

# Forest loss in Cambodia's protected areas

## New research demonstrates REDD+ effectiveness

Maren Pauly<sup>1</sup>, Will Crosse<sup>1</sup>, Joshua Tosteson<sup>1</sup>, 2022. "High deforestation trajectories in Cambodia slowly transformed through economic land concession restrictions and strategic execution of REDD+ protected areas". *Nature Scientific Reports*.

<sup>1</sup>. Everland, Department of Project Impacts

Cambodia has undergone significant forest loss in recent decades, with 2.6 million hectares of forest cover loss occurring since 2001, equating to 29.5% of forest cover and 1.45 billion tonnes of CO<sub>2</sub> emissions. Critically, much of this forest loss and degradation is occurring in mature primary forests, which hold significant carbon and are home to rich biodiversity and keystone species.

### Deforestation Drivers



**Agricultural frontiers** have been spreading across the country in recent decades, destroying habitats and threatening diverse forest ecosystems.



**National highways** have formed an extensive road network, developed to improve urban-rural connectivity, making previously isolated forests readily accessible.



**Economic Land Concessions** have been established in many regions, with an average expansion of 105,000ha/year since 1998. Recently limited via a new government order.



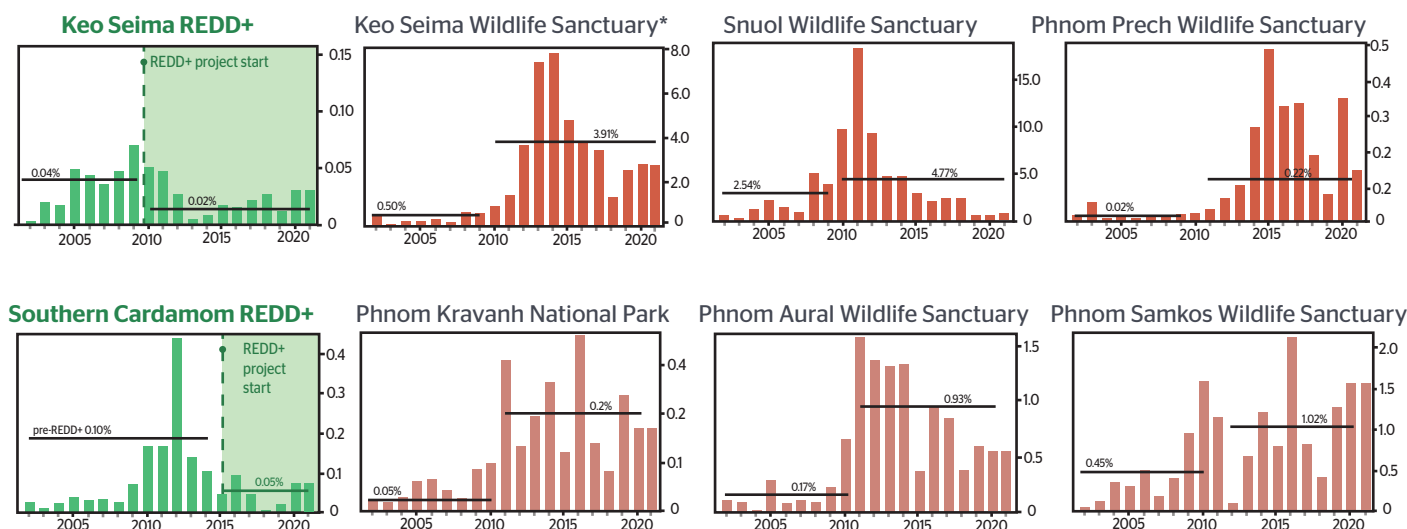
**Illegal logging** for the establishment of settlements as the population continues to grow. Additional logging for the international sale of luxury wood products.

Such deforestation has resulted in landlessness, poverty and land conflicts, forcing communities to migrate in search of arable land, further contributing to the growing degradation and destruction of forests.

### Research Findings

Deforestation was analyzed in 3 protected area blocks, including around Keo Seima and Southern Cardamom REDD+ Projects. Forest loss continues to be a significant threat in these areas, despite their protected status. Protection on paper does not necessarily translate to protection on the ground - particularly in regions of limited resources, high background deforestation and low rule of law.

The **Southern Cardamom and Keo Seima REDD+ Projects were 158% more effective at reducing forest loss** compared to the adjacent protected areas. REDD+ initiatives, when implemented in association with favorable enabling conditions, have strong potential to ensure more effective long-term protection than national protected areas alone within high deforestation landscapes.



A snapshot of deforestation in two protected area blocks in Cambodia. The annual deforestation rates (% of total forest cover, 2001-2021) for 8 protected areas and REDD+ projects were analyzed in a southeastern block (top row) and southwestern block (bottom row). The deforestation rates in the REDD+ projects decreased since project initiation, while deforestation increased in adjacent protected areas.

(\*Keo Seima Wildlife Sanctuary excluding the core protected forest where the REDD+ project is located)

Article is current in press at Nature Scientific Reports (to be published online in October 2022)