



Venezuela Has Lost an Area of Natural Cover Equivalent to the Size of Delta Amacuro, MapBiomias Venezuela Data Reveals

- Between 1985 and 2023, around 4% of the country's natural cover was lost.
- About 62% of Venezuela remains covered by forest formations.

Caracas, November 5, 2024 – An analysis from the new collection of land cover and land use maps from MapBiomias Venezuela reveals that approximately 22% of Venezuelan territory is occupied by human-modified areas, while the rest remains mostly in a natural state, albeit with varying degrees of human intervention. This cartographic analysis identifies two contrasting regions in Venezuela: south of the Orinoco River, 79% of forest formations are concentrated, whereas in the north, where more than 90% of the population resides and where major urban centers and infrastructure are located, 94% of the land has been transformed primarily for agricultural use. In this northern region, herbaceous and shrub formations predominate.

Key Findings: The Transformation of Venezuela's Landscape

Since 1985, Venezuela has lost nearly 41,600 km² of natural cover, with the greatest changes recorded in the north of the country, where agricultural expansion has profoundly transformed the landscape. In this region, altered land surface increased from 40% in 1985 to 48% in 2023, impacting natural cover types such as forests, grasslands, and shrublands. In contrast, the loss of forest formations in the south is significantly smaller, with only 1.7% transformed over the past 39 years. The region remains predominantly covered by forests (525,635 km²), and only 2% of its land is dedicated to agriculture.

The second collection of land cover and land use maps from MapBiomias Venezuela also highlights other important landscape changes, including a progressive increase in urban areas, which have grown by over 60% in the past 39 years, and the expansion of mining activities. Although mining covers only around 2,000 km² in total, it has increased nearly ninefold since 1985. Bolívar and Guayana Esequiba are the states with the highest mining presence.

According to Irene Zager, Research Director at Provita and part of MapBiomias Venezuela's team, "these findings emphasize the continuous pressure on Venezuela's ecosystems and highlight the importance of land use planning to conserve natural resources and mitigate the effects of human activities." She also noted that the information generated by MapBiomias Venezuela provides a key tool for sustainable management and protection of these valuable landscapes.

New Features in the Latest MapBiomias Venezuela Collection: Land Cover and Land Use.

One of the major advantages of the MapBiomias Venezuela network is its ability for constant updates. Each year, data is reprocessed, and a new collection of maps is generated, incorporating advancements in classification and data verification processes, ensuring higher precision and quality in its results.

The latest MapBiomias Venezuela collection includes updated information through 2023, providing access to historical data from 1985 to the present. Additionally, the areas of analysis have been expanded to include the state of Guayana Esequiba and the Los Monjes Archipelago. This collection also features new coverage classes (Shrubland, Other natural areas without vegetation, Glacier) that more accurately and precisely reflect the characteristics of the Venezuelan territory, along with improvements in the mapping of existing classes, with anthropic areas showing the most significant enhancements. Finally, some functionalities of the access platform have also been improved for this update.

MapBiomias Venezuela's Contribution to a Changing Territory

Rodrigo Lazo, Technical Lead of MapBiomias Venezuela at Provita, stated, "MapBiomias Venezuela's results highlight a crucial opportunity to strengthen the relationship between human development and the conservation of natural ecosystems." He emphasized that the data underscores the potential to implement effective public policies and promote land management aimed at achieving a sustainable balance between progress and environmental protection.

MapBiomias Venezuela is an initiative that provides free, open-access data on the main land cover and land use in Venezuela. These map collections offer a comprehensive view of the territory and tell the story of a country. José Sánchez, a member of the MapBiomias Venezuela technical team, notes that "these data can be used by decision-makers to support land-use planning based on updated spatial data or by scientists seeking a detailed historical record of changes in their study area." He also pointed out that these maps serve as a resource for any Venezuelan interested in exploring their surroundings and how their region has changed.

Through an interactive web platform, users can view and download annual maps, charts, and dynamic tables, making it easier to understand changes across different spatial units, such as watersheds, protected areas, and indigenous territories.

ABOUT MAPBIOMIAS VENEZUELA

MapBiomias Venezuela is a collaborative initiative bringing together experts from NGOs, universities, and research centers to generate and share up-to-date information on Venezuela's territorial transformation, publicly and for free. It offers 39 years of annual land cover and land use maps from 1985 to 2023, covering the entire country, including the state of Guayana Esequiba but excluding Isla de Aves.

The network is present in 14 countries and involves more than 100 institutions across South America and Indonesia, aiming to produce maps and data that guides conservation and natural resource management. The maps, with a resolution of at least 30 meters, are created using automated classification algorithms on Google Earth Engine.

<https://venezuela.mapbiomas.org/>