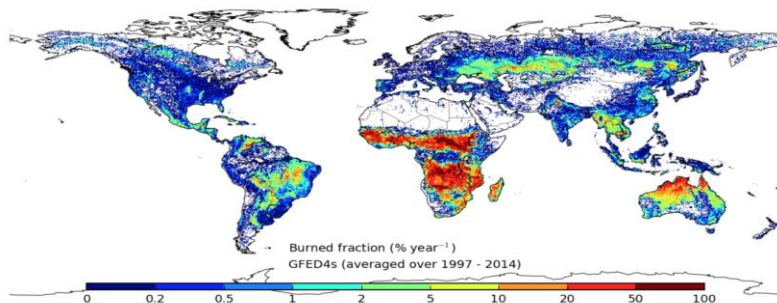
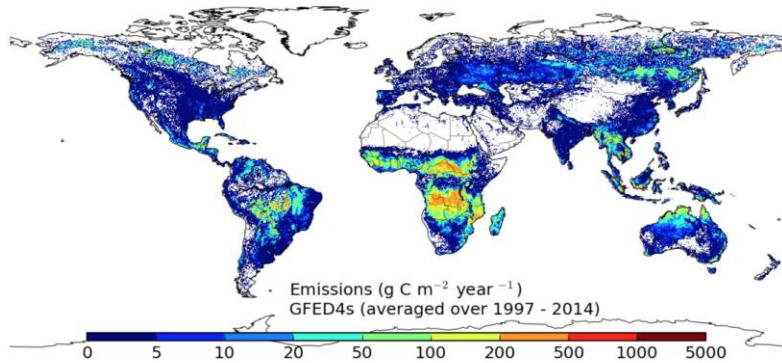


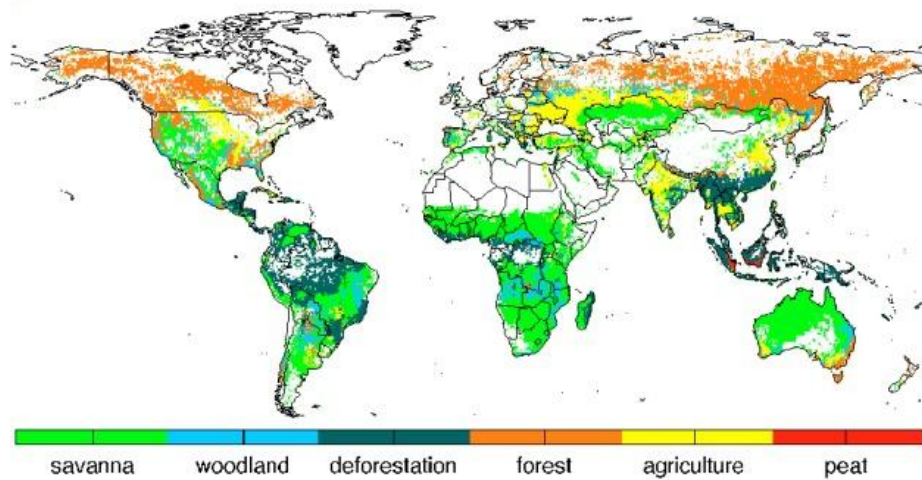
International Savanna Fire Management Initiative

Sam Johnston
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United Nations University
27 November 2015

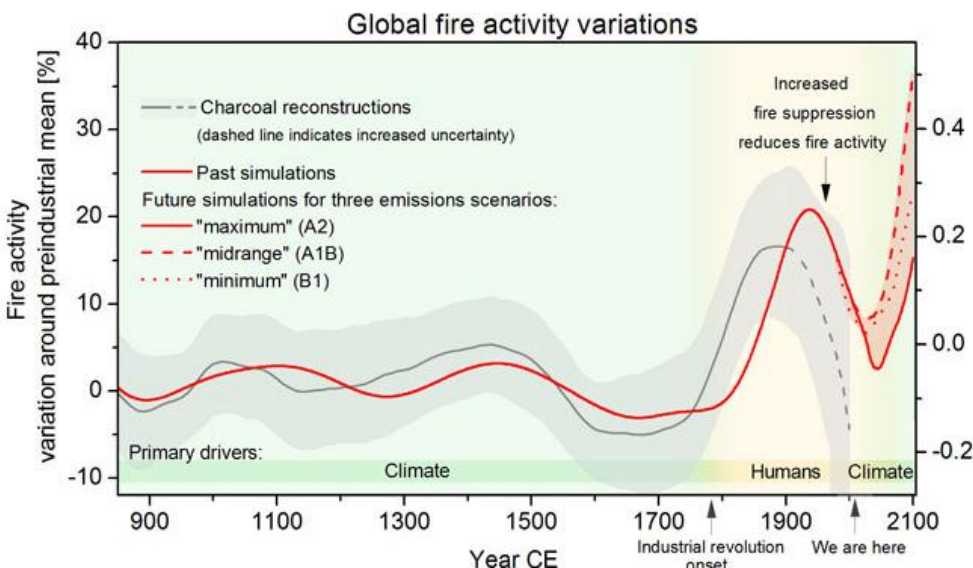
Global Impact of Wildfire



- Burn 3.5 - 4.5 million km²
 - India and Pakistan together
- Gross 8 Gt CO₂ey⁻¹
 - Net 2 Gt CO₂ey⁻¹
- CH₄ and N₂O = 0.7 Gt CO₂ey⁻¹
 - + CO₂ emissions, such as those associated with deforestation and tropical peatlands, that were a net source of 1.3 Gt CO₂ey⁻¹
- US\$2.4 billion yr⁻¹ (GAR 2015)
- Destroy ecosystem services in the range of US\$146–US\$191 billion yr⁻¹ (TEEB)
- NASA predicts that global fire activity could increase by between 5 and 35 percent



- Savannas make up 1/6 of the global land surface
- Suffer twice the rate of conversion as for tropical forests
- Store 15 % (vs. 25 %) of the terrestrial carbon
- 65% of biomass burning comes from savannas
 - 5.25 Gt CO₂ey⁻¹
 - Emit CH₄ and N₂O = 0.31 Gt CO₂ey⁻¹
- Significant proportion of these savanna landscapes are under traditional communal land tenure
- Many of these communities have traditions of fire management that are not currently being practiced



International Savanna Fire Management Initiative

Aims to provide a foundation for implementing a series of pilot sites and developing the MRV to support these sites

Activities

- Document and communicate the Australian experience
- Pilot site identification and preparation
- Learning exchanges between savanna regions around the world
- Raise awareness with indigenous people, donors and international processes

Outputs

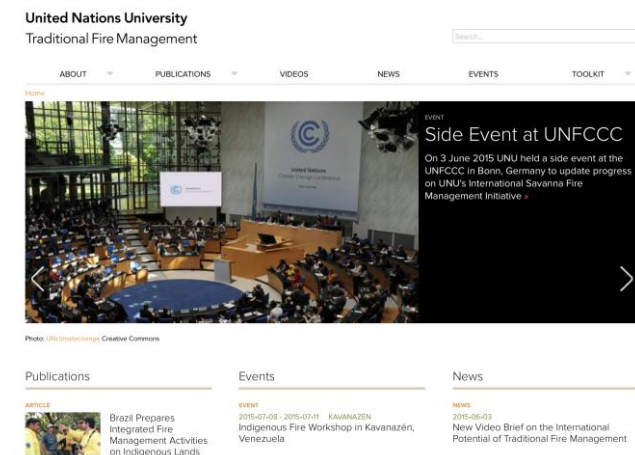
- Documents: Journal Article, Book, Final Report
- Toolkit
- Video clips
- International Awareness
- Reference in IPCC
- Development of Voluntary Market Standards with Gold Standard and Verified Carbon Standard
- Website www.tfm.unu.edu



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Australian Government



Can savanna burning projects deliver measurable greenhouse emissions reductions and sustainable livelihood opportunities in fire-prone settings?

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Although located on opposite sides of the world, Australia and southern African countries share colonial histories in which newcomers introduced indigenous people from employing age-old practices of using fire to manage their lands. This was because in the temperate European countries the settlers had left, fire was often seen as an evil to be avoided and suppressed at all costs. It was assumed that the newly settled territories were wild places where the first peoples exercised no control or co-management over nature.

Many indigenous people, however, in savanna lands across Australia and southern Africa, had been purposefully lighting fires for countless generations before the newcomers introduced formal protective laws and regulations. Indigenous people on both continents did this for many reasons. Fire was not only employed to follow ceremonial practices, but also to ensure that these fire dependent landscapes were able to support the plants and animals upon

Impacts

International Research and Indigenous Knowledge Exchange

- Savanna Fire Management and Sustainable Livelihoods in Developing Countries Meeting, Darwin, May 2013
- Brazil Fire Management Study Tour of Northern Australia, NT/WA, May 2014
- GIZ Evaluation and Planning Workshop, Brazil, July 2014
- World Parks Congress, Sydney, November 2014
- African Fire Learning Exchange and Southern African Regional Fire Workshop, Namibia, December 2014
- Indigenous Perspectives Workshop and Asia Fire Workshop, Kupang, Indonesia, May 2015
- Several doctoral thesis now in progress involving Germany/Australia/Brazil/Venezuela/Indonesia/PNG/Timor Leste and Namibia researchers

Policy

- UNEP including savanna burning in its NAMA guidelines
- Focus on savanna fire within Indonesia National Carbon Accounting System Development
- Development of Timor Leste Disaster Strategy to consider inclusion of savanna fire in strategy
- Tanzania government official returning from studies at CDU Australia, being assisted by Initiative and local African partners towards implementing traditional fire management in Tanzania (George Makheya)
- GIZ Cerrado project collaborating with Initiative to convene high level policy workshop to further policy commitment to fire management in Brazil, June 2016

Findings

- Programs reintroducing TFM for cultural and environmental reasons are beginning to be developed
 - Namibia, Tanzania
 - Brazil, Belize, Venezuela
 - None have captured the carbon benefit
- Similar TFM initiatives are possible in other countries across Africa, Asia and Latin America
- Methodology for measuring the reduction of GHG is easily adapted to other fire dependant landscapes around the world
- Satellite monitoring and data is available for all regions for reporting and verifying the carbon credits
- Reintroduction of TFM could lead to reductions of wildfire emissions by as much as a half
- Global emissions reductions potential could be expected to be in the vicinity of 100 to 150 Mt CO₂ey⁻¹
- TFM represents an important response to the increased wildfire predicted to occur as a result of climate change
- Confirmed potential to deliver the types of co-benefits seen in Australia



Namibia



Brazil