**Remarks by Alejandro Díaz de León, Governor of Banco de México, at the Biodiversity and Environmental Challenges for the Financial System Conference.[1]**

Mexico City, November 30, 2021

1. Mexico is a biodiverse country

Good morning, good afternoon, good evening ladies and gentlemen. First let me thank our very distinguished speakers and participants for making this first Biodiversity and Environmental Challenges for the Financial System conference possible. The conference is only starting but from the very high interest all over the world I am confident to say that it will be very successful.

Mexico is a biologically megadiverse country. It ranks fourth in the group of 17 megadiverse countries that have 70% of globally known species (Mittermeier et al., 1997, 2011a).

Biodiversity provides a range of benefits and significant positive global and local externalities. Unfortunately, it is threatened by climate change,

[1] The opinions and views expressed in this document are the sole responsibility of the author and do not necessarily represent the institutional position of the Banco de México or of its Governing Board.

deforestation originated in agricultural and livestock extension, as well as by air, water, ocean and soil pollution, unsustainable fisheries and the pressures of unplanned urbanization. These are particularly acute in emerging markets and low-income countries.

## 2. There is an unsustainable degradation of ecosystems and biodiversity

At the origin of loss of biodiversity and ecosystem degradation is failure by markets to internalize and to properly price-in both the positive externalities from biodiversity and ecosystems services, and the negative externalities caused by activities that erode our biodiversity and natural capital.

The high demands we are placing on ecosystems, given the current level of economic activity, are no longer sustainable. They compromise the health and living conditions of current and future generations and entail unknown economic and financial risks. Preserving and restoring natural capital is essential to mitigate these risks.

Ecosystems provide a wide range of services such as urban cooling, coastal protection, energy production, carbon capture, food production,

supporting physical and mental health, and scenic beauty. For example, forests play a crucial role in water supply: storage and flows, drinking, irrigation, flood control protection of downstream communities and property and even have influence on the levels of precipitation. Mangroves are transitional ecosystems between terrestrial and marine ones, they develop in coastal lagoons and river mouths and act as a natural flood control system; they act as a barrier against hurricanes; they reduce erosion and protect coasts; they capture carbon and improve water quality by acting as a biological filter, and also serve as a refuge for numerous species of flora and fauna. Safeguarding natural capital has also positive global externalities. The financial community is only beginning to understand the value of ecosystem goods and services for economic activity and its sustainability.

There is a close interlinkage between climate change and biodiversity loss (IPBES (2021)). In the transition to a sustainable economy it is essential to consider climate change and biodiversity loss in parallel, taking into account their specific characteristics.

Developing and emerging countries face an additional challenge, as some mistakenly believe that caring for biodiversity and ecosystems is an agenda that only advanced economies can afford. Losing biodiversity and natural capital makes countries poorer and less resilient. This is particularly challenging for developing and emerging economies with a large endowment of natural capital.

Banco de México is raising awareness on the importance of biodiversity within the general public. We have included images of the flora and the fauna of the most important ecosystems of Mexico on the back of the new six banknotes recently issued.

3. To preserve biodiversity, we must heed the advice of scientists

The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) has provided evidence of the risks we face due to the accelerated changes in nature that are being observed. In the case of Mexico, the National Commission for the Knowledge and Use of Biodiversity (CONABIO, for its Spanish acronym) provides important information on the trends and stock of natural capital.[2]

[2] The general entry to the CONABIO portal is: https://www.biodiversidad.gob.mx/

- Two thirds of the country have high levels of degradation.
- Only 12 out of 31 states maintain sustainability conditions in ecosystems that preserve natural capital.
- Nine states have high levels of natural capital depletion with a high probability of reaching unsustainable levels.
- Eleven states have practically depleted all their natural capital.[3]

States with diminished natural capital tend to have greater soil erosion, be more prone to floods, and tend to suffer outsized negative economic impacts from droughts, tropical storms, and hurricanes. They face deterioration of development opportunities, declining productivity and reduced welfare.

There is a growing conviction among international business and the financial community that nature should be explicitly considered as part of economic analysis and that it cannot be ignored or treated as a separate system as it entails serious sustainability implications. This is strongly supported by academic literature (Dasgupta, 2021), with a deeper understanding of the impacts of firms' activities on natural

[3] See: https://www.biodiversidad.gob.mx/pais/indice_capnat

ecosystems, and their interaction with physical and transition risks (see NGFS & INSPIRE, TNFD, WBCSD). As nature is impacted by human activities, businesses, the economy, and finance will be progressively affected and face increasing interrelated risks.

## 4. Importance of information systems and disclosure

Nowadays, there are many tools that can be used by companies and market participants to assess the impact of ecosystem services on key economic sectors, such as agriculture, tourism, construction, electricity generation, and construction materials, among many others. During this conference we will address how some of these tools and frameworks provide relevant information to financial institutions on nature related financially material risks.[4]

To mention a few examples:

1. The science-based targets for nature (SBTN) aim to serve as a guidance for companies to align their business practices with ecosystems' capacities.

[4] Science-based Targets for Nature Initial Guidance for Business, September 2020.

2. Tools like Encore can help rank and prioritize financial exposures and dependencies of economic activities to ecosystem services.
3. The Taskforce on Nature-related Financial Disclosures (TNFD) currently under development, will complement the Task Force on Climate-related Financial Disclosures (TCFD) framework. It will provide recommendations on how firms should address nature-related risks in their governance, strategy, risk management activities, and metrics and targets.

These tools help financial and non-financial firms assess the risks they are exposed to from environmental degradation and move towards nature-positive outcomes.

5. Opportunities (nature-based solutions)

As financial institutions understand better the benefits of ecosystems services and the potential for nature-based solutions, they will improve their pricing of loans and identify potential investment opportunities, unlocking capital towards these activities.

Innovative financial instruments are starting to be used for the conservation of ecosystems. For example:

- Parametric insurance of coral reefs and beaches in Mexico's Yucatan peninsula. This insurance covers the damage done by hurricanes to coral reefs and beaches from Cancún to Tulúm. This is part of the second largest coral reef in the world. Coral reefs preserve biodiverse marine life and help avoid the erosion of beaches caused by hurricanes.
- Nature performance bonds (NPBs) aimed at emerging market nations to protect ecosystems and biodiversity (F4B report), are linked to pre-defined targets for nature and climate. Positive outcomes would bring about reductions in coupon payments, and even have the potential for adjustment of principal.
- Financing sustainable and more efficient agriculture that restores soil fertility, nutrients and biodiversity can generate better long-term returns, especially in the context of climate-related physical risks.

Countries or regions highly vulnerable to extreme climate events are finding that nature-based solutions can be a cost-effective way to

mitigate the damage from such events. For some, such investments are indispensable to maintain insurability and bankability.

## 6. Role of financial authorities and central banks

With the support from the scientific and financial communities and other stakeholders, financial authorities can play a key role in addressing the risks and opportunities associated with restoring and preserving biodiversity and natural capital. This can be achieved by promoting metrics, standards, and disclosure practices, and integrating biodiversity-related risk factors into financial decision-making.

By making sure financial institutions have access to information on ecosystem services and dependencies, promoting nature-related financial disclosures, and the integration of financially material information in their financial decisions, financial authorities can contribute to the preservation of natural capital.

Financial authorities can also explore the role credit bureaus can have in collecting and providing data to credit institutions on the environmental compliance of borrowers. By providing this information in their reports,

credit bureaus could limit unlawful predatory behavior of firms that degrade the environment, particularly in emerging countries with a weak rule of law.

Finally, central banks have been granted autonomy to insulate them from short-term political pressures, giving them the necessary space to pursue long-term objectives. Although central banks' main mandate is the provision of money, safeguarding financial stability over time is also key. Under this long-term perspective, their actions require alignment with broadly defined social welfare and sustainability objectives.

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