G20 BRASIL 2024
BUILDING A JUST WORLD AND A SUSTAINABLE PLANET

Creating Synergies between the 2030 Agenda for Sustainable Development and the G20

Environment Module

Management and conservation of nature

SUSTAINABLE DEVELOPMENT GOALS

IBGE

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Foreword

The publication **Creating Synergies between the 2030 Agenda for Sustainable Development and the G20**, published by the Brazilian Institute of Geography and Statistics (IBGE), introduces a collection of thematic modules that will be published in 2024, the year in which Brazil, for the first time, assumes the presidency of the Group of Twenty, the G20[1].

This volume, dedicated to the **Environment**, aims at presenting selected information for the countries that make up the G20, whenever such statistics are available in the United Nations Global SDG Indicators Database, in addition to other information, produced by internal sources that cover this theme in Brazil.

The indicators selected in the current issue highlight Brazil's position in relation to the other G20 member countries and reveal the regional differences within the National Territory, through disaggregation by Biomes. Together, these indicators provide valuable input on the environmental agenda, more specifically on the conservation and management of the environment, an important theme of the Sustainable Development Goals - SDGs.

This module presents the results available for some of the indicators of SDGs 6, 14 and 15, providing an integrated view of the environment and its interrelations with social and economic dynamics. As a result, the IBGE, in partnership with other national entities, reinforces the commitment to its institutional mission of providing the information required to the understanding of the Brazilian reality and the exercise of citizenship.

Marcio Pochmann
President of the IBGE

[1] The thematic modules that make up the collection will also be available on the IBGE website.

Introduction

Created in 1999, the G20 comprises 19 countries[2] from the five continents and two regional organizations – the European Union and the African Union. Constituted as a Forum for global economic cooperation, it has expanded its scope of action beyond the economic domain, which includes dealing with issues related to sustainable development, such as climate change, agriculture, health and energy, among others.

The 2030 Agenda for Sustainable Development was signed by UN Member States in September 2015. It is a Plan of Action focused on **people**, **planet** and **prosperity**, and that depends on **partnerships** and **peace** for its completion (the five Ps of the Agenda). A total of 17 Goals, 169 targets and 231 global indicators are assessed to monitor the advance of the Agenda.

In 2016 , the members of the G20 endorsed the 2030 Agenda and created the Development Working Group, which is its coordinating body. The environmental agenda, one of the major global challenges and an increasingly urgent issue, is present in the Working Groups of Sustainability and Climate Change and of Sustainable Agriculture, as well as in the Task Force for Global Mobilization against Climate Change.

In Brazil, the IBGE has worked to produce global indicators and monitor the 2030 Agenda in the country, in cooperation with other producers of official data, and by means of representatives in international groups that deal with this theme. One example is the Inter-Agency and Expert Group on Sustainable Development Goal Indicators - IAEG-SDGs, coordinated by the United Nations Statistics Division - UNSD, of which the IBGE has been co-president since 2023 and represents Brazil, Mercosur states parties and Chile.

The product resulting from this cooperative effort is the ODS Brasil Platform[3], which currently makes available a group of 132 indicators to follow up on the 2023 Agenda in Brazil. The indicators follow internationally established methodologies and patterns and are calculated with regularly produced official national data. In this context, the Brazilian Institute of Geography and Statistics launched, in April 2024, the series **Creating Synergies between the 2030 Agenda for Sustainable Development and the G20**, having the Inequalities[4] Module as its first product.

This document, Environment Module, is a sequence to the series and aims at presenting an environmental portrait in the G20, considering SDG 6 (Clean water and sanitation), 14 (Life below water) and 15 (Life on land). For each one of these indicators, data of G20 member countries are compared, with a special focus on the position of Brazil in relation to the other nations. Next, specific information on Brazil is presented separately. According to the characteristics of each indicator, they are described at national level only, or disaggregated by Biomes, whenever possible. Disaggregation reveals the regional differences within the National Territory, an important factor in a country of continental dimensions such as Brazil.

Therefore, our aim is to provide support material for discussions about the environmental agenda, more specifically on the management and conservation of the environment, within the scope of G20 working groups, as, upon the occurrence of the 19th G20 Summit Meeting, to be held in Rio de Janeiro in November 2024, we attempt to give more visibility to the thematic importance of the Sustainable Development Goals.

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[2] G20 member countries: South Africa, Germany, Saudi Arabia, Argentina, Australia, Brazil, Canada, China, South Korea, United States, France, India, Indonesia, Italy, Japan, Mexico, United Kingdom, Russia and Turkey.

[3] Available from: https://odsbrasil.gov.br.

[4] The first edition of the Inequalities Module was released in April 2024. Its second edition, released a while later, reproduces the previous content with complementary analyses for some indicators.

Finally, it is worth highlighting the G20 Initiative on Bioeconomy – IGB[5], approved by the Group under Brazil's coordination. It is based on three topics – science, technology and innovation, sustainable use of biodiversity, and the role of bioeconomy in promoting sustainable development – and it includes 10 High-Level Principles on Bioeconomy, which are voluntary, non-binding, and suggest how activities should be conducted as to eradicate hunger and poverty, to promote safe and responsible use of science, technology, innovation and traditional knowledge and to promote biodiversity conservation, among other aspects.

Bioeconomy depends on the sustainable use of biodiversity resources, thus helping to promote conservation and generating a virtuous cycle of actions. In this sense, the indicators of management and conservation of nature presented in the 2030 Agenda are of great importance for the debate. In the Environment Module, the indicators on forest management, protection of marine or terrestrial areas, adoption of international frameworks on fair and equitable sharing of benefits arising from genetic resources and associated traditional knowledge, as well as those on the extent of forest areas and of water-related ecosystems present important information, not only for the monitoring of the Sustainable Development Goals of the 2030 Agenda, but also for the debate on bioeconomy in the scope of the G20.

[5] According to the information made available by the Ministry of Foreign Relations and the Secretariat of Social Communication of the Presidency of the Republic of Brazil, "Bioeconomy is an economic system that uses renewable biological resources to produce goods, services, and energy sustainably and efficiently. It represents a shift from a traditional, linear economy, based on fossil fuels and finite raw materials." For more details on the topic, please visit https://www.g20.org/en/tracks/sherpa-track/bioeconomy-initiative.

An environmental portrait in the G20 by means of SDG indicators[6]

SDG 6 Ensure availability and sustainable management of water and sanitation for all

Universal access to drinking water and sanitation, integrated and participatory management to ensure quality and quantity of water, as well as protection and restoration of ecosystems providing this essential asset.

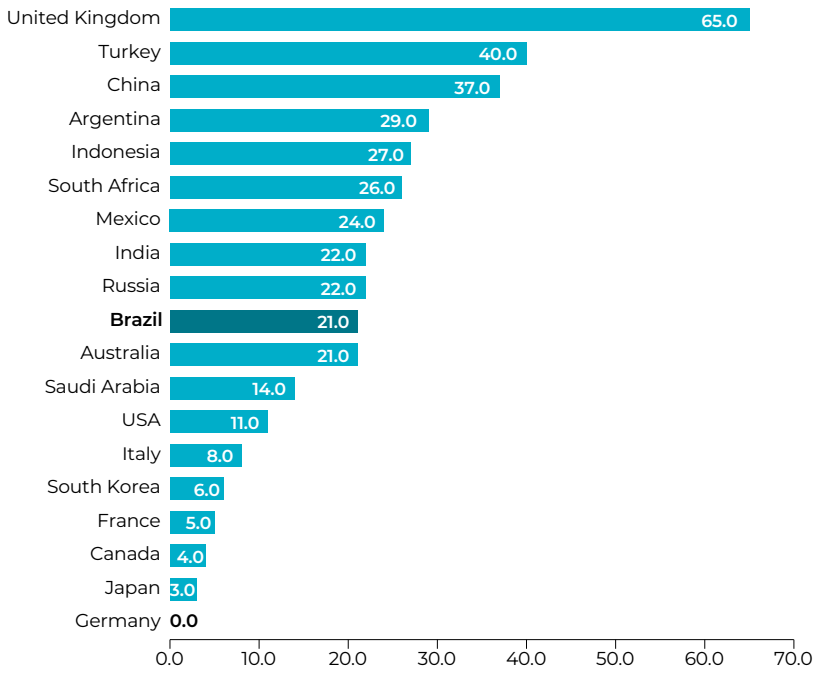
Target 6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes

Indicator 6.6.1 Change in the extent of water-related ecosystems over time

Indicator 6.6.1 tracks changes over time in water-related systems – swamps, peat bogs, mangroves, rivers, flood plains and estuaries, lakes and natural and artificial reservoirs and aquifers – considering subcomponents on spatial extent and quantity of water. This publication presents data on spatial extent.

Among the G20 member countries with available information in the Global SDG Indicators Database and on the specific platform for monitoring the indicator (Freshwater Ecosystem Explorer), United Kingdom, Turkey and China had, in 2020, the biggest proportions of river basins with major changes in the extent of surface waters, in relation to the average extent in the period of 2001-2005, whereas Germany, Japan and Canada had the smallest proportions of basins with major changes. Brazil reached 21%, being close to Australia, India and Russia.

Indicator 6.6.1
Percentage of river basins with major changes in the extent of surface waters in G20 member countries (%)
2020



Sources: 1. UNITED NATIONS. Country profiles. *In*: UNITED NATIONS. Statistics Division. *SDG Indicators Database*. New York, 2024. Available from: https://unstats.un.org/sdgs/dataportal/countryprofiles. Cited: Sept. 2024. 2. UNITED NATIONS ENVIRONMENT PROGRAMME. SDG 6.6.1. *In*: UNITED NATIONS ENVIRONMENT PROGRAMME. *Freshwater Ecosystem Explorer*. New York: UNEP, 2024. Available from: https://www.sdg661.app/. Cited: Sept. 2024.

[6] The icons that illustrate the descriptions of the indicators were taken from the SDG & COVID-19 Data Visualization Toolkit, made available by the United Nations Statistics Division (UNSD). For detailed information on the topic, please visit: https://unstats.un.org/capacity-development/UNSD-FCDO/sdgs-data-visualization-toolkit/

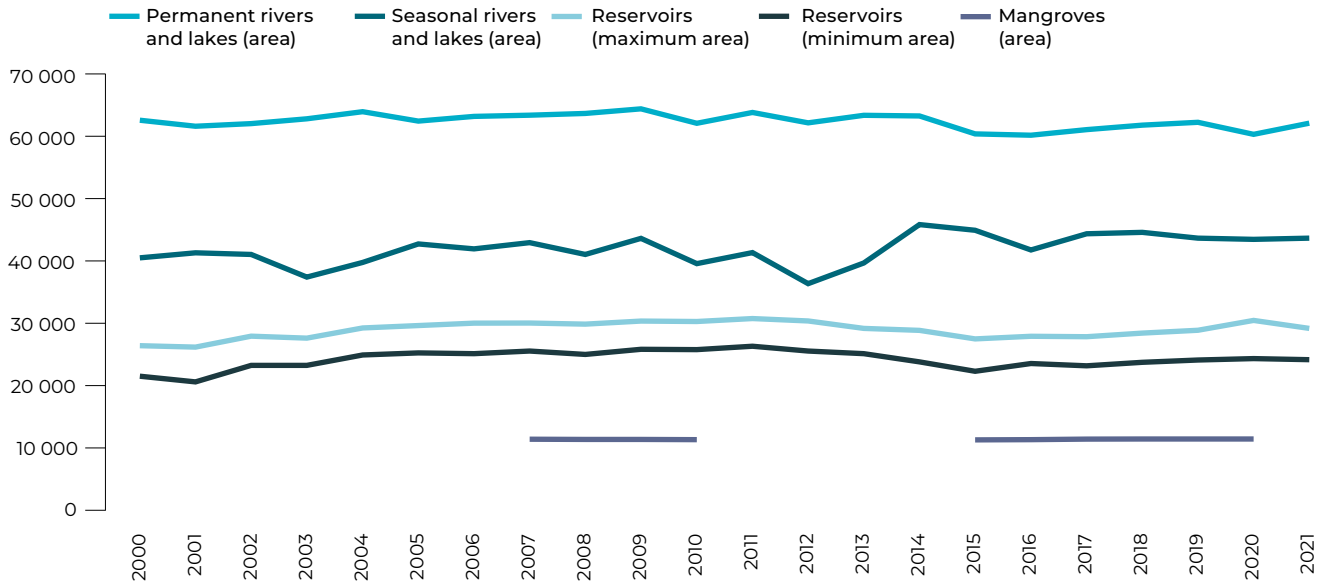
In Brazil, the dynamics of permanent surface water bodies showed a decrease of 1.15% (720 km²), in the period of 2017-2021 in relation to the average of the period of 2017-1019. Seasonal surface water bodies in the same periods analyzed recorded an increase of 5% (2 104 km²). Reservoirs recorded a drop of 1.65% in their minimum extent (404.5 km²). Mangroves had a total loss of 0.52% (59.8 km²). Wetlands in Brazil correspond to 213 880 km² (average area from 2016 to 2018).

The monitoring tool for Indicator 6.6.1 identifies the Prata River basin as a hotspot for new dams, as are the basins of Rivers Tigris and Euphrates, in addition to the Mekong River basin, which is the most prominent in the world. As an additional aggravating factor, the region of the Paraguay River, a tributary of the Paraná River, has been undergoing intense droughts in recent years, which are causing significant fires and reduced river flow. This region is home to the Pantanal Biome, one of the largest continuous wetlands on the planet, home to important springs and to a great diversity of fauna and flora species.

Indicator 6.6.1

Change in the extent of water-related ecosystems (km²)

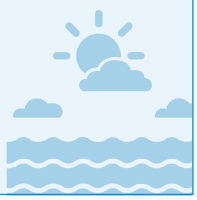
Brazil



Source: AGÊNCIA NACIONAL DE ÁGUAS E SANEAMENTO BÁSICO (Brasil). Alteração na extensão dos ecossistemas relacionados a água ao longo do tempo. *In*: IBGE. *Indicadores Brasileiros para os Objetivos de Desenvolvimento Sustentável*. Rio de Janeiro, 2024. Objetivo 6, indicador 6.6.1. Available from: https://odsbrasil.gov.br/objetivo6/indicador661. Cited: Sept. 2024.

SDG 14 Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Conservation and sustainable use of the oceans, thus mitigating the impacts of acidification, pollution and overfishing and ensuring the access to economic benefits by all, by means of management based on scientific knowledge and of the protection of coastal and marine zones.



Target 14.5 By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on best available scientific information

Indicator 14.5.1 Coverage of protected areas in relation to marine areas

According to Law No. 9,985, of July 18, 2000, which created the National System of Conservation Units - SNUC, Conservation Units (protected areas) comprise legally established land areas and their environmental resources, which include jurisdictional waters, with relevant natural features and having defined borders and conservation objectives, under a special administration regime to which protection guarantees apply, consistent with the federal law. Furthermore, in the marine area, Conservation Units contribute to the recovery of fishing stocks, increase of the fishing potential, climate regulation, recycling of nutrients and to the protection of the coast from accelerated erosion. Due to all these benefits, the establishment of marine protected areas is among sustainable development strategies.

The coverage of marine protected areas is one of the global indicators adopted for the attainment of SDG 14 targets. However, considering the management of Conservation Units in Brazil and the applicable law, Indicator 14.5.1 allows two approaches: one regarding the proportion of Key Biodiversity Areas (KBAs) covered by marine protected areas and the other regarding the proportion of total marine area in the Country covered by marine protected areas.

The metadata made available for this indicator within the United Nations[7] report the approach of KBAs, which contribute significantly to the global persistence of biodiversity. Such areas are identified according to global criteria defined by the International Union for Conservation of Nature - IUCN[8] and allow an approach of the indicator based on the representativeness of Conservation Units in each country in relation to globally defined KBAs.

In Brazil, the provision of information about Conservation Units for the entire country is one of the duties of the Ministry of the Environment and Climate Change, by means of the National Registry of Conservation Units-CNUC[9], the data from which are used for the calculation relative to the representativeness of marine protected areas, namely Conservation Units, in relation to the total marine area of Brazill, with this approach, therefore, being the national indicator[10] .

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[7] For detailed information on these metadata, please visit: https://unstats.un.org/sdgs/metadata/files/Metadata-14-05-01.pdf.

[8] For detailed information on the definition of Key Biodiversity Areas - KBAs, please visit: https://www.keybiodiversityareas.org/.

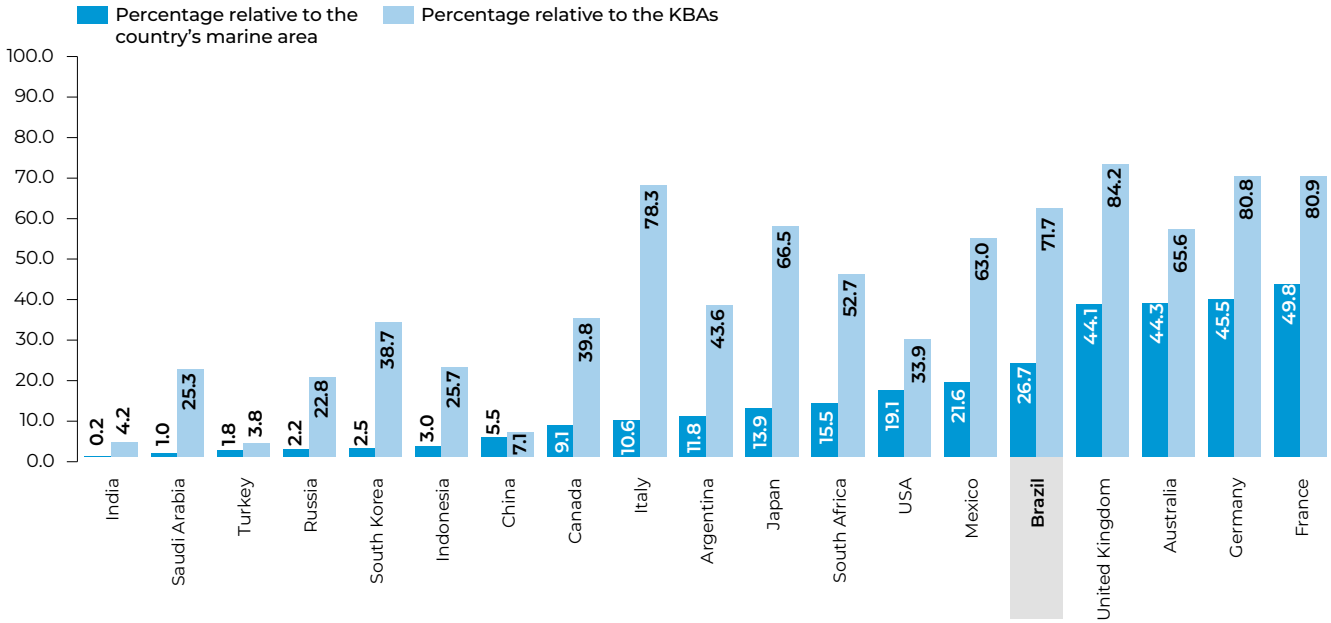
[9] For detailed information on CNUC, please visit: https://www.gov.br/mma/pt-br/assuntos/biodiversidade-e-biomas/areas-protegidas/plataforma-cnuc-1.

[10] The marine area of Brazil corresponds to the Territorial Sea plus the Exclusive Economic Zone - EEZ. The indicator representing protected areas, expressed as marine Conservation Units, relative to the Brazilian marine area, is one of the indicators for monitoring the SDG targets, available on the ODS Brasil Platform (https://odsbrasil.gov.br/). The methodology used to calculate the national indicator guarantees adherence and comparability with Indicator for other G20 member countries, available from the Protect Planet website: https://www.protectedplanet.net/en.

Indicator 14.5.1

Coverage of marine protected areas in G20 member countries in relation to the Key Biodiversity Areas - KBAs and the country's marine territory (%)

2023



Sources: 1. UNITED NATIONS. Country profiles. *In*: UNITED NATIONS. Statistics Division. *SDG Indicators Database*. New York, 2024. Available from: https://unstats.un.org/sdgs/dataportal/countryprofiles. Cited on: Sept. 2024. 2. WORLD DATABASE ON PROTECTED AREAS. Protected areas. *In*: UNITED NATIONS ENVIRONMENT PROGRAMME. World Conservation Monitoring Centre. *Protected Planet*. Cambridge [United Kingdom]: UNEP-WCMC, 2024. Available from: https://www.protectedplanet.net/en/thematic-areas/wdpa. Cited: Sept. 2024.

Note: The national indicator for Brazil regarding the percentage of marine protected areas in relation to the marine area is 26.3%, according to the National Registry of Conservation Units, of the Ministry of the Environment and Climate Change (https://cnuc.mma.gov.br/) and the ODS Brasil Platform (https://odsbrasil.gov.br/objetivo14/indicador1451).

In 2023, considering the representativeness of protected areas in relation to the KBAs, high figures are observed for the indicator of all G20 member countries. The highest results are observed for the United Kingdom (84.2%), France (80.9%) and Germany (80.8%), respectively. Brazil is in the fifth position among the G20 member countries (71.7%) and the leader among BRICS[11] member states and the countries in the Latin American and Caribbean Region - LAC[12] . Additionally, as far as protection is concerned, given the global distribution of species of fish, sea mammals and sea birds, Brazil is ahead of countries with marine areas considered biodiversity hotspots[13], for example, Japan (66.5%), Australia (65.6%), South Africa (52.7%), Argentina (43.6%), South Korea (38.7%) and Indonesia (25.7%).

From the perspective of representativeness of protected areas in relation to total marine areas of countries (similar to the approach for the calculation of the national indicator), the percentage of marine protected areas by Conservation Unit in relation to the marine area places Brazil in the fifth position among G20 member countries, with 26.7%, and as number one among BRICS and LAC countries. Considering this approach for indicator 14.5.1, France leads the group, with approximately 50% of its marine areas protected, followed by Germany (45.5%) and Australia (44.3%).

In Brazil, the national indicator is obtained from official data of protected areas made available by CNUC, as previously mentioned. The CNUC presents time series about Conservation Units, with information about their creation, area and location. Considering the time series, Brazil reached Target 14.5 in 2018, with the landmark of two Conservation Units created by Decree No. 9,313, of March 19, 2018 – the Environmental Protected Area of the Trindade and Martim Vaz Archipelago, and the Natural Monument of the São

[11] BRICS is not a formal economic group, but a partnership of the five biggest emerging economies in the world: Brazil, Russia, India, China and South Africa. For more information on the topic, please visit: https://www.gov.br/planalto/pt-br/agenda-internacional/missoes-internacionais/reuniao-do-brics-2023/historia-do-brics.

[12] For detailed information on countries in Latin America and the Caribbean, please visit: https://www.cepal.org/pt-br/sobre/estados-membros.

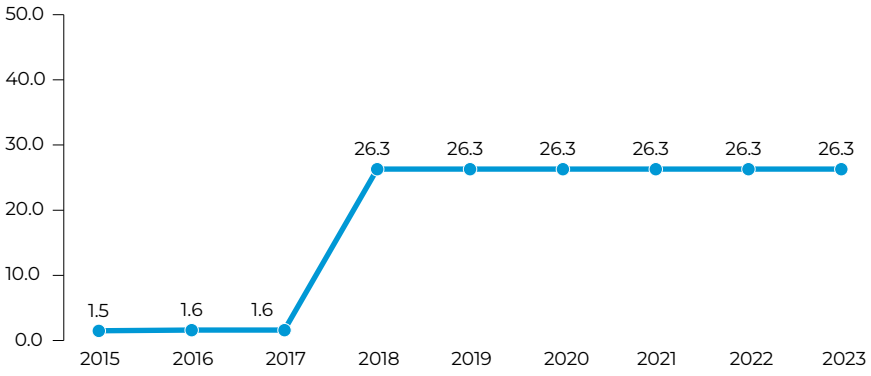
[13] For detailed information on the topic, see: RAMÍREZ, F. et al. Climate impacts on global hot spots of marine biodiversity. Science Advances, Washington, DC: American Association for the Advancement of Science - AAAS, v. 3, e1601198, p. 1-7, 22 Feb. 2017. Available from: https://www.science.org/doi/pdf/10.1126/sciadv.1601198. Cited: Sept. 2024.

Pedro and São Paulo Archipelago, which turned part of the São Pedro and São Paulo Archipelago, in Pernambuco, and the Trindade and Martim Vaz Archipelago, in Espírito Santo, into the two biggest groups of marine Conservation Units in Brazil, as shown in Appendix 2. Since the year 2018 and up to 2023, the last year reported, Brazil managed to keep 26.3% of its marine area covered by protected areas.

The SNUC and its specific provisions and its specific devices classify Conservation Units into groups and categories, as provided for in Law No. 9,985 of July 18, 2000[14]. Marine Full Protection Conservation Units take up an area of approximately 121 thousand km², or 12.6% of the total marine protected areas, distributed into 89 Conservation Units in federal, state and municipal administrative spheres. From this group of Conservation Units, the category Parks and is the most representative in numerical terms, with 51 Conservation Units. In terms of area, the most representative category is that of Natural Monuments, taking up approximately 115 thousand km² (94.8% of the Full Protection Conservation Units).

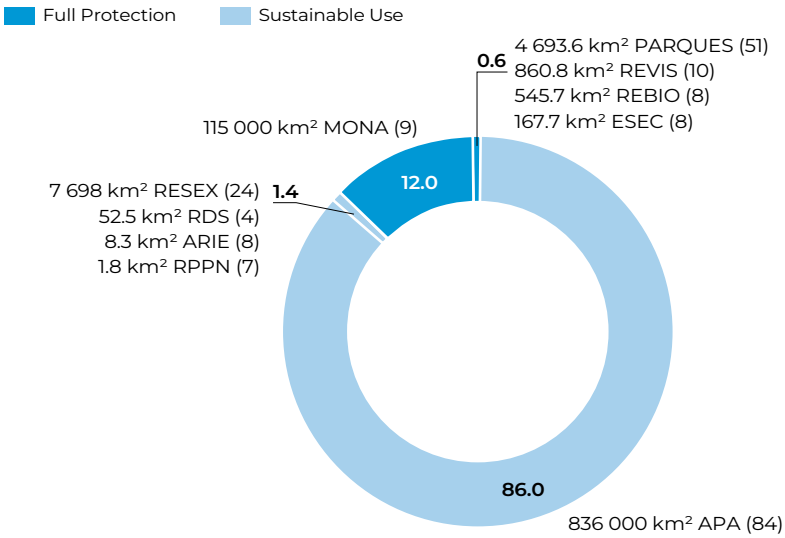
Most of the Marine Conservation Units are classified as Sustainable Use Units, with an area of approximately 844 thousand km², or 87.4% of the total marine protected areas, distributed into 127 Conservation Units. From this group of Conservation Units, the category Environmental Protection Area is the most representative both in numerical terms, with 84 Sustainable Use Units, and in terms of area, having approximately 836 thousand km² (99.1% of the group of Conservation Units for Sustainable Use, that is, almost the total of this group).

Indicator 14.5.1
Coverage of marine protected areas in relation to the marine area (%)
Brazil



Source: BRASIL. Ministério do Meio Ambiente e Mudança do Clima. Cobertura de áreas marinhas protegidas em relação às áreas marinhas. *In*: IBGE. *Indicadores Brasileiros para os Objetivos de Desenvolvimento Sustentável*. Rio de Janeiro, 2024. Objetivo 14, indicador 14.5.1. Available from: https://odsbrasil.gov.br/objetivo14/indicador1451. Cited: Sept. 2024.

Indicator 14.5.1
Distribution of the area of marine Conservation Units, by groups and categories (%)
Brazil
2023



Source: BRASIL. Ministério do Meio Ambiente e Mudança do Clima. Cadastro Nacional de Unidades de Conservação - CNUC.
Notes: 1. The following are considered Full Protection Units: Ecological Station - ESEC, Biological Reserve - REBIO, Park (national, state and municipal) - PARQUES, Natural Monument - MONA, and Wildlife Refuge - REVIS. The following are considered Sustainable Use Units: Extractive Reserve - RESEX, Sustainable Development Reserve - RDS, Area of Relevant Ecological Interest - ARIE, Private Natural Heritage Reserve - RPPN, and Environmental Protection Area - APA.
2. The number of Conservation Units in each category is presented in parentheses.

[14] For detailed information on these categorizations, please see Articles 7, 8 and 14 of the aforementioned law, available from: https://www.planalto.gov.br/ccivil_03/leis/l9985.htm.

SDG 15 Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Conservation, recovery and sustainable use of terrestrial ecosystems and of inland waters, combating degradation, biodiversity loss, illegal trafficking and reducing the impact of invading exotic species by protecting ecosystems and strengthening the management and integration of their assets to the planning process.

Target 15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements

Indicator 15.1.2 Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type

Indicator C15.1.c Coverage of terrestrial protected areas in relation to the total terrestrial area

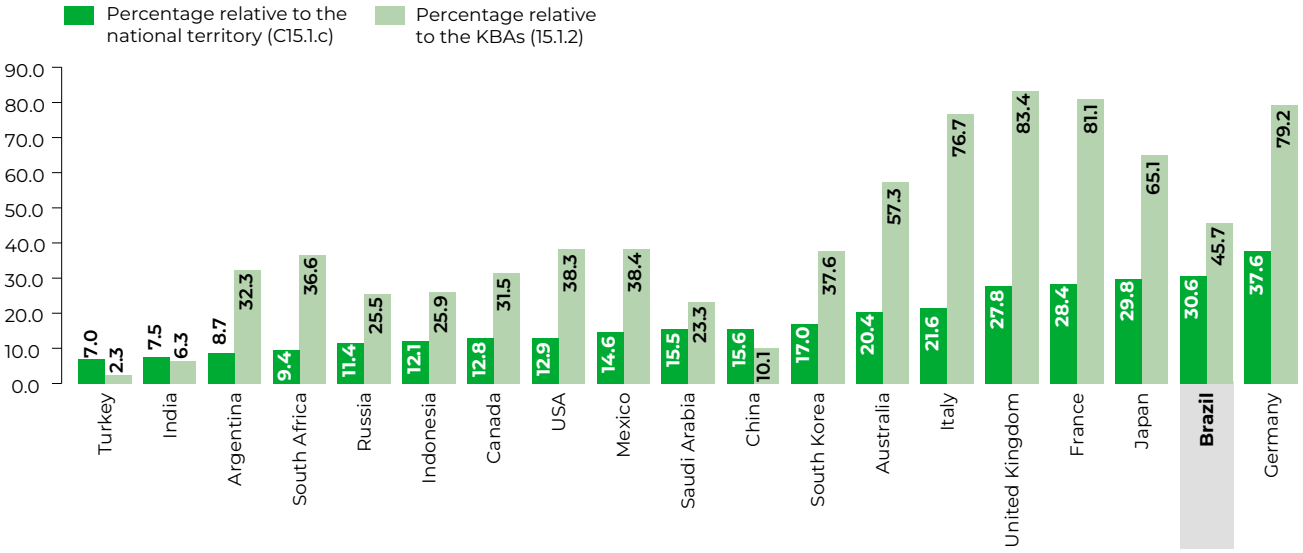
Indicator 15.1.2 measures the advance in the percentage of important sites for terrestrial and freshwater biodiversity, as defined by the Key Biodiversity Areas - KBAs, covered by protected areas, as shown in Appendix 2, by ecosystem type. Establishing protected areas is one of the major global strategies for the conservation and sustainable use of biodiversity.

Data on the terrestrial proportion of land covered by protected areas are also presented, as a complementary indicator, C15.1.c, recommended by the Statistics Division of the Economic Commission for Latin America and the Caribbean División de Estadísticas de la Comisión Económica para América Latina y el Caribe - CEPAL/ECLACSTAT, which makes it possible to determine the total representativeness of the terrestrial protected areas.

Considering the global data for the comparison among countries[15], in 2023, the percentage of the terrestrial protected areas in relation to their own territory places Brazil (30.6%) as second among the G20 member countries, only behind Germany, with nearly 37%. Among the megadiverse countries, that is, those that together concentrate between 60% and 80% of the known species in the world, in the G20, Brazil has the highest proportion of protected areas in relation to its territory, standing before Australia, China, Mexico, USA, Indonesia and India.

[15] Data available on the global SDG indicators database of the UN Statistics Division, available from: https://unstats.un.org/sdgs/dataportal.

Indicators 15.1.2 and C15.1.c
Coverage of terrestrial protected areas in G20 member countries in relation to the KBAs and to the country's territory (%)
2023



Sources: 1. UNITED NATIONS. Country profiles. *In*: UNITED NATIONS. Statistics Division. *SDG Indicators Database*. New York, 2024. Available from: https://unstats.un.org/sdgs/dataportal/countryprofiles. Cited: Sept. 2024. 2. WORLD DATABASE ON PROTECTED AREAS. Protected areas. *In*: UNITED NATIONS ENVIRONMENT PROGRAMME. World Conservation Monitoring Centre. *Protected Planet*. Cambridge [United Kingdom]: UNEP-WCMC, 2024. Available from: https://www.protectedplanet.net/en/thematic-areas/wdpa. Cited: Sept. 2024.

Considering the KBAs, there are higher values for most of the countries, with the United Kingdom (83.4%), France (81.1%) and Germany (79.2%) being the top three countries. In this indicator, the Brazilian value of 45.7% corresponds to the seventh position in the general classification and the second one among the megadiverse countries, behind Australia (57.3%).

For the calculation of the Indicators 15.1.2 and C15.1.c, the areas considered as protected were those belonging to the National System of Conservation Units - SNUC, which results in values other than those contained in the global database used for the comparisons previously presented. On the other hand, the national data have a disaggregation of terrestrial Biomes of Brazil – Amazônia (Amazon), Caatinga, Cerrado, Mata Atlântica (Atlantic Forest), Pampa and Pantanal –, representing a proxy for the types of ecosystems, which present different distribution patterns among them, and favoring a more detailed comparative analysis.

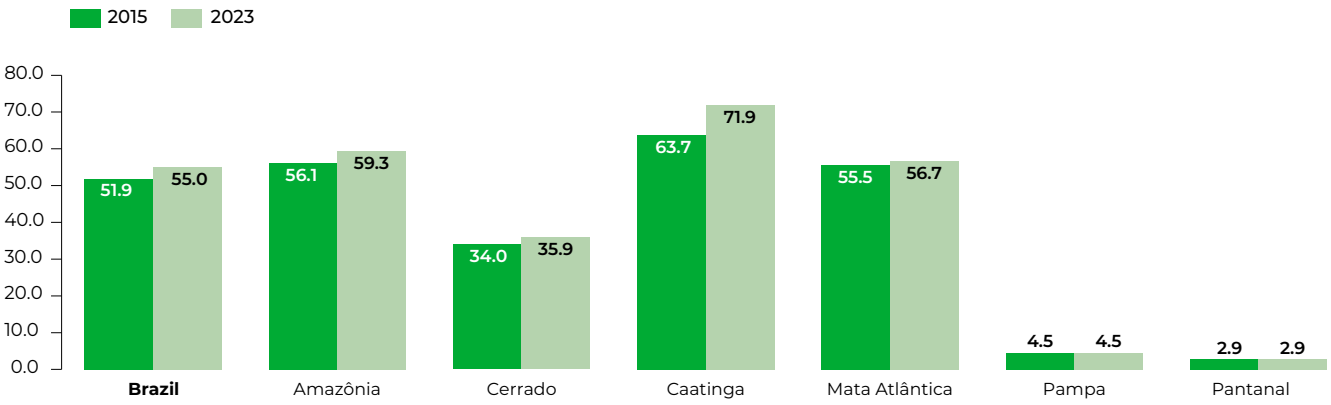
Being disaggregated by Biomes, the results of Indicator 15.1.2 are presented in proportional terms, more specifically the proportion between national data (Conservation Units) and an international parameter (the KBAs). This way, when there are few KBAs indicated for a certain Biome, even a reduced number of Conservation Units can result in a high proportion of protected areas, as it happens in the Caatinga Biome.

The time series of Indicator 15.1.2 goes from 2015 to 2023, and the data presented herein refer to the first and last years. The Caatinga Biome stands out as the one with the highest proportion of protected areas throughout the time series, going from 63.7%, in 2015, to 71.9%, in 2023. In that same period, the proportion of protected areas remained the same for the Pampa and the Pantanal Biomes. Analyzing the area in km² of the Conservation Units that have intersection with the KBAs, the Amazônia, Cerrado and Mata Atlântica have the largest areas in absolute terms, throughout the whole series.

Indicator 15.1.2

Proportion of important sites for terrestrial and freshwater biodiversity covered by protected areas (%)

Brazil and terrestrial Biomes

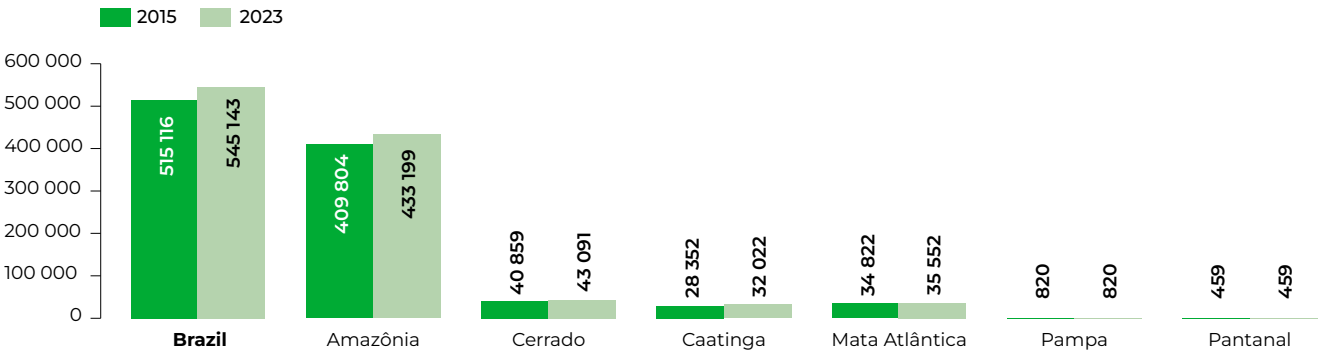


Source: BRASIL. Ministério do Meio Ambiente e Mudança do Clima. Proporção de sítios importantes para a biodiversidade terrestre e de água doce cobertos por áreas protegidas, por tipo de ecossistema. *In*: IBGE. *Indicadores Brasileiros para os Objetivos de Desenvolvimento Sustentável*. Rio de Janeiro, 2024. Objetivo 15, indicador 15.1.2. Available from: from: https://odsbrasil.gov.br/objetivo15/indicador1512. Cited: Sept. 2024.

Indicator 15.1.2

Total area of important sites for terrestrial and freshwater biodiversity covered by protected areas (km²)

Brazil and terrestrial Biomes



Source: BRASIL. Ministério do Meio Ambiente e Mudança do Clima; KBA PARTNERSHIP. Proporção de sítios importantes para a biodiversidade terrestre e de água doce cobertos por áreas protegidas, por tipo de Bioma. *In*: IBGE. *Sidra*: sistema IBGE de recuperação automática. Rio de Janeiro, [2023]. tab. 4962. Available from: https://sidra.ibge.gov.br/tabela/4962. Cited: Sept. 2024.

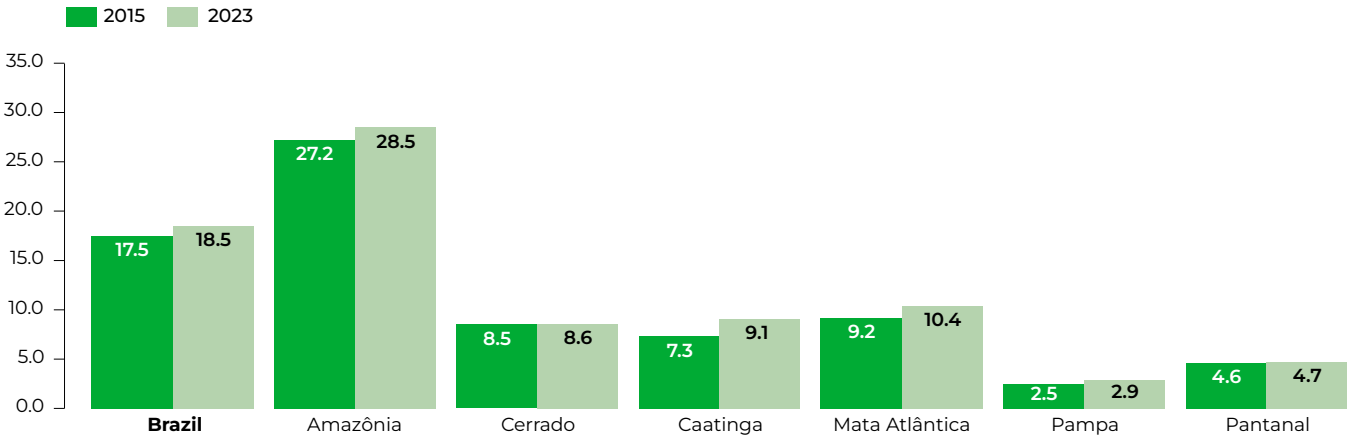
Considering the coverage of Conservation Units in relation to the total terrestrial territory (Indicator C15.1.c), the Amazônia Biome has the highest proportion of terrestrial protected areas throughout the whole period, followed by the Mata Atlântica and the other Biomes. The percentage of terrestrial protected areas has kept relatively stable for most of Biomes. In the Amazônia, there was a change from 27.2% in 2015 to 28.5% in 2023. In the Mata Atlântica, the proportion changed from 9.2% in 2015 to 10.4 in 2023. The Cerrado oscillated between 8.5% and 8.6%, whereas the Pantanal varied between 4.6 and 4.7%. In the Pampa, the terrestrial protected areas represented 2.5% of the total in 2015, reaching 2.9% in 2023. The Caatinga presented the highest rise in this proportion, going from 7.3% in 2015 to 9.1% in 2023, surpassing the Cerrado's index.

In Brazil as a whole, the proportion of terrestrial protected areas ranged between 17.5% in 2015 and 18.5% in 2023. It is worth highlighting that, besides the Conservation Units addressed by the indicator, other types of protected areas also bring important contributions to conservation in Brazil. Such data can be considered in the future by national indicators with more detailed characteristics of the protected areas.

Indicator C15.1.c

Coverage of terrestrial protected areas in relation to the total terrestrial area (%)

Brazil and terrestrial Biomes

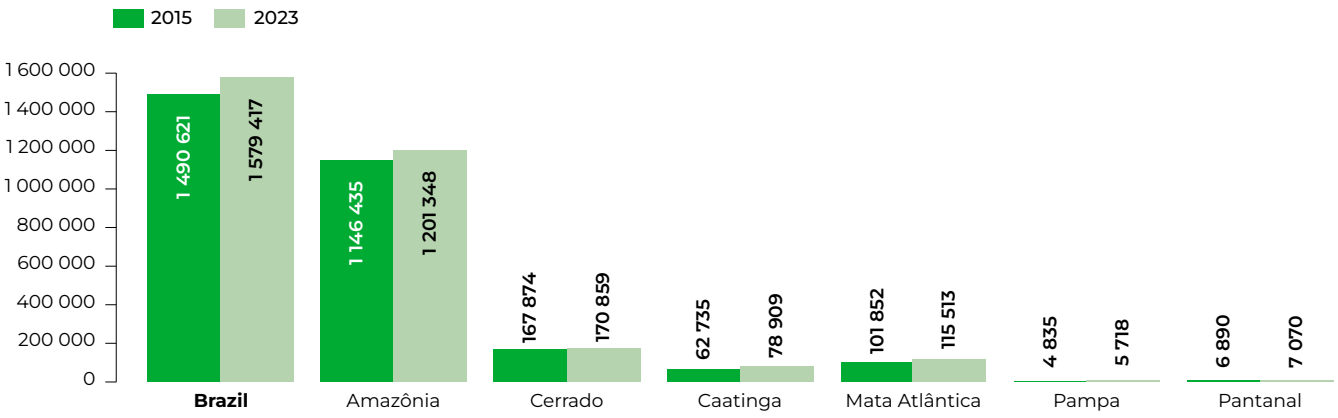


Source: BRASIL. Ministério do Meio Ambiente e Mudança do Clima. Cobertura das áreas terrestres protegidas em relação à área terrestre total. *In*: IBGE. *Indicadores Brasileiros para os Objetivos de Desenvolvimento Sustentável*. Rio de Janeiro, 2024. Objetivo 15, indicador C15.1.c. Available from: https://odsbrasil.gov.br/objetivo15/indicadorC151c. Cited: Sept. 2024.

Indicator C15.1.c

Total area of protected areas (km²)

Brazil and terrestrial Biomes



Source: IBGE. Proporção de áreas protegidas terrestres. *In*: IBGE. *Sidra*: sistema IBGE de recuperação automática. Rio de Janeiro, [2023]. tab. 6746. Available from: https://sidra.ibge.gov.br/tabela/6746. Cited: Sept. 2024.

Indicator 15.1.1 Forest area as a proportion of total land area

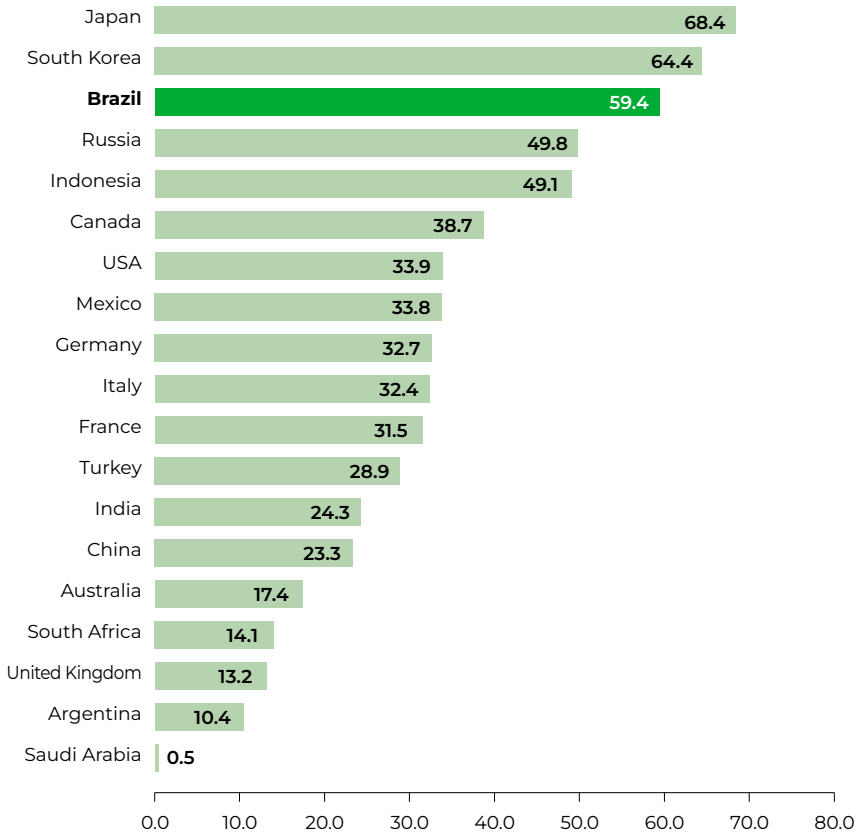
Indicator 15.1.1 presents the percentage of the areas covered by forests, according to the definition of Forests by the Food and Agriculture Organization of the United Nations - FAO[16]) over the total area of the country's territory, excluding the area of inland waters. The land area in 2015 is adopted as reference, so that fluctuations can be avoided in the indicator in case of sudden changes in the country's land area.

In 2020, Brazil was the third country, among the G20 member countries, with the greatest percentage of forest area (59.4%), only behind South Korea (64.4%) and Japan (68.4%). Of note is the fact that all the six Brazilian terrestrial biomes present forest formations, with predominance in the Amazônia and in the Mata Atlântica.

Indicator 15.1.1

Forest area as a proportion of total land area in G20 member countries (%)

2020

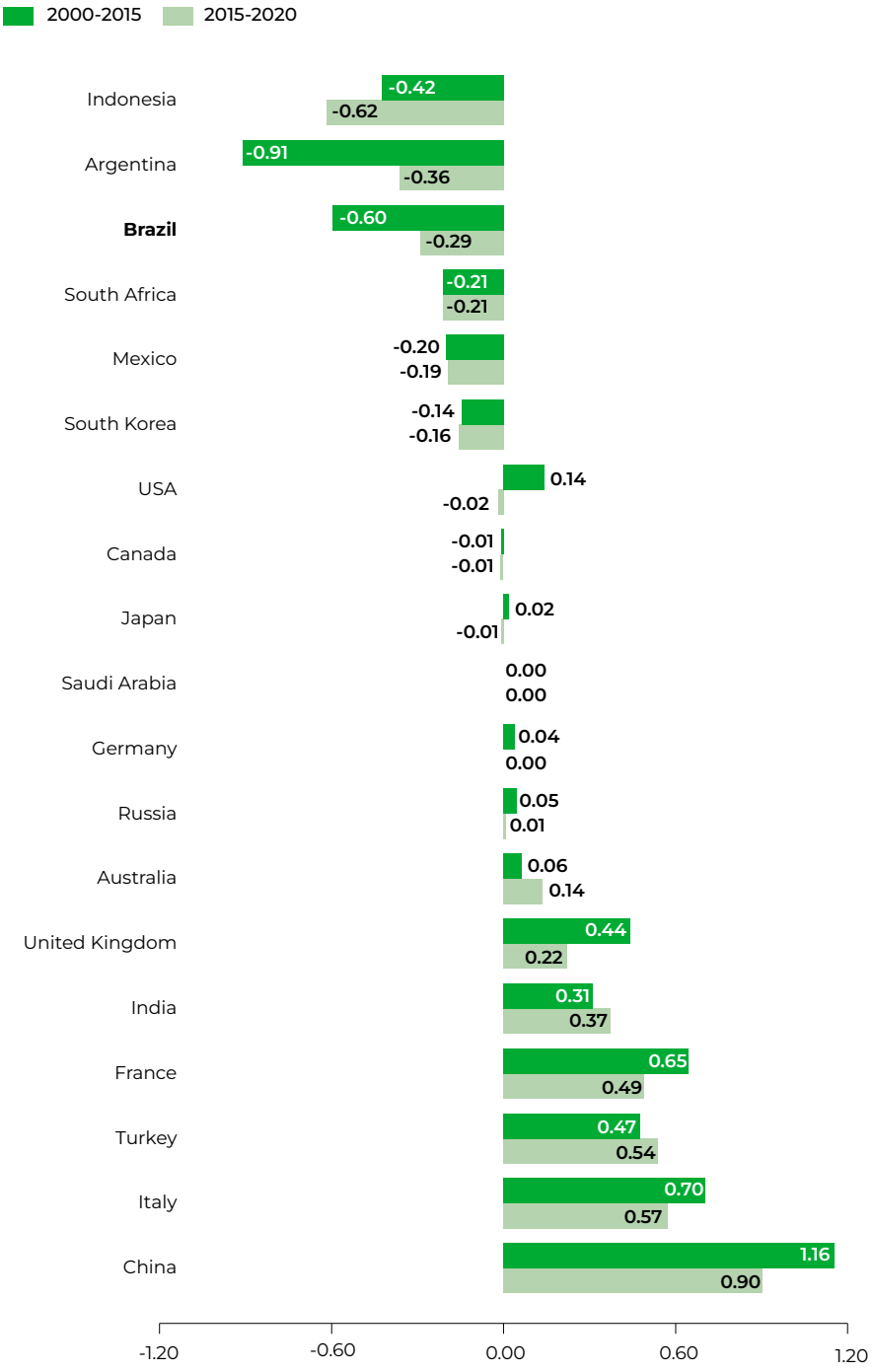


Source: UNITED NATIONS. Country profiles. *In*: UNITED NATIONS. Statistics Division. *SDG Indicators Database*. New York, 2024. Available from: https://unstats.un.org/sdgs/dataportal/countryprofiles. Cited: Sept. 2024.

[16] According to FAO, forests are defined as areas that measure more than 0.5 hectares, with trees taller than 5 meters and crown coverage above 10%, or trees that can reach these parameters in *situ*. That does not include land that are predominantly under agricultural or urban use. The definition encompasses natural and planted forests, for production, conservation or multiple uses. In Brazil, the following Phyto physiognomies are classified as forests: Dense Ombrophilous Forest; Open Ombrophilous Forest; Mixed Ombrophilous Forest; Semideciduous Seasonal Forest; Deciduous Seasonal Forest; Evergreen Seasonal Forest; Campinarana (forested and wooded); Savanna (forested and wooded); Steppe-like Savanna (forested and wooded); Steppe (wooded); Vegetation with Marine, Fluvial, Fluvial-marine and/or Lacustrine Influence (wooded) – Sandbank vegetation, Mangrove, Palm Grove; Remnant Vegetation in contacts in which at least one item is a forest; Secondary Vegetation in forest areas; and Reforestation.

Forests play a fundamental role in the maintenance of biodiversity, as well as native grassland and savannah formations, also found in all Major Regions of the Country. The percentage of the territory covered originally by forests varies among G20 member countries. In Saudi Arabia and Argentina, for instance, which present lower percentages, the greatest part of the territory is naturally deprived of vegetation formations of the forest type. For this reason, another important interpretation of this information derives from the analysis of the annual forest area change rate[17]. In this analysis, Brazil appears among the countries that lost most forest areas in the periods of 2000 to 2015 and 2015 to 2020, standing in the second and third places, respectively. There is a deceleration in that rate, which went from an annual average of 0.60% in 2000 to 2015 to nearly 0.29% per year between 2015 and 2020. In this last period, China and Italy presented the biggest increases in their forest areas, with 0.90% and 0.57%, whereas Indonesia and Argentina were the countries with the biggest decrease, with -0.62% and -0.36%, respectively.

Indicator 15.1.1
Annual forest area change rate in G20 member countries (%)



Source: UNITED NATIONS. Country profiles. *In*: UNITED NATIONS. Statistics Division. *SDG Indicators Database*. New York, 2024. Available from: https://unstats.un.org/sdgs/dataportal/countryprofiles. Cited: Sept. 2024.

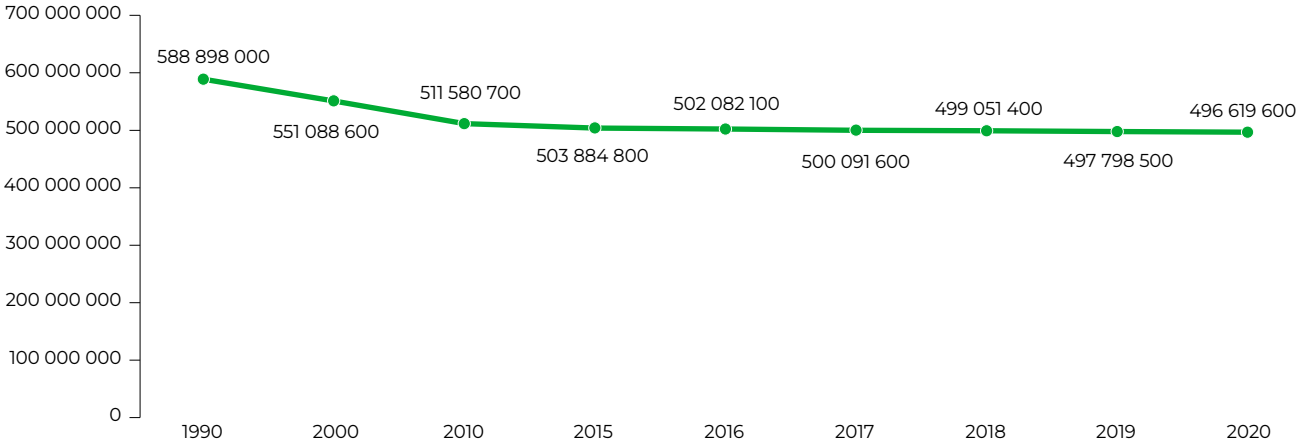
[17] Rate calculated using annual data available on the UNSD platform, and the formula described for the Sub-indicator "Annual forest area change rate" presented in the metadata of Indicator 15.2.1, available from: https://unstats.un.org/sdgs/metadata/files/Metadata-15-02-01.pdf.

The time series of the data described for Brazil comprises observations in the years of 1990, 2000, 2010 and from 2015 to 2020. The information for 2018, 2019 and 2020 are estimates projected as of 2017, the last year with geospatial data available.

One can see in the results that, between 1990 and 2020, there was a significant reduction of the Brazilian forests in relation to their territory, going from 588 898 000 to 496 619 600 hectares, i. e., a loss of 92 278 400 hectares in a 30-year period. In proportional terms, in 1990, forest formations occupied 70.5% of the national territory, versus 59.4% in 2020.

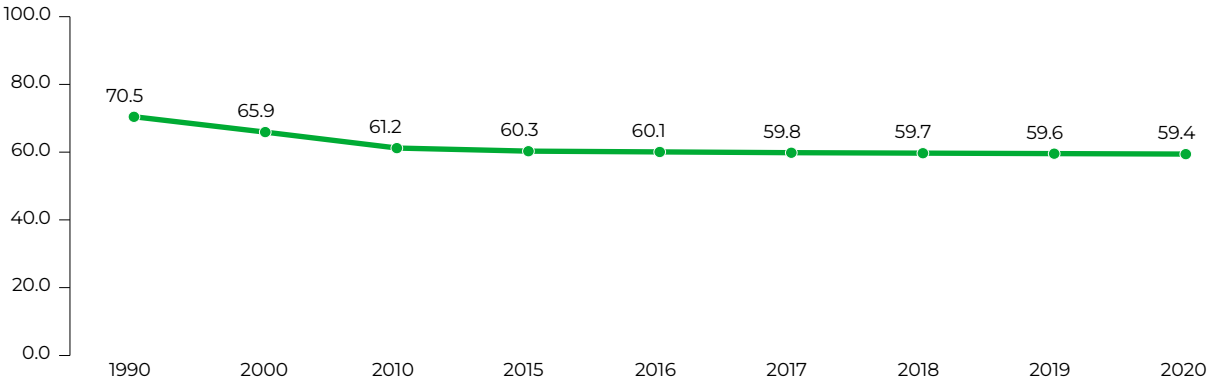
The pace of reduction of the forest areas in relation to Brazil, however, was not uniform, with a greater loss in the periods of 1990 to 2000 and 2000 to 2010. From 2010 to 2020, the proportion remained relatively stable, going from 61.2% to 59.4%.

Indicator 15.1.1
Total forest area (ha)
Brazil



Source: SERVIÇO FLORESTAL BRASILEIRO. Área florestal total. *In*: IBGE. *Indicadores Brasileiros para os Objetivos de Desenvolvimento Sustentável*. Rio de Janeiro, 2024. Objetivo 15, indicador 15.1.1. Available from: https://odsbrasil.gov.br/objetivo15/indicador1511. Cited: Sept. 2024.

Indicator 15.1.1
Forest area as a proportion of the total land area (%)
Brazil



Source: SERVIÇO FLORESTAL BRASILEIRO. Área florestal como proporção da área total do território. *In*: IBGE. *Indicadores Brasileiros para os Objetivos de Desenvolvimento Sustentável*. Rio de Janeiro, 2024. Objetivo 15, indicador 15.1.1. Available from: https://odsbrasil.gov.br/objetivo15/indicador1511. Cited: Sept. 2024.

Target 15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally

Indicator 15.2.1 Progress towards sustainable forest management

Indicator 15.2.1 shows the progress of sustainable forest management. The expression "Sustainable Forest Management" (SFM) was formally defined by the United Nations General Assembly as a dynamic and evolving concept aiming at maintaining and improving environmental, social and economic values of all types of forests for the benefit of current and future generations. The indicator is composed of Sub-indicators that measure progress in multiple dimensions of sustainable forest management. Data on these indicators are collected in countries based on FAO's assessment program, Global Forest Resources Assessment (FRA), following FAO's definition of forests.

The values of each one of the five sub-indicators are classified according to a dashboard of traffic lights: green indicates improvement, yellow, stability and red, degradation compared to a reference period. In the case of the Sub-indicator "Annual forest area change rate", some negative values (indicating a reduction in the forest area) are also classified as "yellow", as long as they are less intense than those in the previous period.

Indicator 15.2.1
Assessment of SDG sub-indicators 15.2.1 in G20 member countries 2020

SDG Sub-Indicators 15.2.1 in G20 member countries	Argentina	Australia	**Brazil**	Canada	China	France	Germany	India	Indonesia	Italy	Japan	Mexico	Russia	Saudi Arabia	South Africa	South Korea	Turkey	United Kingdom	USA
1 - Annual forest area change rate	🟡	🟢	🟡	🟡	🟢	🟢	🟢	🟢	🔴	🟢	🔴	🟡	🟢	🟢	🟡	🔴	🟢	🟢	🟢
2 - Above-ground biomass in forest	🟢	🔴	🟢	🟡	🟢	🟢	🟢	🟢	🟡	🟢	🟢	🟡	🟢	🟡	🟡	🟢	🟢	🟢	🟢
3 - Proportion of forest areas within legally established protected areas	🟢	🟢	🟢	🟢	🟢	🟢	🟡	🟡	🔴	🟡	–	–	🟢	🟡	🟡	🟢	🟢	🟡	🟢
4 - Proportion of forest areas with a long-term management plan	–	🟢	🟢	🟢	🟢	🟢	🟡	🟡	🟢	–	🟡	–	🟡	–	–	🔴	🟢	🟢	🟡
5 - Forest area under an independently verified forest management certification scheme	🟢	🟢	🟢	🔴	🔴	🟢	🟢	🔴	🟢	🟢	🟢	🟢	🔴	–	🟢	🟢	🟢	🟢	🟢

🟢 Indicates improvement of the sub-indicator against the reference period.
🟡 Indicates stability of the sub-indicator against the reference period.
🔴 Indicates degradation of the sub-indicator against the reference period.
– Information not available or not sufficient.

Source: UNITED NATIONS. Country profiles. *In*: UNITED NATIONS. Statistics Division. *SDG Indicators Database*. New York, 2024. Available from: https://unstats.un.org/sdgs/dataportal/countryprofiles. Cited: Sept. 2024.

Today, Brazil does not show indicators classified in red (degradation compared to the reference period), being four of them considered green (improvement) and one yellow (stability). In the analysis of the other G20 member countries, only Turkey and France show all indicators in the green category, whereas the United Kingdom and the United States have four green lights and a yellow one, like Brazil. The Brazilian indicator with the worst performance is the forest area change rate, which while still registering a loss, has decelerated in the last five-year period. The colors of Sub-indicators 3 and 5 stand out in this dashboard, in which many G20 member countries have shown less progress or lack of information.

The Sub-indicator "Proportion of forest area within legally established protected areas" translates the environmental value of forests through protection and maintenance of the biological diversity and associated cultural and natural resources. The calculation is made from the ratio between the forest area within legally established protected areas in 2015, the reference year for this sub-indicator, and the total forest area multiplied by 100.

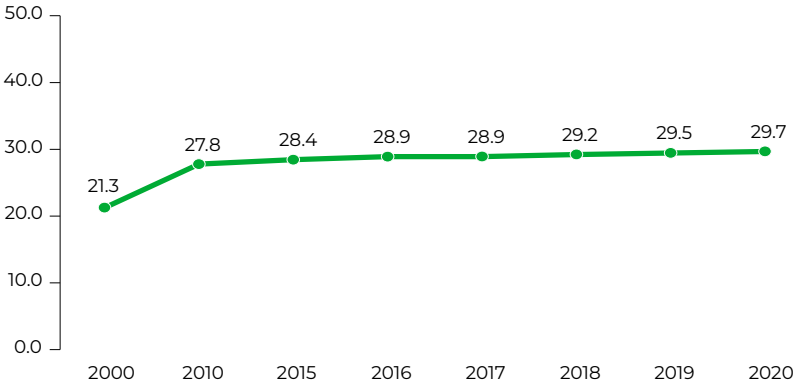
The Sub-indicator "Forest area under an independently verified forest management certification scheme" provides additional qualification to the management of forest areas, assessing areas that are independently verified concerning compliance under a full set of either national or international standards. Data are directly collected from the databases of each certification scheme[18] and delivered to the countries for validation.

The Sub-indicator "Proportion of forest area within legally established protected areas" continuously grew in Brazil between the years of 2000 and 2020, changing from 21.3% to 29.7% The Sub-indicator "Forest area certified by an independently verified forest management certification scheme" advanced between 2000 and 2017 (638.42 to 7 305.84 thousand hectares, respectively), though it retreated in 2018 (6 905.47 thousand hectares), last year with available data.

Indicator 15.2.1

Proportion of forest area within legally established protected areas (%)

Brazil

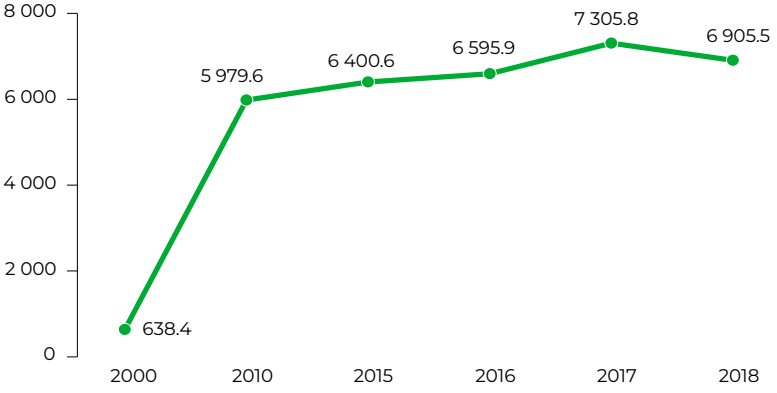


Source: SERVIÇO FLORESTAL BRASILEIRO. Proporção de área florestal dentro de áreas protegidas legalmente estabelecidas. *In*: IBGE. *Indicadores Brasileiros para os Objetivos de Desenvolvimento Sustentável*. Rio de Janeiro, 2024. Objetivo 15, indicador 15.2.1. Available from: https://odsbrasil.gov.br/objetivo15/indicador1521. Cited: Sept. 2024.

Indicator 15.2.1

Forest area under an independently verified forest management certification scheme (1 000 ha)

Brazil



Source: SERVIÇO FLORESTAL BRASILEIRO. Área florestal sob um esquema de certificação de manejo florestal verificado de forma independente. *In*: IBGE. *Indicadores Brasileiros para os Objetivos de Desenvolvimento Sustentável*. Rio de Janeiro, 2024. Objetivo 15, indicador 15.2.1. Available from: https://odsbrasil.gov.br/objetivo15/indicador1521. Cited: Sept. 2024.

[18] The most disseminated certification systems in the entire world are the FSC (Forest Stewardship Council) and the PEFC (Program for the Endorsement of Forest Certification). In Brazil, the first actions took place in 1994 and the first area certified by the FSC was in 1995. Besides the FSC certification, CERFLOR (Brazilian Forest Certification Program), internationally recognized by PEFC, has been available since 2002. For more information, please consult the National Forest Information System - SNIF, on the Brazilian Forest Service portal - SFB, at the address: https://snif.florestal.gov.br/pt-br/certificacao-florestal#:~:text=As%20principais%20certificadoras%20que%20atuam,Skal%20International%20(FSC%20e%20CERFLOR).

Target 15.6 Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed

Indicator 15.6.1 Number of countries that have adopted legislative, administrative and policy frameworks to ensure fair and equitable sharing of benefits

Indicator 15.6.1 aims at listing the countries that have adopted political, administrative and legislative frameworks to ensure a fair and equitable sharing of benefits derived from the use of biodiversity. Benefit-sharing is the division of benefits from the economic exploitation of finished goods or reproductive material developed from the access to genetic heritage or Associated Traditional Knowledge - ATK[19].

With the establishment of the Convention on Biological Diversity - CBD, in 1992, during the United Nations Conference on Environment and Development, also known as Earth Summit, held in Rio de Janeiro, genetic resources became resources of national sovereignty, though their distinct nature in relation to those resources linked with agriculture is recognized. Therefore, the two main international frameworks related to sharing of benefits have been consolidated - the International Treaty on Plant Genetic Resources for Food and Agriculture, approved in Rome, on November 03, 2001, and signed by Brazil on June 10, 2002, and the Nagoya Protocol, adopted in 2010. Except for Russia, which did not adopt any of these international agreements, all the G20 member countries signed at least one of them – eight countries signed one of them and 10 signed both of them.

Indicator 15.6.1
Adoption of international frameworks on the sharing of benefits from biodiversity in G20 member countries
2023

Country	International Treaty on Plant Genetic Resources for Food and Agriculture	Nagoya Protocol
Argentina	✔	✔
Australia	✔	✖
Brazil	✔	✔
Canada	✔	✖
China	✖	✔
France	✔	✔
Germany	✔	✔
India	✔	✔
Indonesia	✔	✔
Italy	✔	✖
Japan	✔	✔
Mexico	✖	✔
Russia	✖	✖
Saudi Arabia	✔	✔
South Korea	✔	✔
South Africa	✖	✔
Turkey	✔	✖
United Kingdom	✔	✔
USA	✔	✖

✔ Signatory ✖ Non signatory

Source: UNITED NATIONS. Country profiles. *In*: UNITED NATIONS. Statistics Division. *SDG Indicators Database*. New York, 2024. Available from: https://unstats.un.org/sdgs/dataportal/countryprofiles. Cited: Sept. 2024.

[19] For detailed information about the topic, please visit: https://www.gov.br/mma/pt-br/acesso-a-informacao/institucional-quem-e-quem/institucional/quem-e-quem-1/colegiados/patrimonio-genetico-e-conhecimentos-tradicionais-associados.

The sharing of benefits may occur in either monetary or non-monetary mode, and it is established through an agreement between the parties. On the one side are users, who may be researchers from several areas of knowledge, industries from the sectors of biotechnology, pharmaceuticals, cosmetics, pesticides, among others. On the other side are those holders of traditional knowledge or the Union, which represents the interests of the Brazilian population on the genetic heritage, which is a common good.

The portion pursuant to ATK providers is established through a negotiation between users and providers. In Brazil, such negotiation results in the Sharing of Benefits Agreement – ARB, established by the Biodiversity Law (Law No. 13,123, of May 20, 2015). In some cases, the resources from the sharing of benefits are directed to the National Fund for Sharing of Benefits, created by Decree No. 8,772, of May 11, 2016, and under the Ministry of the Environment and Climate Change.

The Brazilian database for this indicator covers the period from 1999 to 2018. In 1999, there was no legislative framework related to the Benefit-sharing, though it was created through a Provisional Measure in 2000 and later effected by Law and Legislative Decrees. The National Fund for Sharing of Benefits was created in 2015, confirming the Brazilian position concerning the importance of this theme in the country.

Indicator 15.6.1

Major frameworks about sharing of benefits of biodiversity in Brazil

Sources: Decreto Legislativo n. 70, de 18.04.2006, Decreto Legislativo n. 136, de 11.08.2020, among other references.

Target 15.9 By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts

Indicator 15.9.1a Number of countries that have established national targets in accordance with or similar to Aichi Biodiversity Target 2 of the Strategic Plan for Biodiversity 2011-2020 in their national biodiversity strategy and action plans and the progress reported towards these targets

Indicator 15.9.1b Integration of biodiversity into national accounting and reporting systems, defined as implementation of the System of Environmental-Economic Accounting

Indicator 15.9.1 brings information on the degree of integration of the biodiversity values in the planning of countries, measured from two Sub-indicators: Existence of national targets adhering to Target 2 of the Strategic Plan for Biodiversity 2011-2020 agreed upon during the Tenth Session of the Conference of the Parties of the Convention on Biological Diversity - CBD, held in Nagoya in 2010, known as Aichi Targets; and Degree of implementation of the System of Environmental-Economic Accounting in the country. Aichi Target 2 aims at dealing with the key causes of biodiversity loss, intertwining biodiversity concerns with government and society actions. The System of Environmental-Economic Accounting - SEEA is an international reference framework aiming at measuring the relations between the environment and the economy. It integrates social, environmental and economic data into a single statistical structure, taking into account the particularities of each country and the availability of these data.

Almost all G20 member countries advanced in one of the two sub-indicators, at distinct levels. The only exceptions are: in the Sub-indicator 15.9.1a, the United States, which is not signatory of the CBD, and Australia and Russia, which do not have national targets adhering to Aichi Target 2, and, in the Sub-indicator 15.9.1b, Argentina, which has not yet implemented a program for Environmental-Economic Accounting.

Implementation of **Indicators 15.9.1a** and **15.9.1b** in G20 member countries

2023

Country	Indicator 15.9.1a (1)	Indicator 15.9.1b (2)
Argentina	!	⊗
Australia	✖	3
Brazil	!	3
Canada	✔	3
China	✔	1
Germany	!	3
France	!	3
India	✔	3
Indonésia	✔	3
Italy	!	3
Japan	!	2
Mexico	!	3
Russia	✖	3
Saudi Arabia	!	1
South Africa	✔	2
South Korea	✔	3
Turkey	!	3
United Kingdom	✔	3
USA	–	1

(1) Aichi Target 2

- ✔ Existing national target, with enough progress in execution;
- ! Existing national target, without enough progress in execution;
- ✖ Non-existence of national target;
- – Non-signatory.

(2) Environmental-Economic Accounting

- 3 Regular compilation and dissemination: the country regularly publishes and disseminates at least one account;
- 2 Dissemination: the country has compiled and published at least one account in the last five years;
- 1 Compilation: the country has compiled at least one account in the last five years;
- ⊗ Not implemented: the country has not yet implemented an account consistent with the SEEA.

Source: UNITED NATIONS. Country profiles. *In*: UNITED NATIONS. Statistics Division. *SDG Indicators Database*. New York, 2024. Available from: https://unstats.un.org/sdgs/dataportal/countryprofiles. Cited: Sept. 2024.

In Brazil, the target equivalent to Aichi Target 2 is the National Target 2 of Biodiversity, established by Resolution No. 6, of September 3, 2013, of CONABIO (National Commission for Biodiversity). The National Target is more ambitious than the Global Target as it encompasses the values of geo-diversity and socio-diversity and includes the reduction of the inequality and the reporting systems in addition to the strategies provided by the Aichi Target. According to the Fifth and Sixth National Reports to the CBD, which include actions up to 2014 and up to 2018, respectively, the implementation of Target 2 advanced in Brazil, though at an insufficient rate. In 2023, Brazil started the revision of the National Targets and of the National Biodiversity Strategy and Action Plan - NBSAP, in order to align with the Kunming-Montreal Global Biodiversity Framework.

Concerning the Environmental-Economic Accounting, Brazil is one of the countries with regular production and dissemination of Environmental-Economic Accounting, started in 2018 with the release of the first edition of the Environmental-Economic Accounting for Water, resulting from a partnership between the IBGE and the National Water and Sanitation Agency - ANA. Today, new editions of accounts for water, energy, forests (logging and non-logging resources), biodiversity, land, extension and condition of ecosystems are being either developed, tested or planned. Such development reinforces the Brazilian commitment to producing information relative to the use of natural resources and its value, both for the economy and for nature.

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Appendices

1 Framework of the indicators presented and respective global custodian agencies

2 Marine and terrestrial Conservation Units and Key Biodiversity Areas in Brazil

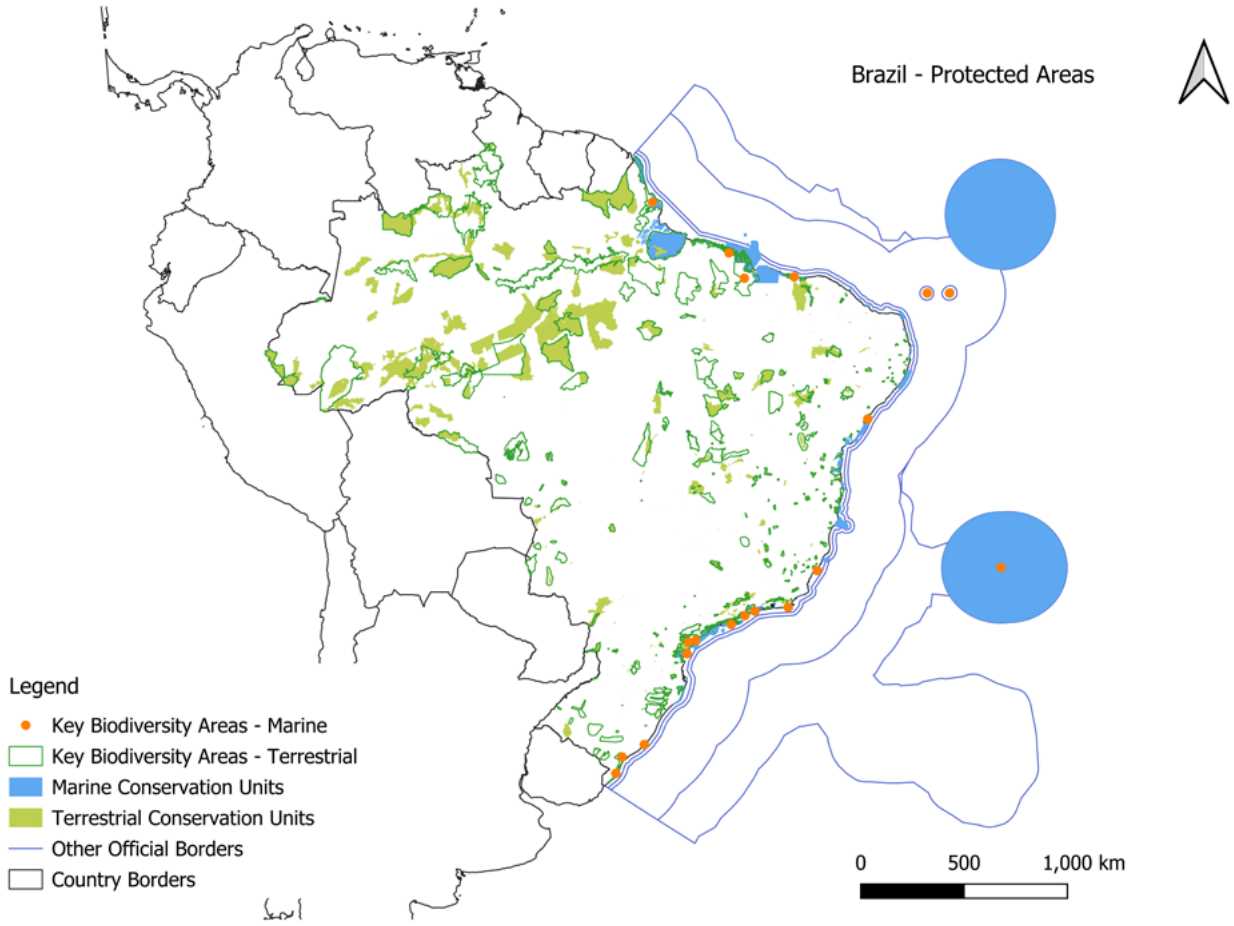
1 Framework of the indicators presented and respective global custodian agencies

Indicator	Custodian agencies
6.6.1	United Nations Environment Program (UNEP)
14.5.1	International Union for Conservation of Nature (IUCN) BirdLife International (BLI) World Conservation Monitoring Centre of the United Nations Environment Program (WCMC-UNEP)
15.1.1	Food and Agriculture Organization of the United Nations (FAO)
15.1.2	International Union for Conservation of Nature (IUCN) BirdLife International (BLI) World Conservation Monitoring Centre of the United Nations Environment Program (WCMC-UNEP)
15.2.1	Food and Agriculture Organization of the United Nations (FAO)
15.6.1	Secretariat of the Convention on Biological Diversity (SCBD)
15.9.1a	United Nations Environment Program (UNEP) Secretariat of the Convention on Biological Diversity (SCBD)
15.9.1b	United Nations Environment Program (UNEP) United Nations Statistics Division (UNSD)

Source: UNITED NATIONS. Data collection information and focal points. *In*: UNITED NATIONS. Statistics Division. *SDG Indicators*. New York, 2024. Available from: https://unstats.un.org/sdgs/dataContacts/. Cited: Sept. 2024.

Note: Global custodian agencies are responsible for providing a list of national entities that supply data to the international system, defining a data collection calendar and providing guidance on collection processes, appointing, for each indicator, a focal point with which issues regarding definitions, calculation methods, data, among others, will be discussed.

2 Marine and terrestrial Conservation Units and Key Biodiversity Areas in Brazil



Sources: 1. Ministério do Meio Ambiente e Mudança do Clima, Cadastro Nacional de Unidades de Conservação - CNUC. 2. KBA Partnership, World Database of Key Biodiversity Areas.

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Environment Module

Management and conservation of nature

In 2017, the United Nations General Assembly approved the framework of global indicators for monitoring the 2030 Agenda for Sustainable Development, which had been under discussion since 2015, with a total of 231 indicators.

In Brazil, the development of the Indicators for the Sustainable Development Goals - SDGs was under the IBGE's responsibility, and the Institute, in collaboration with other entities that produce official data for the country, joined international efforts aimed at monitoring the achievement of the 169 targets of the 2030 Agenda, in accordance with the 17 Goals. To this end, data from institutional and external surveys were used.

The SDG indicators are constructed based on methodologies developed by their custodian agencies and validated by a Group of Experts (Inter-agency and Expert Group on Sustainable Development Goal Indicators - IAEG-SDGs), following international standards. In this group, coordinated by the United Nations Statistics Division (UNSD), the IBGE also represents the Mercosur countries and Chile.

In the year when Brazil holds the presidency of the G20 for the first time, the release of this publication by the IBGE proposes the theme of the **Environment** for discussion, through selected indicators from SDG 6 (Clean water and sanitation), 14 (Life below water) and 15 (Life on land).

For additional information on the theme, we invite the reader to visit the ODS Brasil Platform, on the IBGE website (https://odsbrasil.gov.br/), where all indicators produced to date and their respective technical information are available to monitor the progress of the 2030 Agenda in the country.

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