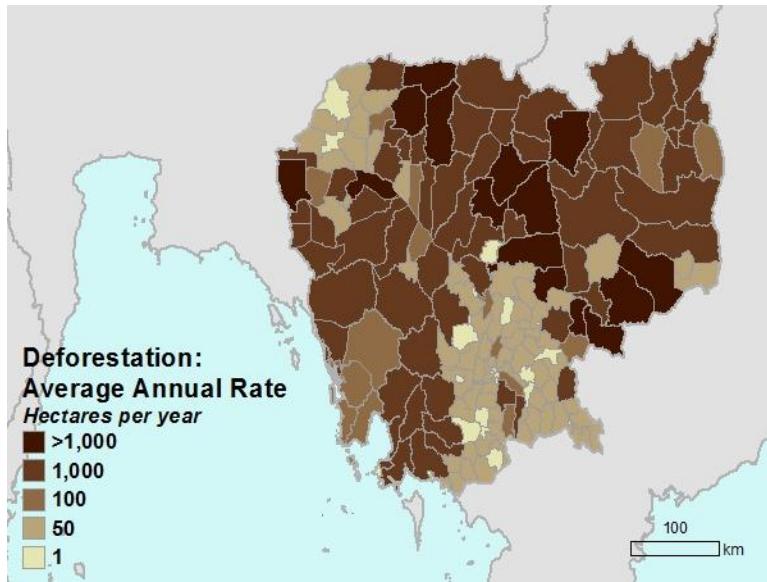


Cambodia



National deforestation estimates in percent per year and agricultural statistics are from FAO (2010).

Mapped sub-national estimates of the Deforestation Indicator in hectares are indicative only, given the resolution of the data source, and are from CI (2011), derived from the MODIS percent tree-cover change product for 2000 to 2005 (Hansen, et al 2009).

Deforestation¹

Forest area (2010): **57%**

Primary forest area (2010): **3%**

1990-2000: **-1.14 %y⁻¹**

2000-2005: **-1.45 %y⁻¹**

2005-2010: **-1.22 %y⁻¹**

Agriculture²

Agriculture as % of GDP (2010): **36%**

Agricultural land (2010): **31.5%**

Top 3 commodities, by footprint (2010):

Rice: 2.8m ha

Maize: 0.3m ha

Cassava: 0.2m ha

Employment in agriculture (2008): **72%**

*Rates at sub-national level are for indicative purposes only given use of relatively coarse MODIS data

Sub-national Region	Hectares per Year (indicative)
Sandan	4,609
Phnum Proek	3,725
Varin	2,107
Thala Barivat	1,943
Santuk	1,916

Context

Political Context

After three decades of political instability, the government of Cambodia is now dedicating its efforts towards advancing economic growth³ and examining ways to reduce deforestation.⁴ For example, in 2012 the government declared a moratorium on new economic land concessions aiming to curb illegal logging and deforestation.⁵ Advancing economic development by improving agricultural productivity is a top priority for the government⁶ and since rice cultivation is practiced by 80% of Cambodian farmers, the government has developed a suite of policies aiming to improve production and increase export opportunities for this important crop.⁷

Socio-economic Context

Despite some rapid economic improvements in urban centers, rural poverty remains a challenge.⁸ An estimated 85% of the population is dependent on farming for household food and income security.⁹ Current land use and management practices have degraded Cambodia's natural forest and have led to a number of conflicts among land-dependent impoverished communities who are heavily dependent on forest-related livelihood activities.¹⁰

Deforestation Drivers

While the central region of Cambodia contains the largest remaining lowland evergreen forest in the country and shelters 80% of the most valuable and endangered indigenous tree species in the region, it also exhibits the highest forest loss.¹¹ Starting in the 1990s, as result of rapid economic growth and fragile environmental regulations, 60% of the country was leased to private timber industry, which led to widespread deforestation and forest degradation.¹² Land speculation driven by high prices has also contributed to accelerated forest clearing in recent years.¹³ In particular, economic land concessions for production of rubber, sugar cane, cassava and more recently biofuel crops have led to substantial deforestation and displacement of forest-dependent populations.¹⁴ Improper farming systems, lack of access to irrigation and some inability to tap into financial opportunities for lasting production has led to a decrease in rice production at a rate of 4 to 5 times less than neighboring countries.¹⁵ These circumstances also lead to forest conversion as farmers seek out additional land for new rice paddies in order to meet the high market demand and rural population growth.¹⁶ Forest degradation is also caused by unsustainable fuel wood collection and charcoal production. The latter is more damaging as it requires green wood and in some regions is more profitable than agriculture.¹⁷ Due to lack of alternative energy sources, wood is the primary energy source for most rural and some urban households.

References

- ¹ CI (2011) Global map of deforestation indicators derived from the MODIS percent tree-cover change product. Unpublished data set, Conservation International. Arlington, Virginia, USA.
- FAO (2010) Global Forest Resources Assessment 2010
- Hansen, M., DeFries R.S., Townshend J.R.G., Carroll M., Dimiceli C., Sohlberg R.A. (2003) Global Percent Tree Cover at a Spatial Resolution of 500 Meters: First Results of the MODIS Vegetation Continuous Fields Algorithm. *Earth Interactions*, Vol 7, No 10, pp 1-15.2 The World Bank: Agriculture, value added (% of GDP): World Bank national accounts data, and OECD National Accounts data files.
- ²The World Bank: Agricultural land (% of land area): FAO
- The World Bank: Employment in agriculture (% of total employment): International Labour Organization, Key Indicators of the Labour Market database
- ³Poffenberger, M. (2009). Cambodia's Forest and Climate Change: Mitigating Drivers of Deforestation. Natural Resources Forum, 33: 285-296.
- ⁴ Conservation International 2012. Agents, drivers and underlying causes of deforestation in the Prey Long region, Cambodia. Arlington, USA.
- ⁵ Reuters 2012. Cambodia suspends new land concessions to companies. <http://www.reuters.com/article/2012/05/07/cambodia-land-idUSL4E8G79HB20120507>
- ⁶ USAID. Cambodia: the human impact of forest conflict. Report. USAID; 2006. http://pdf.usaid.gov/pdf_docs/PNAD1843.pdf. Last accessed 30-11-2011
- ⁷ Yu, B. and S. Fan (2011) Rice production response in Cambodia. *Agricultural Economics*. 24 (3): 437-450.
- ⁸ Hill, H. and J. Menon. (2011). Reducing Vulnerability in Transition Economies: Crises and Adjustment in Cambodia. *ASEAN Economic Bulletin*, 28(2): 134-159.
- ⁹ Central Intelligence Agency 2013. The World Factbook – Cambodia. USA. Accessed on <https://www.cia.gov/library/publications/the-world-factbook/geos/cb.html>
- ¹⁰ USAID. Cambodia: the human impact of forest conflict. Report. USAID; 2006. http://pdf.usaid.gov/pdf_docs/PNAD1843.pdf. Last accessed 30-11-2011
- ¹¹ CTSPA/FA 2003, *Forest Gene Conservation Strategy*. Cambodia Tree Seed Project, Forestry Administration, Phnom Penh, Cambodia
- ¹² Poffenberger, M. (2009). Cambodia's Forest and Climate Change: Mitigating Drivers of Deforestation. Natural Resources Forum, 33: 285-296.
- ¹³ Poffenberger M, Smith-Hanssen K. Forest communities and REDD climate initiatives. Asia Pacific issues; 2009.
- ¹⁴ Poffenberger, M. (2009). Cambodia's Forest and Climate Change: Mitigating Drivers of Deforestation. Natural Resources Forum, 33: 285-296.
- ¹⁵ Poffenberger, M. (2009). Cambodia's Forest and Climate Change: Mitigating Drivers of Deforestation. Natural Resources Forum, 33: 285-296.
- ¹⁶ Poffenberger M, Smith-Hanssen K. Forest communities and REDD climate initiatives. Asia Pacific issues; 2009.
- ¹⁷ World Bank 2011. Readiness Plan Idea Note (R-PIN) Washington USA http://www.forestcarbonpartnership.org/sites/forestcarbonpartnership.org/files/Cambodia_R-PIN_Revised_Feb_2009.pdf