



**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 in Latin America and the Caribbean<sup>1</sup>

### Key regional statistics related to SDG 15

- Between 1990 and 2015, Latin America and the Caribbean lost almost 10% of its forest area.
- Land-use changes and agriculture are responsible for 42% of greenhouse gas emissions in the region, compared to 18% globally.
- According to the Food and Agriculture Organization of the United Nations (FAO), there are 16.5 million family farms in the region (80% of all farms) which, with more than 60 million workers, are the primary source of agricultural and rural employment.
- Desertification and degradation of agricultural lands are widespread in the region, while the productivity of approximately one fifth of the region's vegetated land surface has decreased.
- South America and Africa are the most affected by productivity declines (27% and 22% respectively), which points to a long-term alteration in the productive capacity of the land and a resultant impact on terrestrial ecosystem services.
- In South America, all of the land cover/land use classes were affected by negative land productivity trends considerably above global averages. One of the main anomalies of these trends is located in the vast semiarid plain of the Dry Chaco in the border region between Argentina, Brazil and Paraguay.
- Desertification, land degradation and loss of ecosystems reduce water availability in a context where, by 2050, at least one in four people is likely to live in a country affected by chronic or recurring shortages of fresh water (UN-Water).

<sup>&</sup>lt;sup>1</sup> The analysis of the Sustainable Development Goals (SDGs) presented here is the outcome of the discussions held within the framework of the third meeting of the Forum of the Countries of Latin America and Caribbean on Sustainable Development, convened under the auspices of the Economic Commission for Latin America and the Caribbean (ECLAC) in Santiago, from 24 to 26 April 2019.





## **SDG 15**

15 LIFE IN LAND

- Terrestrial protected areas cover almost a quarter of the region's surface area -4.85 million km2, of which 2.47 million km2 are in Brazil -, forming the largest network of terrestrial protected areas in the world and surpassing the 17% target established by the Aichi Biodiversity Targets of the Convention on Biological Diversity.
- Protected areas account for one fifth of the carbon sequestered by all land ecosystems and maintain key water systems for production and consumption.
- Some 83% of the region's forest area is located in countries that share the Amazonian subregion, while only 1% is located in the Caribbean. The Caribbean saw a net increase in forest area between 2010 and 2015, mainly as a result of the abandonment of sugar cane plantations and other agricultural land.

#### Key messages from the region on the issues addressed by SDG 15 and its targets

- Deforestation and desertification caused by human activities and climate change pose major challenges to sustainable development and have affected the lives and livelihoods of millions of people.
- Although the situation varies across countries and subregions, deforestation is a reality in most of the countries
  of Latin America and the Caribbean. The reduction in forest area, coupled with changes in land use and
  management, resulted in a drop in large-scale evapotranspiration, with consequential water imbalances and
  water shortages.
- The natural resources of Latin America and the Caribbean provide regional and global food, water and energy security, while at the same time contributing to regulating processes such as pollination and climate and air quality regulation, as well as to human health. Despite the potential for sustainable growth of the region's natural resources, there have been significant shortcomings in their use and exploitation.
- The agricultural bias in the region's export structure is increasing, at the expense of forest ecosystems.

# Challenges and opportunities for the implementation, follow-up and review of SDG 15 and its targets

#### Challenges

- One of the challenges related to the sustainable intensification of agricultural production is to achieve zero net degradation through sustainable land management, applying soil, water, vegetation and biodiversity management practices in a broad agroecological and socioeconomic context.
- Land grabbing in forest areas often leads to industrial-scale monocropping accompanied by pesticide use, as well as conflicts with local communities and the destruction of their way of life.
- Soil loss and land degradation are a threat to the future of the regional economy and inclusive social development, and to the livelihoods of people living in poverty. Efforts have been made to offset land degradation through more intensive use of fertilizers and pesticides (fungicides, herbicides and insecticides), with adverse consequences for soil and water quality.
- While biobased exports make up more than 50% of total exports from countries such as Argentina, Honduras, Nicaragua, Paraguay and Uruguay, there are no synergies with biodiversity protection and the share of high-value-added bioeconomy exports is very low.



- Even the countries of the region with the greatest weight in the global agrifood trade possess only a few of the agriculture patents granted under the Patent Cooperation Treaty when compared to the leading transnational seed and agrochemical companies.
- In Latin America and the Caribbean, almost half of indigenous women live in rural areas. Land rights and access to land are core demands of the political agenda of rural, indigenous and campesino women's organizations, and tie in with other issues affecting them, such as the situation of human rights defenders, territory and land defence, and the negative effects of climate change on food security.
- Although family farming has helped in maintaining balanced diets and conserving agrobiodiversity, family farmers face challenges associated with a lack of stable and paid employment; poor access to markets, production resources and rural services; vulnerability to climate change; lack of participation in the governance of natural resources; and urban migration.

#### **Opportunities**

- Biotechnology helps to improve agriculture and combat hunger and malnutrition.
- Forest management under sustainability criteria is possible and represents a productive and conservation alternative to other practices or destructive uses of forest resources. In altered environments and even amid degradation processes, restoration using forest plantations under the "close-to-nature forestry" or "new generation plantation" models can play a major role in promoting zero net deforestation.

### Lessons learned and good practices with respect to SDG 15 and its targets

- The restoration of ecosystems contributes to the achievement of biodiversity protection and land degradation neutrality targets and compliance with the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention). Therefore, within the framework of the global partnership for ecosystem restoration, El Salvador launched a national programme and, together with the Central American Integration System (SICA), put forward the proposal to declare a United Nations decade on ecosystem restoration. In March 2019, the General Assembly proclaimed 2021-2030 the United Nations Decade on Ecosystem Restoration.
- The Colombian sustainable livestock project is an example of how silvopastoral production systems (integration of different types of trees with livestock production and conservation of native forests) raise farm productivity while enhancing the provision of environmental goods and services. These include improved water regulation and erosion control; increased biodiversity and carbon storage; and reduced nitrous oxide and methane gas emissions.
- In Brazil and Mexico, sustainable use protected areas (those that allow timber production) are more effective at preventing deforestation than strictly protected areas.





# Recommendations from Latin America and the Caribbean for achieving SDG 15 and its targets

- Apply more modern agricultural and livestock production processes in the region to increase production, generate income and employment, and limit the negative impact of current production patterns on the environment.
- Develop more sustainable, healthy and diverse, low-imput agricultural and food systems that, in addition to conserving and regenerating biodiversity, constitute more resilient, energy-efficient and socially just systems.
- Promote bioeconomy-based activities, which would help to combine growth, social development and environmental protection. The bioeconomy fosters new ways of organizing the value chains associated with biodiversity (biochains) and the creation of a circular economy.
- Reduce dependence on fossil fuels and promote the production and knowledge-intensive use of biological resources, processes and principles for the sustainable supply of goods and services in all sectors of the economy (bioenergy farming and bio-inputs, food, fibres, health products, industrial products and bioplastics).
- Recognize the key role that scientific and technological knowledge can play in redefining the relationships between the agricultural sector, ecosystems and industry.



