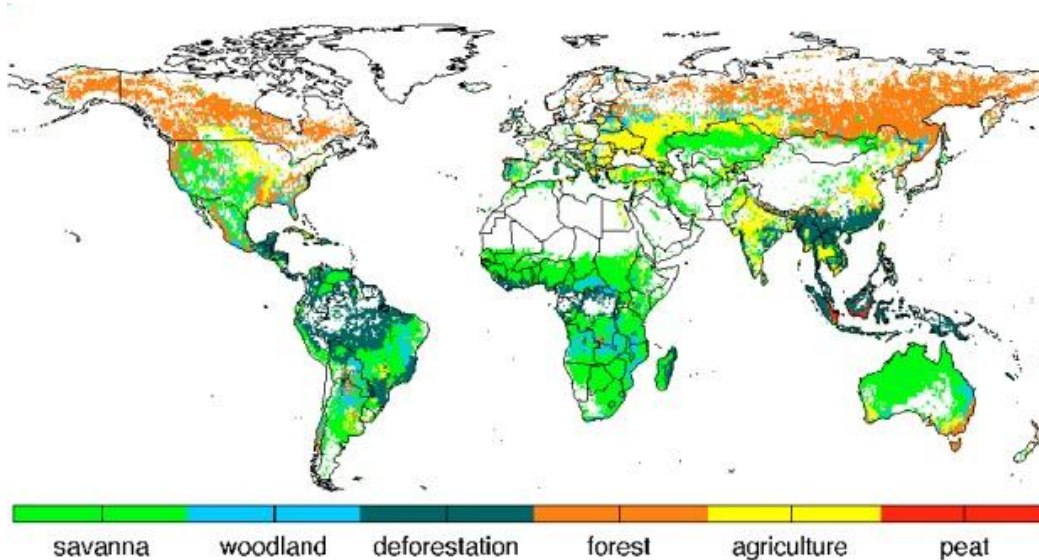
Fire Abatement

- CFI potentially allows for further created from:-
 - Extension of the savanna burning to lower rainfall regions
 - Develop methodology for bio-sequestration
 - Develop an agro-ecological methodology to combine better fire management and carbon incomes with pastoral production
 - Reduction of methane emissions from management of feral water buffalo
 - 5 million extra tonnes annually over the next 20 years
- Significant opportunities are beginning to occur with some regularity
 - Ichthys Project, the Northern Territory
 - Gorgon Project, Western Australia
 - South of Embley Project, Queensland
- Collectively these projects have committed more than \$200 million to offsets of various types.

Fire Abatement



Mean annual fire carbon emissions ($\text{gCm}^{-2}\text{year}^{-1}$), averaged over 1997-2009

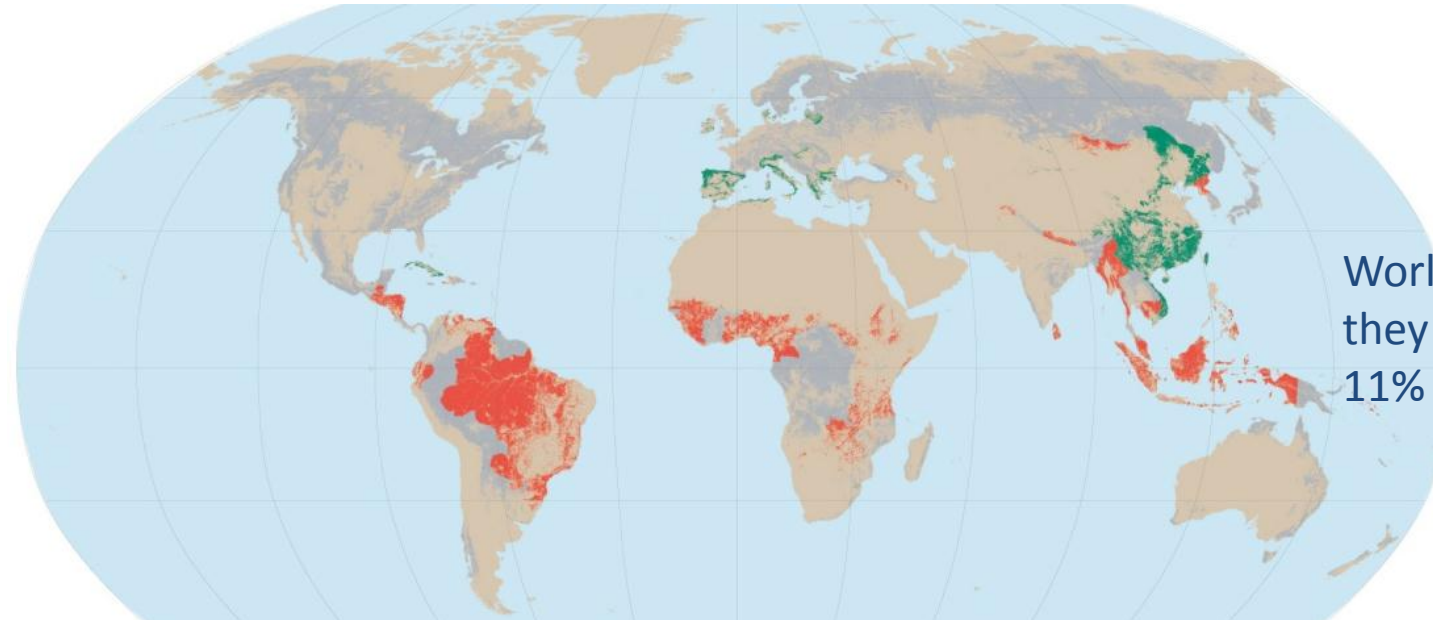


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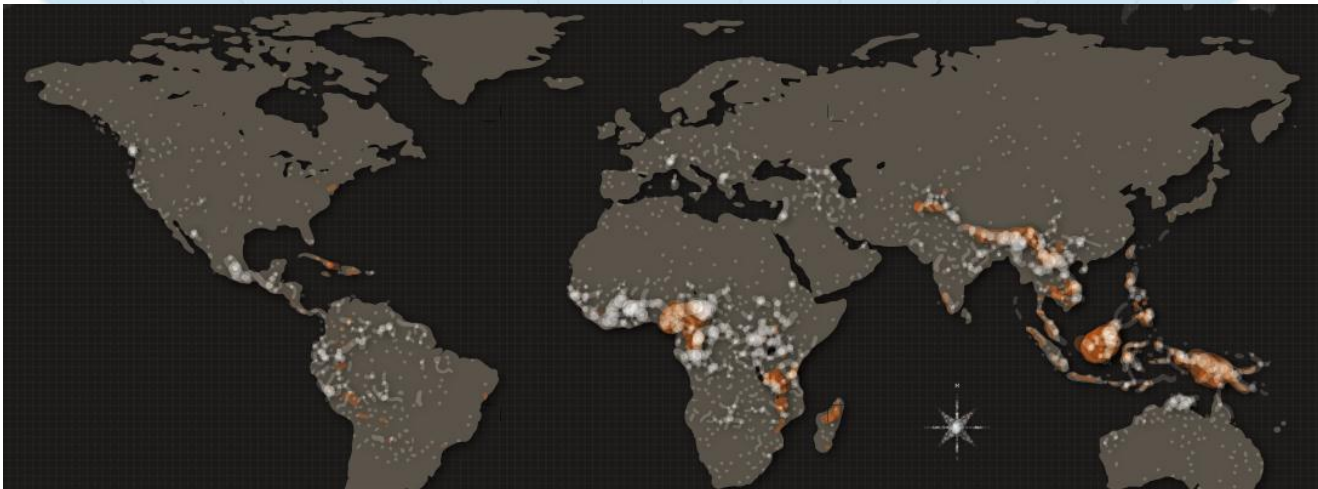
REDD+

- Reducing emissions from deforestation and forest degradation in developing countries, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries
- The IPCC (2007) noted that reducing deforestation is the mitigation option with the largest and most immediate carbon stock impact in the short term per hectare and per year globally
- Could contribute as much as 6Gt CO₂e or 1/3 of the needed abatement between now and 2020
- Cost €9 tCO₂e
 - More than energy efficiency but less than CCS on power plants (€40-55) or solar (€37)

Deforestation



World Bank estimates that
they legally own more than
11% live in over 80%



REDD+ Projects

- Bilateral programmes, FCPF, UN-REDD, FIP, GEF, ITTO-REDD, CBFF, Amazon Fund, Private sector, Philanthropy
 - Total available about \$5bn
 - *climatefundsupdate.org*
 - *reddpluspartnership.org*
- Indonesia and PNG are both heavily involved in developing REDD+ projects
 - enormous tropical forests that are eligible
 - “epicentre” for REDD-plus activities
 - participate in the major international aid schemes

Climate Funds Update

Home Climate fund profiles Global trends Regional trends Types of funding The data Resources About us

The latest information on climate funds

Climate Funds Update is an independent website that provides information on the growing number of international climate finance initiatives designed to help developing countries address the challenges of climate change.

This site aims to detail:

- Where and by whom climate change funds are being developed;
- The scale of proposed and actual financing; and
- What the funds support, across themes and regions and particular projects.

[Overviews of key global trends and statistics in climate finance >>](#)

[Listing and profiles of climate funds >>](#)

[Where project funding is being spent in the world >>](#)

[What types of projects are being funded >>](#)

[Access the data on climate funds >>](#)

[Background publications and resources on climate finance](#)



Latest updates

New update - April 2012 We have now updated all fund and project data through 30th March 2012. Please contact the Climate Funds Update team with any questions or for further information.

Posted 26 Apr 2012 08:39 by Alice Caravani

New update - February 2012 All fund and project information on Climate Funds Update is now current, as of 31 January 2012. You can also read Sima Shahhoda and Luane Schallabek's blog on the...

Posted 20 Feb 2012 02:35 by Alice Caravani



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REDD+ Partnership

The REDD+ Partnership serves as an interim platform for its partner countries to scale up actions and finance for initiatives to reduce emissions from deforestation and forest degradation (REDD+) in developing countries.

To that effect, the Partnership aims to take immediate action, including improving the effectiveness, efficiency, transparency and coordination of REDD+ initiatives and financial instruments, to facilitate among other things knowledge transfer, capacity enhancement, mitigation actions and technology development and transfer.

This website holds information on the work of the Partnership, its aims and progress, and key documents, including the outcomes of Partnership meetings and workshops.

COUNTRIES



As of 1 January 2012, the Partnership

DATABASE

VOLUNTARY REDD+ Database

Consult the voluntary REDD+ Database

REDD+ PARTNERSHIP DOCUMENT



Download the REDD+ Partnership Document

More...

NOTIFICATIONS

The second meeting and workshop of the REDD+ Partnership in 2012 will be held in Bonn, Germany on the 11 and 12 May. More information will soon be available.

The first meeting and workshops of the REDD+ Partnership in 2012 were held in London, UK on 27 and 28 February. Background

Opportunities for Indigenous Peoples

- The WALFA experience has important lessons
 - linkages between western management methodologies and TK
 - social, cultural and governance benchmarks
- Developing an international platform for raising awareness and exchanging experience
- Verifying that these credits are robust from a social, cultural and community governance perspective will be significantly influenced by the WALFA experience