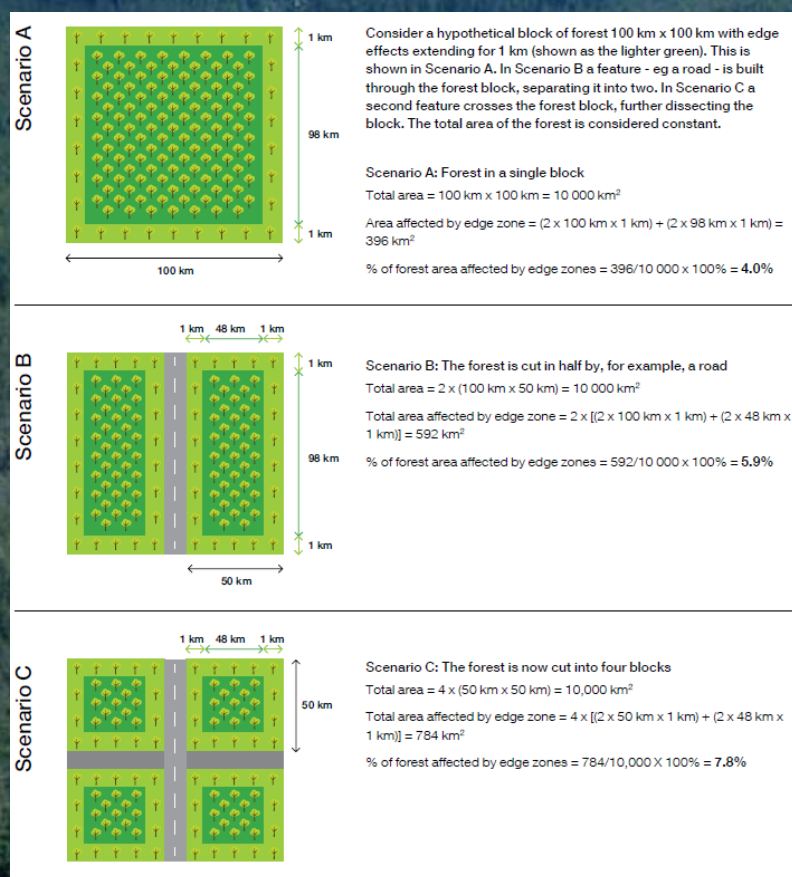


# Fragmentation of Intact Forest Landscapes (IFLs) Increases Vulnerability to Climate Change.

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Intact Forest Landscapes (IFLs) are a special category of forests, they are large (> 500 km<sup>2</sup>) blocks of forest without roads and untouched by commercial logging or farming. Yet, their intactness is being lost as they are being fragmented into ever smaller forest pieces, with particular risks to carbon storage and biodiversity.

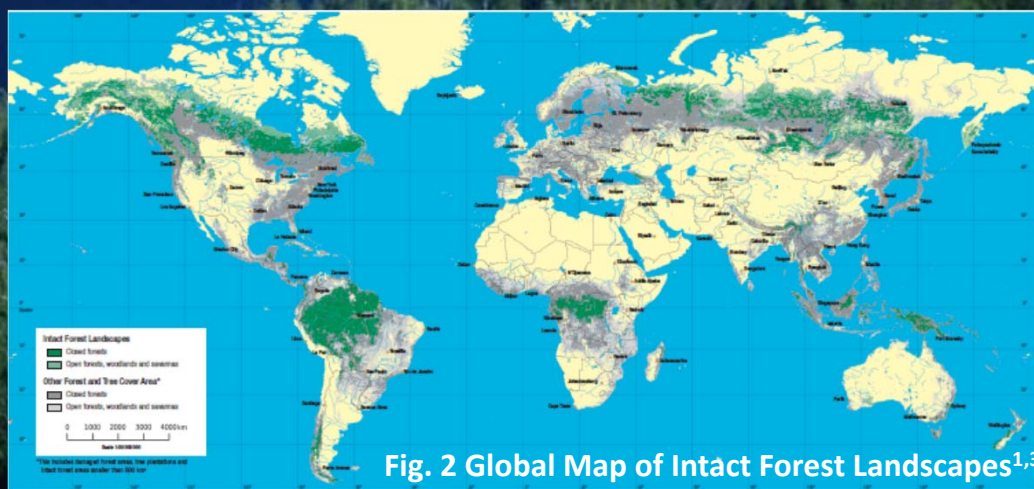


Fragmentation of IFLs causes immediate losses of forest carbon to the atmosphere. In addition, the edges created by fragmentation (Fig. 1) are prone to drought and fire<sup>1</sup>, the projected impacts of climate change in some forest areas. Thus, fragmentation risks creating a vicious cocktail by releasing both carbon and increasing the vulnerability of the remaining forest (and hence carbon stocks) to climate change impacts<sup>1</sup>.

Fragmentation is usually the first step in opening up an intact forest landscape to further degradation and ultimately deforestation. The initiator of fragmentation is the building of roads into these IFLs (e.g. for forestry or mining) as these provide the access for logging (whether legal or illegal) and ultimately, in many cases, conversion to agriculture<sup>2</sup>.

**Fig. 1 Forest fragmentation increases the proportion of forest affected by edges**

Protection of IFLs needs to be a priority for both carbon and biodiversity, which underpins ecosystem services. To facilitate protection, the location and extent of IFLs has recently been mapped (Fig. 2)<sup>1,3</sup>. IFL protected areas need to include community protected areas that accommodate low impact uses such as hunting and collecting<sup>1</sup>.



**Fig. 2 Global Map of Intact Forest Landscapes<sup>1,3</sup>**

**IFLs are essential for the Earth's climate, biodiversity and people: their protection is essential.**

**More details at  
[www.intactforests.org](http://www.intactforests.org)**

<sup>1</sup> Greenpeace 2011. Intact Forest Landscapes: why it is crucial to protect them from industrial exploitation. (and references therein)

[http://www.greenpeace.org/international/en/publications/reports/IntactForestLandscapes\\_TechNote/](http://www.greenpeace.org/international/en/publications/reports/IntactForestLandscapes_TechNote/)

<sup>2</sup> Laurance, W. F. & Balmford, A. 2013. A global map for road building. Nature 495: 308-309.

<sup>3</sup> Potapov, P. et al. 2008. Mapping the world's intact forest landscapes by remote sensing. Ecology and Society 13: 51.