

Pressure on public finances due to climate change: Challenges to improving current conditions and reducing future impacts (DFOE-AE-OS-00001-2017)

This document from the General Comptroller Office of Costa Rica (SAI Costa Rica) to the Parliament has the purpose to provide input for political control about the main pressures over Public Treasury due to climate variability, as well as the challenges involved in this context to improve the citizen's life quality.

The relevance of the topic is because of the increasing global average temperature, changes in rainfall patterns, rising sea levels, and increasingly frequent and intense weather events. These issues have an impact on public infrastructure, health, and welfare of the population, which also puts the public finances at risk. Thus, between 1988 and 2010 in Costa Rica, 320 events were recorded, as illustrated below:



Eventos extremos del período 1998-2010

Fuente: Elaboración propia con datos de IMN, CNE y MIDEPLAN.

SAI Costa Rica identified climate change as a trend to be considered by public managers, in the timely risk management that allows the better orientation of public policy design and the expenditure forecasting to address, adapt to or mitigate its effects. This is because it requires financial, technological, and human resources.

General summary of trends and challenges encountered

Costs of repairing and reconstructing from 1988 to 2010

SAI Costa Rica estimated that the annual cost of infrastructure repair and reconstruction went from CRC 8.903 million in 1988 to CRC 202.681 million in 2010, representing 1.01% of GDP, due to floods, storms, and droughts effects; this is an exponential growth in the cost of roads, bridges, aqueducts and other relevant infrastructure. Between 1988 and 2010 the costs of these extreme weather events varied between 0.3% and 1.7% of GDP per year, and on average each quarter is 3% more expensive than the previous one.

Increasing cost trend from 2011 to 2025

SAI Costa Rica estimated an increasing cost for the period from 2011 to 2025, due to the hydrometeorological and extreme weather events effects. By 2025, in a conservative scenario, these costs would represent between 0,68% and 1,05% of GDP; and in a scenario



that foresees greater risk, between 1,64% and 2,50% of GDP. The latter percentage would imply spending 1,47 times the maximum percentage of GDP incurred to date.

It is neccessary to create a climate fiscal framework for Costa Rica

In the opinion of SAI Costa Rica, it is appropriate to create a climate fiscal framework, which refers to the mechanisms that allow identifying and projecting the resources destined to finance mitigation, adaptation, and attention actions for hydrometeorological and extreme climate events. This framework should allow: i. Identification and precise estimation of the sources of resources; ii. Allocation of resources according to priorities, which is essential in a context of shortage of public financial resources and urgent needs; iii. Budgetary accounts that make it possible to identify climate spending and investment in public resilient infrastructure, i.e. with the capacity to withstand floods, droughts, and other adverse natural events; and iv. to timely make this information available to the citizens.



Ejes del Marco Fiscal Climático

Thus, SAI Costa Rica sends this opinion to the Parliament, which is a relevant stakeholder in the establishment of a climate fiscal framework, as an issuer of laws on the subject, in ratifying related international conventions, in the political control and approval of the National Budget. These roles are fundamental to building the path that facilitates fiscal forecasting to strengthen climate actions, and in requesting accountability for the progress of the entities and organizations involved.

The methodology utilized in this document was the analysis and reflection on previous audit reports, the literature review about climate change effects and international financing models, the legal analysis feasibility, and finally, using budgetary analyses to estimate historical costs and using econometric techniques to forecast future costs due to climate change, specifically related to extreme hydrometeorological events.