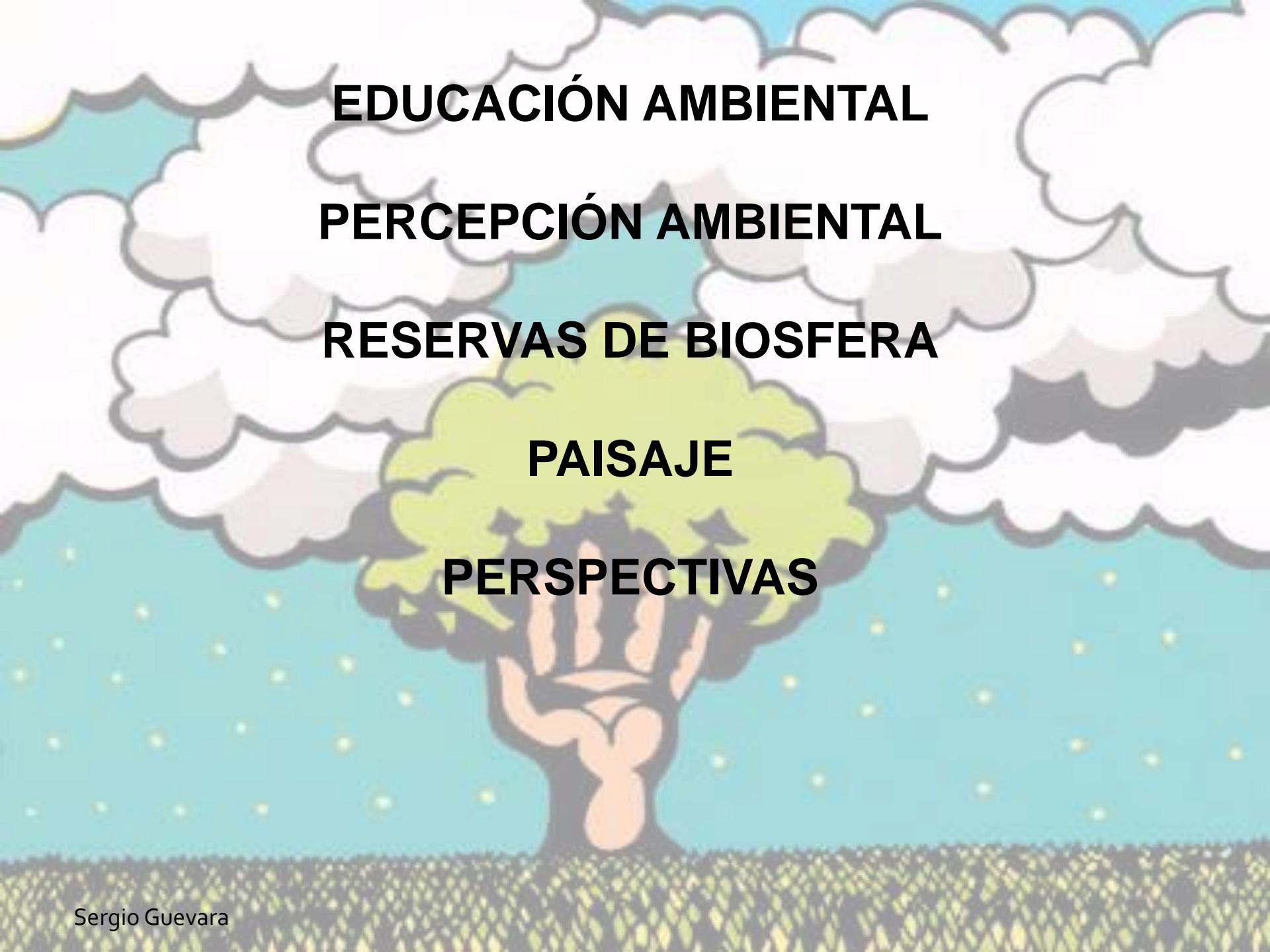




La educación ambientada en el paisaje el ingenio de las reservas de biosfera



EDUCACIÓN AMBIENTAL

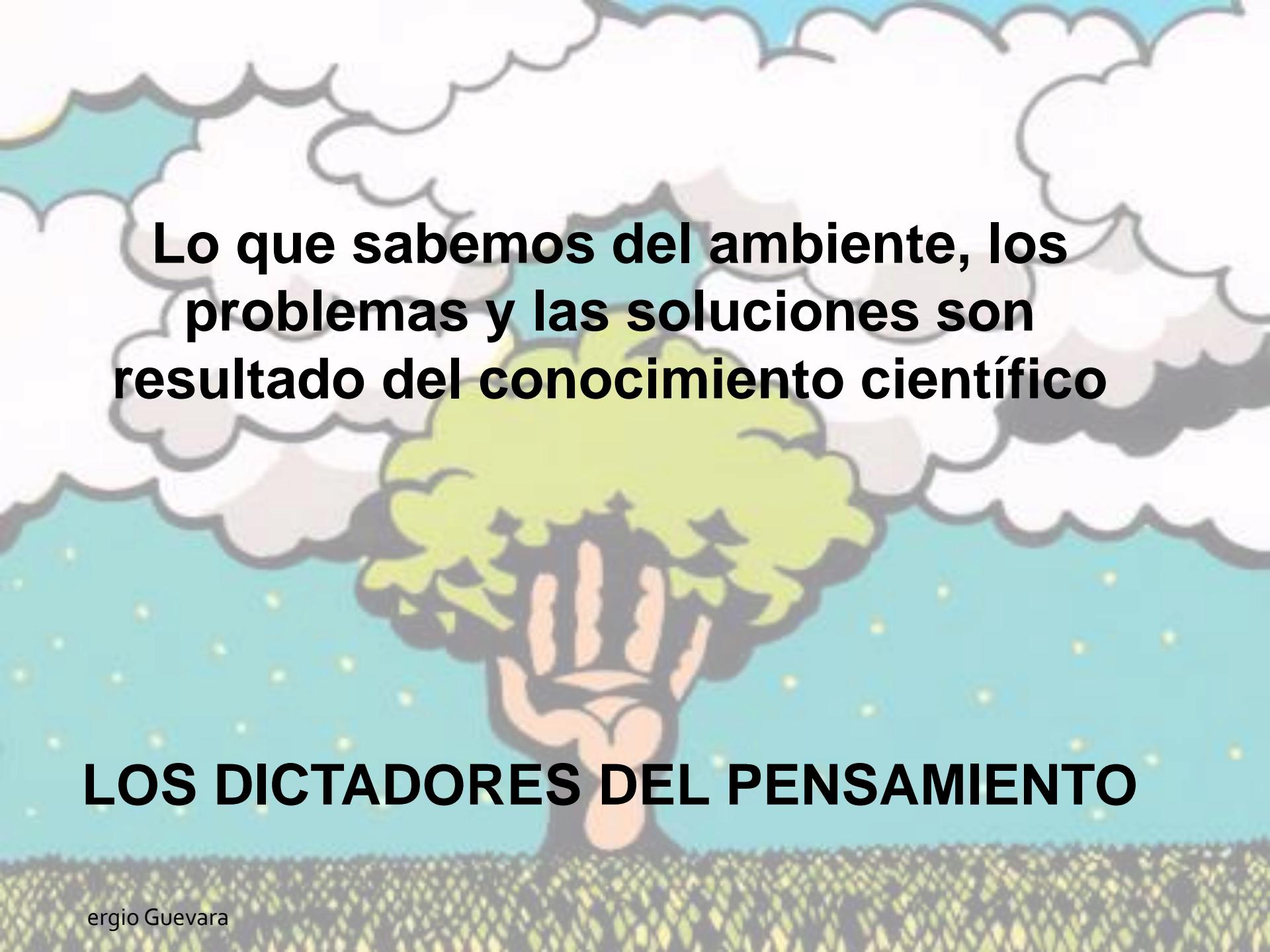
PERCEPCIÓN AMBIENTAL

RESERVAS DE BIOSFERA

PAISAJE

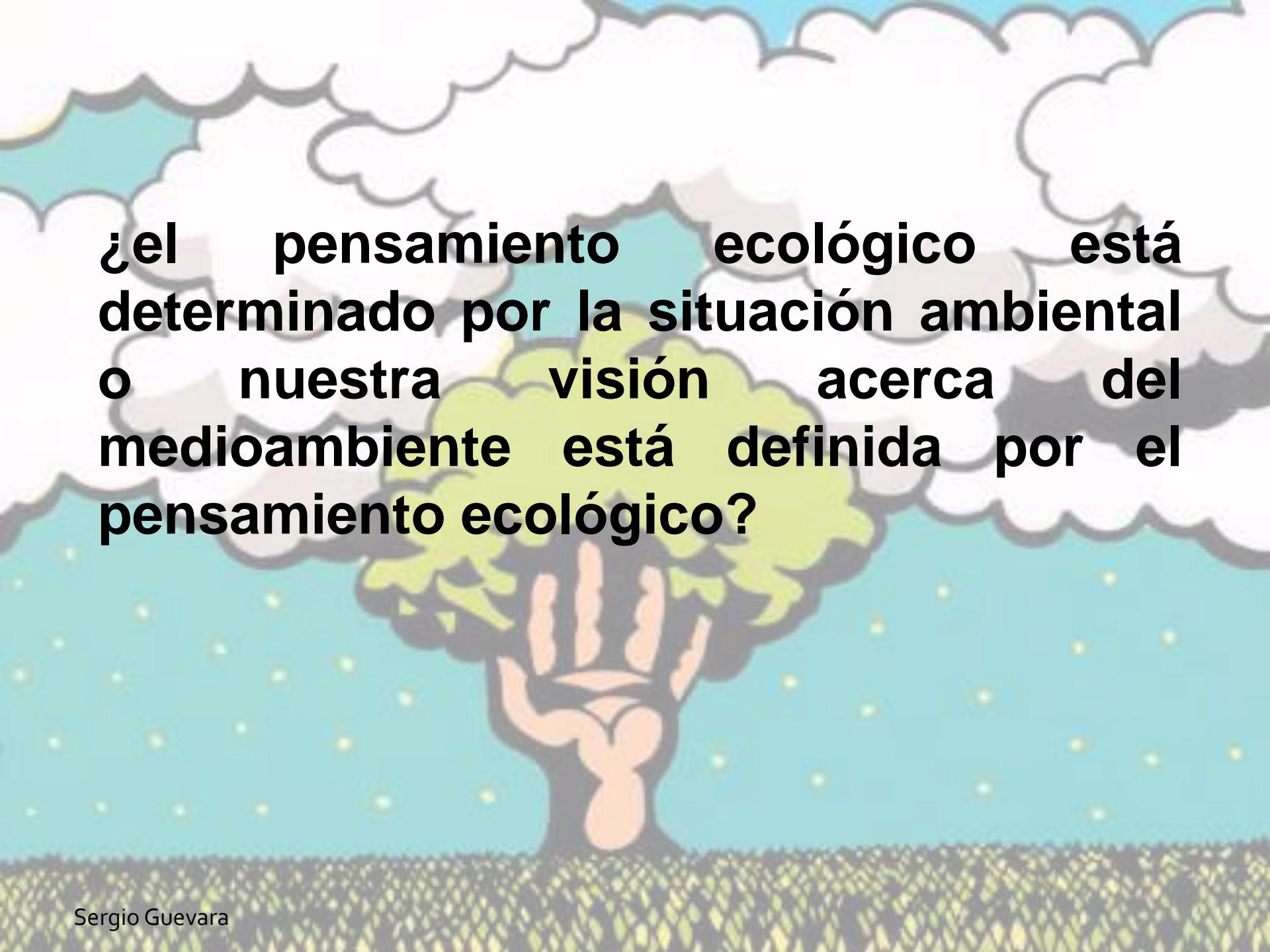
PERSPECTIVAS

Un mundo donde la gente sea consciente de su futuro común y de la interacción con el planeta, que actúe colectiva y responsablemente en la construcción de una sociedad próspera en armonía con la biosfera



Lo que sabemos del ambiente, los problemas y las soluciones son resultado del conocimiento científico

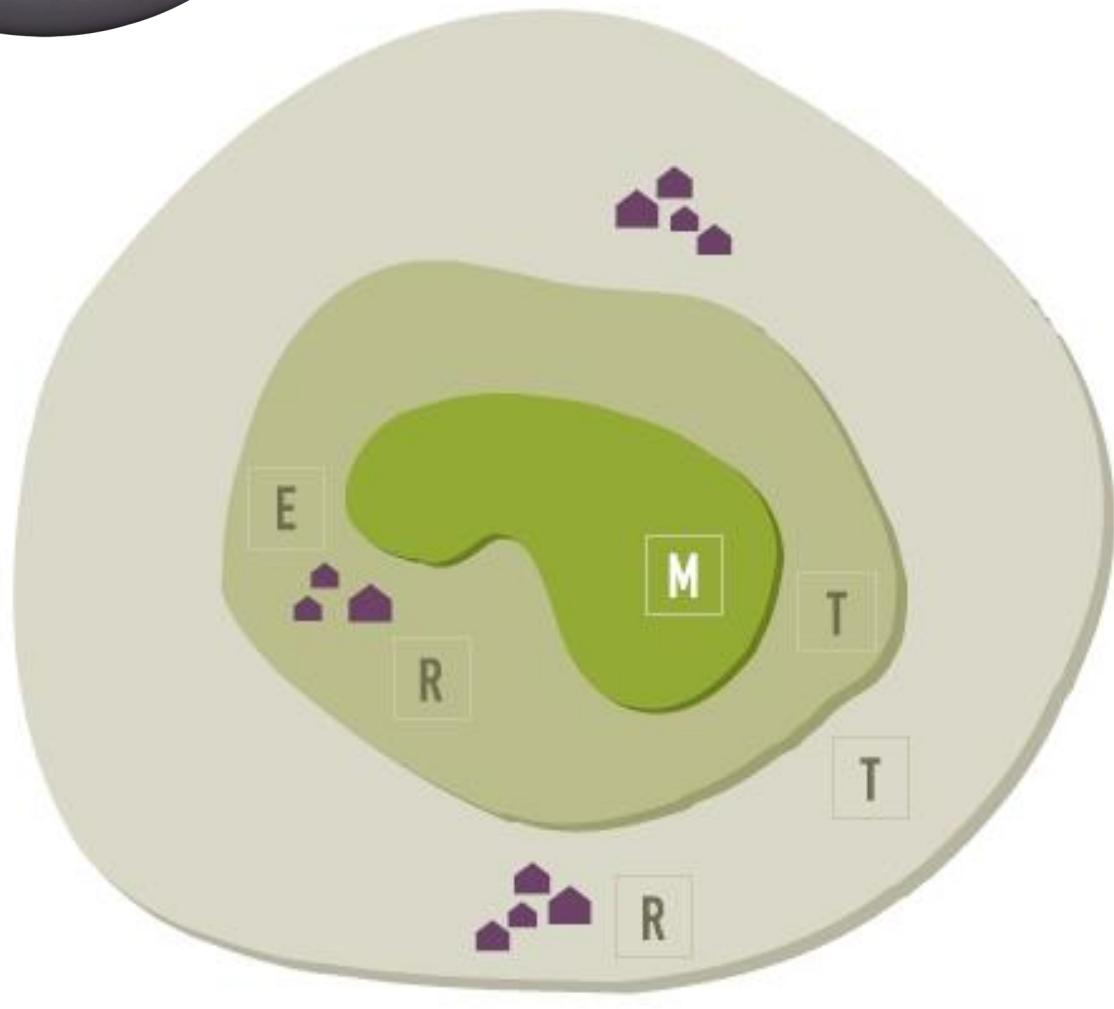
LOS DICTADORES DEL PENSAMIENTO

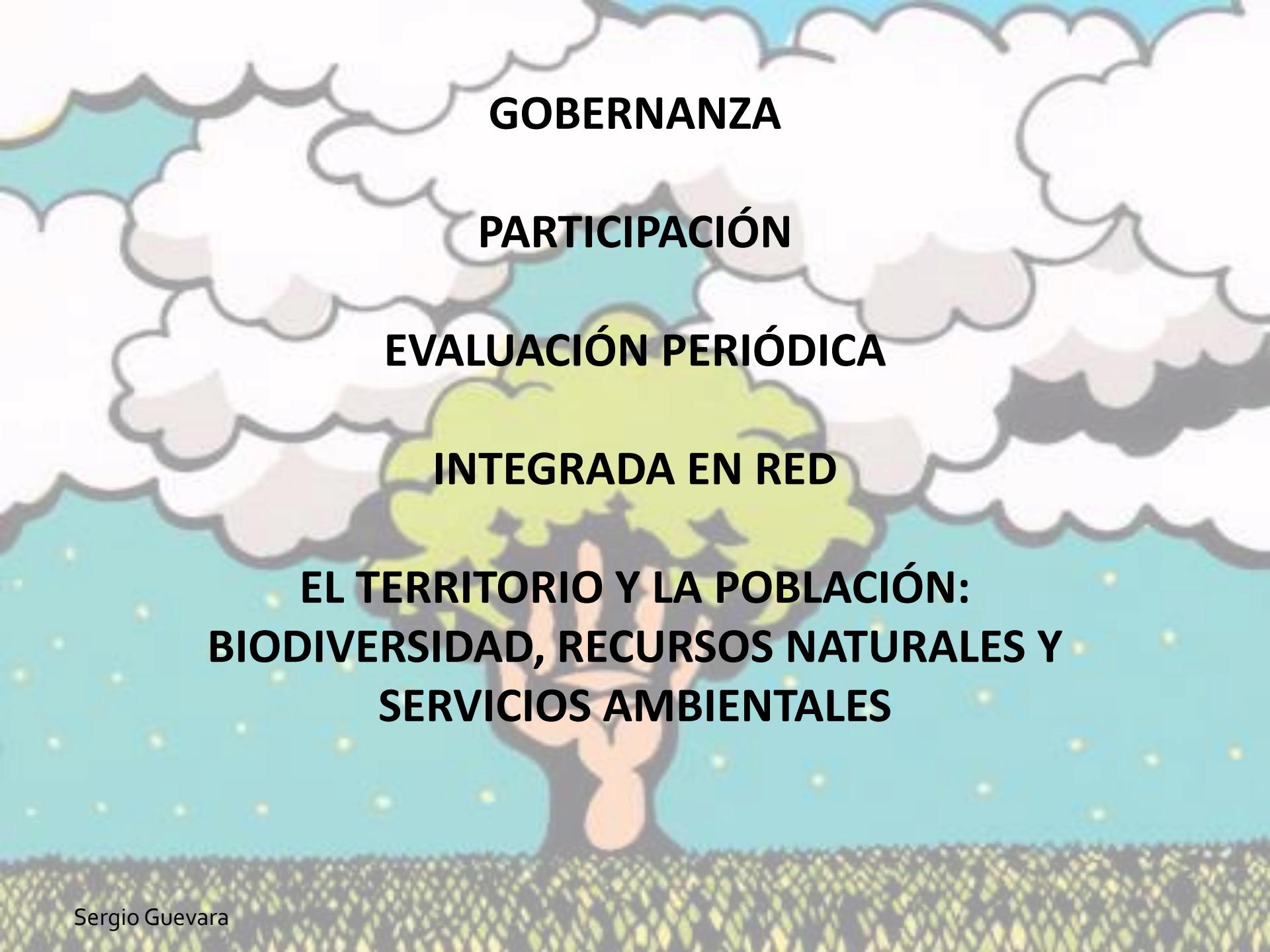


¿el pensamiento ecológico está determinado por la situación ambiental o nuestra visión acerca del medioambiente está definida por el pensamiento ecológico?



- Zona núcleo** (dark green square)
- Zona tampón o de amortiguación** (medium green square)
- Zona de transición** (light green square)
- Asentamientos humanos** (purple house icons)
- Instalaciones de investigación o experimentación** (R icon)
- Vigilancia continua** (M icon)
- Educación y capacitación** (E icon)
- Turismo y recreación** (T icon)





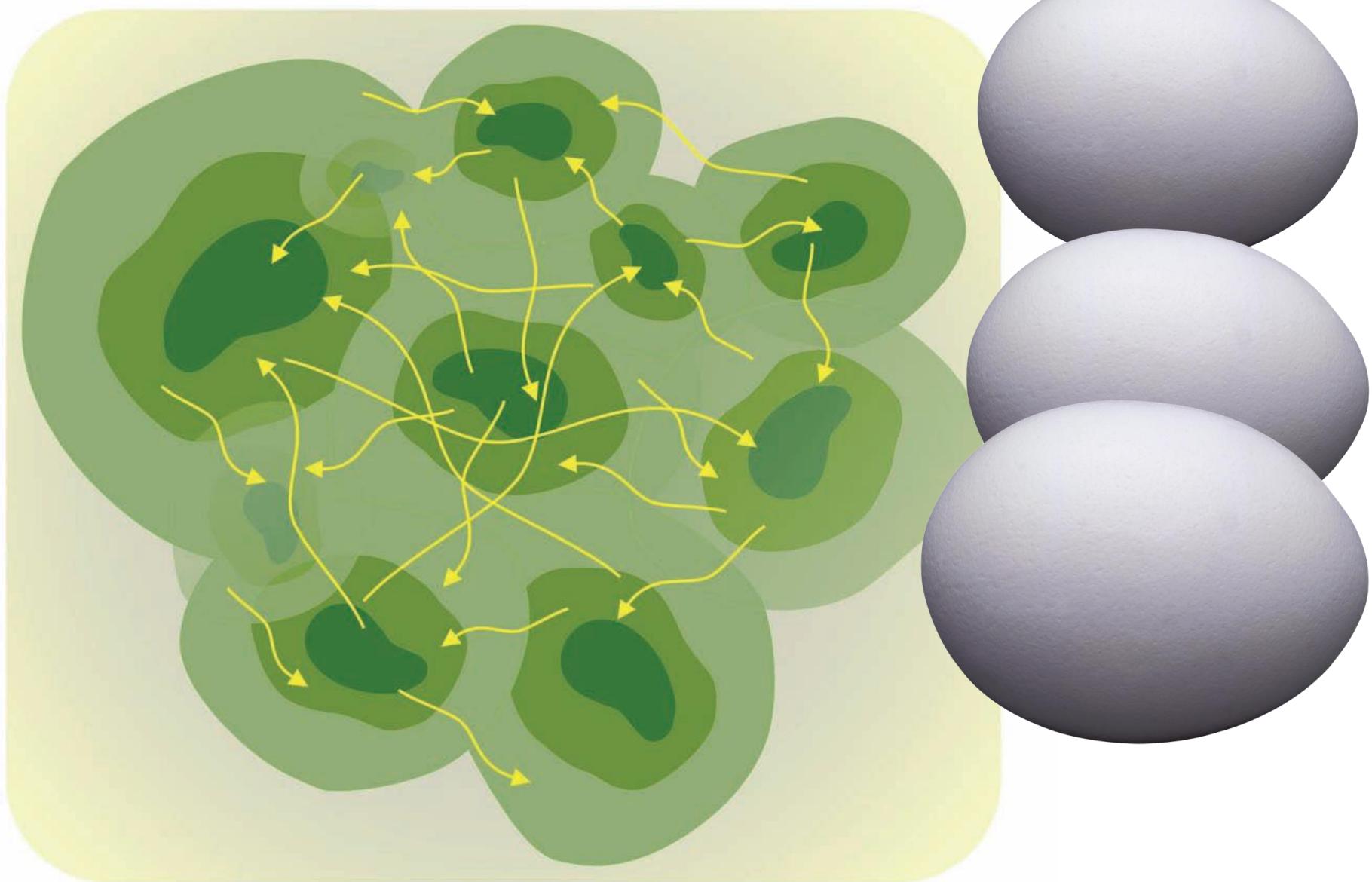
GOBERNANZA

PARTICIPACIÓN

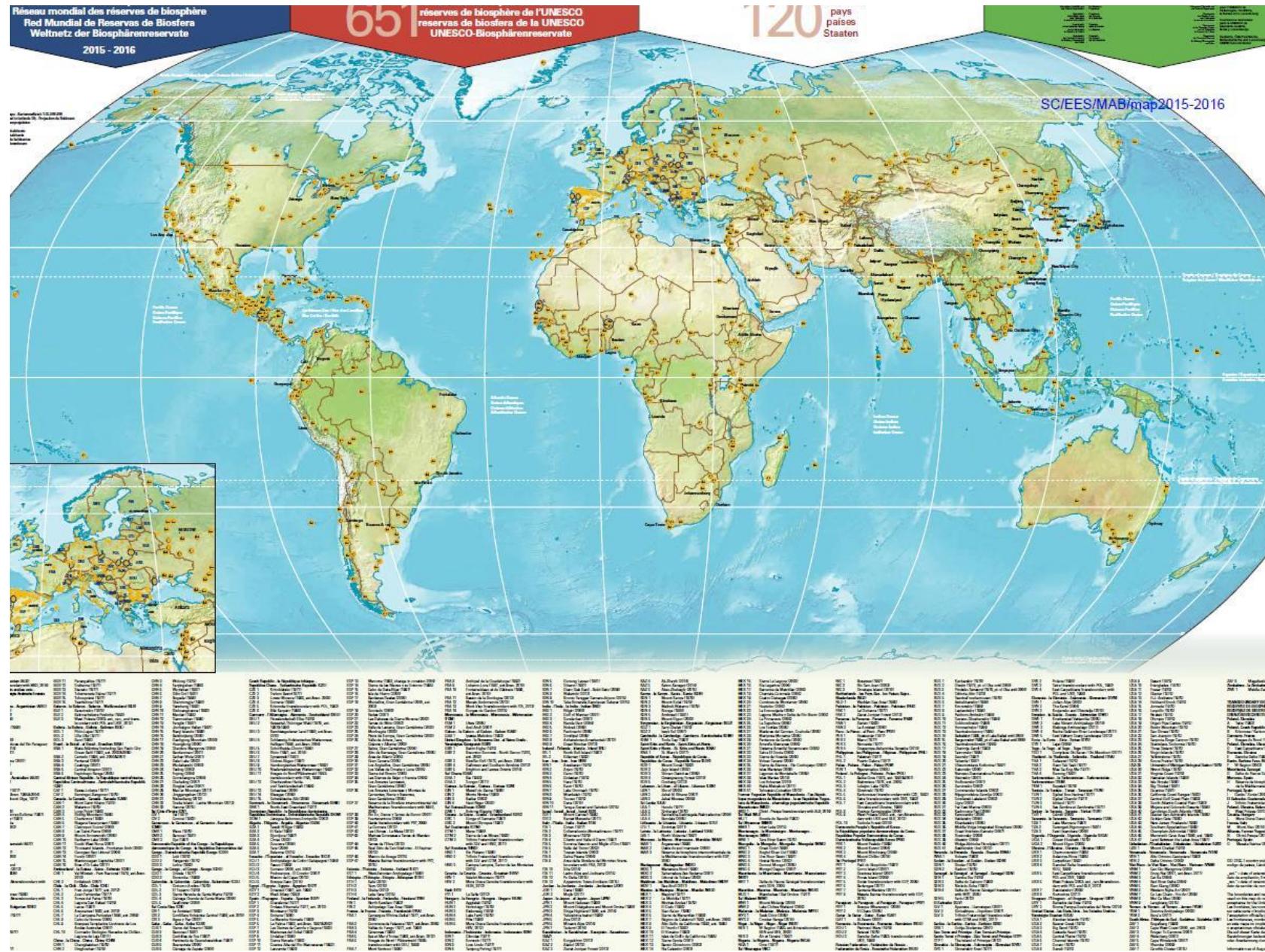
EVALUACIÓN PERIÓDICA

INTEGRADA EN RED

**EL TERRITORIO Y LA POBLACIÓN:
BIODIVERSIDAD, RECURSOS NATURALES Y
SERVICIOS AMBIENTALES**



669 RESERVAS DE BIOSFERA EN 120 PAISES



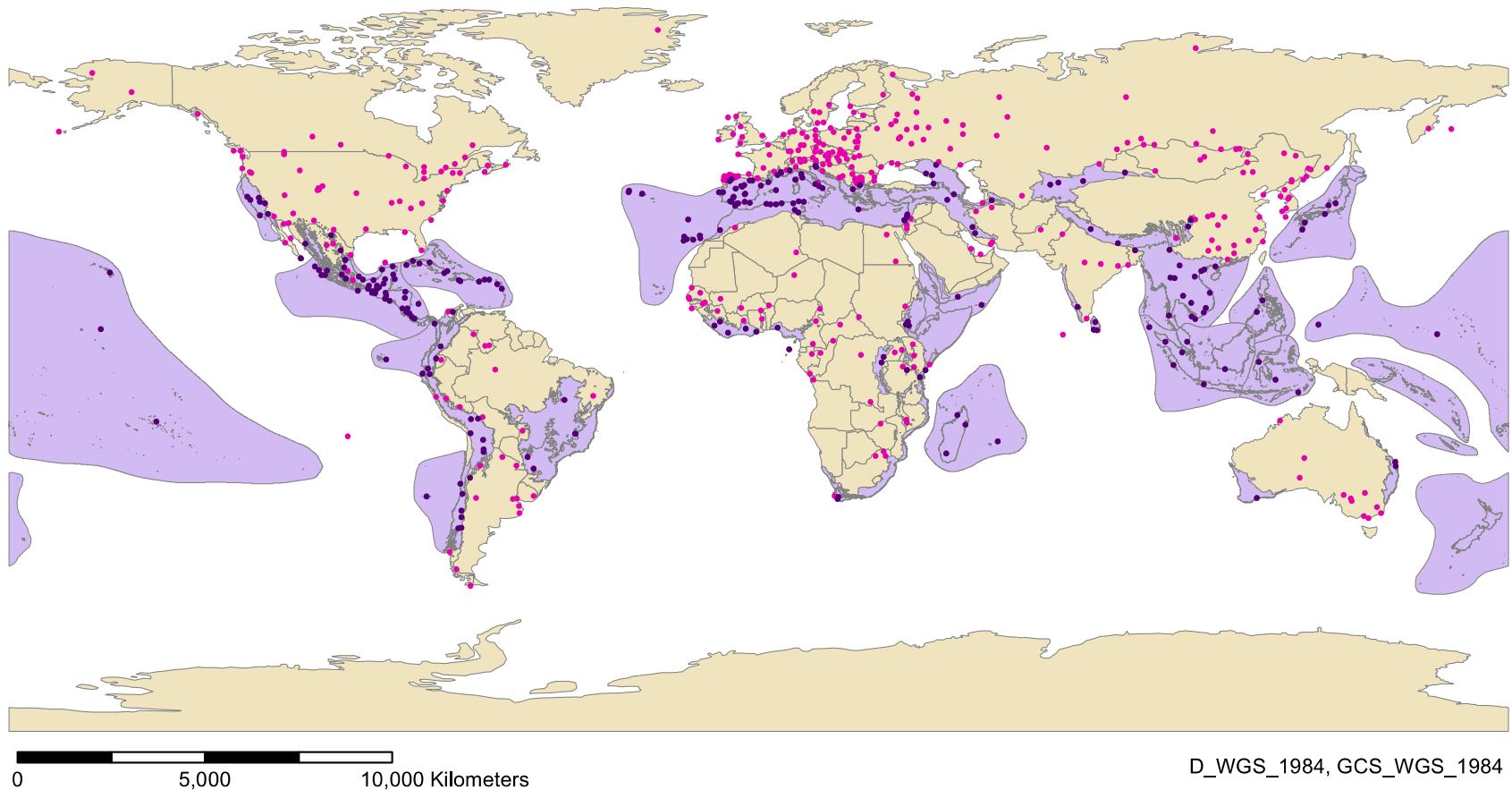


669 reservas de biosfera en 120 países

10 millones de km²

170 millones de personas

UNESCO Biosphere Reserves Located within Biodiversity Hot Spot Regions, 2013



Legend

- UNESCO Biosphere Reserves (609 reserves)
- UNESCO Biosphere Reserves located in biodiversity hot spot regions (242 reserves)

Biodiversity hot spot regions

Countries

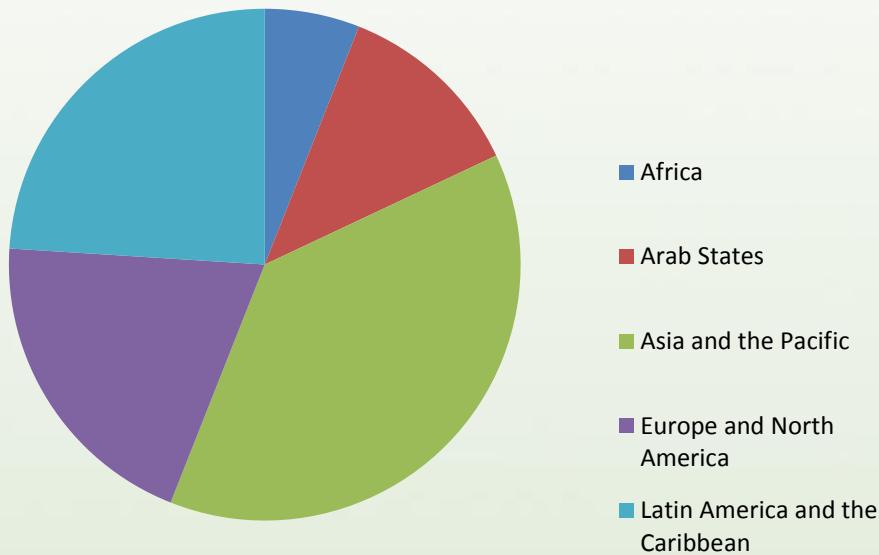
Source: Conservation International

1. Myers, N., Mittermeier, R.A., Mittermeier, C.G., da Fonseca G.A.B., Kent, J. (2000) Biodiversity Hotspots for Conservation Priorities. *Nature* 403 (6772): 853-8.

2. Mittermeier, R.A., Gil, P.R., Hoffmann, M., Pilgrim, J., Brooks, T., Mittermeier, C.G., Lamoreux, J., da Fonseca, G.A.B. (2004) Hotspots revisited. Cemex: Mexico City, Mexico.

Biosphere Reserves statistics:

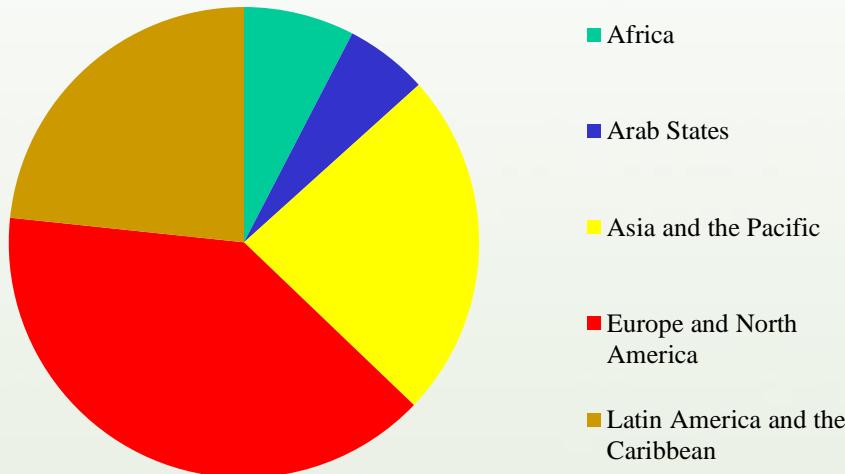
- Biosphere Reserves with dryland ecosystems



Region	Dryland BR	Percentage
Africa	3	6,00%
Arab States	6	12,00%
Asia and the Pacific	19	38,00%
Europe and North America	10	20,00%
Latin America and the Caribbean	12	24,00%
Total	50	100,00%

Biosphere Reserves in numbers:

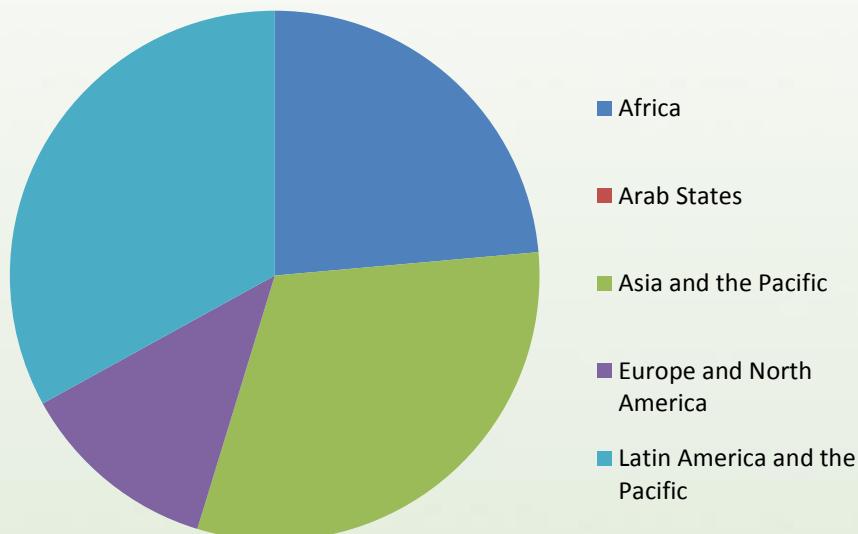
- Biosphere Reserves with marine, coastal, island areas



Region	Marine, coastal and island BR	Percentage
Africa	16	7,61%
Arab States	12	5,74%
Asia and the Pacific	50	23,81%
Europe and North America	83	39,52%
Latin America and the Caribbean	49	23,33%
Total	210	100%

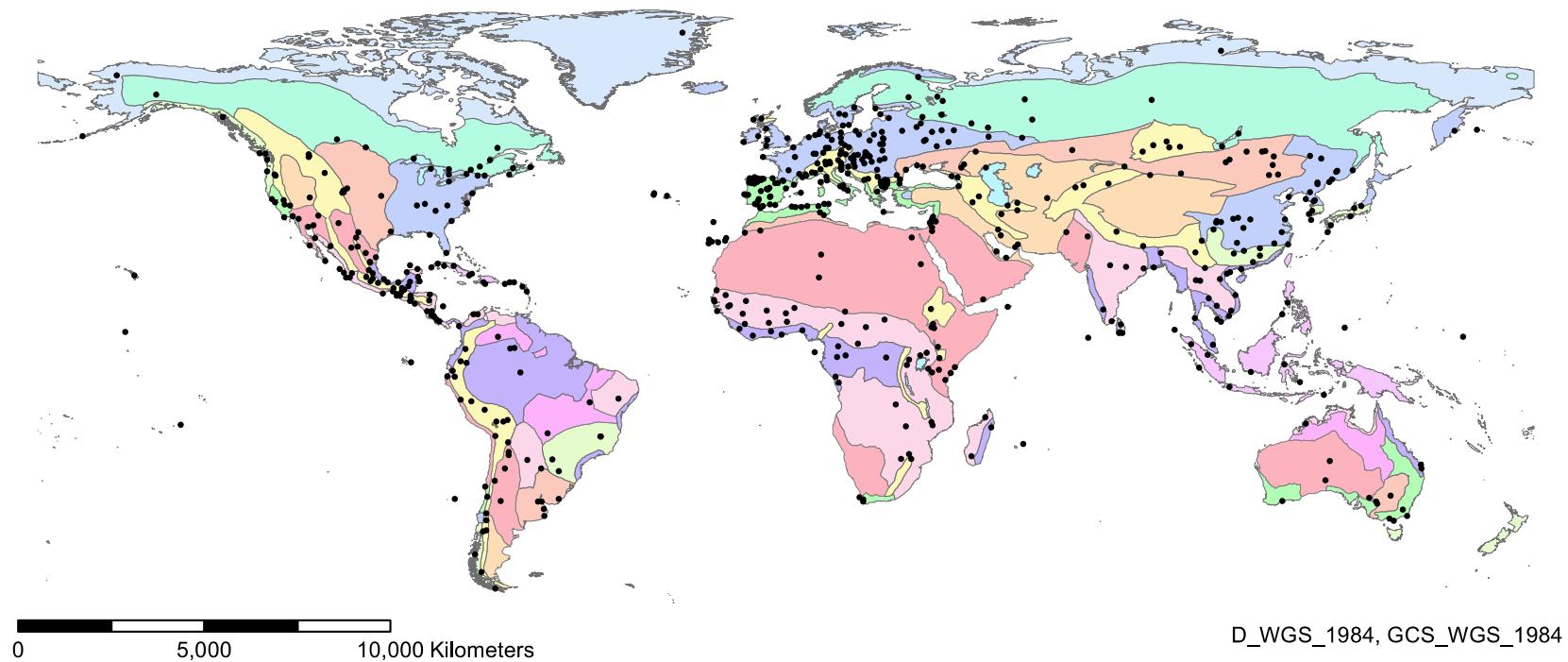
Biosphere Reserves statistics:

- Biosphere Reserves with rainforest ecosystems



Region	Rainforest BR	Percentage
Africa	25	23,58%
Arab States	0	0,00%
Asia and the Pacific	33	31,13%
Europe and North America	13	12,26%
Latin America and the Pacific	35	33,02%
Total	106	100

UNESCO Biosphere Reserves & Udvardy Ecoregions, 2013



Legend

- UNESCO Biosphere Reserves (608 reserves)

Udvardy's Ecoregions

- Cold-winter deserts (14 reserves)
- Evergreen Sclerophyllous forests (94 reserves)
- Lake systems (5 reserves)
- Mixed island systems (42 reserves)
- Mixed mountain systems (89 reserves)
- Sub-tropical / Temperate rain forests / Woodlands (26 reserves)
- Temperate broad-leaf forests (115 reserves)

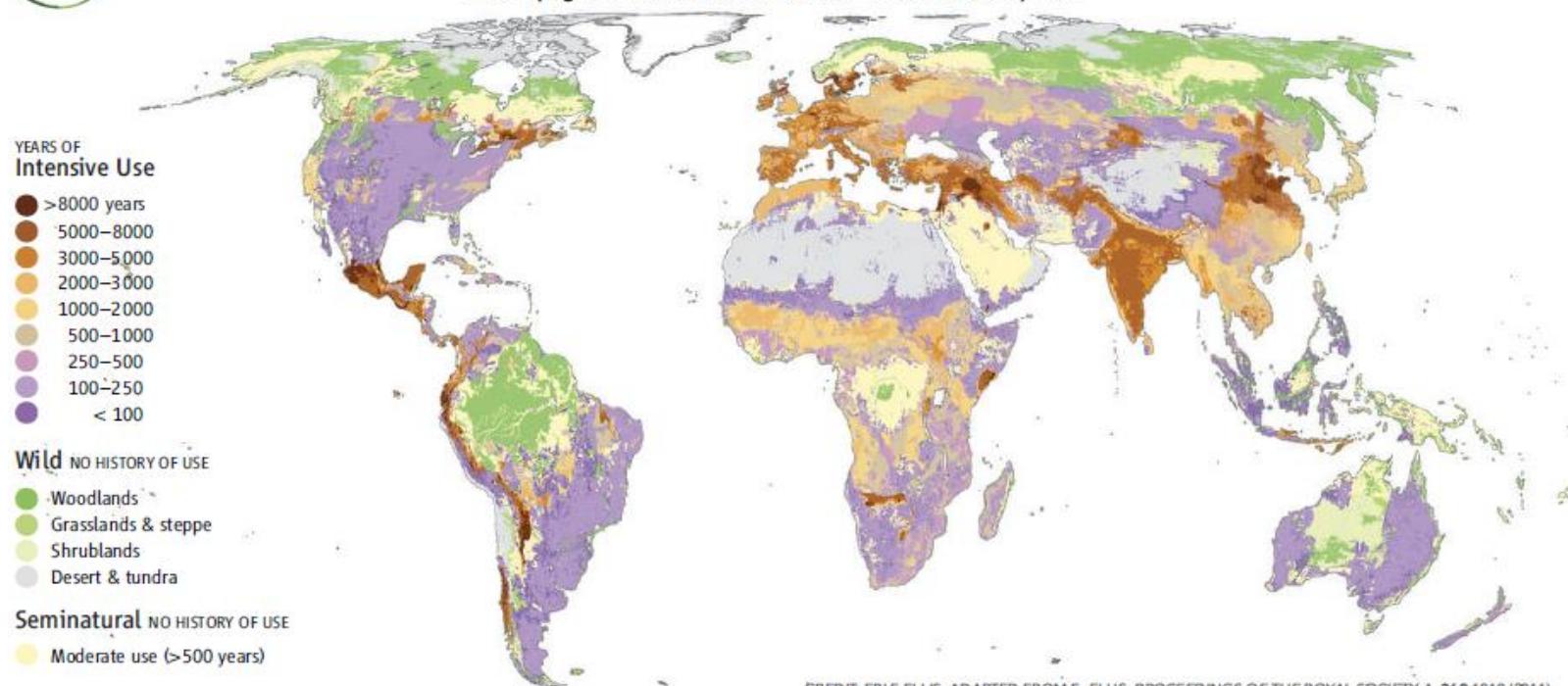
Source: Udvardy, M.D.F. (1975) A classification of the biogeographical provinces of the world. Morges (Switzerland): International Union of Conservation of Nature and Natural Resources. IUCN Occasional Paper no. 18.

- Temperate grasslands (31 reserves)
- Temperate needle-leaf forests / Woodlands (21 reserves)
- Tropical dry forests / Woodlands (74 reserves)
- Tropical grasslands / Savannas (3 reserves)
- Tropical humid forests (43 reserves)
- Tundra communities (4 reserves)
- Warm deserts / semi-deserts (47 reserves)

TRANSFORMACIÓN ANTROPOGÉNICA DE LA BIOSFERA



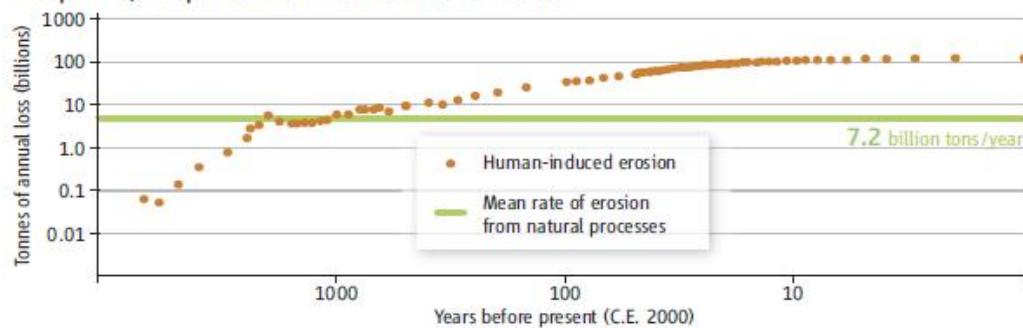
Anthropogenic Transformation of the Terrestrial Biosphere



CREDIT: ERLE ELLIS, ADAPTED FROM E. ELLIS, PROCEEDINGS OF THE ROYAL SOCIETY A, 369:1010 (2011)

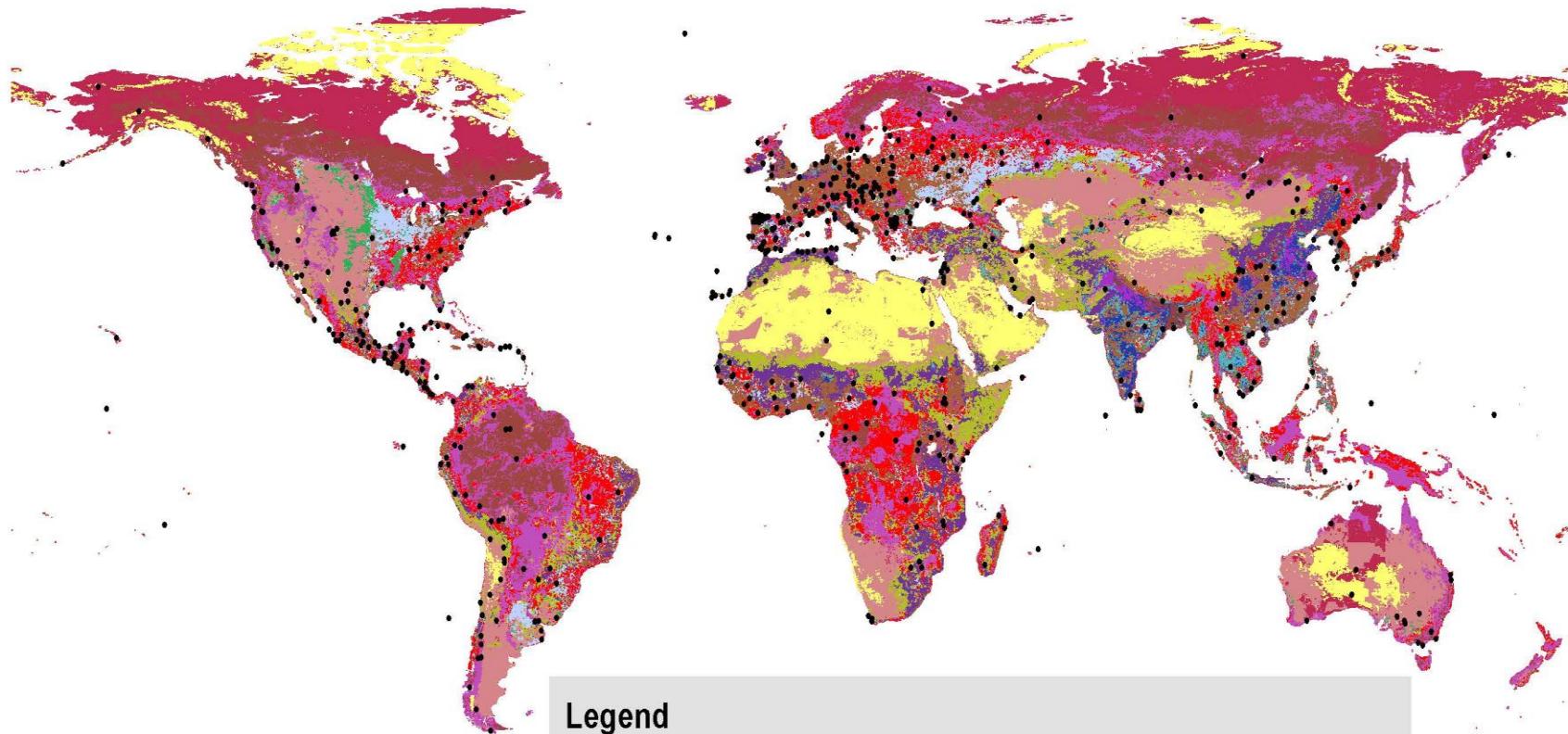
Perhaps the most obvious mark we've made to the planet is in land-use changes. For millennia, humans have chopped down forests and moved rock and soil for agriculture and pastureland—and more recently, for construction.

Deep Time, Deep Erosion: Who Erodes Land Faster?



SOURCE: BRUCE H. WILKINSON, GEOLOGY 33, 3 (MARCH 2005)

DISTRIBUCIÓN DE PAISAJES ANTROPOGÉNICOS EN EL MUNDO



Legend

- Biosphere Reserves

Anthromes

<all other values>

LABEL

11: Urban

12: Dense settlements

21: Rice villages

22: Irrigated villages

23: Cropped & pastoral villages

24: Pastoral villages

25: Rainfed villages

26: Rainfed mosaic villages

31: Residential irrigated cropland

32: Residential rainfed mosaic

33: Populated irrigated cropland

34: Populated rainfed cropland

35: Remote croplands

41: Residential rangelands

42: Populated rangelands

43: Remote rangelands

51: Populated forests

52: Remote forests

61: Wild forests

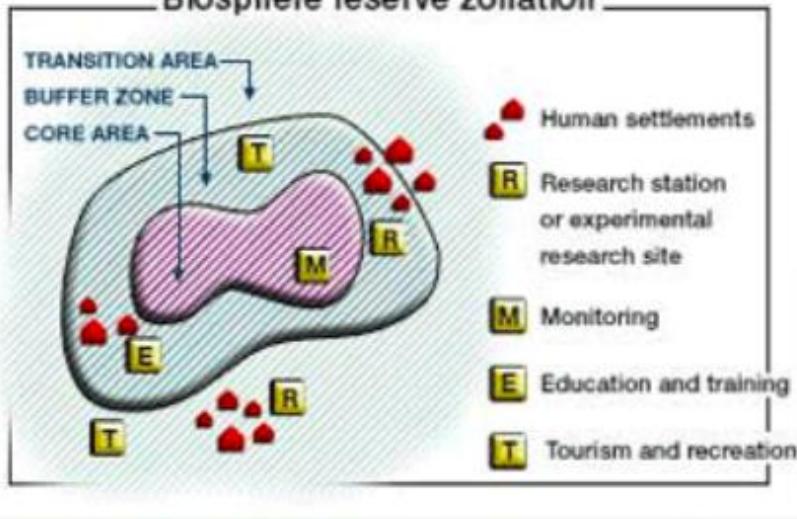
62: Sparse trees

63: Barren

ANTHROMES



Biosphere reserve zonation

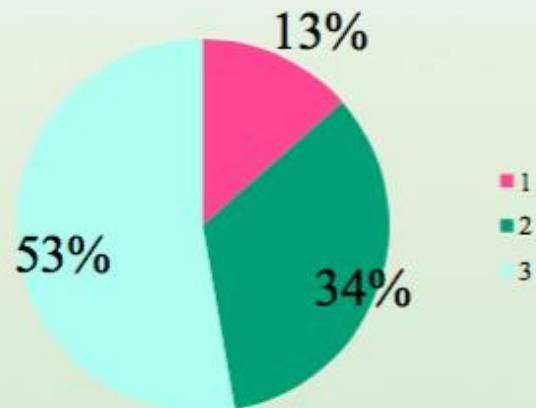
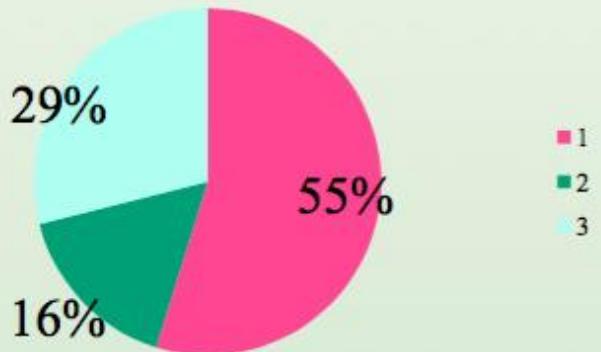


Pre-Seville BRs (until 1995):

Core area (ha)	Buffer zone	Transition area
173,508,770	51,481,817	91,560,680

Post-Seville BRs (since 1996):

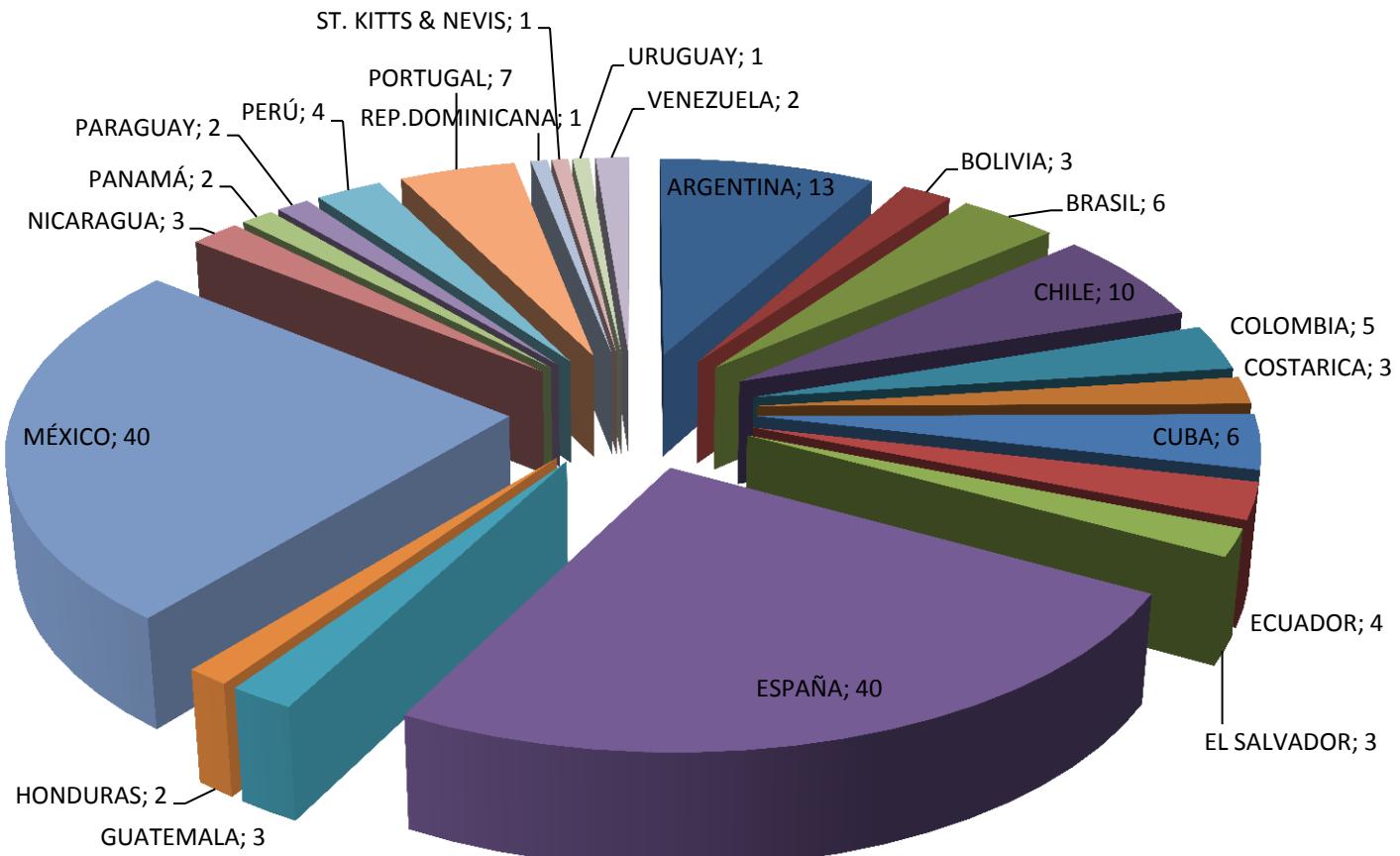
Core area (ha)	Buffer zone	Transition area
34,270,281	85,540,523	133,874,426



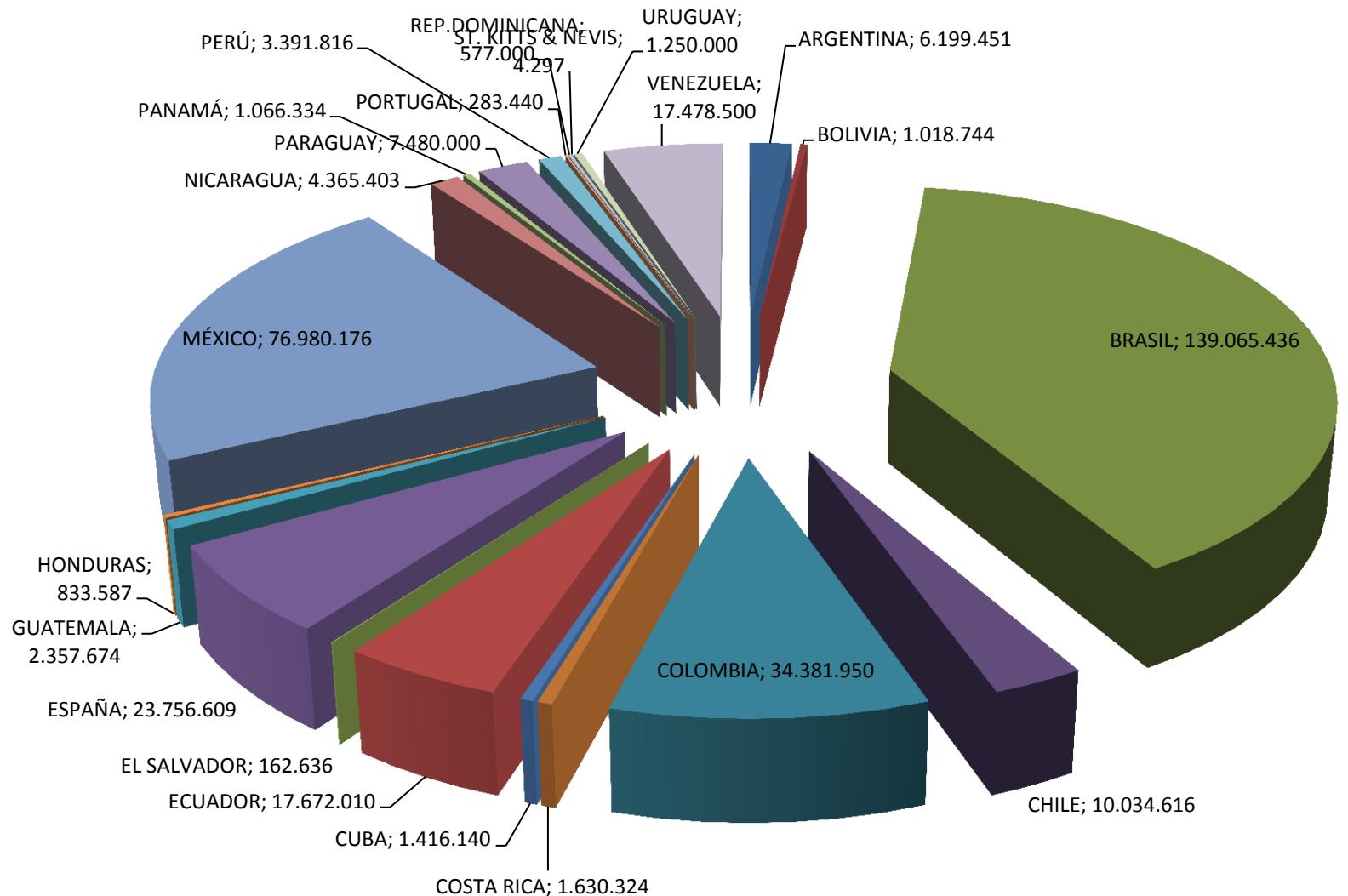


RESERVAS DE BIOSFERA EN IBEROAMÉRICA Y EL CARIBE

Número de reservas por país



Extensión de las Reservas por país (ha)



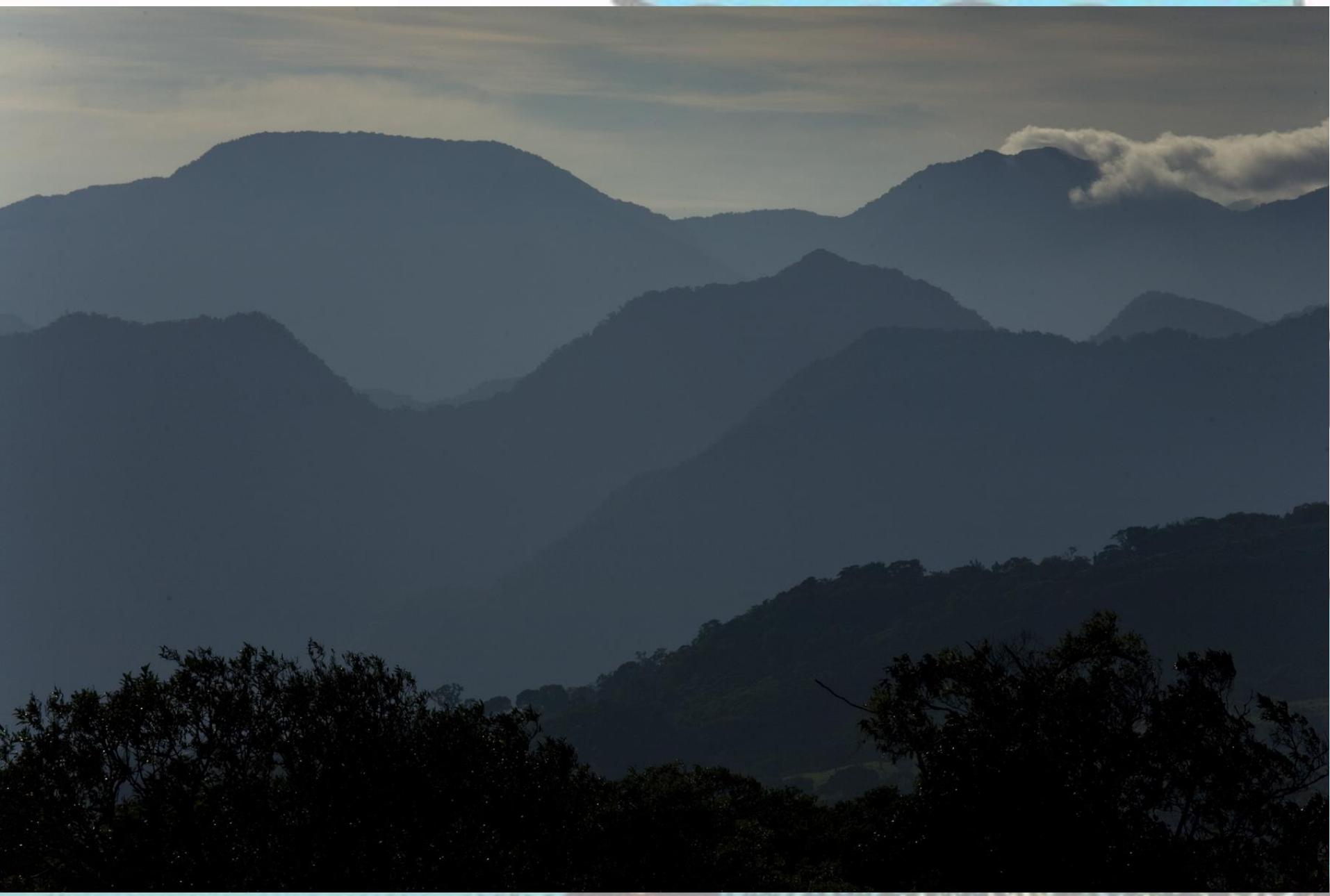


Sergio Guevara

el territorio de Iberoamérica y el Caribe fue colonizado por grupos humanos, que usaron intensiva y extensivamente la tierra y los recursos naturales

a pesar de ese intenso y prolongado uso, la diversidad cultural y natural es muy grande

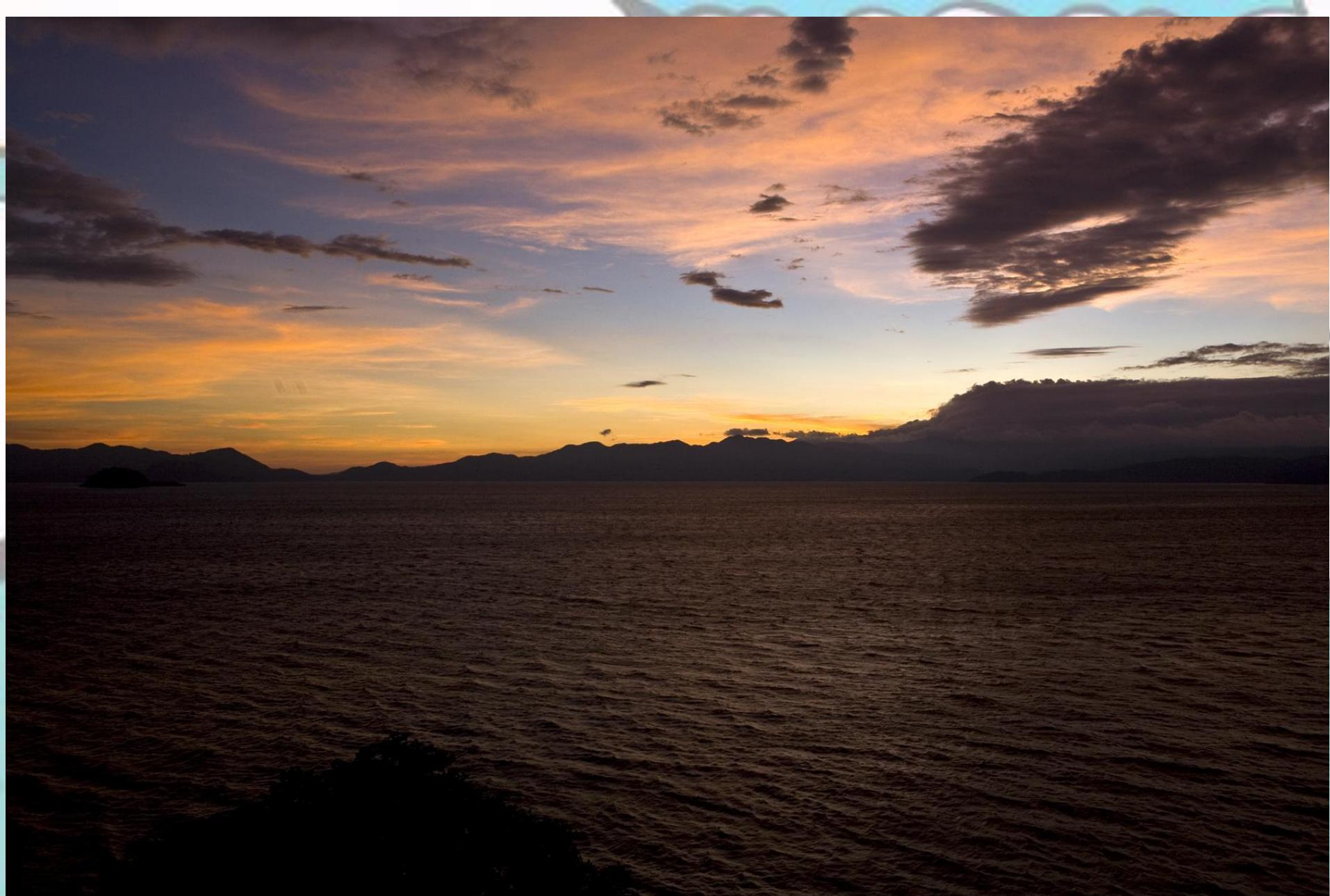
esa paradoja se resuelve en los paisajes, un sistema heterogéneo cuya estructura y función han sido seleccionados por los eventos naturales y el manejo humano



Sergio Guevara



Sergio Guevara



Sergio Guevara



Sergio Guevara



Sierra de Huautla



Cumbres de Monterrey



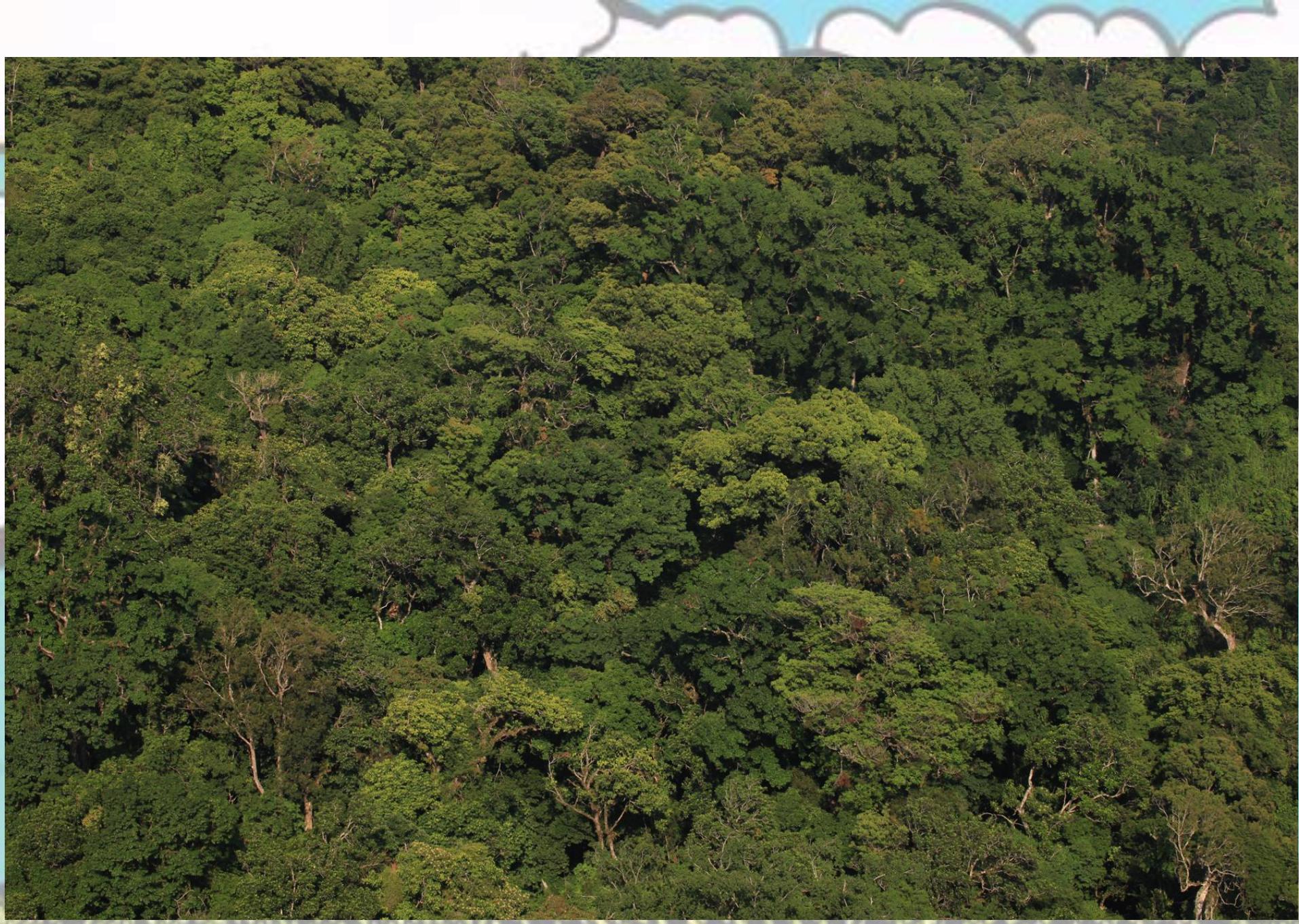


Maderas del Carmen

Sergio Guevara



Sergio Guevara



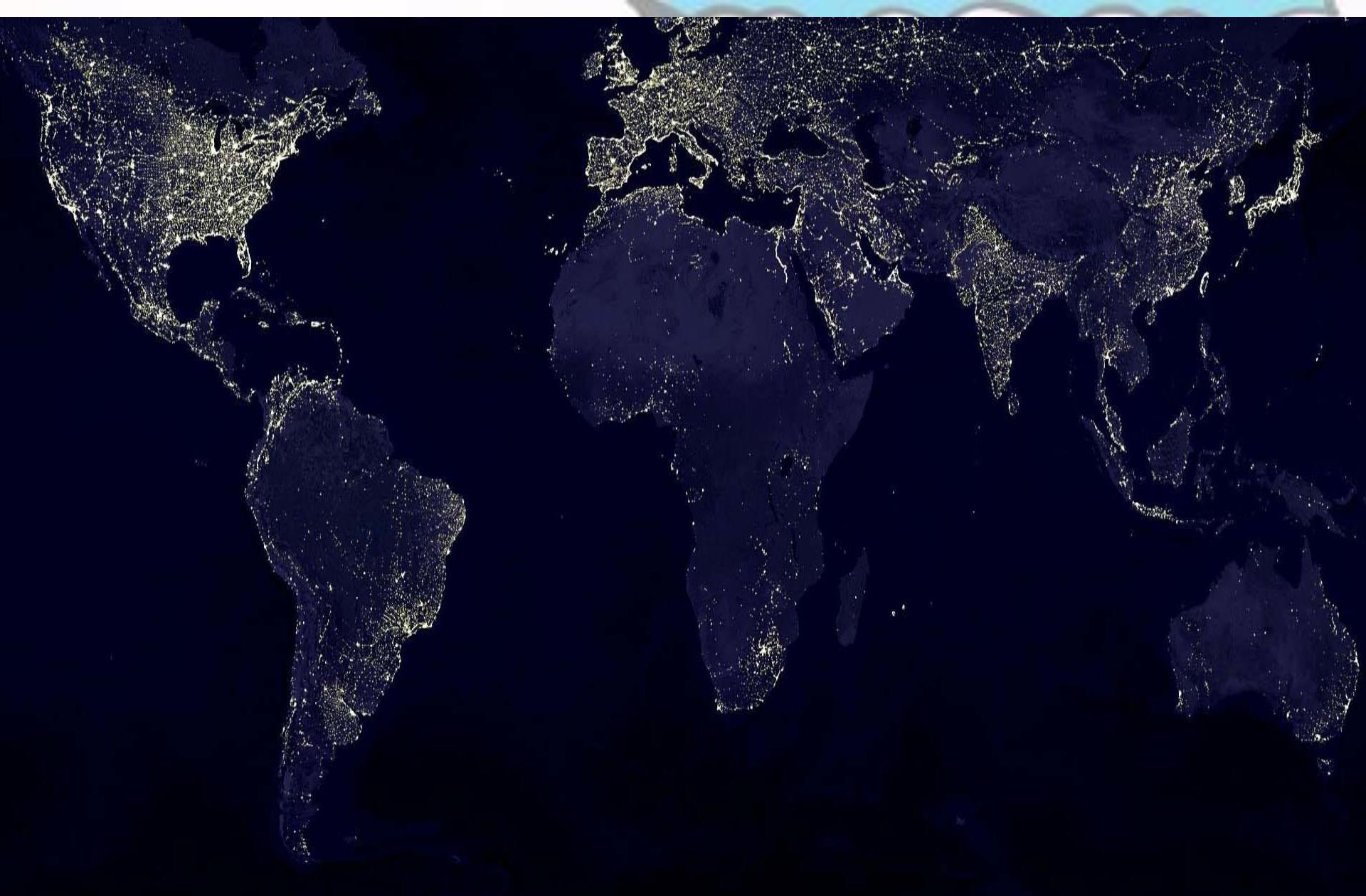
Sergio Guevara

A dense forest of green trees covering a hillside. The trees are various shades of green, from bright lime to deep forest green. Some have bare branches, while others are fully leafed out. The forest appears healthy and well-maintained.

LA DIVERSIDAD BIOLÓGICA Y
CULTURAL ESTÁ EN CONSTANTE
MOVIMIENTO

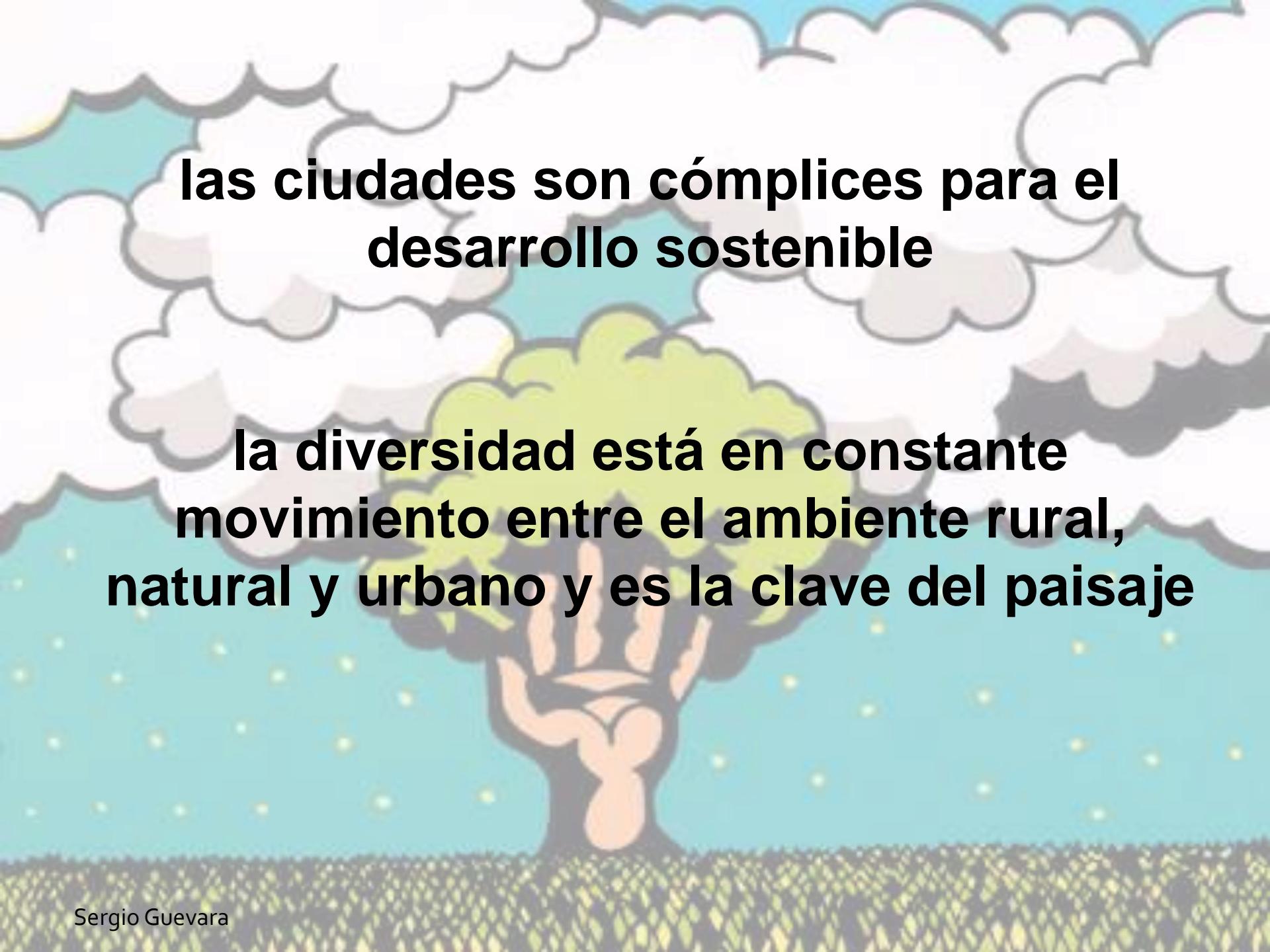
UNA PERSPECTIVA





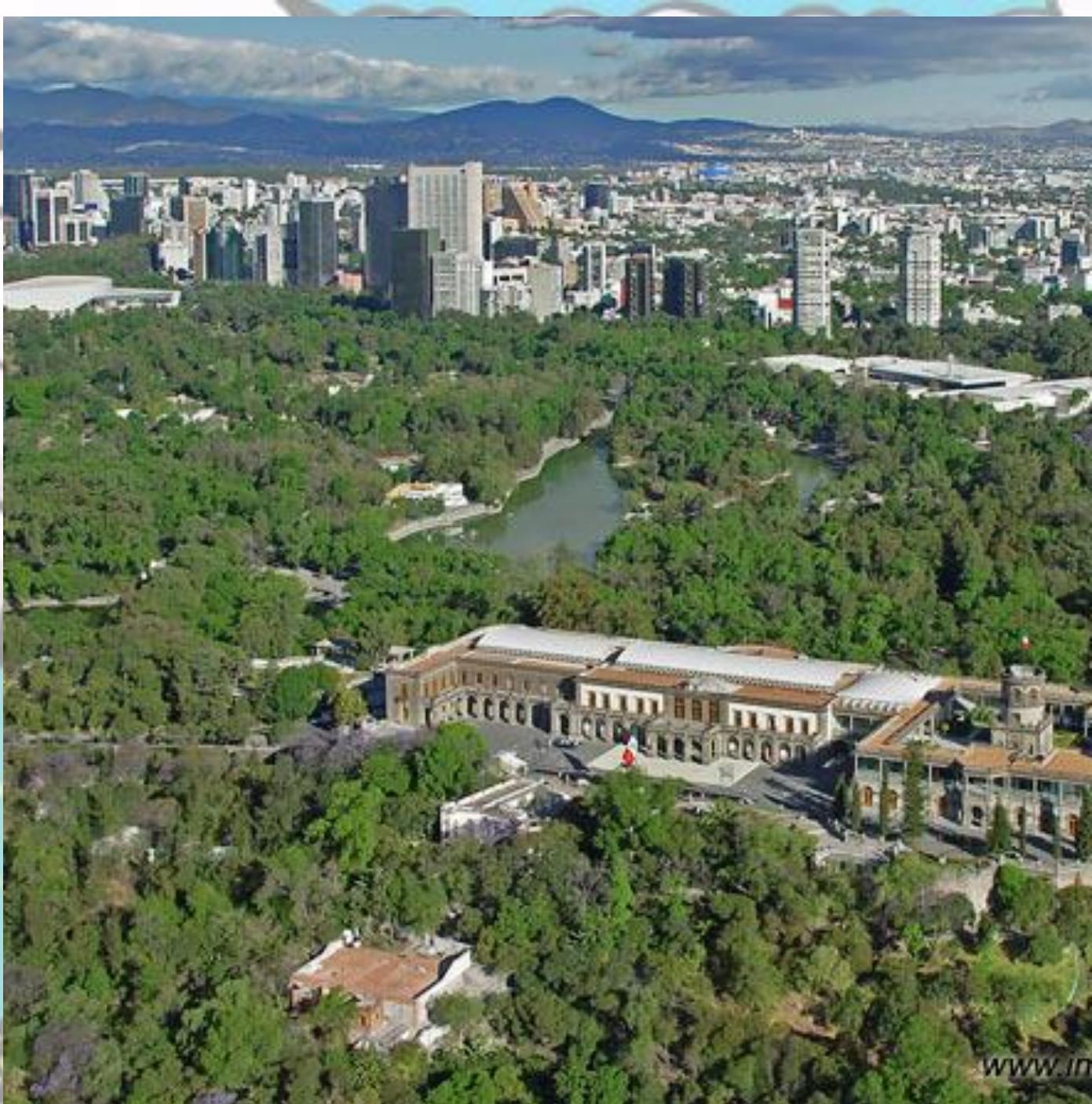
Sergio Guevara





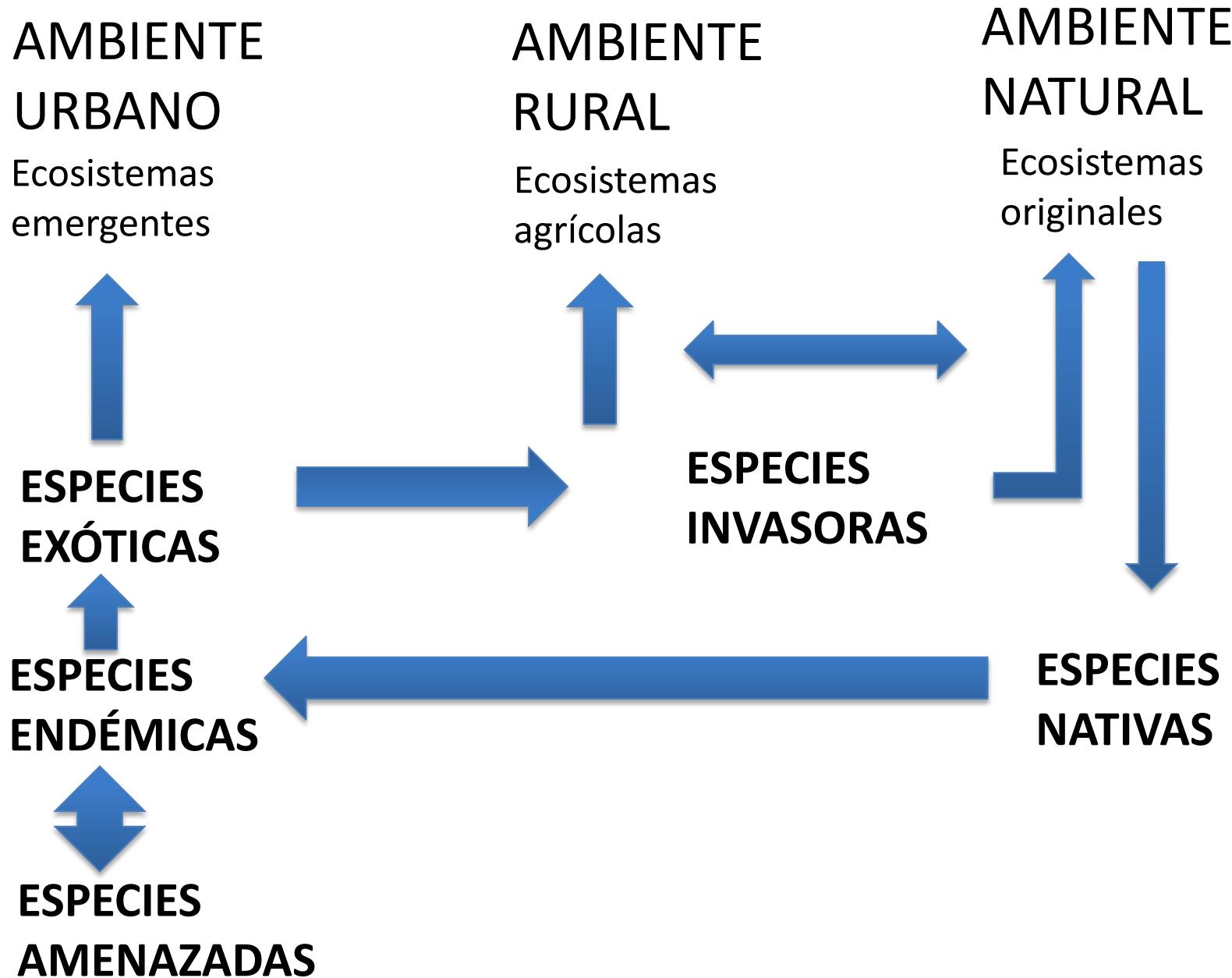
**las ciudades son cómplices para el
desarrollo sostenible**

**la diversidad está en constante
movimiento entre el ambiente rural,
natural y urbano y es la clave del paisaje**



Sergio Guevara

EL FLUJO DE LA BIODIVERSIDAD





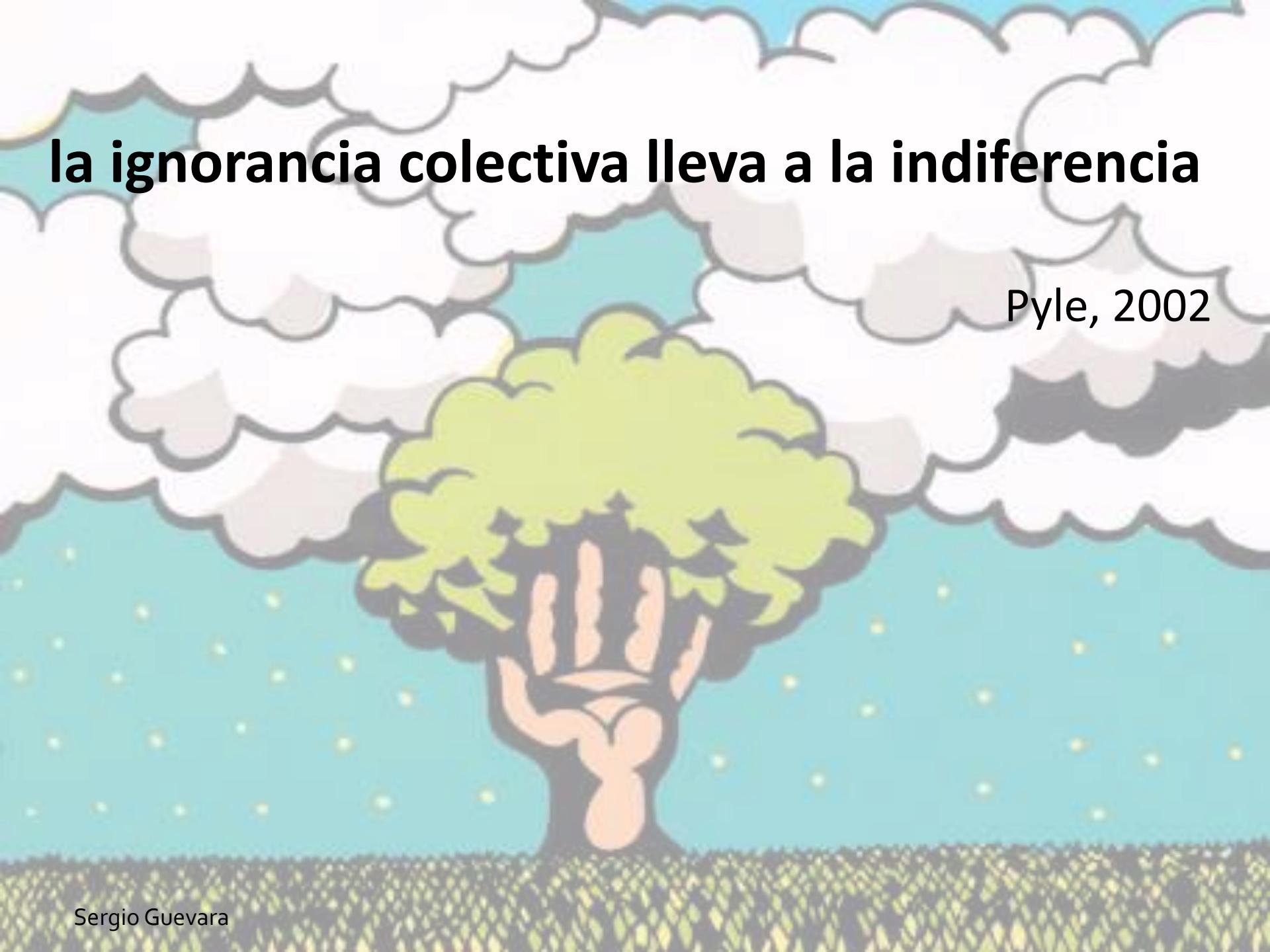
Sergio Guevara

La ciudad promueve la globalización y la fragmentación del territorio y al mismo tiempo es la estrategia para cambiar la relación entre los ambientes natural, urbano y rural en el contexto de la sustentabilidad regional.

Es necesario un programa de adiestramiento y actualización continua para los

la ignorancia colectiva lleva a la indiferencia

Pyle, 2002





Sergio Guevara