



MapBiomás Venezuela: 40 years of changes in land cover and land use in the country

Since 1985, Venezuela's forests have been reduced by approximately 4.4% of the country's land area, with 76% of this loss occurring north of the Orinoco River.

MapBiomás Venezuela's Collection 3 on Land Cover and Land Use presented new data on the current state of the territory and changes over time, since 1985 to 2024. “We are launching forty years of maps on the transformation of the Venezuelan territory, covering 25 classes or types of land cover, including natural cover, such as forests, grasslands, and shrublands, and those human-use covers, such as agricultural, urban, and mining,” said Irene Zager, Research Director at Provita. She highlights the incorporation of two natural land covers that had not been previously mapped (Andean grassland/shrubland and floodable Andean grassland/shrubland). “Their incorporation into this new collection contributes to a better understanding of the dynamics of change in the Venezuelan Andes”, added the director.

A history of transformation, to rethink the future

The data revealed that between 1985 and 2024, Venezuela lost nearly 30,000 km² of forest formations, equivalent to 4.4% of the territory. "Of this decrease, 76% is concentrated north of the Orinoco River, especially in the Los Llanos region, with 10,518 km² (35%); the main cause of transformation is the expansion of agricultural areas," said Carlos E. González, LSIGMA-USB Coordinator.

Meanwhile, south of the Orinoco River, the changes were smaller. "In the Amazon and Guayana Esequiba regions, we find 78% of all the country's forest formations; here we have transformed some 7,057 km² of forests, which represents 24% of Venezuela's forest loss," said Rodrigo Lazo, Technical Coordinator of Land Cover and Use at MapBiomias Venezuela, at Provita.

Anderson Albarran, Coordinator of Socio-Environmental Information Systems at Wataniba, highlighted: "At MapBiomias Venezuela, we work collaboratively, combining various disciplines and from multiple civil society organizations, academic institutions, and public entities, so that this information on Venezuelan territory is available to the public free of charge. We hope that these maps will support research, conservation, and sustainable management of our natural resources, as well as climate change mitigation and adaptation."

MapBiomias Venezuela Annual Seminar

These data were presented during the MapBiomias Venezuela Annual Seminar, held on Thursday, November 6, 2025, in the Dr. Tobías Lasser Auditorium of the Faculty of Sciences at the Central University of Venezuela (UCV).

The event also highlighted the upcoming products to be launched by MapBiomias Venezuela, with MapBiomias Water and MapBiomias Urban.

The event featured a panel of experts with Abigail Castillo (UCV and MINEC), Karenia Córdova (UCV), Luz Delgado (UNEG), Douglas Rodríguez-Olarte (UCLA), and Carlos Urdaneta (USB), who discussed the relevance of MapBiomias Venezuela's data and future analysis priorities.

MapBiomias Venezuela's Award: A celebration of the use of open data

During the seminar, the first edition of the MapBiomass Venezuela's Award was also held, organized in partnership with the Institute of Zoology and Tropical Ecology of the UCV, as part of its 60th anniversary celebrations.

For this first edition, several applications were received for the categories: Undergraduate Student and General. Mylene Gutiérrez, member of the Award Organizing Committee and professor at the UCV, highlighted: "This award recognizes innovative projects based on the data made available by our platform. The winning projects addressed highly relevant issues such as the evidence of climate change on agriculture, changes in land cover in protected areas, and deforestation."

MapBiomass Venezuela

MapBiomass Venezuela is an initiative co-created by Provita, Wataniba, the Laboratory of Geographic Information Systems and Environmental Modeling of the Simón Bolívar University (LSIGMA – USB), and the Amazon Network of Georeferenced Socio-Environmental Information (Raisg), in collaboration with specialists from different NGOs, universities, and research centers in the country, organized by themes and regions.