



Environmental Accounts and environmentally adjusted GDP of Mexico

Raúl Figueroa Díaz

November 2019

First case study in the world

THE WORLD BANK
SECTOR POLICY AND RESEARCH STAFF

ENVIRONMENT DEPARTMENT

INTEGRATED ENVIRONMENTAL AND ECONOMIC ACCOUNTING A CASE STUDY FOR MEXICO

JAN VAN TONGEREN & STEFAN SCHWEINFEST
UN STATISTICAL OFFICE

ERNST LUTZ
THE WORLD BANK

MARIA GOMEZ LUNA & FRANCISCO GUILLEN MARTIN
INSTITUTO NACIONAL DE ESTADISTICA, GEOGRAFIA Y INFORMATICA

DECEMBER 1991

Environment Working Paper No. 50

This paper has been prepared for internal use. The views and interpretations herein are those of the author(s) and should not be attributed to the World Bank, to its affiliated organizations or to any individual acting on their behalf.

1. **Ordered information** (SNA-Mexico and administrative records)
2. **International collaboration mechanisms**
(United Nations Statistical Office / The World Bank)
3. **Recognition of environmental pressures**
(Brundtland Report, Ley General del Equilibrio Ecológico y la Protección al Ambiente (1988))
4. **Interinstitutional collaboration; leadership and vision; national capabilities**

Environmental Accounts Objectives

- Impact of economic activities
- Ecosystem assets and services
- Condition of water resources
- Efforts made by society to protect the environment
- Among others...



This project allows generating information to answer questions about the depletion of forests in a country with a great biodiversity.

Mexico's environmental accounts measure the impact of economic activity on the environment

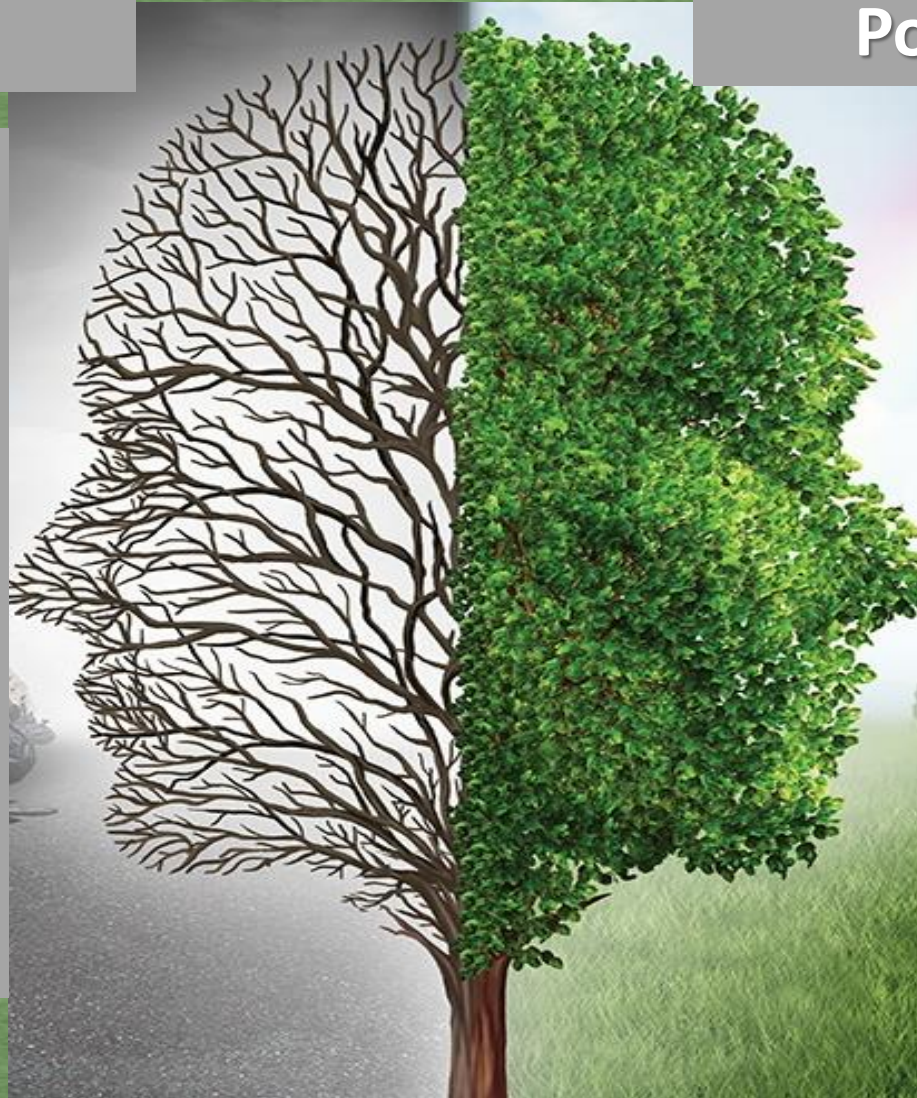
Negative externalities:

Depletion:

- Forest resources
- Groundwater
- Hydrocarbons

Degradation:

- Air emissions (mobile, point and area sources)
- Wastewater
- Soil degradation
- Solid waste



Positive externalities:

Environmental Protection

Expenditures:

- Ambient air and climate
- Wastewater
- Biodiversity
- Environmental management
- Waste management
- Research and development
- Water and soil
- Others

The concept of the Ecological Net Domestic Product

Production

P

IC (-)

GDP

CFC (-)

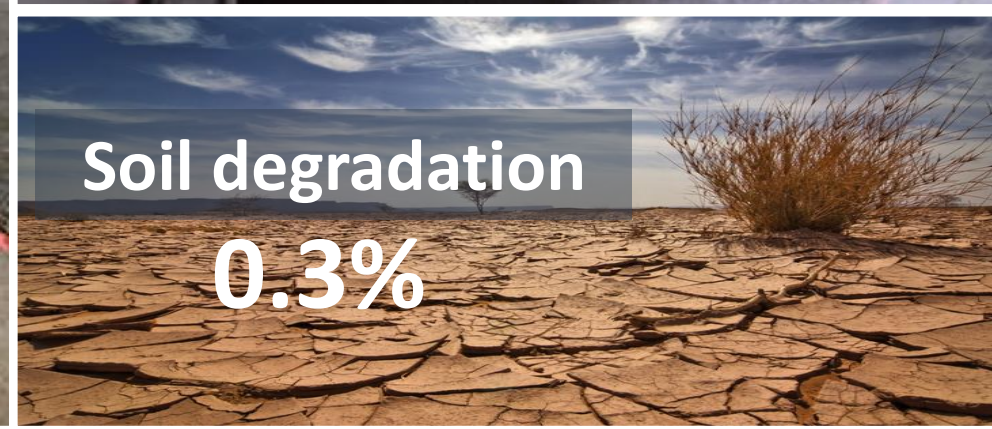
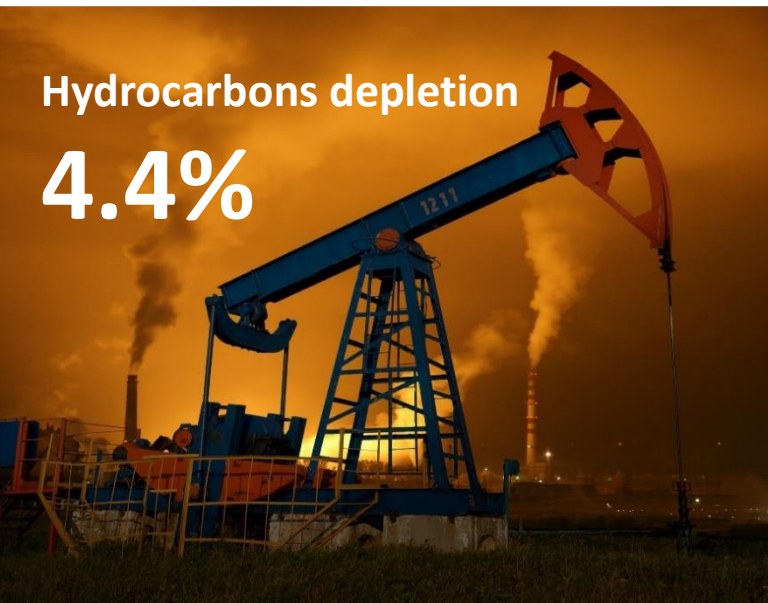
NDP

DC (-)

DgC (-)

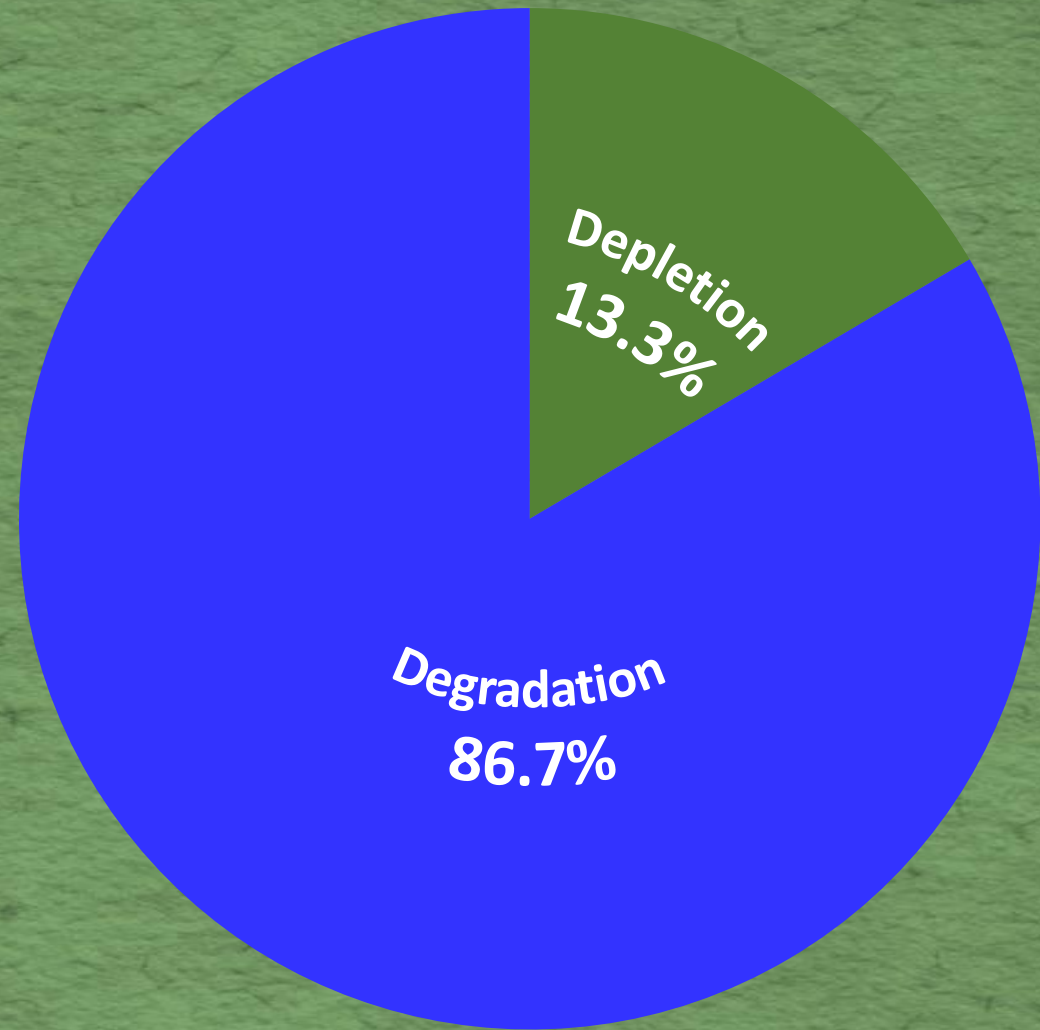
ENDP $(X - M) + C_p + C_g + A_{ke} + A_{kanp}$ **Expenditure**

Average Growth Rate of environmental impact 2003-2017 (volume)



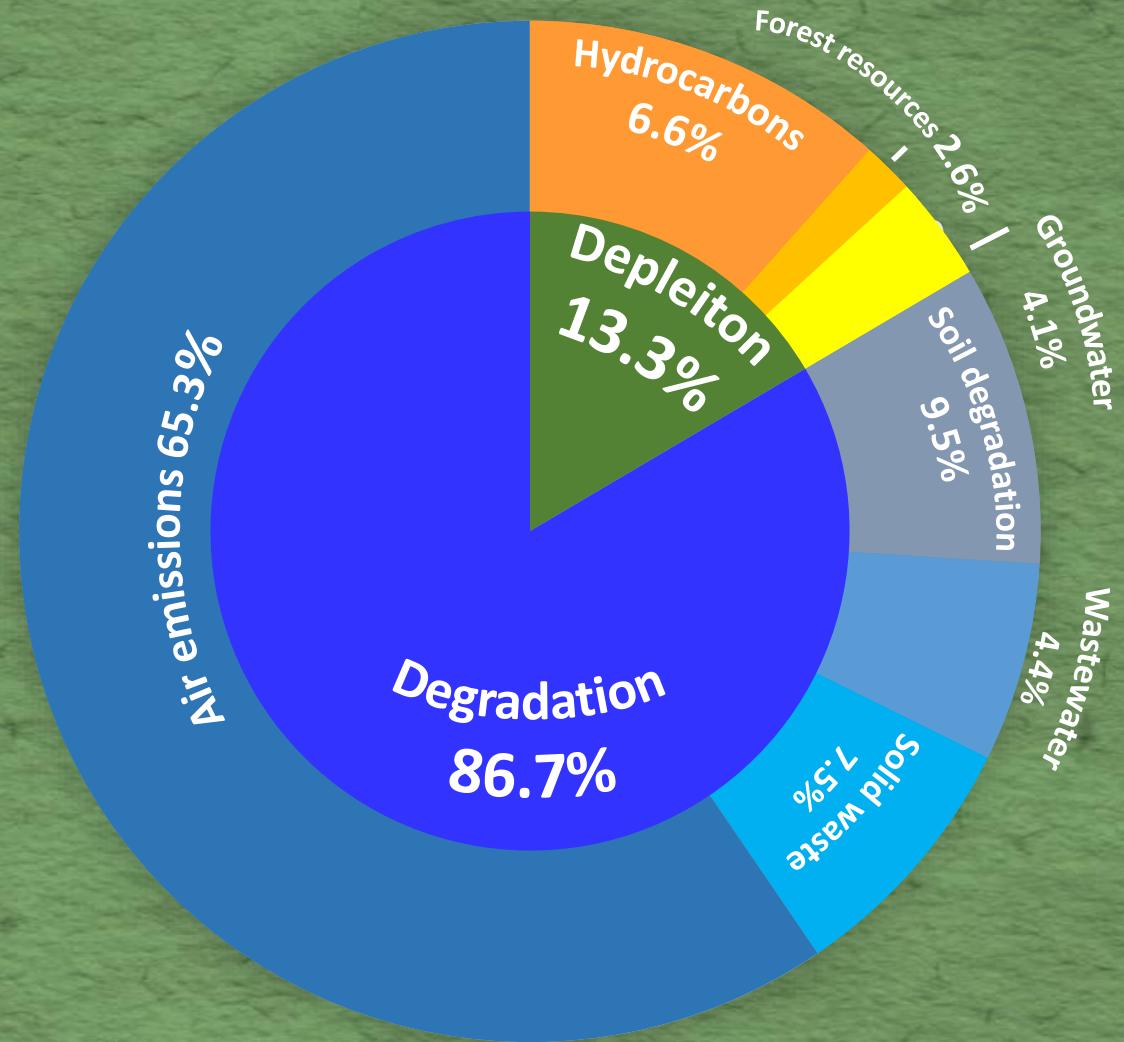
Negative externalities. Environmental costs

The “negative” impacts through the determination of the total costs for depletion and environmental degradation, in 2017 was equivalent to **4.3% as a share of GDP**



Negative externalities. Environmental costs

The “negative” impacts through the determination of the total costs for depletion and environmental degradation, in 2017 was equivalent to **4.3% as a share of GDP**

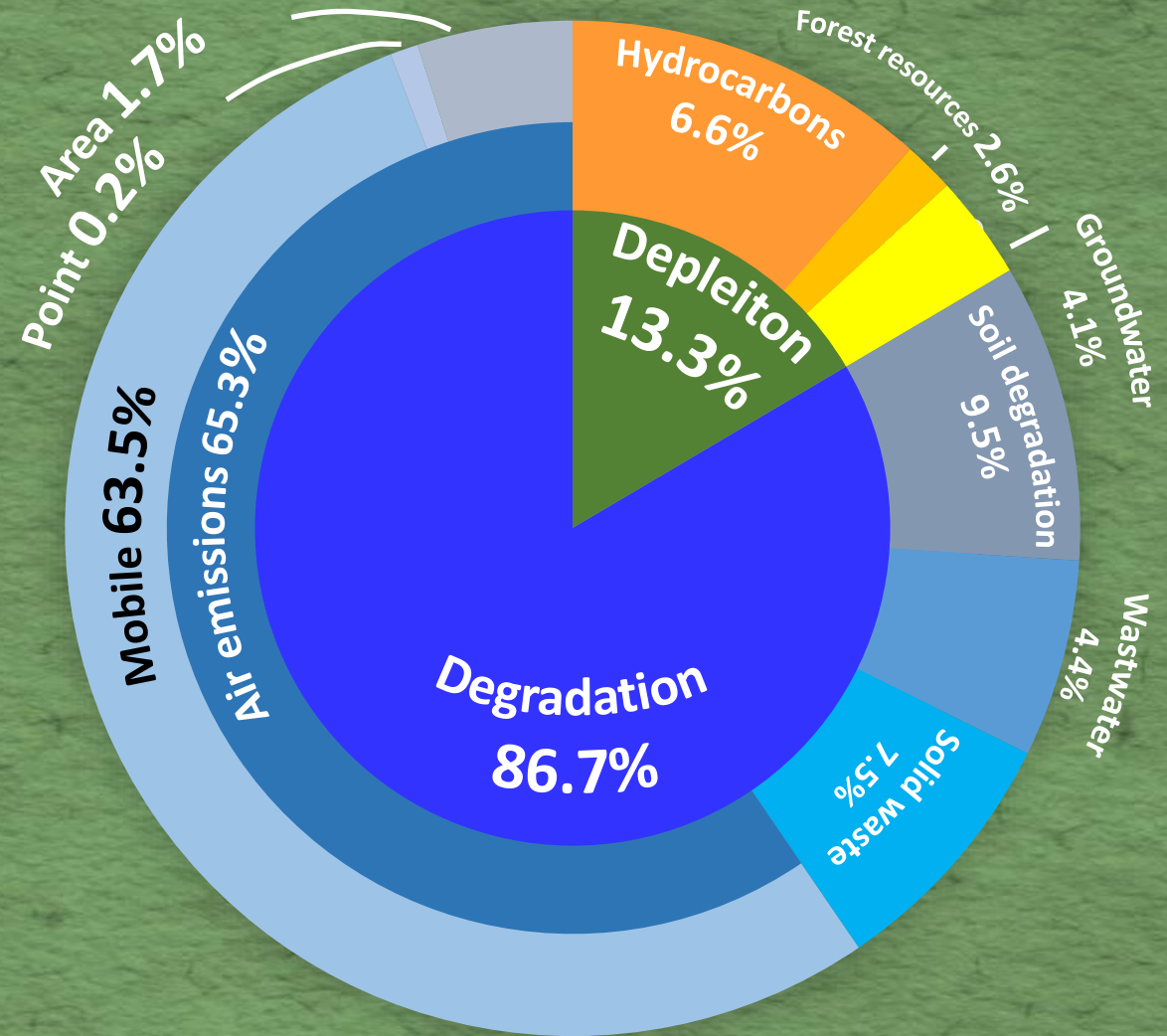


Negative externalities. Environmental costs

The “negative” impacts through the determination of the total costs for depletion and environmental degradation, in 2017 was

t to

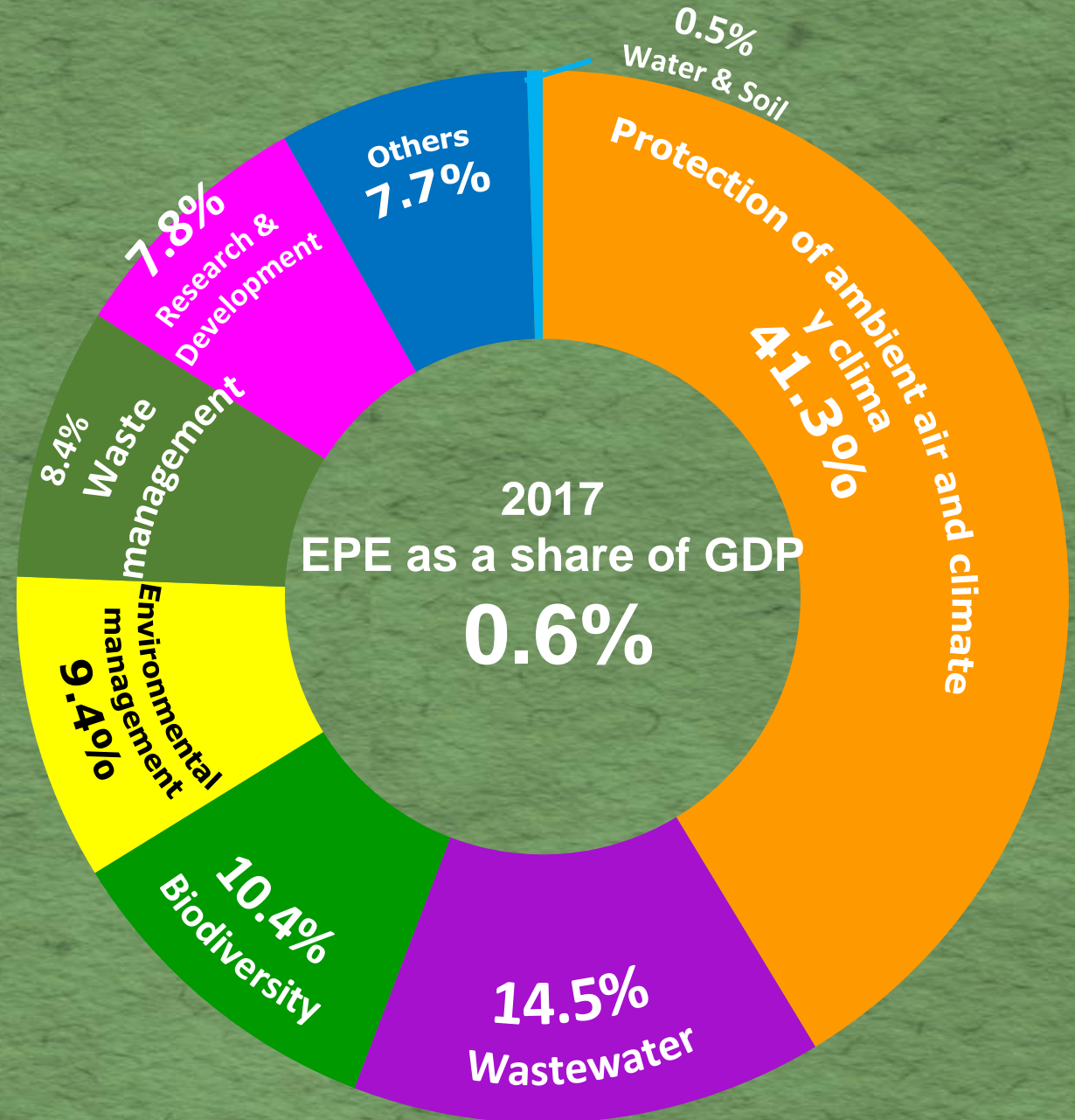
are of



Update to 2018:
December 4th
2019; 06:00 hrs.

Environmental Protection Expenditures. Positive externalities

Goal: Record the expenditures to measure, prevent, control and reduce pollution, as well as any other environmental degradation generated by decisions on production, distribution and consumption activities.



Environmental Protection Expenditures related to public sector as a share of GDP, 2003-2017



Main results

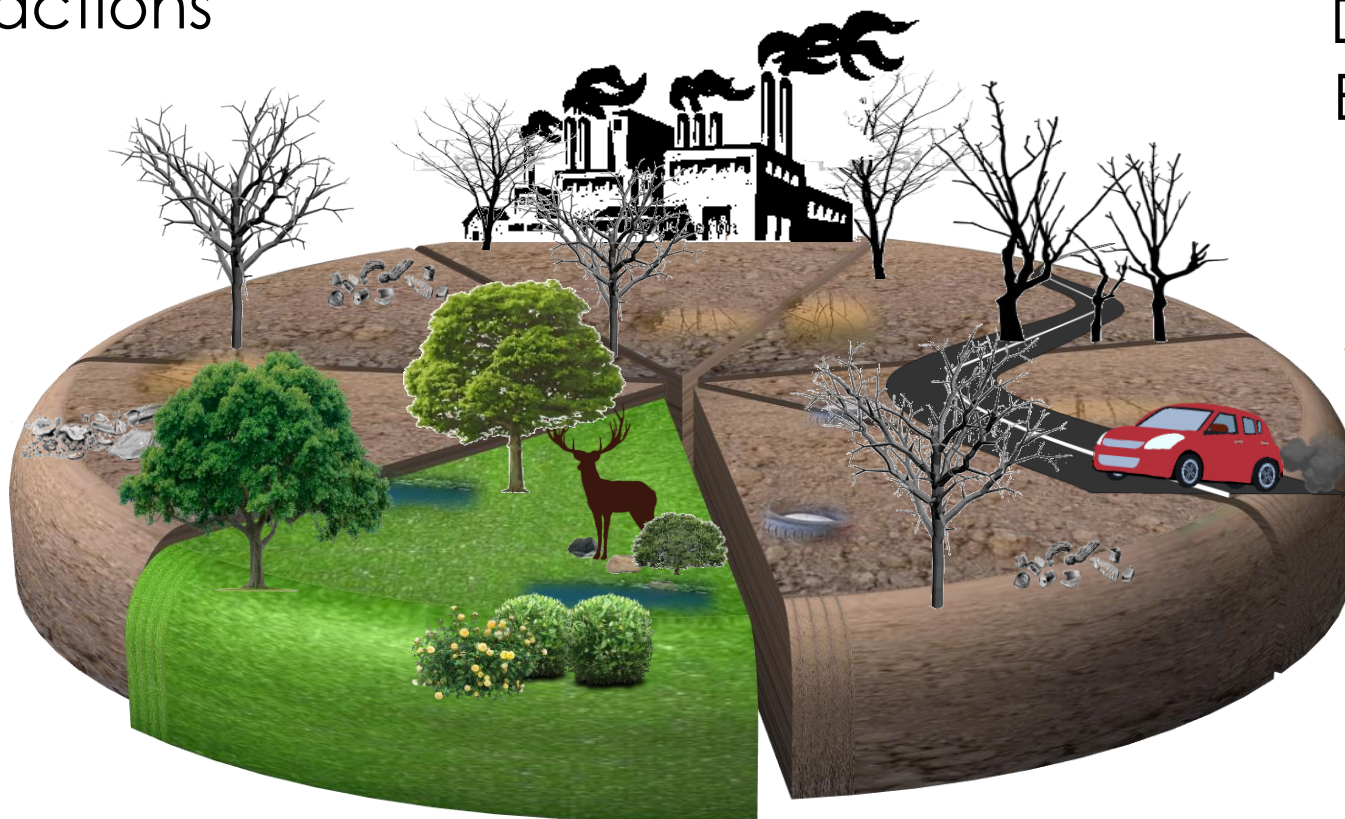
Decoupling between Economy and Environmental damage (Index 2003=100)



● Gross Domestic Product ● Total Cost for Depletion and Environmental Degradation

Main results

In 2017, the environment impact represented **6.6 times** times more than the actions to protect it



Total Cost for
Depletion and
Environmental
Degradation
\$ 50,113
Million dollars

Environmental Protection Expenditures
\$6,581 Million dollars

Déficit
Ambiental
\$ 43,532
Million dollars

Conociendo México

01 800 111 46 34

www.inegi.org.mx

atencion.usuarios@inegi.org.mx



INEGI Informa

