

PUBLIC INVESTMENT IN BIODIVERSITY CONSERVATION

In Latin American countries, protected areas cover between 1 and 30% of their territories. In 2008, the fraction conserved in Guatemala was 30%. In Dominican Republic 26, Belize 25, Costa Rica 23, Honduras 22 and in Venezuela 20%.

There is no rule that establishes how much a state should invest in biodiversity conservation, or in fact, in any other subject. However, governments implicitly prioritize when planning their national budgets.

During 2007-2008, Latin American countries invested US\$195/km² in the management of their protected areas. Variation was large, from US\$3,935/km² in El Salvador and US\$1,647/km² in Costa Rica to US\$20/km² in Paraguay. Venezuela occupied the sixth place among the countries with lowest investment, with US\$101/km².

The contribution made by Venezuelan national parks (NP) and natural monuments (NM) to the economy is infinite. Not only because they provide intangible goods that cannot be monetized, such as the pleasure of enjoying nature or the affection humans feel for other life forms, but also because the value of the goods and services provided by ecosystems will always be necessarily partial and the true amount underestimated. However, let us examine a few figures to put in perspective the contribution of NP and NM to the economy, society and human well-being.

Let us consider, for example, water, the most critical natural resource for humanity: we drink it, we use it to eliminate refuse, to wash ourselves, cook, water plants, cool machinery, as a means of transportation, and, as if this was not enough, to generate electricity. Canaima NP protects the watershed of the Caroní River and provides water to Guri Lake. The park generates benefits on the order of US\$3,295×10⁶ per year, considering only its contribution to hydroelectricity and tourism. If we add up all potential hydroelectric production in the country and estimate the amount of petroleum that would be necessary to produce the same amount of energy in 2007, savings in oil would be equivalent to almost US\$56×10⁹, an amount similar to that year's national budget – this, without getting into the environmental impact that would result from its combustion. Likewise, 77% of NP protect the headwaters of rivers that serve the most densely inhabited urban areas and the most important agricultural areas in the north of the country. It is estimated that the water generated in 18

NPs supplies 83% of the urban population and that only the Andean protected areas provide water to 40% of agricultural areas in the country.

What is the cost to the Venezuelan state for the benefits provided by NP and NM? In the 2014 national budget, the amount allocated to the National Parks Institute (Inparques, in charge of NP and NM) was US\$44.7×10⁶, or 0.06% of the total. In exchange, just the contribution of Canaima NP mentioned above represents a return to the national economy larger than 7.300%. Those US\$44.7×10⁶ invested annually, less than one tenth of a percent point of the national budget, generate savings from hydroelectric production of the same order of the budget itself.

It is an objective reality that the conservation of Venezuelan biodiversity is a very low governmental priority. Of all the ministries, four consume more than 60% of the national budget. In 2014, the state plans to acquire a debt in the order of Bs.7×10⁹ for the acquisition of arms, almost four times the budget of the Ministry of the Environment, that, with Bs.1,9×10⁹ (0,43% of the national total), occupies the 17th position among 31 ministries. Since mid-2012, the national press has mentioned plans to purchase 24 fighter jets to substitute the aging F-16 fleet. Each Sukhoi Su-35 flanker, one of the models being considered, costs between US\$52×10⁶ and 65×10⁶, more than the 2014 budget for Inparques.

The contributions of biodiversity to human wellbeing are infinite, but investment in its conservation is disproportionately low. Increasing Inparques' budget to an equivalent level of other Latin American countries would take it to 1.2% of the 2014 national budget. It would undoubtedly be a substantial increase, but it would still be less than the debt planned for purchasing arms that year.

NP and NM are just the tip of the iceberg. Venezuela has the privilege that native biodiversity is also abundant in the remainder of its territory. I am not advocating monetizing biodiversity but valuing it adequately. Understanding its contribution to the national economy would allow to better grasp how the lack of investment in its protection indeed represents a large cost to all of us.

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