



State of ecological connectivity in the Amazon

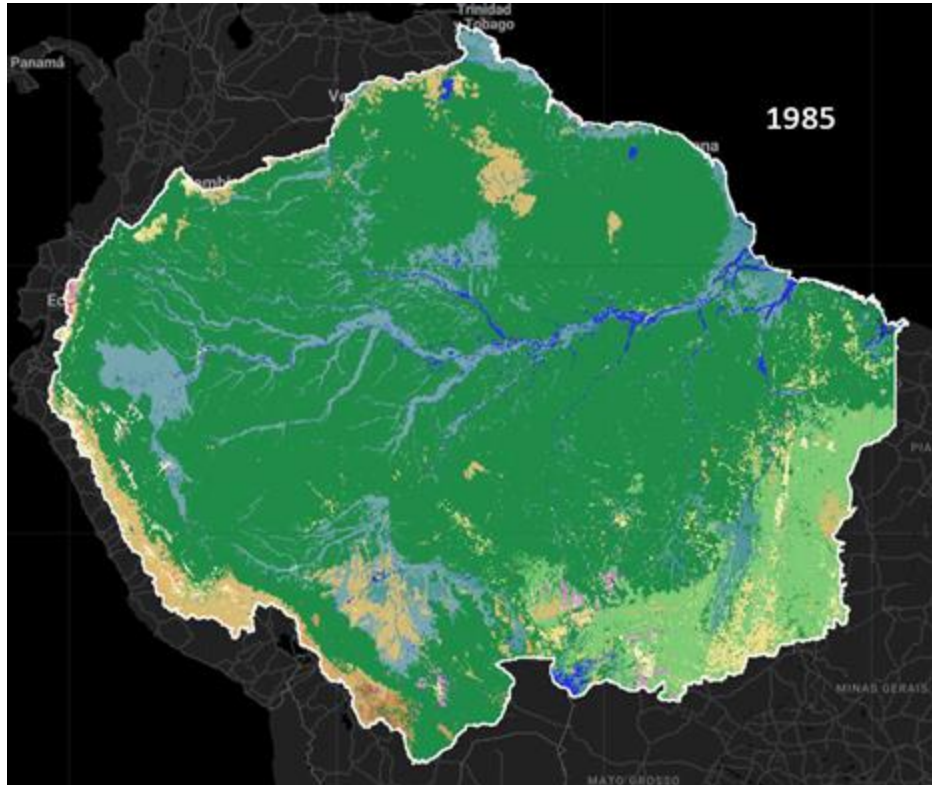
Carmen Josse PhD – Fundación EcoCiencia



Rio Miriti, Paraná, Colombia
Gaia Amazonas

A changing Amazon: 1985 to 2023

Deforestation from economic activities



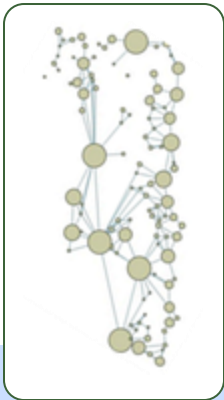
93 Mha
natural
vegetation
lost
between
1985 - 2023

Agricultural
land cover
increased
67%

17%
loss
from
1985.

METHODOLOGY

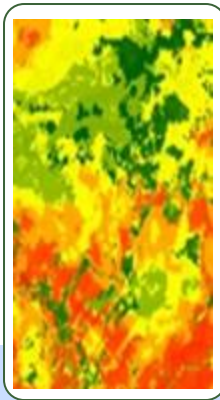
Connectivity algorithm based on circuit theory
[McRae et al. \(2016\)](#)



Nodes

Remaining
natural
cover

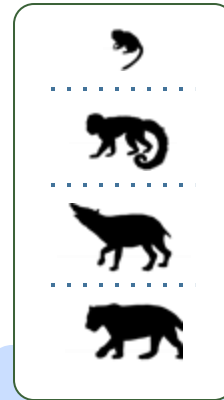
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Resistance

Land use
change
MapBiomass

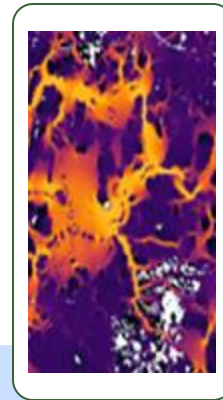
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Ecotypes

Different
movement
ranges in
different biomes

:



**Resulting
connectivity**

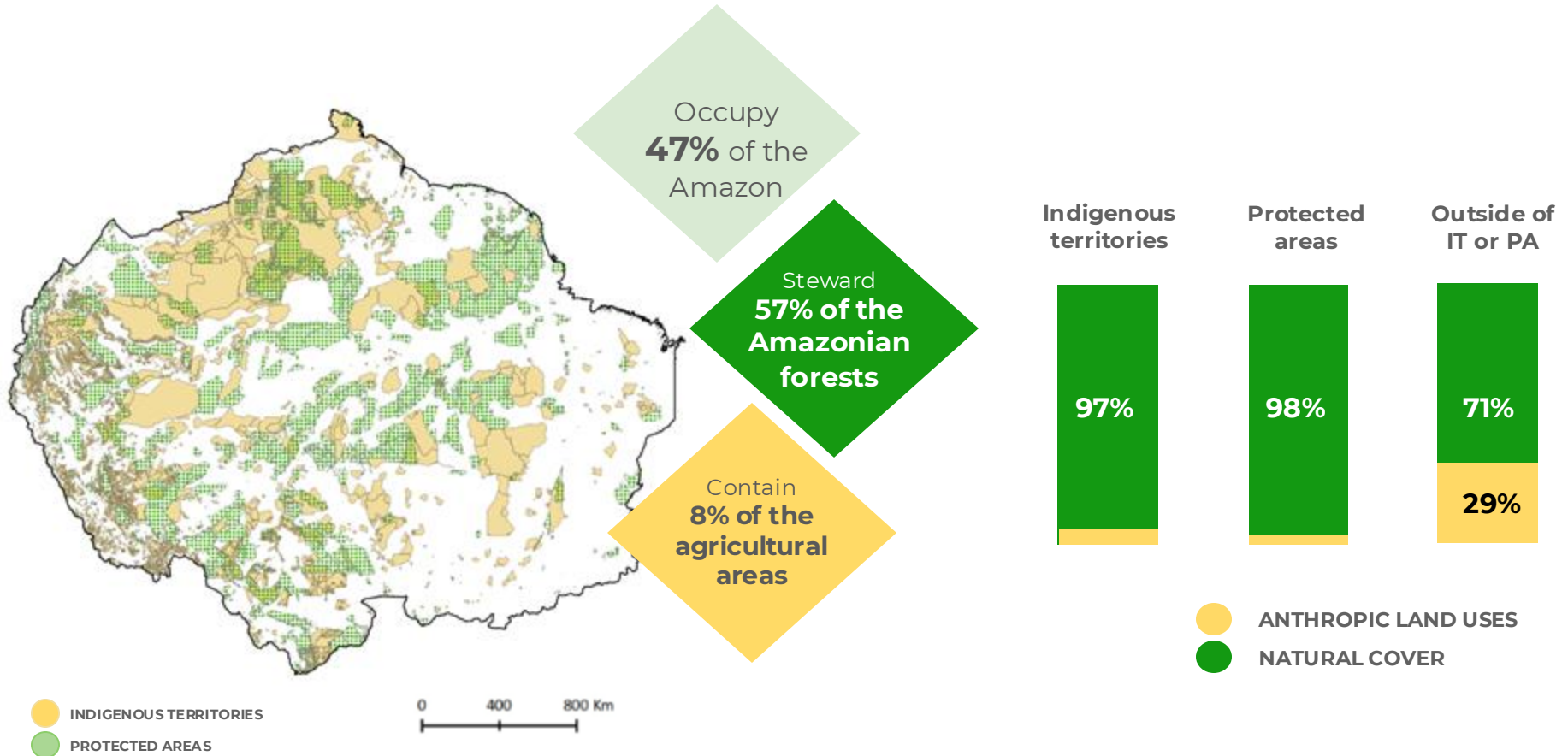


Parque Indígena do Xingu, Brasil

André Villas-Bôas / ISA

Indigenous Territories and Protected Areas

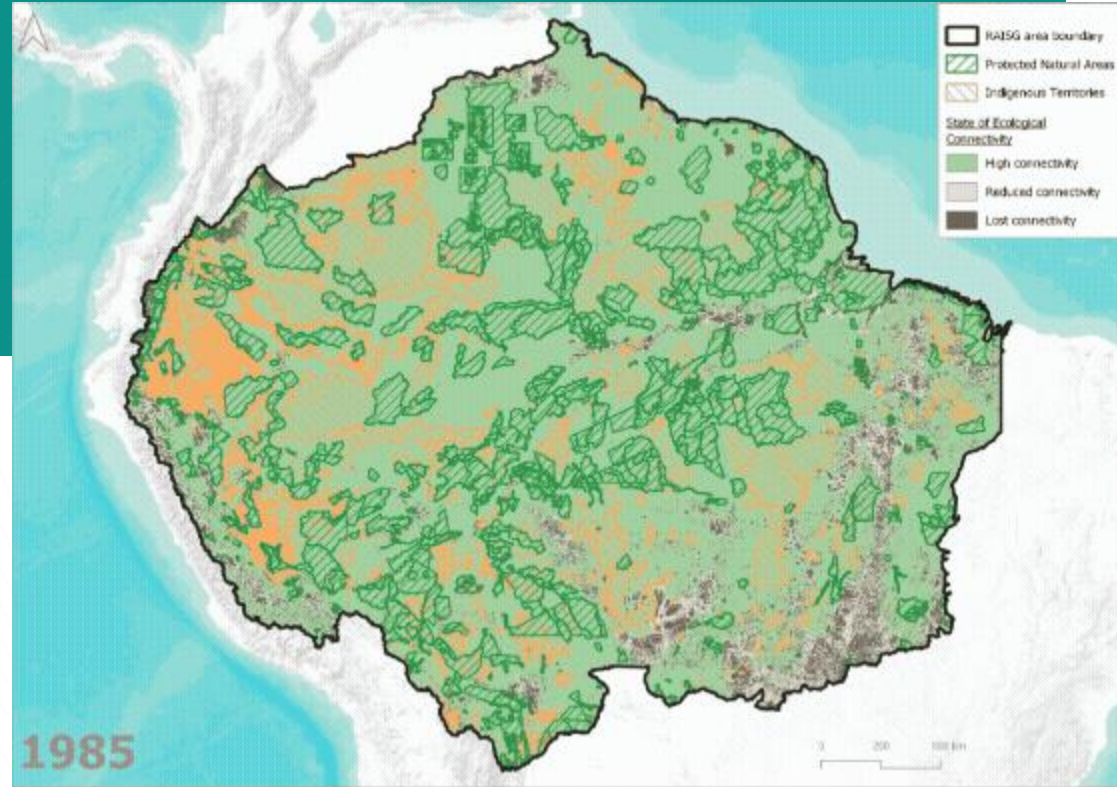
Key to conservation



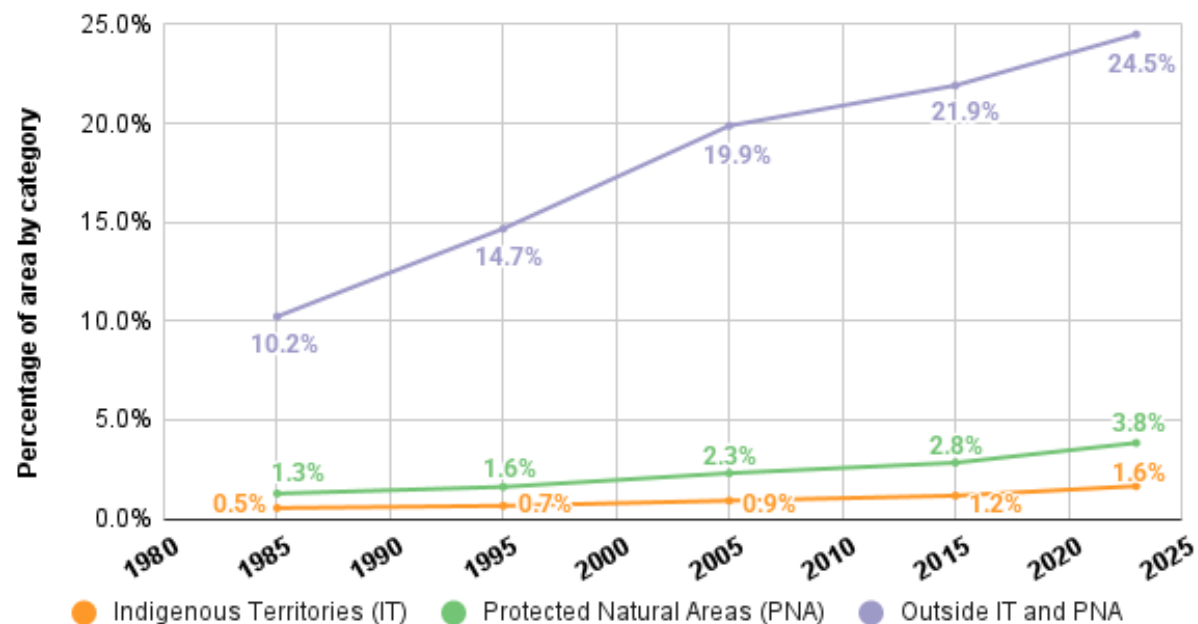
Progressive loss of connectivity

Impact on Protected areas and
Indigenous territories

22% of connectivity loss
Plus
12% of reduction in
connectivity



Percentage of areas with lost connectivity





Fragmentation and connectivity loss
threaten the integrity of the Amazon

Ton Koene / ISA

Recommendations

1. Recognize connectivity as a criterion to guide development policies in the Amazon.
2. Stop deforestation, degradation, and criminal fires.
3. Include connectivity related indicators in NDCs and NBSAPs.
4. Restoration programs to prioritize recovery of connectivity.
5. Guarantee Indigenous Peoples and local communities participation.



Thanks for your
attention

raisg.org/es/conectividad
raisg.org/pt-br/conectividade
raisg.org/en/connectivity



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