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## UNITED NATIONS DEVELOPMENT PROGRAM FINANCE INITIATIVE FOR BIODIVERSITY

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### BIOFIN CHILE - 2017

PolicyBrief

# BIODIVERSITY IN CHILE

## ► SUGGESTIONS TO FUND ITS CONSERVATION

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### Executive Summary

## TOWARDS SUSTAINABLE ► DEVELOPMENT

A well-functioning nature is essential for sustainable development, which is based on the balance between economic growth, social inclusion and the protection of the environment. 80% of the human diet comes from animal and vegetal species, so the decline of ecosystems not only affects the life of individuals, but also the entire society. Besides, biodiversity is vital for the economy: something as subtle as pollination is conditional for producing medicines, bio-fuels, fibers and construction materials. Chile is not exempt from this fact: 17.4% of its GDP and over a half of its exportations directly depend on natural resources.

The loss and decline of biodiversity is a global process which is also present in Chile. In this country, the negative impacts are related to: (i) changes in land use, (ii) the introduction and spread of invasive exotic species, (iii)

the intensive development of primary production sectors, (iv) forest fires and, (v) climate change. This is enhanced by practices and policies of the private sector and also of the State. Additionally, the allocated budgets for biodiversity protection are comparatively low to those given for productive development, which have an impact on nature. The analysis of the central government spending on biodiversity shows its low incidence: 0.036% of GDP (2014). Since optimization and redistribution of the available resources are required, it is suggested to enhance biodiversity funding through public policies aimed at: the environmental institutions strengthening, the implementation of an economic model based on the sustainable use of natural resources, and the expansion of market instruments to ease the support of the private sector for biodiversity funding.

# BIOFIN Biodiversity and Finance in Chile

The Biofin project is one of the responses of the international community to the worldwide acknowledgment about the current global investment on conservation and sustainable management of biodiversity, which is not enough to face the challenges caused by its loss and degradation.

Biofin works in consideration of conservation priorities of the country stated in the National Biodiversity Strategy 2016-2030 (NBS), a public policy which was updated within the frameworks of the Convention on Biologic Diversity, the Strategic Plan 2011-2020, and the 20 goals of Aichi.

## The Project is executed in 31 countries and seeks for:

- ▶ Transforming the national funding for biodiversity, by strengthening the capacities of planning and design of the NBS.
- ▶ Designing a financial strategy, in view of public and private resources to increase the funding for biodiversity management.
- ▶ Promoting the integration of biodiversity management in the national priorities and in the land-use and development plans.

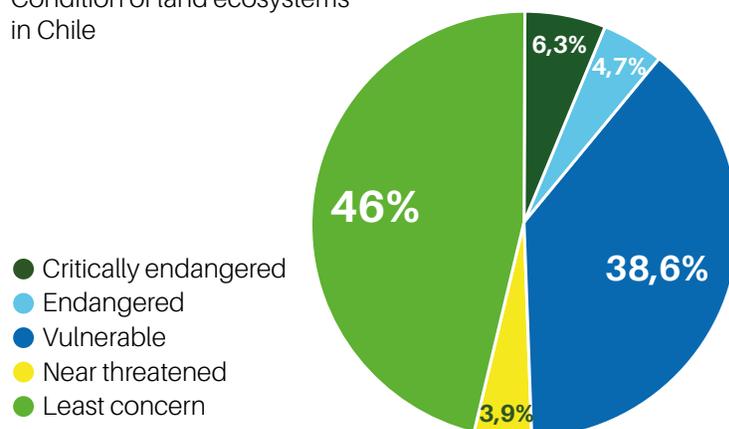
## Doing so implies a national-scale methodology designed to:

- ▶ Analyze the current condition of the public spending on biodiversity.
- ▶ Calculate the costs of meeting the conservation goals stated in the NBS and its Action Plans.
- ▶ Estimate the financial gap between the current and the required spending.
- ▶ Design a financial strategy to face the financial gap of the NBS.
- ▶ Promote the pilot application of some of the instruments, nationally and/or sub-nationally designed.

## What is the condition of biodiversity in Chile?

The loss and decline of biodiversity is a global process, fostered by direct factors (demographic growth, efficiency in the use of resources and consumption) and indirect causes (urbanization, growth of productive sectors, water demand, power demand, etc.). This would have caused a decline of 58% of global biodiversity (WWF, 2016) between the years 1970 and 2012. Chile is not exempt of this trend, and has experienced important loss and decline processes in land-based species and ecosystems (half of them shows certain threat level) and in the marine environment (half of the 38 main national fisheries are exploited exceeding the sustainable biological cut-offs; whose 25% are depleted and 25% are overexploited).

▶ **Graph 1:**  
Condition of land ecosystems in Chile



## Nationally, the main causes for biodiversity loss and decline are related to:

1. Changes in the land-use (to satisfy the needs of the productive and urbanization sectors).
2. Introduction and spread of invasive exotic species.
3. Development of primary production sectors, particularly agro-forestry, mining, fishing and aquaculture.
4. Forest fires.
5. Climate change.

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These causes are affected by multiple practices and policies of the private sector and also from State agents. Important public policies are: the urban policy of 1979, the Forestry Subsidies Program (DL 701) and Subsidies for Investments on Irrigation and Drainage (Law 18.450). Additionally, there is no institution aimed at the management of biodiversity conservation priorities, nor an agency which can strengthen the work with the forestry sector; and public budgets for biodiversity protection are significantly lower to those assigned for productive development, which put pressure on natural resources. Besides, environmental competences are distributed along the country through at least 14 ministries and 28 public services; plus the related competences of the 15 Regional Governments and the 345 municipalities, which shapes a highly complex institutional

setting. The new institutional model –born in 2010- hasn't been able to reverse the negative trends of the natural capital and of the public goods generated by biodiversity.

This institutional weakness is added to other factors which act as barriers limiting the creation of an enabling environment to promote the importance of increasing the funds for biodiversity protection; such as the low visibility of this issue in the public agenda, the absence of economic instruments for the participation of the private sector, the scarce involvement of the financial sector and the weak framework for the functioning of the State's instruments. Just a systematic and gradual approach on these barriers will contribute to the creation of a more favourable institutional and political environment for biodiversity funding.

## Summary of the barriers for biodiversity funding in Chile

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### ▼ Institutions

Restructuring of environmental institutions aimed at the management of biodiversity, protected areas and forestry sector still in process.

Low strengthening of efficiency and effectiveness levels in the implementation of public initiatives and programs

Limited incorporation of goals and targets for biodiversity protection in different public policies of the State.

### ▼ Political/ Behavioural

Low visibility of themes related to biodiversity and its management in the public agenda.

Limited knowledge about the benefits of biodiversity protection among citizens and decision-makers.

### ▼ Market

Absence of proper economic instruments and incentives for the participation of the private sector in actions for conservation and management of biodiversity (OECD, 2016).

The private sector has no incentives to internalize externalities, such as compensation banks or payments for ecosystem services, with the consequent decline of biodiversity.

### ▼ Financial

Limited incorporation of evaluation criteria which include the protection of the natural capital in the financial sector: bank, stock exchange, insurances (PNUMA-CAF, 2016).

### ▼ Regulatory

Weak operational and legal framework for the functioning of policies and regulatory instruments which are available for the Chilean State to protect the natural resources (OECD, 2016).

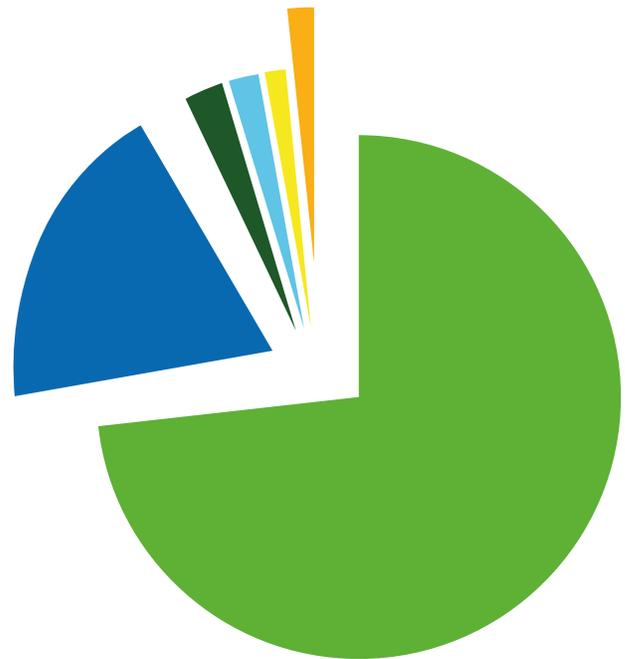
# How much does the Chilean State spend on biodiversity?

The public funding for biodiversity is an irreplaceable role of the State, given the status of public good of the services delivered by ecosystems, such as scenic beauty, air quality, atmospheric regulation, protection against floods and erosion, as well as determining the productivity and stability of soils. Those goods and services differ from private ones in the allocation of prices (since they do not show competition or exclusion in their use) and directly affect in the well-being of the country and all of its inhabitants. Those services contribute to the economic growth, as in the case of national fisheries and the mining sector which by itself contributed 11% of the GDP during the year 2014.

► **Graph 2:**  
Cumulative budget 2010-2014

Selected Ministries for this Study in Relation to Biodiversity Protection.

- Economy ●
- Agriculture ●
- Energy ●
- Mining ●
- Environment ●
- Biodiversity protection ●



The comparison between the current budgets of the five selected ministries and the resources allocated for biodiversity protection shows a sharp contrast. This example clearly evidences the budgetary inequity among the productive sectors -such as the promotion of agriculture- which push the loss of biological diversity and those related to its protection.

The analysis of the Chilean central government public spending on biodiversity shows its low incidence in the state budget, reaching an average percentage of 0.12% for the period 2010-2014. In those years, the spending increased by 64.3%, from \$34,272,368 in the year 2010 to \$56,323,939 in 2014, equivalent to an annual growth rate of 11.3%. This is 0.036% of the GDP by the year 2014, lower than in Colombia and Costa Rica with 0.1% and 0.5% respectively (UNDP, 2015).

► **Graph 3:**

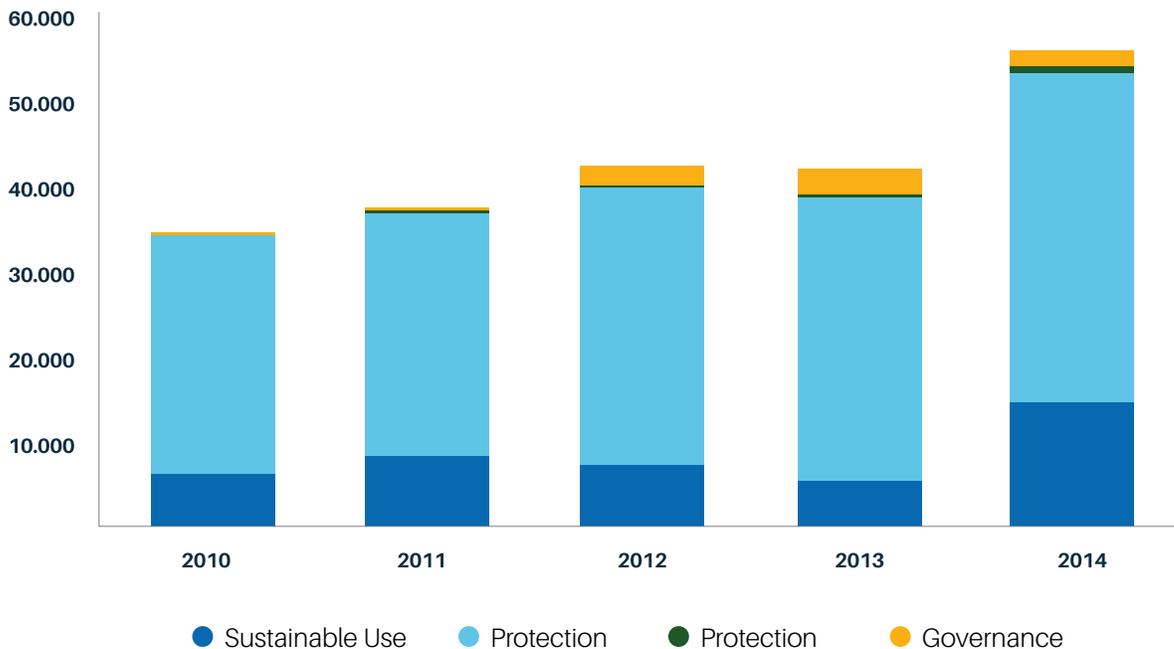
Funds for biodiversity as a share of the GDP



The upward trend of the spending in Chile is mainly explained by the creation of the Ministry of Environment in the year 2010 (which allowed the allocation of additional resources to the sector); and the increase experienced by the Undersecretary for Fishing and Aquaculture in the year 2013, thanks to amendments to its governing act, Law 18.892.

► **Graph 4:**

Amount and percentage of share of spending on biodiversity by strategy (MM\$ 2015)



The detailed revision of the spending on biodiversity under the criteria of sustainable use, protection, restoration, as well as management and governance shows the low incidence of restoration, only reaching 0.9% of the total spending on biodiversity during the year 2014. Conservation explains 68.9% of the said expenditures, mainly related to the activities of CONAF, followed by the sustainable use strategy (26.4%) and management - governance (3.8%).

# What has been the answer of the Chilean State to preserve biodiversity?

The institutional response of Chile to face biodiversity issues was generated from a number of international treaties on natural patrimony conservation which the country has joined, such as the Convention on Nature Protection and Wildlife Preservation - Washington (1940), the Convention on Wetlands - RAMSAR (1971), the Convention on International Trade in Endangered Species of Wild Fauna and Flora - CITES (1973), the United Nations Convention on the Law of the Sea (1982), the Convention on Biological Diversity - CDB (1992), among others.

In the year 2010, the Law No. 20.417 modified the national environmental institutional structure by the creation of the Ministry of Environment, the Environmental Evaluation Service and

the Superintendence of Environment. The Law No. 20.600 of the year 2012 created the Environmental Courts, in the communes of Antofagasta, Santiago and Valdivia.

Additionally, the country has upgraded the National Biodiversity Strategy (NBS) of the year 2003, within the framework of the new guidelines stated in the Strategic Plan 2011-2020 of the Convention on Biological Diversity and the 20 goals of Aichi, which is aimed at the increase of citizens awareness and participation; the reduction of the productive sectors pressure on natural resources; the enhancement of the promotion and development of more sustainable productive practices and the inclusion of guidelines for the conservation and sustainable use of biodiversity in public

and private policies, promoting social equity in the distribution of biodiversity benefits.

Other public policies including biodiversity concerns are the Adaptation Plan to Climate Change on Biodiversity (2014), National Action Plan on Climate Change 2017-2022, Energy 2050: Energy Policy of Chile and National Plan for Sustainable Tourism Development, among others.

However, since this is a recent initiative, the environmental institutions for biodiversity is still in a restructuration process and public budgets are significantly lower compared to those allocated to productive sectors putting pressure on biodiversity; the new institutional model has not been able to reverse the negative trends of the natural capital and the public goods arising from biodiversity.

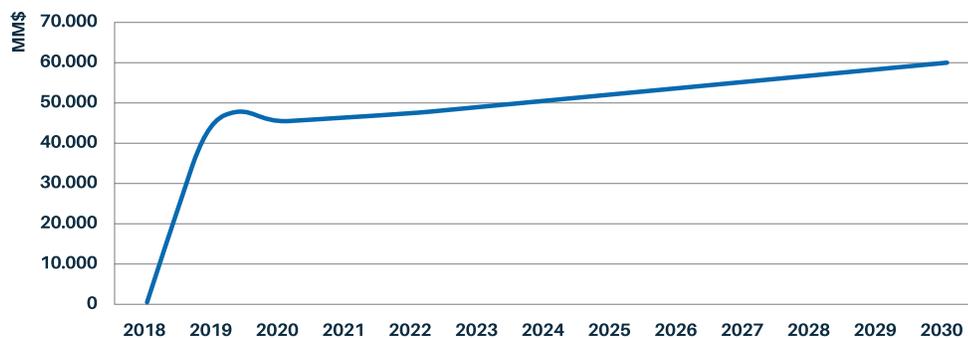
## ¿What is the funding gap for biodiversity?

The public policy instrument reflecting the required efforts of the country for the strengthening of biodiversity funding is the National Biodiversity Strategy. The estimated monetary resources to implement the NBS reach CL\$618,599,019,194, equivalent to USD 943,993,620 (UNDP, 2017).

Considering the said need of resources and that the public spending on biologic diversity protection reached M\$56,323,939, it is possible to state that there is a significant financing gap between the public spending on trend and the required resources to fund the National Biodiversity Strategy. In fact, those resources should be increased by at least 0.025% of the GDP.

► **Graph 5:**

NBS Financial Needs 2018-2030 (MM\$ 2015)



The described data support a useful quantitative base to know the amount of resources allocated by the State to protect its biodiversity, to determine funding gaps for the National Biodiversity Strategy, and to elaborate a financial strategy allowing the mobility of public and private resources. These three elements also serve as input for the implementation of public policies aimed at the safeguarding of biodiversity and the valuing of the services it provides.

# ► SUGGESTIONS for biodiversity funding

- The State should make resolute progress towards public policies for the strengthening of the environmental institution, the implementation of an economic model based on the sustainable use of natural resources, and the expansion of market instruments to ease the contribution of the private sector to the biodiversity funding.
- The country requires the completion of its environmental institutions on biodiversity issues and a Service in charge of the management and implementation of the country's conservation priorities, stated in the National Biodiversity Strategy 2016-2030. The strengthening of governance, intra-sector coordination and funding increase, aroused from diverse economic instruments and mechanisms, will allow supporting the implementation of this institution.
- Chile urgently needs a long-term climate national policy in accordance to the guidelines of the Paris Agreement, which can link the biodiversity funding strategies with the climate change agenda. This allows a more comprehensive view of the environmental issue and boosts a higher synergy among both matters, which help the acknowledgment by decision-makers and their inclusion in the public agenda.
- The State can highlight its role in the public management for biodiversity conservation via two ways: The first one is the evaluation of the public programs applying sustainable management and biodiversity criteria, particularly in the budgets for production development. The second one seeks for enhancing efficiency and effectiveness of the available resources, by the inclusion of result-based management in the planning and implementation of the biodiversity conservation priorities.
- At an institutional scale, it is suggested to promote the national and sub-national cooperation to enhance effectiveness when applying environmental regulations. An option would be the use of the 6% which the Budget Law gives to regional governments to finance diverse activities, such as environmental protection and environmental protection. This item would allow nonprofit private and public entities and municipalities to take initiatives aimed at promoting conservation in the territories in which they live.
- It is suggested to upgrade the information base of the State to strengthen the decision making on environmental issues through the availability of indicators and statistics with respect to the funding for environment, climate change and biodiversity. A monitoring integrated information system should be available within the frame of Clearing House Mechanism (CHM), recommended by the Convention on Biological Diversity.
- The financial sector can reinforce its contribution to the sustainable development by an initial voluntary regulation including, in the context of a risk analysis, the valuing of and impact on the natural capital. It is suggested that this sector subscribes to the Equator Principles and moves towards a formalized regulation allowing the risk analysis to be incorporated as a practice in the funding of sensitive projects in terms of their negative impact on the environment or community.
- It is recommended to promote the application of sustainable management and biodiversity criteria in programs and initiatives for productive development financed by public budget through broad agreements among institutions which allow the development of guides, training on the criteria inclusion, development of pilots or other ways.
- The country needs to reinforce the environmental compensation system through better institutionalization and effectiveness allowing the incorporation of costs in the development projects and the protection of the natural capital. A compensation system contributes to enhance market rules, and it is one of the recommended measures by the Convention on Biologic Diversity.
- Investing on biodiversity is vital for a balanced growth of the country, activity which calls for the entire society. Its funding cannot only rely on the public budget, but requires a sure comprehensive action of all actors, particularly of the private sector through its financial and productive areas. To do so, the State must set up clear rules, complete its institutions and optimize its funding sources. This is the only way in which Chile can move towards a sustainable development along with economic growth, social inclusion and protection of its natural resources to contribute to the well-being of all of its inhabitants.

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