
The background of the slide features a stylized illustration. In the center is a tree whose trunk is formed by a human hand with fingers spread, reaching upwards. The tree's canopy is a solid green color. Above the tree are large, white, puffy clouds with black outlines. The sky between the clouds is a teal color, dotted with small yellow stars. At the bottom of the image is a dark, textured ground line.

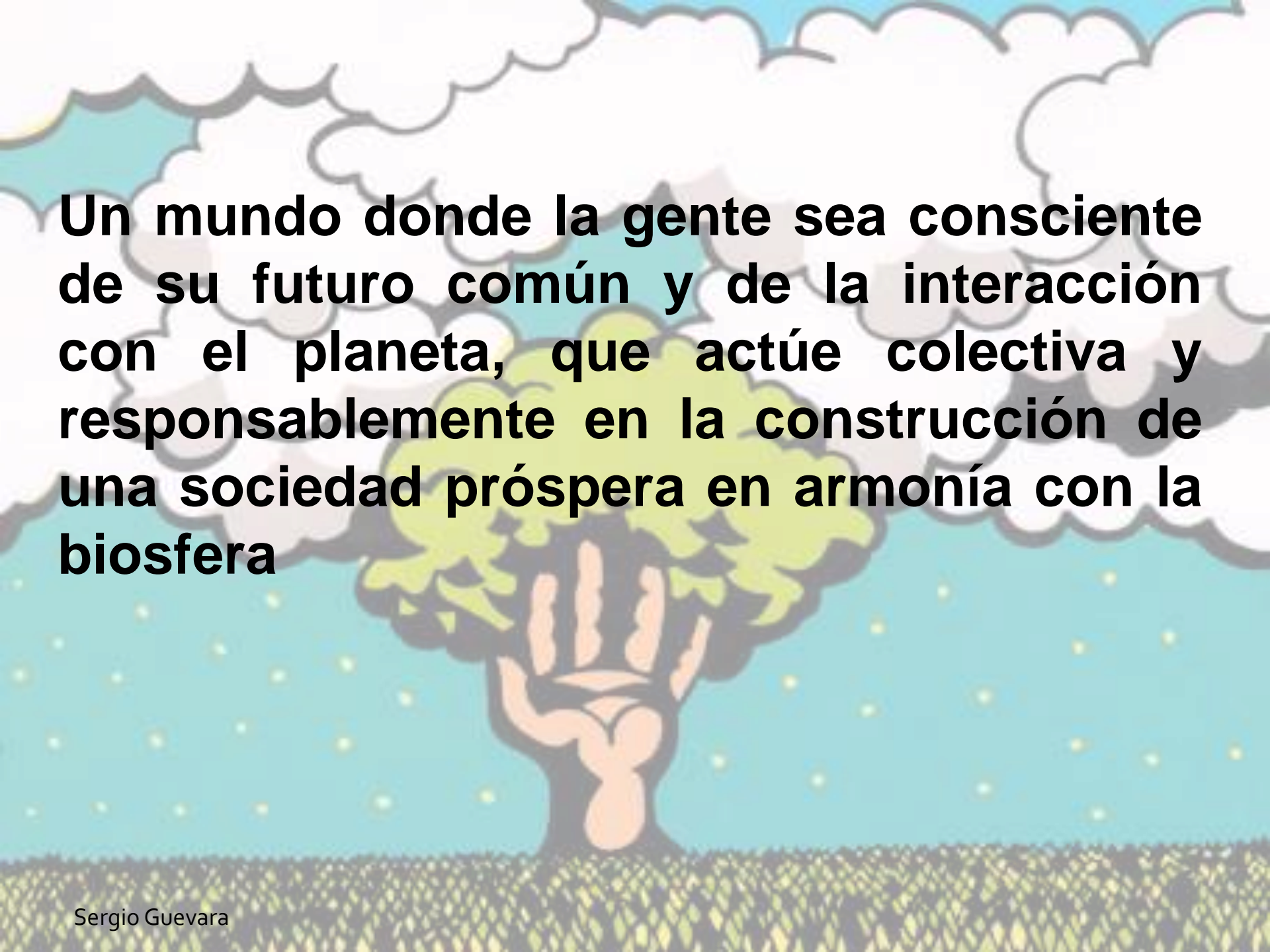
La educación ambientada en el paisaje el ingenio de las reservas de biosfera

Sergio Guevara

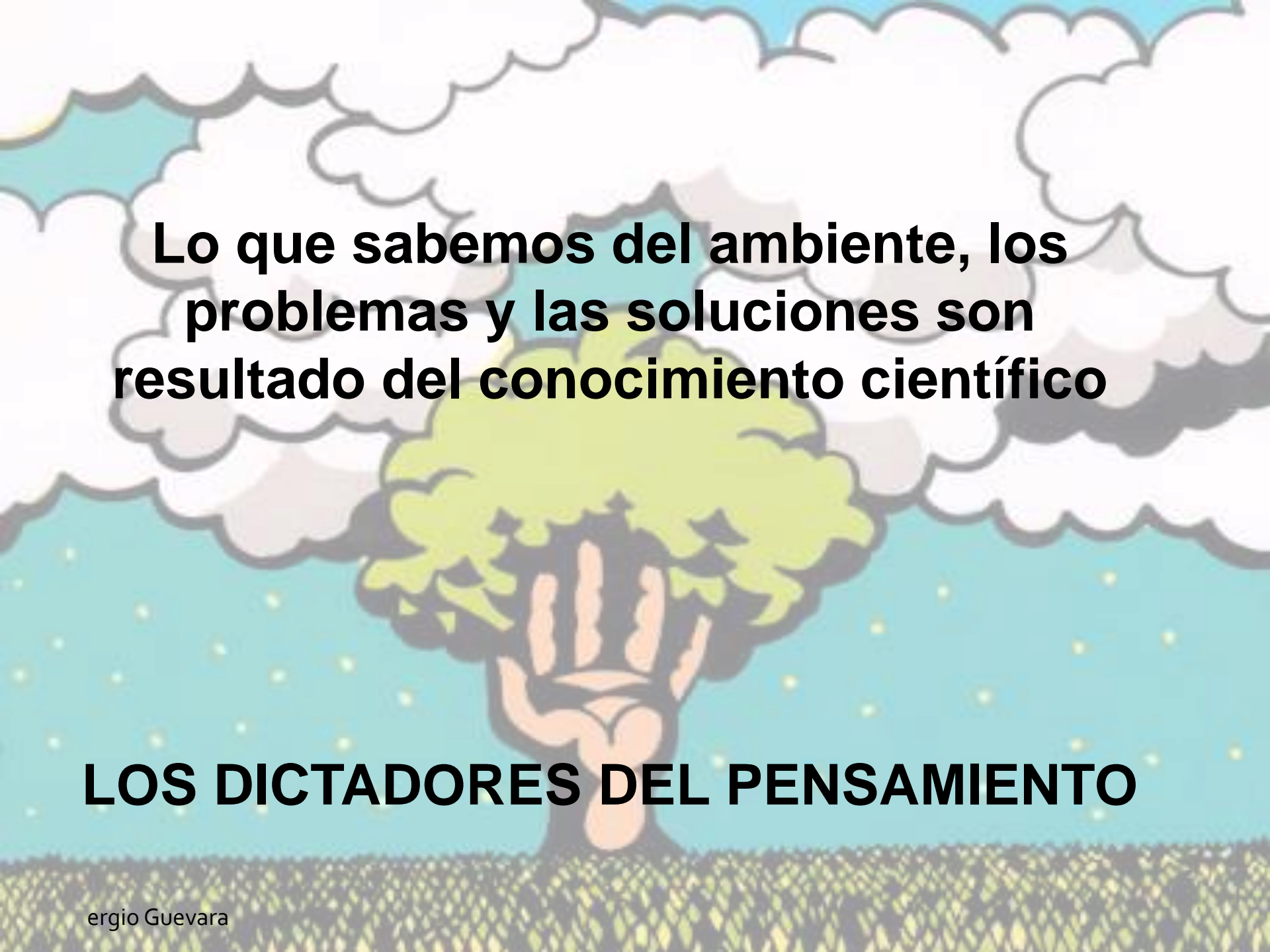
II Jornadas de educación ambiental de CEIDA
Abril de 2018



EDUCACIÓN AMBIENTAL
PERCEPCIÓN AMBIENTAL
RESERVAS DE BIOSFERA
PAISAJE
PERSPECTIVAS

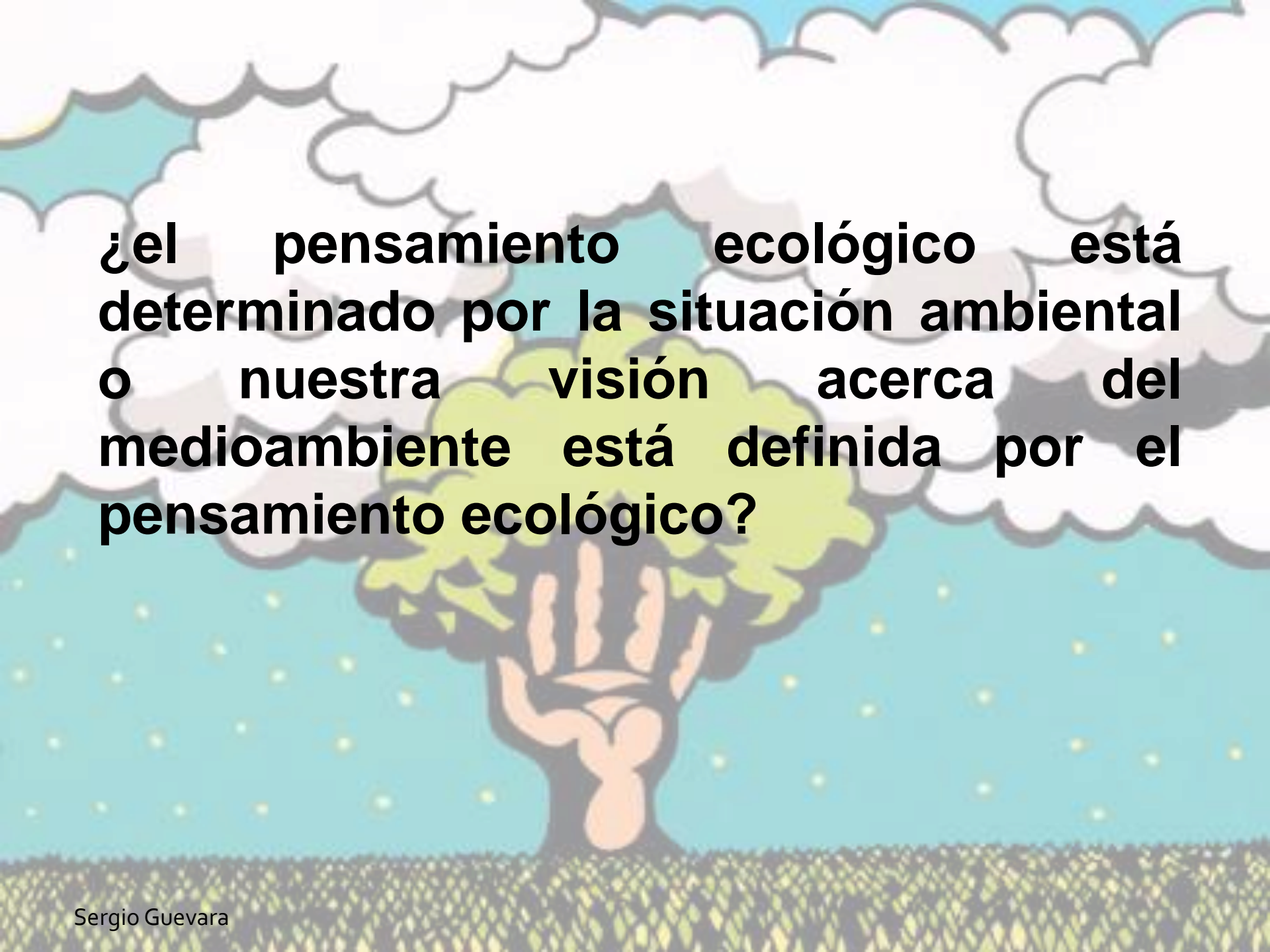


Un mundo donde la gente sea consciente de su futuro común y de la interacción con el planeta, que actúe colectiva y responsablemente en la construcción de una sociedad próspera en armonía con la biosfera

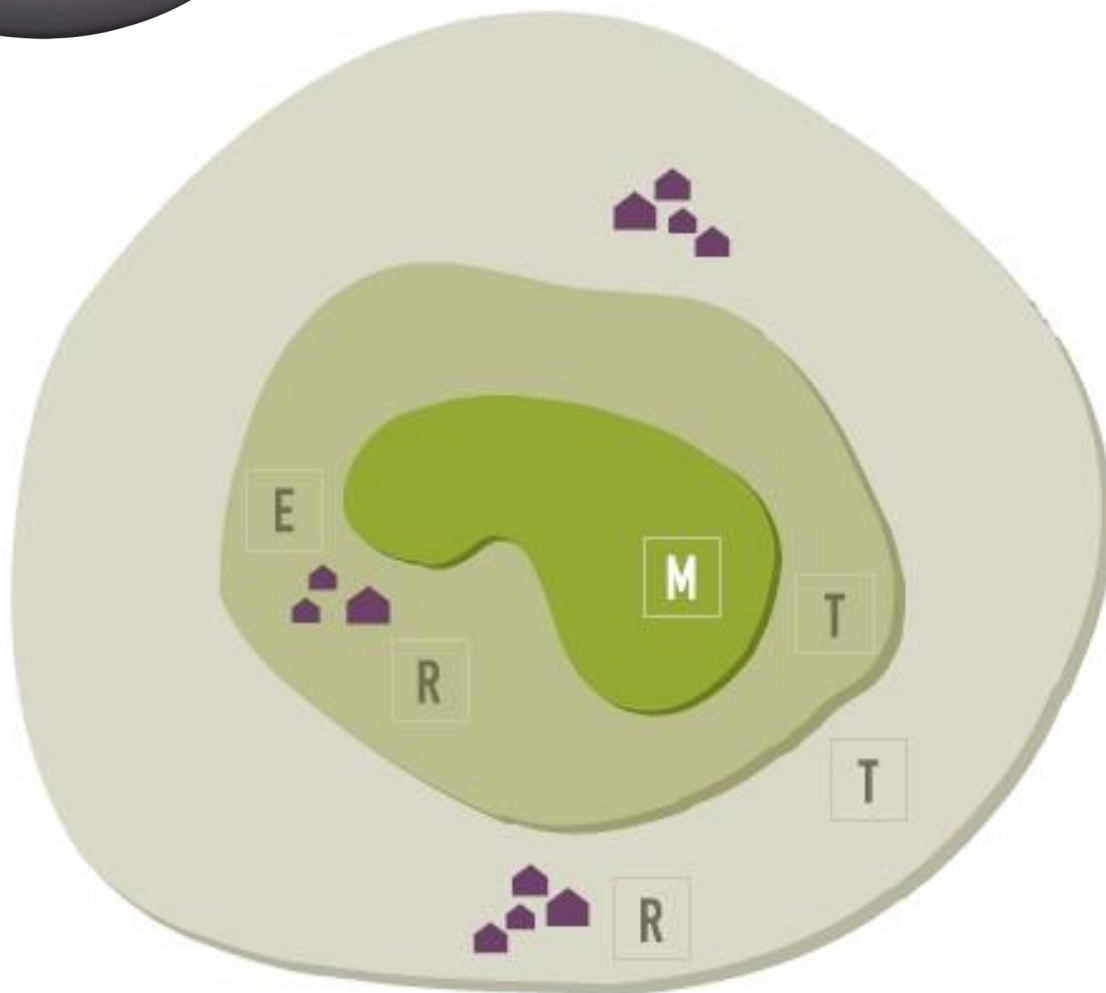


**Lo que sabemos del ambiente, los
problemas y las soluciones son
resultado del conocimiento científico**

LOS DICTADORES DEL PENSAMIENTO

A stylized illustration of a tree where the trunk is a human hand with fingers spread, reaching upwards. The canopy is a solid green shape. The background consists of large, white, puffy clouds with grey outlines, and a light blue sky filled with small yellow stars. The ground at the bottom is a dark, textured area with small yellow and green specks.

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





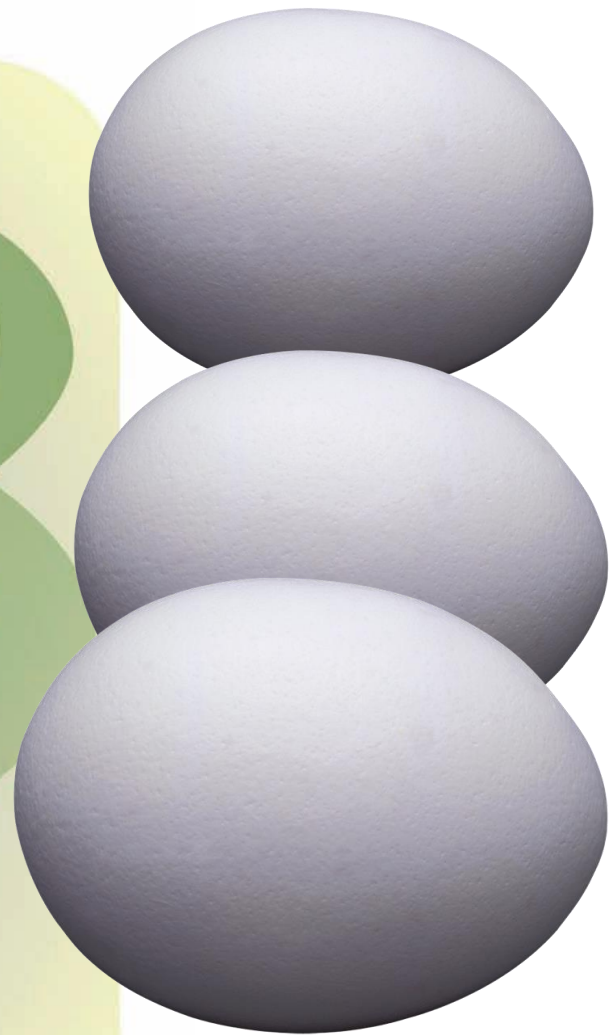
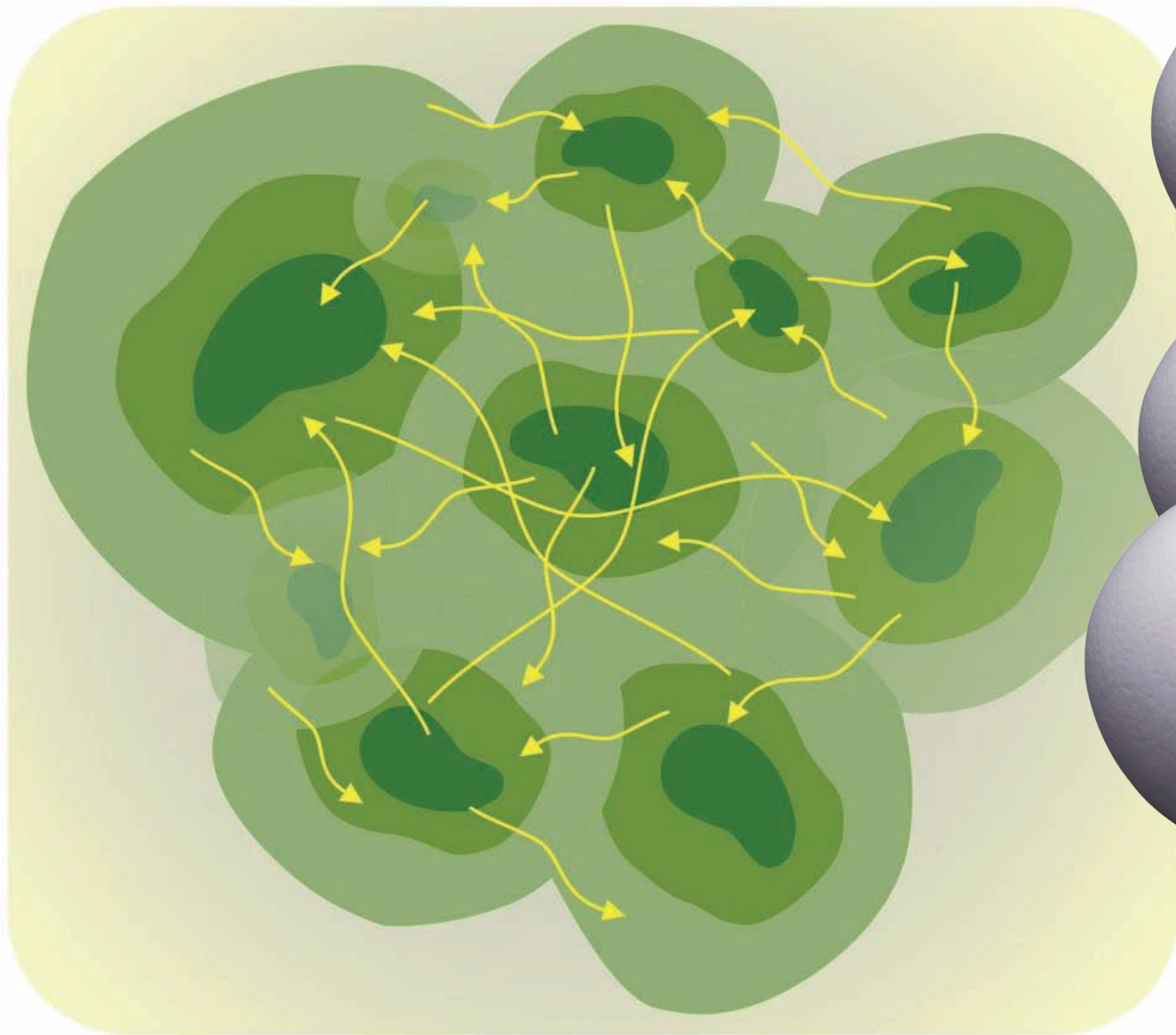
GOBERNANZA

PARTICIPACIÓN

EVALUACIÓN PERIÓDICA

INTEGRADA EN RED

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



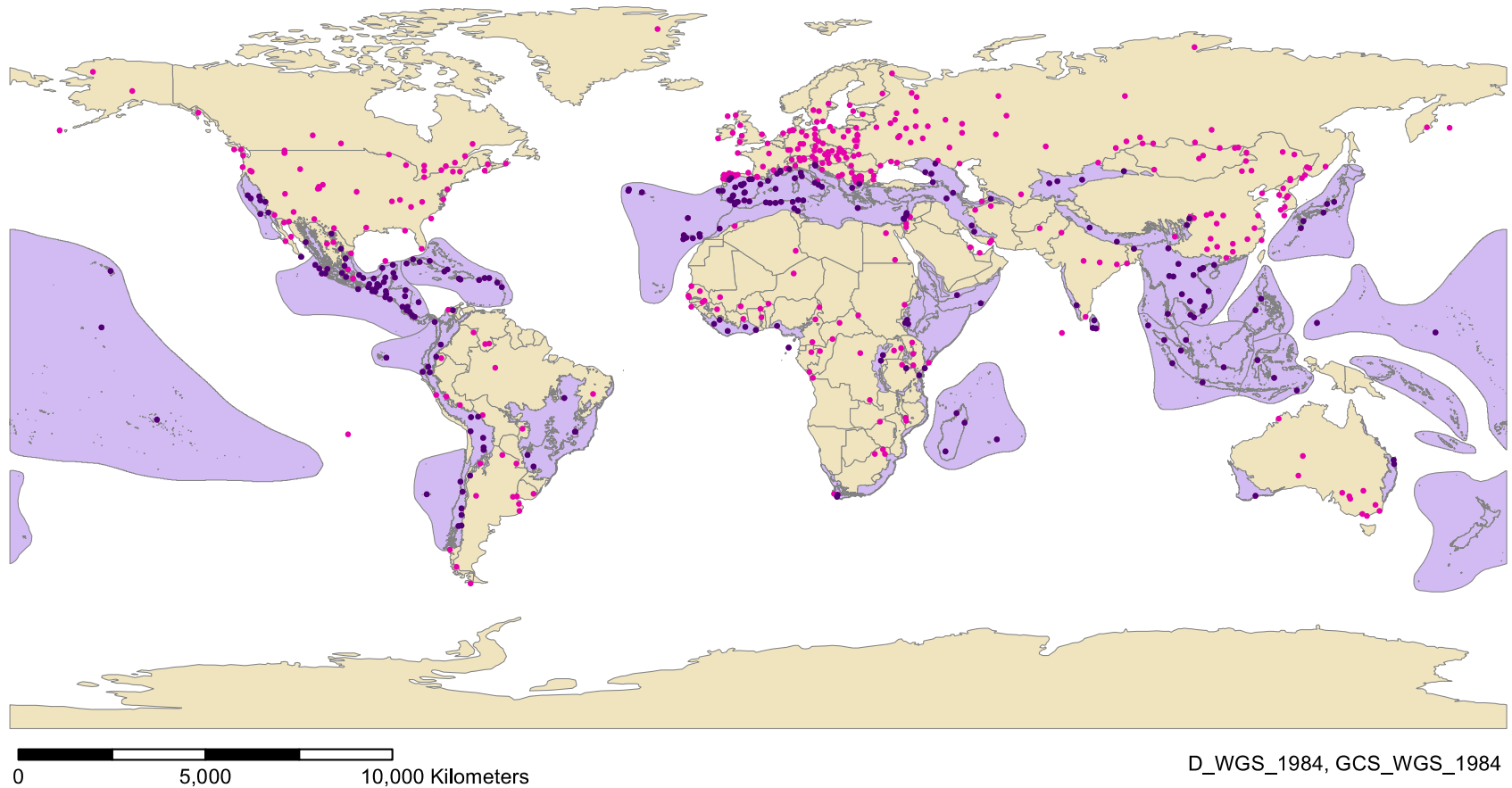
A stylized illustration of a hand holding a tree against a background of clouds and a starry sky. The hand is a light skin tone, with fingers spread, holding a green, bushy tree. The background consists of large, white, fluffy clouds with grey outlines, set against a light blue sky filled with small yellow stars. The bottom of the image shows a dark, textured ground.

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



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.

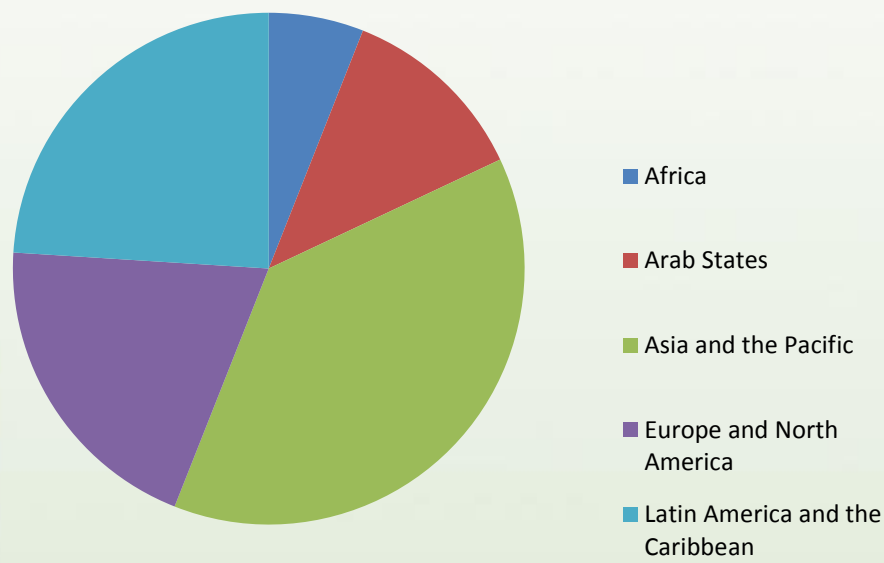
Legend

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



Biosphere Reserves statistics:

- Biosphere Reserves with dryland ecosystems



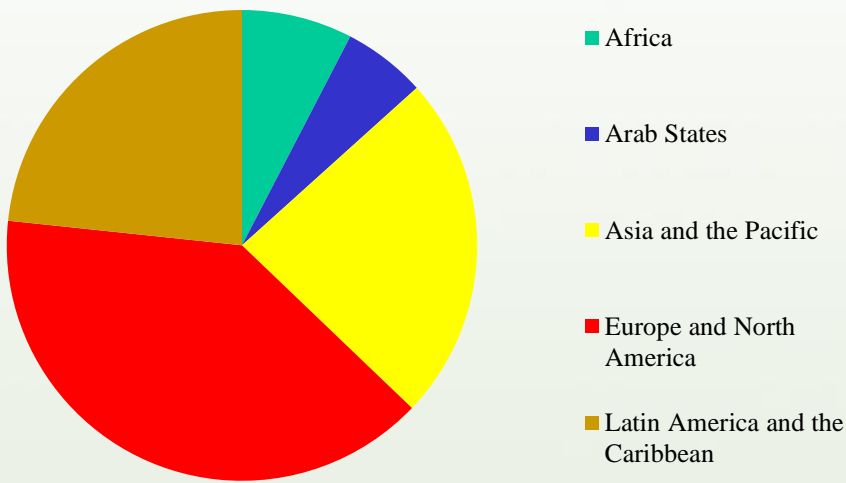
Region	Dryland BR	Percentage
Africa	3	6,00%
Arab States	6	12,00%
Asia and the Pacific	19	38,00%
Europe and North America	10	20,00%
Latin America and the Caribbean	12	24,00%
Total	50	100,00%





Biosphere Reserves in numbers:

- Biosphere Reserves with marine, coastal, island areas



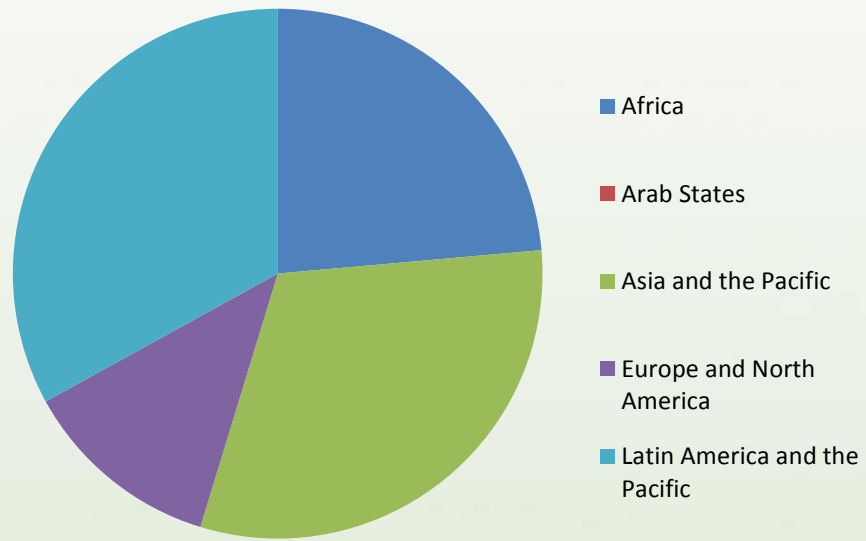
Region	Marine, coastal and island BR	Percentage
Africa	16	7,61%
Arab States	12	5,74%
Asia and the Pacific	50	23,81%
Europe and North America	83	39,52%
Latin America and the Caribbean	49	23,33%
Total	210	100%





Biosphere Reserves statistics:

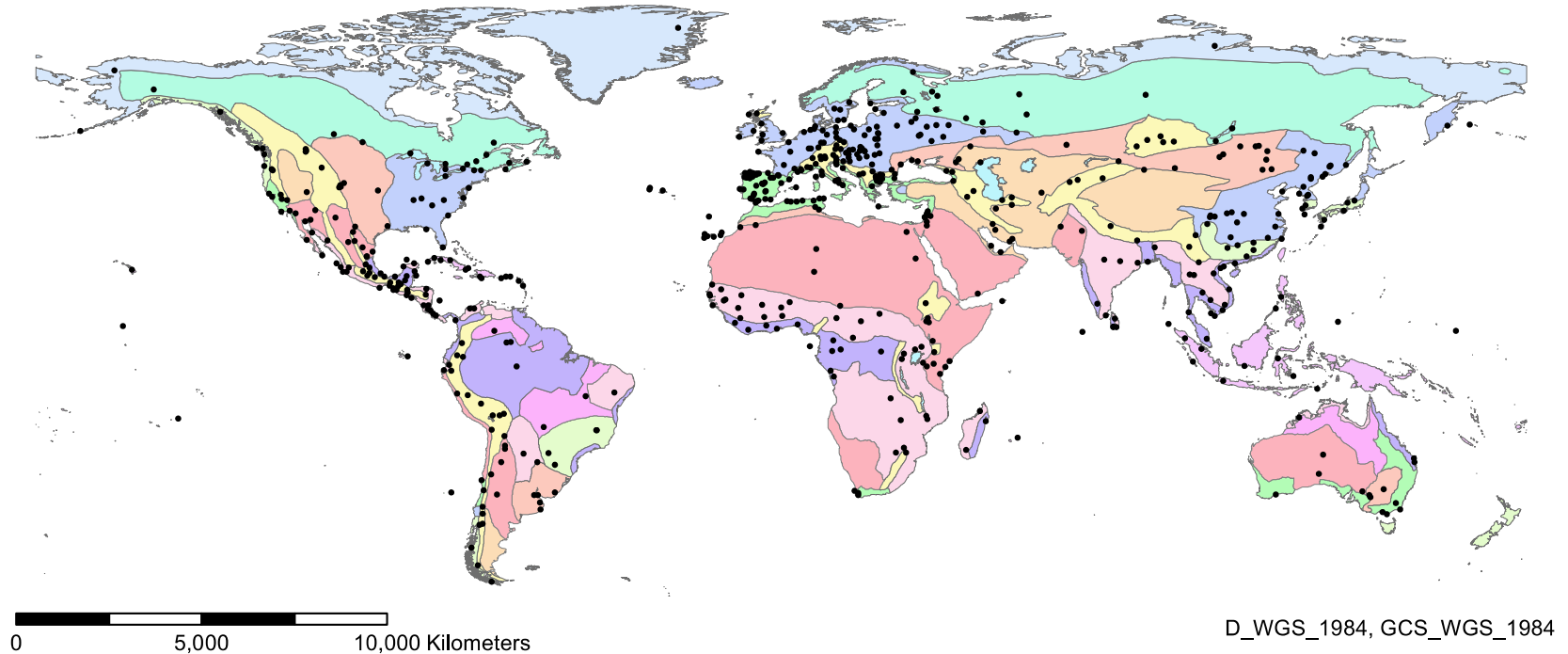
- Biosphere Reserves with rainforest ecosystems



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)	 Temperate grasslands (31 reserves)
 Evergreen Sclerophyllous forests (94 reserves)	 Temperate needle-leaf forests / Woodlands (21 reserves)
 Lake systems (5 reserves)	 Tropical dry forests / Woodlands (74 reserves)
 Mixed island systems (42 reserves)	 Tropical grasslands / Savannas (3 reserves)
 Mixed mountain systems (89 reserves)	 Tropical humid forests (43 reserves)
 Sub-tropical / Temperate rain forests / Woodlands (26 reserves)	 Tundra communities (4 reserves)
 Temperate broad-leaf forests (115 reserves)	 Warm deserts / semi-deserts (47 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.

TRANSFORMACIÓN ANTROPOGÉNICA DE LA BIOSFERA



Anthropogenic Transformation of the Terrestrial Biosphere

YEARS OF
Intensive Use

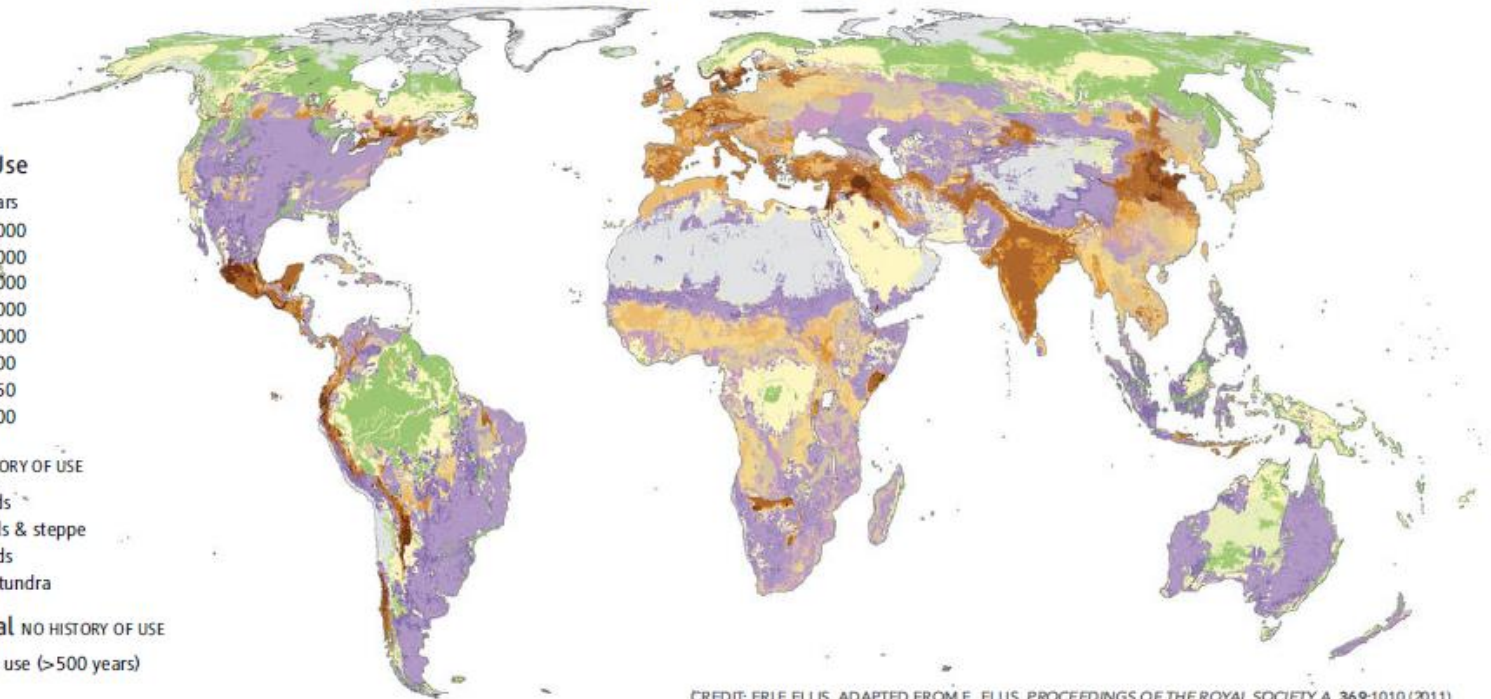
- >8000 years
- 5000–8000
- 3000–5000
- 2000–3000
- 1000–2000
- 500–1000
- 250–500
- 100–250
- < 100

Wild NO HISTORY OF USE

- Woodlands
- Grasslands & steppe
- Shrublands
- Desert & tundra

Seminatural NO HISTORY OF USE

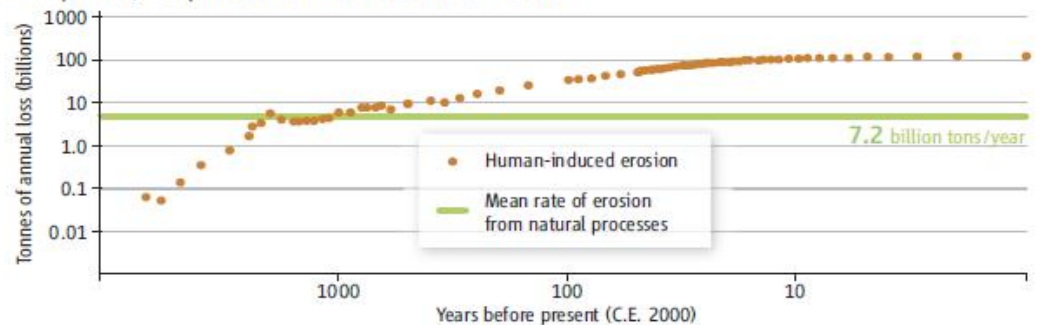
- Moderate use (>500 years)



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

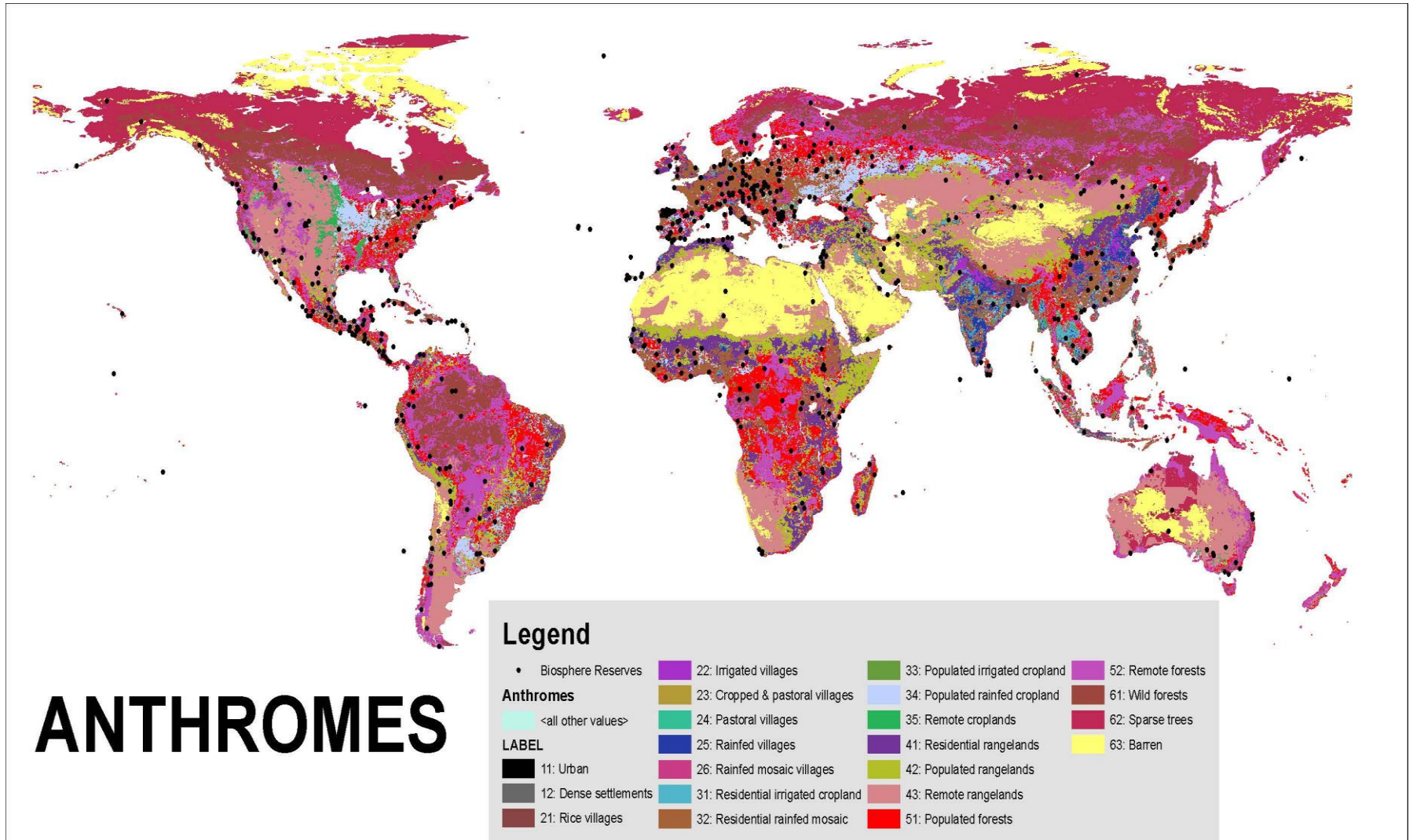
Perhaps the most obvious mark we've made to the planet is in land-use changes. For millennia, humans have chopped down forests and moved rock and soil for agriculture and pastureland—and more recently, for construction.

Deep Time, Deep Erosion: Who Erodes Land Faster?



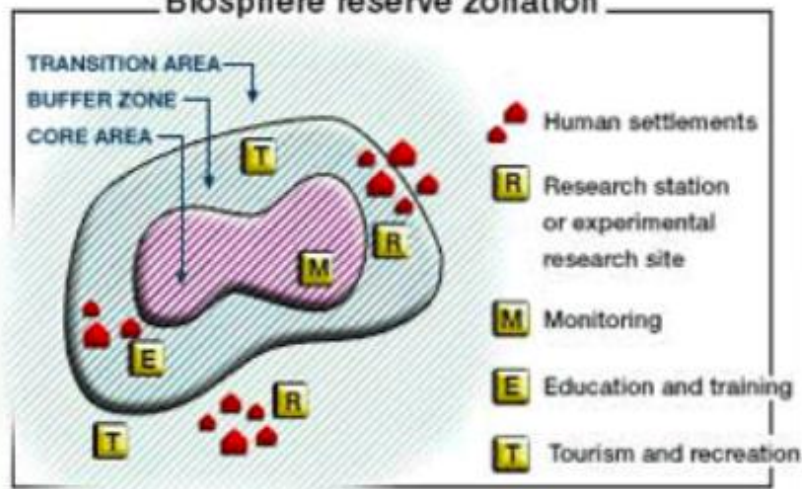
SOURCE: BRUCE H. WILKINSON, GEOLOGY 33, 3 (MARCH 2005)

DISTRIBUCIÓN DE PAISAJES ANTROPOGÉNICOS EN EL MUNDO





Biosphere reserve zonation

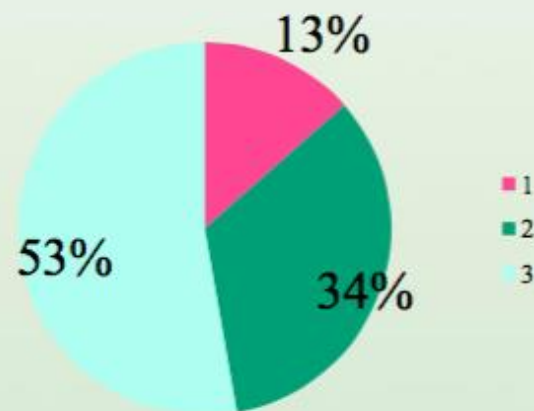
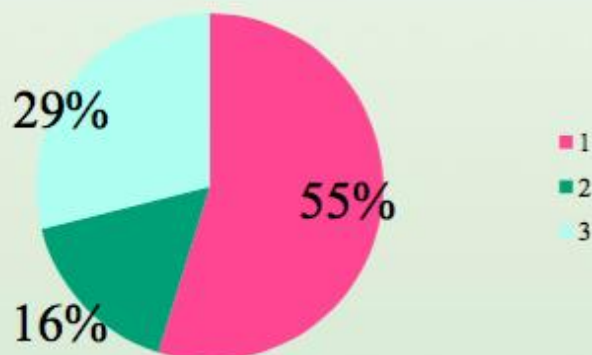


Pre-Seville BRs (until 1995):

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

Post-Seville BRs (since 1996):

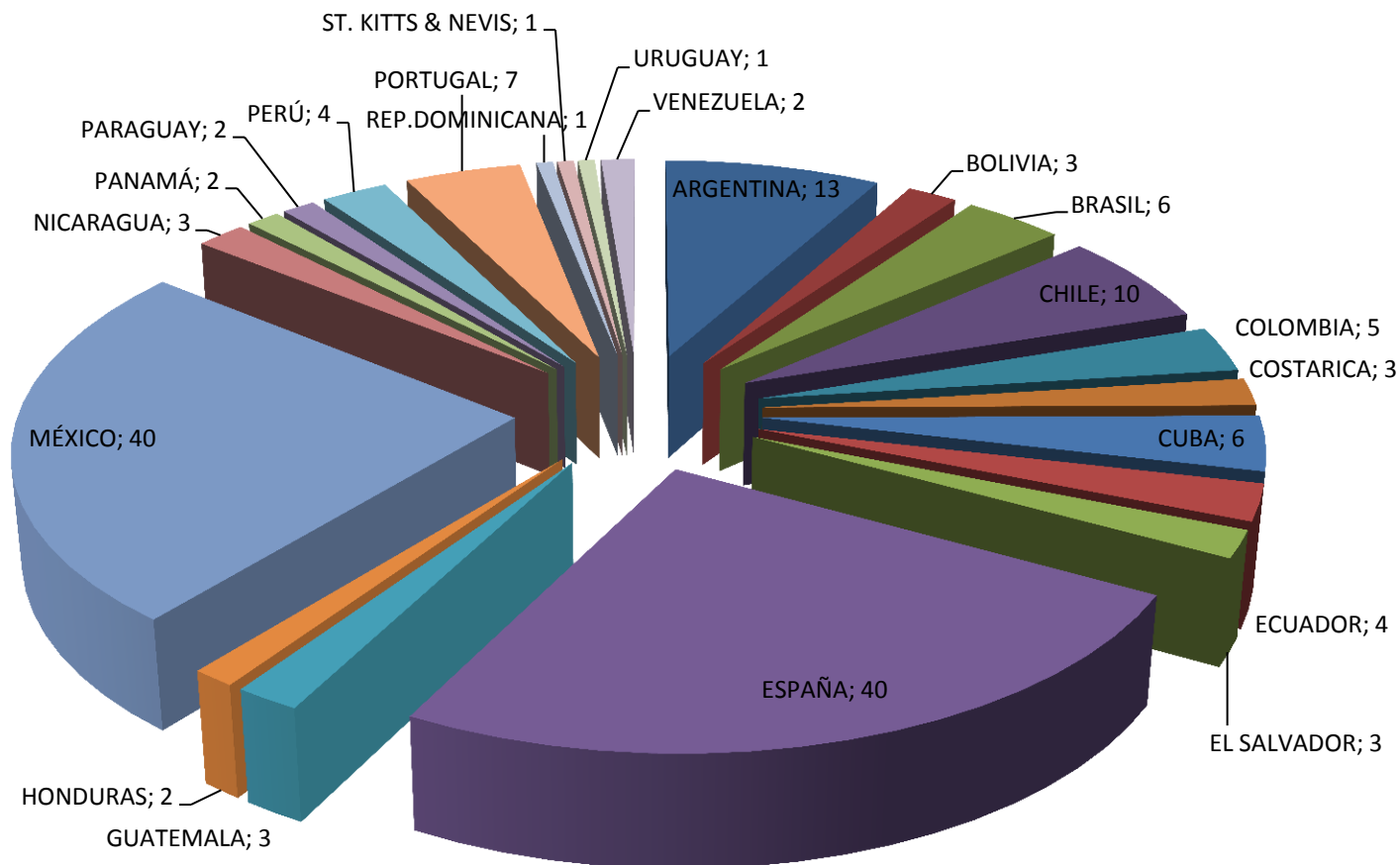
Core area (ha)	Buffer zone	Transition area
34,270,281	85,540,523	133,874,426



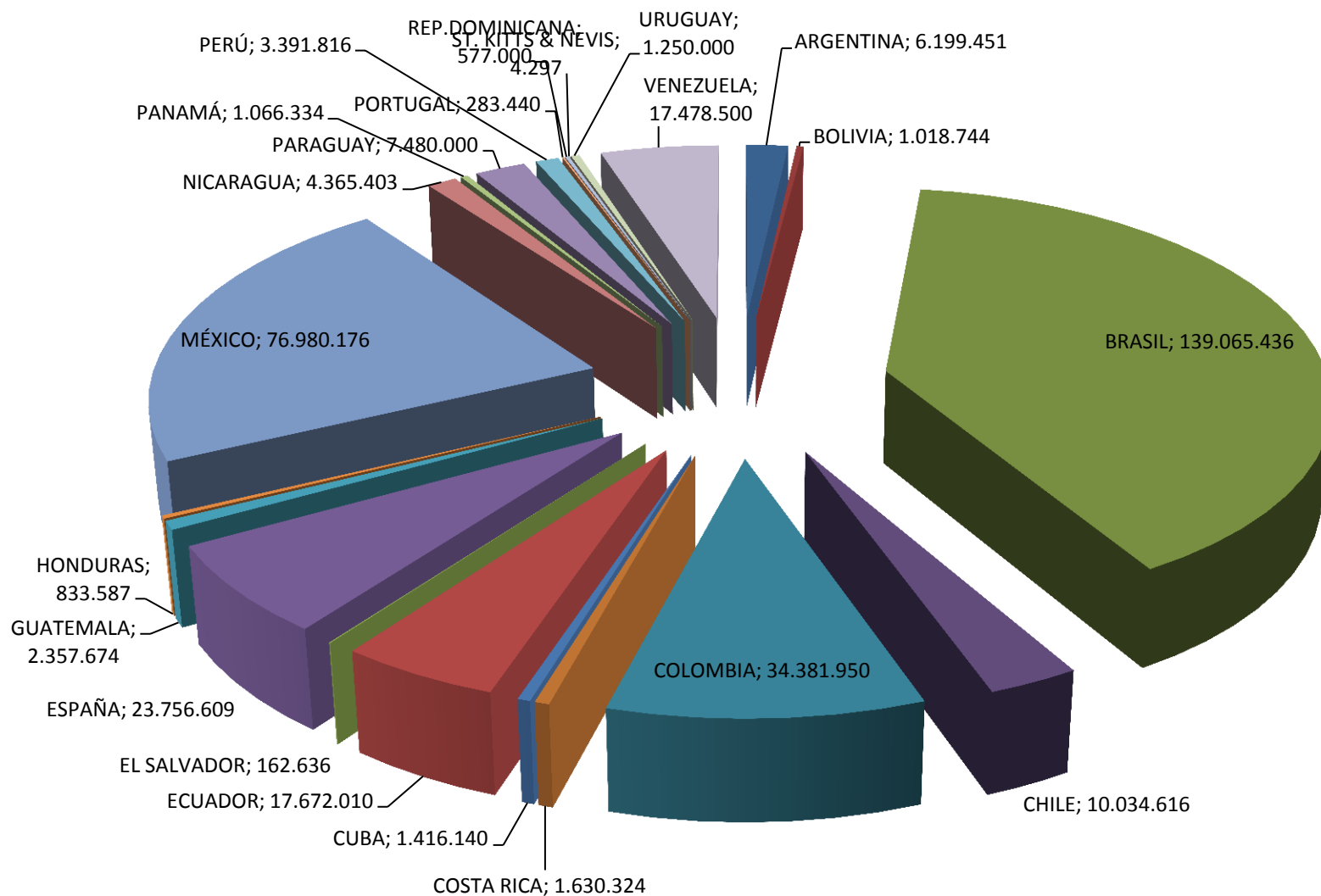


RESERVAS DE BIOSFERA EN IBEROAMÉRICA Y EL CARIBE

Número de reservas por país



Extensión de las Reservas por país (ha)

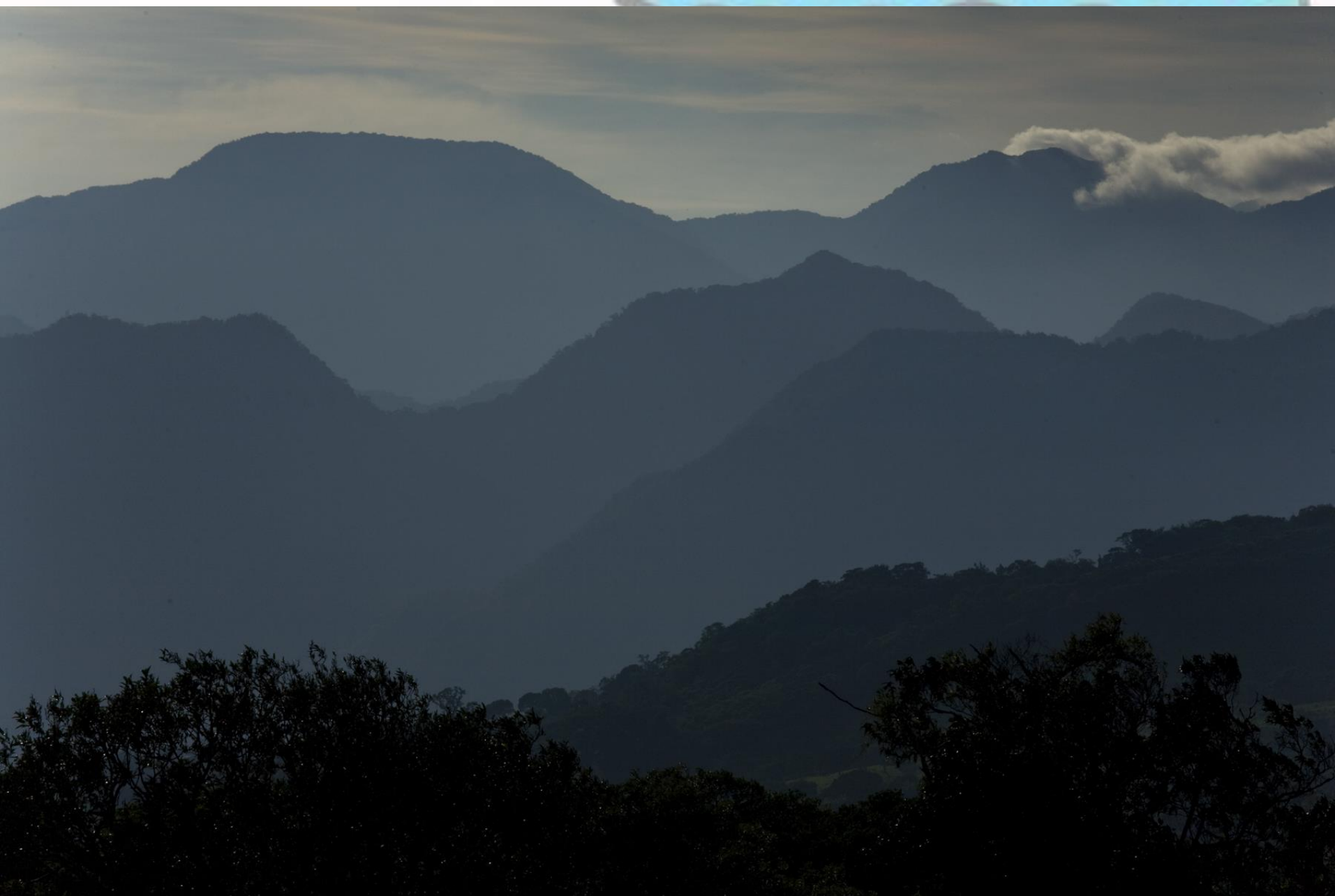




el territorio de Iberoamérica y el Caribe fue colonizado por grupos humanos, que usaron intensiva y extensivamente la tierra y los recursos naturales

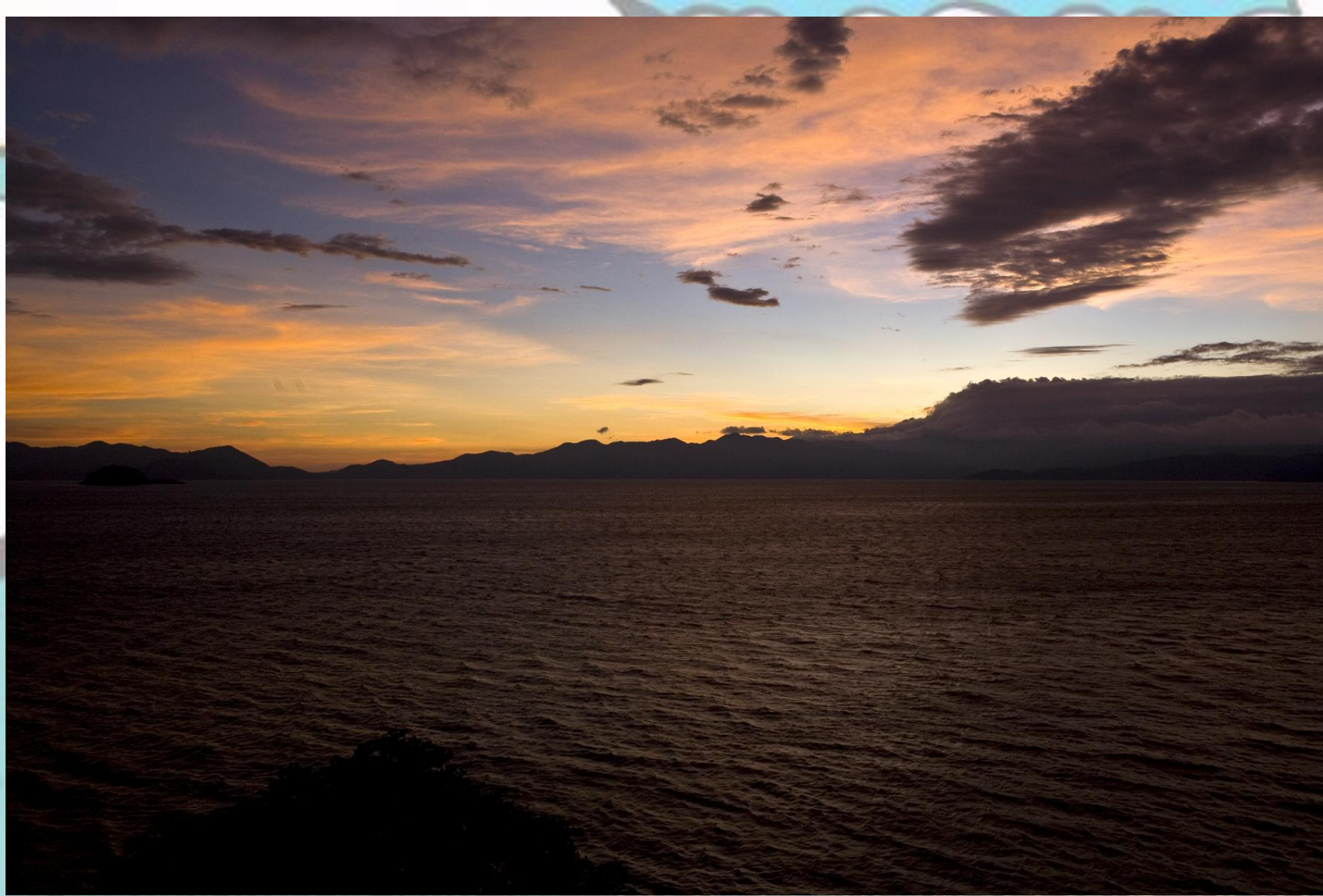
a pesar de ese intenso y prolongado uso, la diversidad cultural y natural es muy grande

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







Sierra de Huautla



Cumbres de Monterrey





Maderas del Carmen





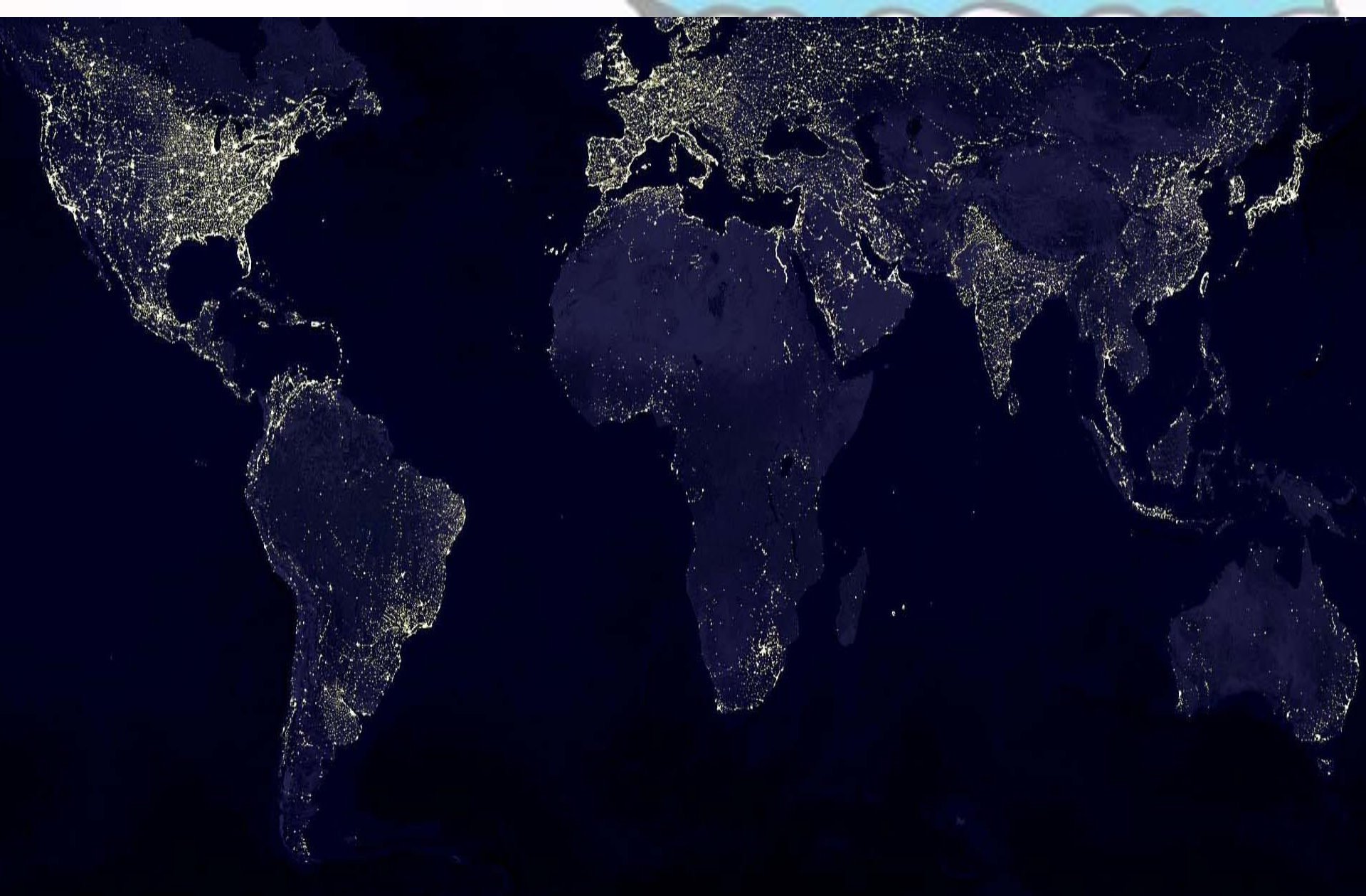
Sergio Guevara

An aerial photograph of a dense, lush green forest. The canopy is thick and textured, with various shades of green. The text is centered in the middle of the image.

LA DIVERSIDAD BIOLÓGICA Y
CULTURAL ESTÁ EN CONSTANTE
MOVIMIENTO

UNA PERSPECTIVA



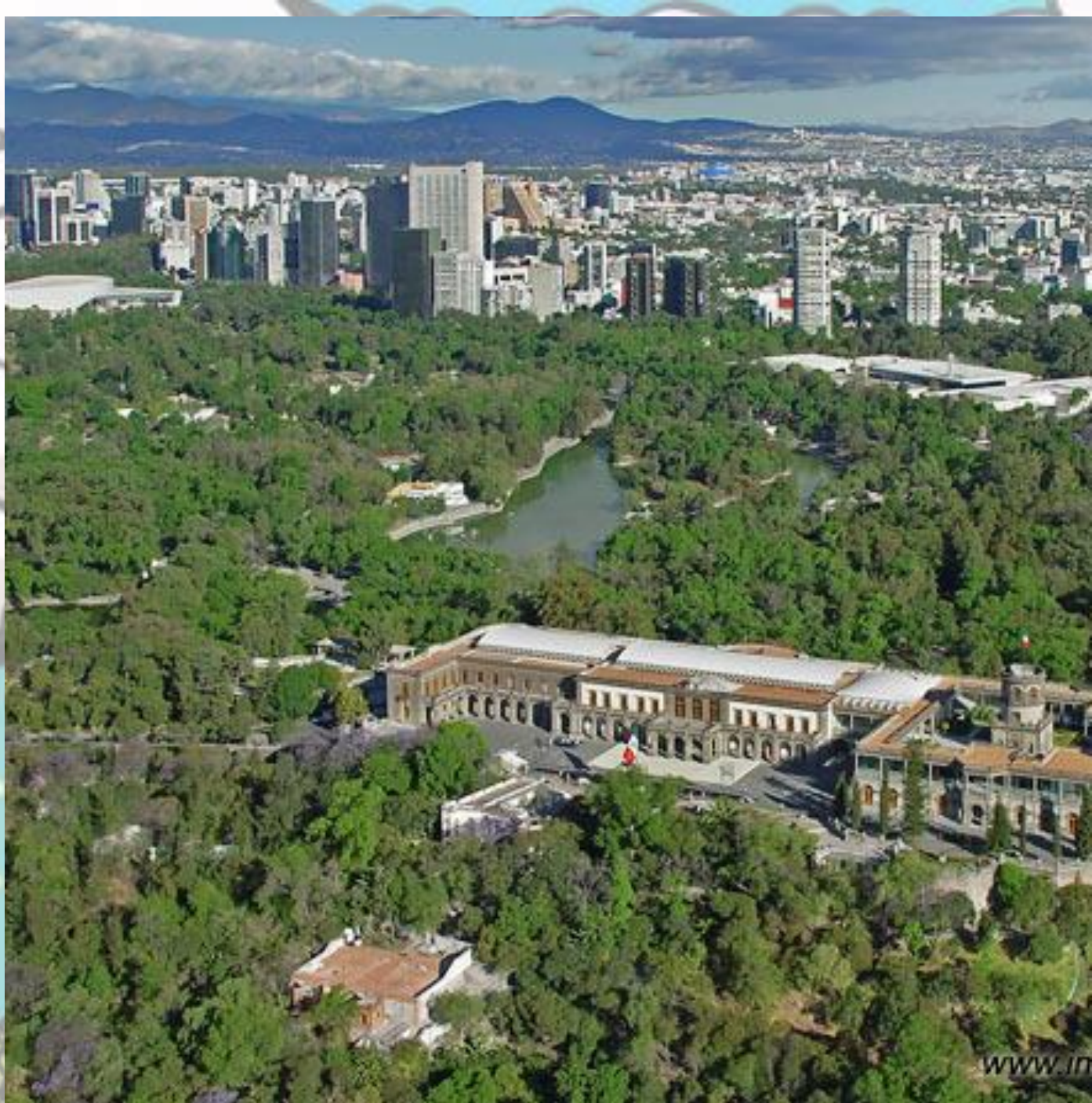






**las ciudades son cómplices para el
desarrollo sostenible**

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



EL FLUJO DE LA BIODIVERSIDAD

**AMBIENTE
URBANO**

Ecosistemas
emergentes

**AMBIENTE
RURAL**

Ecosistemas
agrícolas

**AMBIENTE
NATURAL**

Ecosistemas
originales

**ESPECIES
EXÓTICAS**

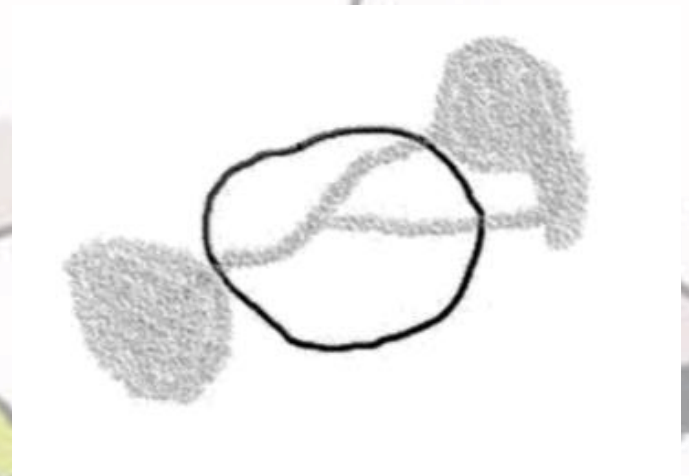
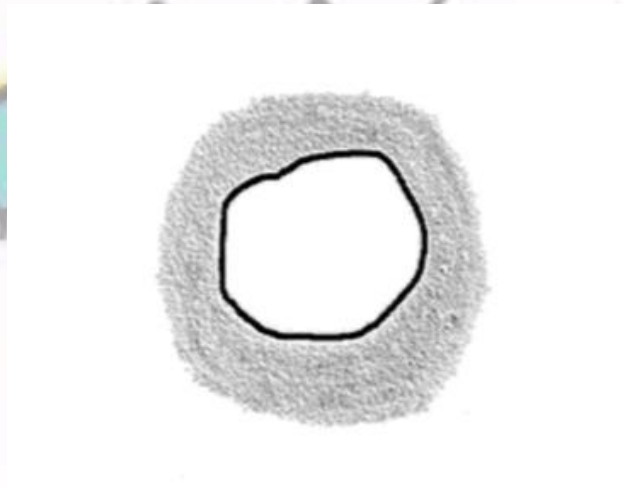
**ESPECIES
ENDÉMICAS**

**ESPECIES
AMENAZADAS**

**ESPECIES
INVASORAS**

**ESPECIES
NATIVAS**





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

