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The Cerrado

The Cerrado is one of the largest areas of ecological importance in South America, second only to the Amazon. It covers an area of over 2 million km², equivalent to 25% of Brazil's landmass, bordering the Amazon and Atlantic forests¹. The Cerrado's vegetation varies greatly between savannah (61%), woodland (32%) and grassland (7%)².

Most of the 43 million people that live in the biome live in urban centres, including Brasília, Belo Horizonte and Cuiabá, and an estimated 12.5 million people depend directly upon the biome's natural resources for their income or subsistence³. As of early 2016, 44% of the Cerrado's native vegetation had been cleared for farming⁴, primarily as a result of large-scale commercial agriculture,



which developed in the 1970s and intensified from the 1980s onwards⁵. This contrasts with the Amazon, where roughly 12% of native vegetation has been converted to farmland⁶.

Water Resources and Climate Regulation

The biome is critical to climate regulation, biodiversity, and water and food security in Brazil. Rivers which start in the Cerrado provide 70% of the Brazilian population with fresh water⁷ and hydroelectric plants in the Cerrado supply Brazil with up to 80% of its energy needs⁸.



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70% of Brazil's population

use fresh water from rivers originating in the Cerrado

The biome is often referred to as an 'upside-down' or 'inverted forest' as the majority of its biomass is made up of deep underground root systems with a large capacity to absorb water and store carbon⁹. It feeds the Guarani aquifer, the world's second largest underground water reservoir, which provides water to drought-prone metropolitan regions in south Brazil¹⁰.

Its biodiversity and vegetation also play an essential role in regulating continental climate systems through channelling water vapour in rain cycles from the Amazon to southern Brazil, Bolivia, Paraguay, Argentina and Uruguay¹¹.

Biodiversity

The Cerrado is considered the most biodiverse savannah in the world¹² and, owing to its abundance of endemic species combined with the extent of its habitat loss, it is one of the world's 36 biodiversity hotspots¹³. One third of the 12,669 plant species¹⁴ and 18% of the 2,373 vertebrate species in the biome are endemic¹⁵. Almost 1,000 species in the Cerrado are threatened with extinction¹⁶.



The most biodiverse savannah in the world

with more than 12,600 species of plant



Almost 1000 species in the Cerrado are threatened with extinction

Soy

Brazil is a major producer of soy, second only to the United States internationally, and is expected to become the largest producer as global demand increases over the next ten years¹⁷. Over half (52%) of the soy produced in Brazil in 2013/2014 was produced in the Cerrado and soy represents 90% (15.6 million km²) of all agricultural output from the biome¹⁸. The expansion of soy production in the region has driven widespread deforestation¹⁹. This has been concentrated in Matopiba in recent years, a region in the north of the

biome which covers the state of Tocantins and part of Maranhão, Piauí, and Bahia²⁰. Between 2009 and 2013, 73% of the soy deforestation in the Cerrado occurred in Matopiba²¹.

Protection

The Cerrado biome is very poorly protected.

Just 14% of its area has been recognised by the Brazilian government as either a conservation unit (8%) or indigenous territory (6%)²². In contrast, 53% of the Amazon is legally protected²³ making the Cerrado the least protected biodiversity hotspot in the world²⁴.

Safeguards for the Cerrado's native vegetation under the Brazilian Forest Code are also much weaker than for the Amazon. A key component of the Forest Code requires landowners to maintain a proportion of their land as a Legal Reserve to protect native vegetation. The proportion of a private property which must be maintained as Legal Reserve in the Amazon biome stands at 80%, but ranges from 20% to 35% in the Cerrado²⁵.



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Over half of Brazil's soy production comes from the Cerrado

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