



Is a non-profit, non governmental organization thats is structured by a Council built up of people with an outstanding track record, with high ethical and professional level, which have national and international recognition and with a firm commitment to democratic and freedom principles.

The Council is structured with an Executive Committee, and Advisory Committee of Specialists and a Comunication Advisory Committee, and a Executive Director coordinates the operation of these three Committees.

One of the main objectives is the collection of reliable and independent information on the key variables of our economic, political and sociocultural context in order to diagnose, with a good degree of certainty, the state where the country is located.

Vital Signs intends to serve as a light to show the direction that Mexico is taking through the dissemination of quarterly reports, with a national and international scope, to alert society and the policy makers of the wide variety of problems that require special attention.



Weak or absent pulse can have many causes and represents a medical emergency.

The more frequent causes are the heart attack and the shock condition. Heart attack occurs when the heart stops beating. The shock condition occurs when the organism suffers a considerable deterioration, which causes a weak pulse, fast heartbeat, shallow, breathing and loss of consciousness. It can be caused by different factors.

Vital signs weaken and you have to be constantly taking the pulse.

## **EXECUTIVE COMMITTEE**

Maria Amparo Casar Enrique Cardenas\*

Julio Frenk

Maria Elena Morera

Alejandra Palacios

Federico Reyes Heroles

Jorge Suarez Velez

**Duncan Wood** 

Carlos Lascurain

**Ejecutive Director & Prosecretary** 

\*President 2020-2023

## ADVISORY COMMITTEE SPECIALISTS

**Eduardo Backoff** 

**Rosanety Barrios** 

Juan Carlos Belausteguigoitia

Jose Ramon Cossio

Salomon Chertorivsky

Katia D'Artigues

Luis De la Calle

Carlos Elizondo Mayer-Serra

Luis Foncerrada Pascal

Ricardo Fuentes Nieva

Rogelio Gomez Hermosillo

Luis Raul Gonzalez Perez

Eduardo Gonzalez Pier

**Eduardo Guerrero** 

Tonatiuh Guillen

Alejandra Haas

Carlos Heredia

Gonzalo Hernandez Licona

Alejandro Hope

**Carlos Hurtado** 

Maria Eugenia Ibarraran

Edna Jaime

Sergio Lopez Ayllon

Carlos Mancera

**Regina Martinez Casas** 

**Lorenza Martinez Trigueros** 

**Lourdes Melgar** 

Alfonso Mendoza

Manuel Molano

**Lourdes Morales** 

**Tony Payan** 

Jacqueline Peschard

Jose Antonio Polo Oteyza

Alejandro Poire

Casiopea Ramirez

Francisco Rivas

Jose Roldan Xopa

Hernan Sabau

**Iose Sarukhan Kermez** 

Sylvia Schmelkes

Jaime Sepulveda

Carlos Serrano H.

Eduardo Sojo

Francisco Suarez Davila

Miguel Szekely

Luis Carlos Ugalde

Pablo Zarate

# Table OF CONTENTS

#### **EXECUTIVE SUMMARY 10**

### MAPPING THE PROBLEM 17

### CONTEMPT FOR THE LAW 31

Arbitrary Decrees, governing unquestioned 34 Institutions as a spur 37 Contrasts breached 41 Implications of contempt for the law on corruption, impunity, transparency, and accountability 43 Contempt for the law; the aternal losers: as a conclusion 52

### WEIGHTS WITHOUT COUNTERWEIGHTS 54

The government's budget attack <u>56</u>
Colonization of autonomous powers <u>59</u>
Pressures and atacks on the 4T non-aligned <u>70</u>
Consequences of the weakening of formal and informal weights and counterweights system <u>75</u>

### MILITARY, MONEY AND POWER 86

Military in command: the control of positions and strategic tasks for the Mexican State 88

The budgetary wealth of the Armed Forces 91

The Armed Forces, the realm of opacity 95

Unlimited capabilities for the Army and Navy and complicity with the Legislative power 97

Military personnel, policy, and the failure of security in Mexico: an affront to the democratic state of law 100

The consequences of Mexican militarization 105

As a conclusion 108

### EXECUTION OF THE BUDGET AND PUBLIC FINANCE CRISIS 111

Permanent budgetary cuts to all activities but the flagship projects and the Armed Forces 113

Budgetary adjustments and social unbalances 117

Insufficient income and the formal labor market 120

Funding: afores and debt 122

Lack of private investment, low growth, unemployment, poverty, and migration 125

"Lit cartridge" (dixit Urzúa) for the next government 131 Long-term and labor participation gap 132 Remittances. To whom, where, linked to organized crime?

133

Non-contributory pensions 136

Internal and external migration 137

Reasons for the increase in migration to the USA 137 Immigration containment and abuse of authority 138 Displaced 140

Impoverishment, shrinking middle classes 141 Conclusions 142

### TIMEBOMB: EDUCATION AND HEALTH 145

Education 146

Problemas and implications in Mexican education 146 Increment in inequality and lack of education conditions 147 Deepening of gender educational gaps 153

Decay in teacher training schools: untrained trainers

156

Political use of the educational apparatus and attacks on science 159

Health. Quality of life gaps and deterioration 165

Punishment of early childhood 167

Inadequacy of the basic vaccination scheme and the

decline in medical treatment 168

Non-filled prescriptions and mental health 171

Impact on life expectancy 173

Prediction of failure: Insabi to IMSS-Bienestar 175

Implications of moving the model 175

How and to whom?: Inheritance for new generations 177

### **ENERGY. THE MEXICAN DILEMMA 181**

Introduction 181

The energy outlook in the world and in Mexico 182

Energy market in Mexico 186

Role of the energy sector in public finances 197

Pemex, CFE finances and federal contributions 203

Commentary on the political weight of unions 208

Mexico's energy dilemma 209

Legacy for new generations 212

### NOTHING TO MANAGE: DISREGARD FOR ENVIRONMENTAL STEWARDSHIP <u>215</u>

Introduction 215
What are the implications? 217
Non-compliance with commitments and goals 217
Dismantling of State capacities 220
Specific anti-environmental policies 225
Consequences. How it affects? 230
Water 231
Air 234
Soil 236
Who is affected, and how much? 238
Health, education, and vulnerable groups 238
Economy, regional and national development 239
Legacy for new generations 243

### FINAL CONCLUSIONS 247

REFERENCES 252



# **EXECUTIVE** Summary

ly arise and perish. By nature, when a system ages or has anomalies, a new one occurs to replace it. The same happens in societies; when public institutions or the rulers of a political community don't respond or offer efficient solutions to high instability scenarios, citizens begin demanding substantial changes and concrete actions in the face of the institutional ineptitude or impunity of the rulers. That is when they do not renew their ways, institutions, or rulers, and there is also immobility, a prevalence of harmful practices, and a democratic regression; social systems and their institutions end up adjusting naturally.

The transformations the Mexican political system has undergone throughout this century is an issue that has merited the study of hundreds of scholars and specialists. During this period, three political parties have had the opportunity to govern the country, each of them implementing policies that, in their opinion, could have generated the expected changes in, among others, social, political, and economic matters. Four years after the beginning of the current government, with a limited strategy and precarious planning, the government's achievements are not only limited, but day by day, they generate more significant lags, irreversible in many cases, in practically all sectors of the country.

The country managed to transition from an authoritarian regime that lasted much of the twentieth century to a true democracy, a must-have renewal that Mexican society had long demanded. Since the 1990s, the construction of the democratic regime in Mexico has been able to strengthen institutional processes and counterweights in the face of the arbitrary decisions of the old hyper-presidentialism; it has created autonomous bodies that provide greater economic certainty and respond to the demands of civil society, and it has decentralized political power in order to function as a true federation.

However, the current government threatens to undermine the legacy of three decades of democratization, disrupt institutions and change the balance of civil-military relations. Today's Mexico is experiencing significant regressions, which Signos Vitales describes as serious problems that not only threaten the maintenance of a democratic regime but also violate the proper functioning of the national economy and the political stability of the federation. They are seven large "tumors" that affect the whole country. These tumors root another series of problems that result in negative impacts for the whole of society in the short term, but that will affect more severe-

ly the most vulnerable and marginalized sectors in the medium term. Next, Vital Signs will present the seven tumors that threaten to promote institutional decomposition and the return of authoritarianism in Mexico.

The report goes through several serious problems that BEGIN WITH CONTEMPT FOR THE LAW. IN MEXICO, THERE IS NO TRUE RULE OF LAW; for example, the probability of a crime being reported and solved barely reaches 1%, so 99% of all unlawful acts remain unpunished. Regarding the Transparency International Corruption Perception Index, Mexico ranks 124 out of 180, which places us in a worse position than countries with less economic development, such as Sierra Leone or El Salvador.

A SECOND PROBLEM IS THE LACK OF AN ACTUAL CHECKS AND BALANCES SYSTEM AND THE DETERIORATION OF FUNDAMENTAL CIVIC GUARANTEES. The current government has promoted institutional dismantling, for example, significant budget reductions that have affected the proper functioning of relevant autonomous bodies. Between 2018 and 2022, 36 journalists were killed for informing society; this represents a clear violation of freedom of speech.





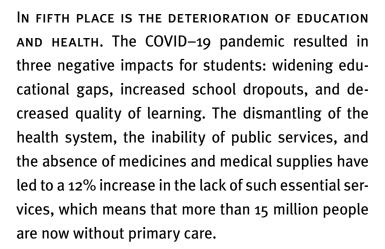


THIRDLY, IT WAS FOUND THAT A SEVERE PROBLEM IS MILITARIZATION, which takes over total control of the country daily. In recent years, the number of military personnel occupying civilian positions at various levels of government has increased. In addition to the military's administrative capture of relevant

government areas, the military has significant annual budget increases, despite the current president's Republican austerity policy. Increased public security responsibilities and tasks also imply increased charges against the military for human rights violations and illegal actions.



A FOURTH PROBLEM CONCERNS THE CRISIS IN PUBLIC FINANCES. Between 2018 and 2021, there was a significant budget imbalance of –414 billion pesos, even though the government eliminated essential public trusts for various social sectors. Another problem is the dependence of many families in the north–central and southern parts of the country on remittances. Currently, remittances sent to Mexico are almost equal to the wage bill, and in some entities or regions of the country, they have a more significant share of household income. The stagnation or reduction in Mexican families' purchasing power reflects the economy's mediocre performance in recent years.











IN THE PENULTIMATE PLACE, a problem is placed that, in one way or another, gives shape and meaning to the economic life of Mexico: THE ENERGY LIMITATION, PRODUCTION, DISTRIBUTION, AND SECURITY. How energy policy is handled acts as a brake on the country's economic development, affecting the quality of life of millions of Mexicans. The operability of the economic

system depends on energy; it affects our health and places obstacles to sustainable prosperity and inclusion. Since López Obrador's administration began, oil exports have come down. In the fourth bimester of 2022, exports were 988.2 thousand barrels per day (mbd); in the last bimester of 2018, these were 1.17 million barrels per day (MBD) (-15.3% variation).



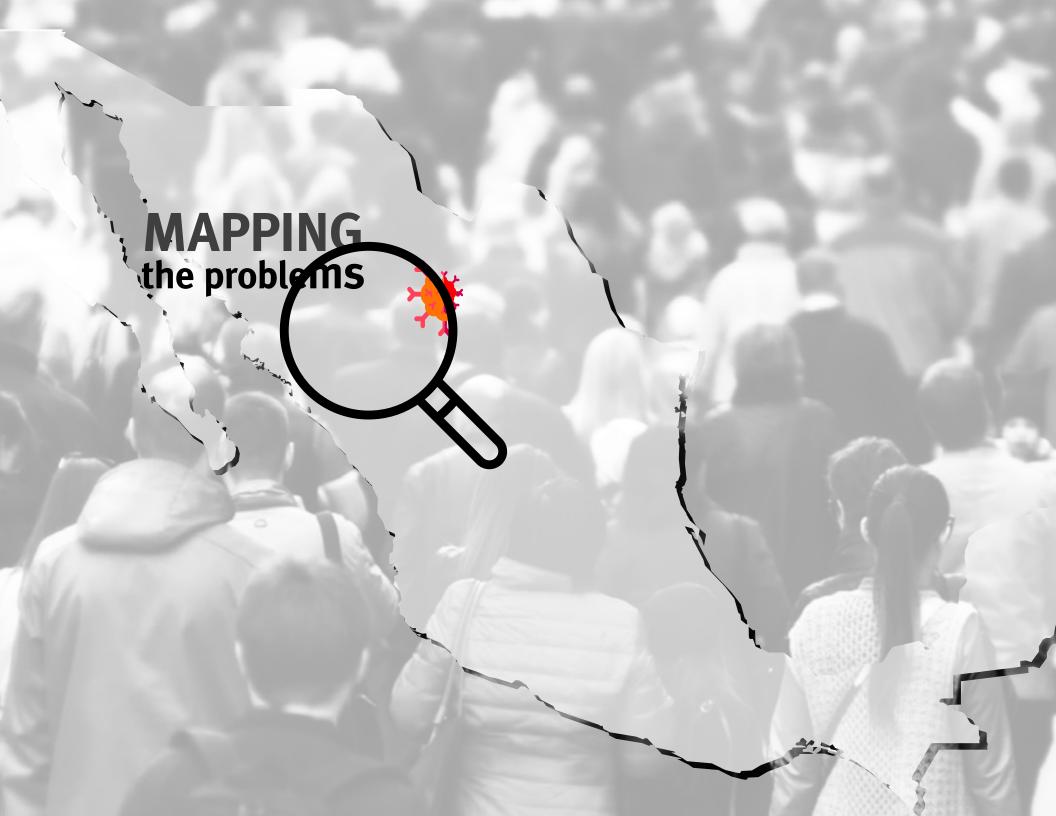
*Image*: Pemex oil exports. Available at elsoldemexico. com.mx

FINALLY, a severe problem characterized by being transversal to all sectors and issues of human life, which also has the enormous capacity to extend its impact and affect their good performance, is NE-GLECT AND DESOLATION OF THE ENVIRONMENT, NATU-RAL RESOURCES, AND CLIMATE CHANGE. Mexico does not have an environmental policy capable of facing the challenges, threats, and consequences that these problems bring with them. The consequences left by a negligent government, environmentally speaking, are vast, dangerous, and very costly. The most notorious and impactful are those that directly and immediately affect people's quality of life, such as health, increased poverty, increased food shortages, unemployment, higher prices of essential products, or family economic stagnation. Low levels of investment in water and sanitation have contributed to pollution and inefficient water use in the country in recent years. Investment and spending on Mexico's drinking water, sewerage, and sanitation infrastructure decreased by 18.1% (1,411.8 MP) in 2022 compared to 2018 (SHCP, Department of Finance and Public Credit, for its acronym in Spanish 2018b; 2022d). The scenario for air pollution is critical. In the country, about 48 thousand people die every year due to health problems related to air pollution (Mimus, 2021).



The problems described in this report threaten Mexico and Mexicans and have the regrettable characteristic of detonating more significant issues if they are not resolved or addressed in the short term. Many of these are rooted in the ideology of the current government term. Many others have were not added to the agenda because they were taken care of in the past by governments the president refers to as neoliberal. The fact is that the cost of not taking care of them will affect the country's course and the route that millions of Mexicans can take immediately.







ontrary to what much of the electorate and public opinion assumed, the democratic alternation of 2018 caused Mexico's growth and strengthening to deviate from the path that led to democratic consolidation gradually. Although the incipient experience of Mexican democracy has posed arduous unresolved challenges, it would be absurd to think that the actions and policies implemented in the last three decades in favor of the democratic transition have entirely failed. On the contrary, there is evidence that significant advances must be preserved and consolidated. Unfortunately, the government is now trying to impose a single vision by distorting the truth in all areas, which has resulted in extreme polarization of society. This has been accompanied

by the systematic violation of the law, the weakening of State institutions and their use for political and personal purposes, ineffective government planning, and the mismanagement of public resources.

In the quarterly reports and several other documents, Signos Vitales has presented diagnoses on the policies, ways, and mechanisms with which the current government faces the problems of governance and democracy, social and political—economic. In the same way, this new government style's impact on the Mexican population in the short, medium, and long term has been analyzed. For instance, hard evidence and data have been presented regarding the widespread decline in education and its future chal-

lenges. Something similar has happened in health, energy, environment, poverty, employment, vulnerable groups, and welfare. The analyses on the autonomous institutions and bodies' decomposition once created democratic counterweights have been added to these diagnoses. The national public security, the militarization, and the concentration of power crisis, as well as the mediocre management of economic policy, have contributed significantly to the precarious situation that the country is going through. In other words, an attempt has been made to provide a timely follow—up to the vital signs that the country presents at this time of political confrontation and neglect of institutions, but mainly of the consequences of these actions on Mexican's quality of life.

The importance of the problems that Mexico currently faces lies mainly in the capacity to continue causing present and future effects of great caliber and their ability to expand and contaminate other sectors or public areas. As a result, specific individuals and groups are severely affected by the current government's decisions, which remain unchanged in its policies. The number of problems is enormous and varied, so simply their recognition and order are essential tools for proposing solutions.

It is increasingly necessary to propose ways to recover and overcome what had been achieved in previous decades without this meaning that they had met the expectations of Mexicans or that they were oblivious to problems and crises, having already fulfilled two—thirds of the current government. There is an urgent need to learn from what has happened in the current six—year period and to think and imagine a democratic, secure, fairer, more inclusive, prosperous Mexico with society and government that comply with the rule of law in a context of plurality, respect, and peaceful coexistence.

There is an urgent need to learn from what has happened in the current six-year period and to think and imagine a democratic, secure, fairer, more inclusive, prosperous Mexico with society and government that comply with the rule of law in a context of plurality, respect, and peaceful coexistence.

In this report, Vital Signs presents a true, reliable, and as complete diagnosis as possible of our reality to contribute to the national debate at this stage in our history. For the structuring of the report, Signos Vitales posed the following questions: What are the fundamental problems that Mexico faces that, if unresolved, would make the great purposes of the country impossible to advance relations or the destruction? What are those problems that, if not taken care of (or at least if a solid start to its resolution is not undertaken), seriously hinder the solution of other problems afflict us? In other words, it is a question of identifying all those moot issues that must be resolved and addressed because they hinder the country's development. Moreover, at the same time, because of their high negative impact, they affect in the same way other substantive areas of vital importance to the life and sustenance of a democratic, safe, prosperous, just, and inclusive Mexico.

What are the fundamental problems that Mexico faces that, if unresolved, would make the great purposes of the country impossible to advance relations or the destruction?

What are those problems that, if not taken care of (or at least if a solid start to its resolution is not undertaken), seriously hinder the solution of other problems afflict us?

Based on these questions, Signos Vitales has detected that the main problems that Mexico suffers, whose attention and resolution are fundamental for the country to move forward, come from the following seven scenarios: contempt for the law; the weakening of democratic weights and counterweights; the militarization and underpinning of authoritarianism; the design of public policy and the discretionary exercise of the budget and public finances; the precariousness of education and health services; the return to the state monopoly in the energy field, and the environmental crisis.

THE CONTEMPT FOR THE LAW, THE RULES, AND THE LE-GAL STRUCTURES THAT SUSTAIN THE MEXICAN STATE has been a constant that weakens and corrodes the political and institutional fabric. By not honoring his oath to "comply and enforce the Constitution and the laws that emanate from it" during his swearing-in, the president caused the corrosion and weakening of everything that sustains our country's coexistence. Knowingly violating the laws and the Constitution itself thwarts political and social coexistence, and the government seems not to care. If the violation of the regulations is followed by contempt of court sentences that force compliance, citizens' rights, and institutions are weakened, and widespread vulnerability increases. The law of the jungle is privileged: only the strongest survive.

The fact that law violations by the President himself, the Secretary of the Interior, and other high-ranking officials are already widespread and promoted destroys the slight possibility of political and social coexistence in Mexico. Added to this, disrespect for political institutions, autonomous bodies, and democratic procedures undermines trust, promotes arbitrariness and injustice in all political and social spheres, and encourages acts of impunity and corruption. The aftermaths of the government's author-



*Image*: López Obrador's oath to comply with the Constitution and the laws, December 1, 2018. *Photo*: Sinembargo.com.mx at www.wildentrepreneur.org/

Knowingly violating the laws and the Constitution itself thwarts political and social coexistence, and the government seems not to care. itarian action generate irreversible consequences in the short term that affect Mexicans in a transversal way, and that can have repercussions for many years in the future. Examples include the deterioration of human rights, the pursuit of justice, the precariousness of economic development and international trade relations, and the destruction of the environment and natural heritage.

A SECOND PROBLEM THAT DESTROYS THE DEMOCRATIC FRAMEWORK OF THE COUNTRY IS THE WEAKENING OF THE POWERS AND INSTITUTIONS that constitute counterweights to the central jurisdiction since these prevent the excessive accumulation of power and the loss of freedoms and guarantee the protection of all groups and people in society. The current government has moved further and further away, indeed backward, from the path of consolidation of the democratic regime in Mexico. This assault from power has affected the institutions that guarantee Mexican democracy. Instead of generating consensus and deliberation to reach agreements, the government intends to impose its conditions and block any actor who poses resistance, be they political parties, the media, civil society organizations, or even individuals. The consequences range from the proper exercise of the Supreme Court of Justice, as the governing







Destruction of the democratic framework of the country is weakening the powers and institutions that constitute counterweights to the central power.

institution of the judiciary, to attempts to co-opt various autonomous bodies, such as the National Electoral Institute and non-governmental organizations, which guarantee democratic exercise in national public life. Likewise, losses in terms of democratic achievements have had negative consequences in other sectors, such as in the commercial sphere in terms of the violation of international contracts and treaties; the defense of human rights; the deterioration of the health system, and even environmental deterioration.

THIRD, THE ARMED FORCES' INTERFERENCE IN VIRTUALLY ALL GOVERNMENT ACTIVITIES AND THEIR PERMANENCE IN THE STREETS until at least 2028 constitutes the main concern of civil society in modern Mexico. The civil power has already legally handed over internal and external security to the Armed Forces. While it had done so de facto for at least three—six years terms, it was still clearly defined that internal security should be civilian in nature. During this sexennium, said powers were given the Sedena (Secretariat of National Defense, for its acronym in Spanish) at least until 2028. In addition, the president has assigned essential civilian responsibilities to the Army or Navy, which have gradually become the executive arm of the current government in strategic areas, such as

### INTERFERENCE OF THE ARMED FORCES



**PORTS** 

**AIRPORTS** 

**CUTOMS** 

CONSTRUCTION

SOCIAL PROGRAMS AND VACCINATION

**CIVIL AIR CONTROL** 

MAYA TRAIN OPERATION

AIR LINE PROJECT

TOURISM SERVICE PROJECT



ports and customs, several airports, including Mexico City, the Mayan Train, and the Trans—isthmic one, and, through the National Guard, the safeguarding of communications, maritime and air. The government now delegates civil activities and public resources management to the Armed Forces, a sector that the authorities and civil society will hardly be able to hold accountable for the opaque functioning of their activities (which, by the way, was criticized some time ago by the now president). The government has given the

Armed Forces such power that there are currently well–founded doubts about the pre–eminence of civilian power over military power. The consequences and implications of this relationship of forces fundamentally alter our political system to the detriment of democracy.

FOURTH, ECONOMIC POLICY has been subordinated to two central objectives that determine practically all the rest of public policy in this sexennium: first,

Image: The Defense secretary, Luis Cresencio Sandoval González, and Marine secretary, José Rafael Ojeda Durán. *Photo*: Isaac Esquivel at www.elpais.com.



to maintain a relatively balanced budget at all costs and not to make a significant fiscal reform, whose shortfalls come from domestic indebtedness and accumulated public savings and assets, which determines the "austerity" budgetary policy and implies the decision to keep the exchange rate stable; second, to restore state monopolies in the energy sector through Pemex and the CFE (Mexican Petroleum and the Federal Electricity Commission For their acronym in Spanish respectively) From these two objectives, regardless of the costs involved and their economic, political and social consequences, all the action of public policy can be derived. It should also be mentioned that the priority for President López Obrador to accumulate the greatest possible power in the Executive has consequences in economic policy and any other public policy area. The two objectives of monetary policy mentioned are the population's well-being, economic prosperity, health, and education of Mexicans, as well as the conservation of our natural resources and the environment.

Government actions to maintain a certain balance in public finances have had disastrous consequences for the country. On the expenditure side, the federal administration has made budget cuts in virtually all

### **OBJECTIVES OF THE ECONOMIC POLICY**



#### **BALANCED BUDGET**

NOT TO MAKE FISCAL REFORM

"REPUBLICAN" AUSTERITY

SHOULD THERE BE A NEED FOR RESOURCES:
INTERNAL DEBT
SAVINGS
ACCUMULATED PUBLIC ASSETS

··· STABLE EXCHANGE RATE



RESTORE STATE MONOPOLIES: PEMEX AND CFE

dependencies, except the Armed Forces, Pemex, and the CFE, and has used discretionary budgets allocated by Congress, reserve funds, and trusts in other uses to adjust public spending. Regardless of whether investment falls or income insecurity increases, economic stagnation and rising levels of unemployment perpetuate poverty in all its forms and foster internal and external migration. In the health crisis context of the COVID pandemic, neglect has affected priority sectors that require more staff and budgetary funds, such as essential health services and the entire education sector. The postponement of real support for society, without political or ideological ends, continues to directly threaten the future of millions of Mexicans, to maintain the fiscal balance at the base to sustain the exchange rate.

FIFTH, THE POLICIES IMPLEMENTED OVER THE PAST FOUR YEARS DO NOT SEEM TO HAVE THE APPROPRIATE IMPACT ON ALLEVIATING MANY SOCIAL PROBLEMS that afflict us and will be difficult to improve in the years to come. The prevailing inequalities in the education sector after the pandemic increased social gaps. More than two years after the beginning of the great confinement, the educational landscape lacks the elements to compensate for the deficiencies in learning, teacher training, or promotion of scientific pro-

grams. The academic and scientific landscape seems conditioned by mediocre leadership that permeates and replicates the implementation of inefficient policies in the face of the critical landscape Mexico is experiencing today. The same problems occur in the health sector, where limitations in all its areas turn out to be the common denominator, with constant attacks, adjustments, and disappearance of institutions, which in the past managed to advance and give better results in decent health care. Again, Mexican society will have to face the postponement of priority tasks such as full universal vaccination cov-



*Image*: Schools in bad conditions. *Photo*: Daniel Camacho at www.elsoldeto-luca.com.mx

erage, timely medical treatment, or the primary and effective provision of consultations and medical prescriptions. Taken together, the current government has left social groups highly in need of better care and services adrift. The authorities have exchanged the nascent social welfare institutions and programs for economically unviable pharaonic projects, which have done little to change the country's course for the general benefit of the Mexican population. The consequences will be long—lasting.

DILEMMA that will profoundly affect the economy, politics, and the environment. The federal government has been unable to interpret the rickety diagnosis presented in this sector. Suppose we continue with the current energy policy for a short time. In that case, we will be suffering from an energy shortage, and most of the energy we will have will be of bad quality, with pollutants, and with failures in its dis-

Image: Waiting room in IMSS at www.eldeforma.com.



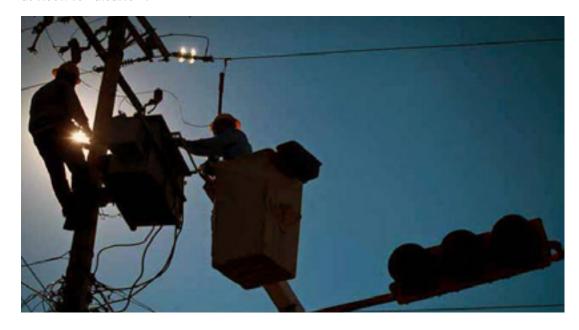
DIAGNOSIS OF MEXICO: DARK PERSPECTIVES :: 26

tribution. In electricity, investment lack has occurred in the CFE in recent years - together with the policy of returning to fuel oil that pollutes so much -hinders those who produce clean energy and through cogeneration, as well as dispatching first the energy that the CFE produces even if it is much more expensive, sets the table for a major crisis in the sector. In hydrocarbons, the suspension of auctions for exploration and exploitation rights of areas of the country for private companies cut short the possibility of significantly increasing crude production. The accumulation of financial and operational problems in Pemex, with decreasing returns due to the decision to privilege refining over exploration and production, places Pemex in a situation of technical bankruptcy. If we add to this the obstacles that the government has put in place to stimulate greater competition in the energy market, which results in increasing subsidies, the financial situation of the CFE and Pemex is unsustainable.

This situation poses a serious dilemma: to avoid shortages by providing sufficient, accessible, and sustainable clean energy to the country (to companies, families, government, etc.), the government will have to deal with Pemex, the CFE, and their unions. If it decides to do so, there will necessarily be a re-

duction in the size and functions of the state's "productive" companies and a confrontation with the three unions (including the SME (Mexican electricians union, for its acronym in Spanish) that remains linked to the CFE), which will have a high economic and political cost. If it is not decided to face the situation, the government, in turn, will take as many palliatives as possible to avoid an energy shortage crisis while in power, including a return to ex–ante energy policy. However, sooner rather than later, it will explode, as in 1982, with the medium– and long–

*Image*: Advice in case of electricity blackout. Photo: Archives at elsoldesinaloa.com.mx





term consequences we are already familiar with. The future of energy supply is unclear, and even less so with the demands of Canada and the United States against Mexico for alleged violations of the USMCA. What seems unavoidable is that there will be a major adjustment before the problem of clean energy shortages can be solved.

SEVENTH, DEALING WITH THE DETERIORATION OF THE ENVIRONMENT AND CLIMATE CHANGE can no longer be postponed. Although in the past, no government has given the priority that the issue really requires (except for the moderate action taken by the government of Felipe Calderón), the current government's rubric has been contempt, undermining, and neglect of air, land, and water quality, as well as climate change.





*Images*: "New oil union gets registration; employees have other option for the first time in 86 years". Photo: Cuartoscuro at Animal Político.

"Answers to «the private business of the SME directors and the fight with the government»" at marxismo.mx.

"CFE fires 57 thousand base workers in this presidential period". Photo: Archive Ernesto Muñoz at elsoldemexico.com.mx

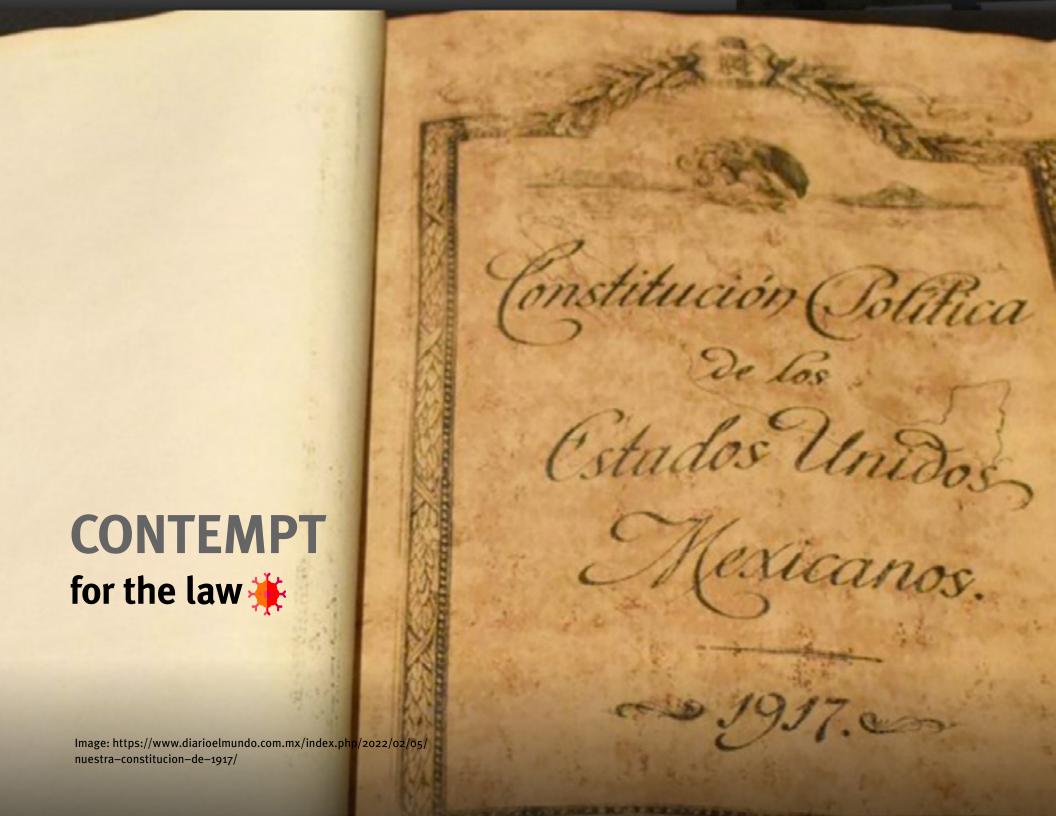
The country's institutional and budgetary onslaught on the environmental sector is unprecedented. Despite the pressures and recommendations of other countries and international organizations, Mexico continues a path of little consideration of environmental issues that may have costly consequences shortly. Examples of this are the government's stellar projects, such as the Maya Train or the Dos Bocas Refinery.

The effects of environmental mismanagement and the lack of adequate attention to climate change are transversal to practically all other sectors, such as health, education, vulnerable groups, economy, regional development, poverty, food crisis, and insecurity many others. This government has been unable to visualize the future consequences and prioritize the issue properly at a time when the sum of proposals and actions should be the rule and not the exception.

All these seven problems put Mexico in a high-risk position to get us on the right track and to control, mitigate or reverse the severe consequences that are being felt. The greater the delay in solving each of these problems, the greater and more complicated the ways of solving them and the more impactful their results are in society, the economy, or the envi-

ronment. At Signos Vitales, we consider that pointing out these seven issues/problems constitutes an initial step to proposing and designing public policies that can face the challenges afflicting the country. Timely and relevant attention is needed to address these kinds of difficulties by generating a real consensus that will help build a new version of Mexico.





### CONTEMPT

## for the law 🌞

country's regulatory framework, whatever it may be, serves or at least should act, as the frame of reference for members of that society to know what is allowed and what is not allowed to be done. In addition, the framework establishes legitimate procedures for reaffirming or modifying the rules of coexistence and indicates how the rights of individuals, their responsibilities, and even the penalties to which a person, organization, or the State itself may be subject are materialized.

In this sense, respect for the Constitution and Mexican laws is a minimum and indispensable requirement for a government to be considered democratic in constitutional terms. Although Mexican political history has been marked, precisely, by the systematic violation of the law by the entire Mexican state, in the last three years, a publicly hostile attitude to-

wards compliance with the legal order has been accentuated by members of the federal government, mainly by the president.

Like all the presidents that Mexico has had, López Obrador swore to comply with and enforce the Constitution and the laws that emanate from it; however, this administration has demeaned the country's legal framework in different ways. On the one hand, the procedure by which a government can carry out specific actions has been violated. On the other, it has breached, by omission and by action, the content of various normative provisions that touch almost all areas of public policy, from security to the composition of executive bodies of autonomous powers, also encompassing the electoral and environmental field.

| TABLE 1. SOME OF THE VIOLATIONS OF THE LAW BY THE FEDERAL GOVERNMENT 1/2  |   |
|---|---|
| 1. Hydrocarbons Law   | 14. Request passenger transport companies to require identification from those traveling around the country via public transport.   |
| 2. Electricity Reform Act   | 15. Remuneration Act  |
| 3. Decree on the Electric System Reliability Policy   | 16. National Guard Law  |
| 4. Judicial Reform of April 15, 2021, ("Zaldívar Law")  | 17. Use of Force National Law   |
| 5. Internal Security Act (The SCJN (National Supreme Court of Justice, for its acronym in Spanish) determined the unconstitutionality of the challenged rule)   | 18. The disappearance of the Educational Physical Infrastructure National Institute (INIFED for its acronym in Spanish), transferring its tasks and budget to students, parents, and teachers in schools.   |
| 6. Resignation of Minister Medina Mora  | 19. Rogelio Ramírez de la O gave López Obrador information about the interest rates BANXICO (Mexican Bank for its acronym in Spanish) would set   |
| 7. Suspension of Judge Jorge Arturo Camero  | 20. National Detention registry law   |
| 8. Appointment of the NHRC representative   | 21. Reform of the National Code of Criminal Procedure and the Tax Code  |
| <ol> <li>Appointment of Commissioners of the CRE (Energy Regulatory Commission for its acronym in Spanish)</li> </ol>   | 22. National Seized Assets Law  |
| 10. Appointment of the head of the Agency for Safety, Energy, and Environment (ASEA)  | 23. Law on the Career of Teachers   |
| 11. Cancellation of the Metrobus in the Lagoon  | 24. Reform of the Federal Law on Budget and Fiscal Responsibility   |
| 12. Cancellation of the Constellation Brands Brewery  | 25. Making excessive and unjustified use of direct public procurement allocations   |
| 13. Decree with reforms that eliminate various trusts for the protection of human rights defenders and journalists, the development of science and technology, and the support fund for former migrant workers. | 26. The announcement in which director general of The National Fund for Tourism Development (Fonatur for its acronym in Spanish) announced that the Army would receive all the resources obtained from the operation of the Mayan Train, in addition to all the tracks and the railroad will be owned by the Sedena (Secretariat of National Defense for its acronym in Spanish). |

| TABLE 1. SOME OF THE VIOLATIONS OF THE LAW BY THE FEDERAL GOVERNMENT 2/2   |   |
|--|---|
| 27. Intervention by the President in the 2021 interim elections through acts of propaganda during the morning conferences he holds.  | 37. Recall Referendum Act   |
| 28. Popular consultation to "prosecute" former presidents  | 38. The president used images and religious phrases in a morning conference to justify his government's work.   |
| 29. Shortage of medicines  | 39. The Financial Intelligence Unit froze the accounts of the municipality of Delicias, in Chihuahua, due to protests caused by the water conflict in the La Boquilla dam.  |
| 30. The 2021 Expenditure Budget of the Federation does not include resources for developing the local police, and the Strengthening of Public Safety Performance Program (Fortaseg for its acronym in Spanish) disappears. | 40. The president announced that he would carry out a popular consultation to decide if the Armed Forces should continue to carry out public security tasks until 2028, it would not be framed in article 35 of the Constitution. Later he said that it would not be a consultation but an exercise in citizen participation protected by art. 27 of the Organic Law of the Federal Public Administration. That legal basis does not make the decision binding. |
| 31. Transfer all powers in port post administration from the Secretariat of Communications and Transportation (SCT) to the Marine Secretary (Semar).   | 41. Law of the General National Public Security System  |
| 32. Failure to provide personal protective equipment for personnel facing the COVID-19 crisis.   | 42. Violation of the Transparency Law in Loret de Mola's Income case  |
| 33. Decree ordering the Mobile Telephony Users National Roll (Panuat for its acronym in Spanish).  | 43. Use "servants of the nation" as electoral propaganda in vaccination.  |
| 34. Decree issuing the new Act on the Attorney General's Office.   | 44. Irregularities in appointments in the CNDH (National Human Rights Commission, for its acronym in Spanish), the CRE, and the SCJN.   |
| 35. "Nahle Decree" sought to reduce economic competition in the electricity market and discourage the use of clean energy.   | 45. Liberation of Ovidio Guzman Lopez   |
| 36. Federal Law of "Republican Auserity"   |   |

Source : In-house elaboration with information of Signos Vitales (2021) (p.23) and Common Cause (2021).

This has had significant consequences on the political and economic dynamics of the country that are reflected in substantial tensions between party political groups, besides showing the frankly authoritarian nature of the federal government in the irrational and opaque spending of part of the public budget, in the reduction of private investment due to the enormous uncertainty due to the contracts breached by the government, or in the confrontation of the top management of the Mexican State with its main trading partners.

The implications of the president and his cabinet ruling without being interested in sticking to the game's general rules are numerous. However, the fact stands out that arbitrary decrees govern the country and not by negotiating with the different parts of the Mexican State and society, the use of institutions for political purposes for or against friends and enemies of the current administration, or the possibility of violating contracts by canceling or changing them unilaterally.

### ARBITRARY DECREES, GOVERNING UNQUESTIONED

A first feature that has drawn attention to the actions of the federal administration is that the head of the Executive has promoted the central part of its government program through agreements and presidential decrees with an enormous legal and political scope. Contrary to his campaign commitment to not reforming the constitution, his parliamentary group has already amended the Magna Carta on 55 occasions, and although during the first three years of López Obrador as president, the C Constitution was reformed fewer times than during the first three years of the governments of Enrique Peña Nieto and Felipe Calderón, 2019 became the third year with more reforms of this type since 1917 (Chamber of Deputies, 2021). On occasions when he has not achieved the necessary majorities, López Obrador has resorted to two mechanisms to impose his acts of government:

- 1. Issuing decrees or presidential agreements and
- 2. Violating the Mexican legal framework.

The President has resorted to a set of agreements and decrees to give normative support to his government program, in so doing, skipping the parliamentary process. While all Mexican federal executives have taken advantage of this mechanism, the current administration has based much of its security and development policy on this strategy. Some of López Obrador's most striking decrees and agreements for their scope and open contradiction to the Constitution are those that regard the budgetary concentration of power in the President of the Republic figure and those related to a transparent and open process of militarization. These two fields of action have been vital for the President to increase his ability to control public administration, subnational governments, and even autonomous powers such as the Judiciary, which from the first moment of his mandate was threatened with budgetary cuts.

A clear example of how López Obrador strove to break legal restrictions on using the federal budget was the presidential decree published on April 23, 2020, establishing austerity measures by the government.<sup>1</sup> This decision allowed the President to modify the

destination of the resources allocated to the federal government with complete arbitrariness. It should be mentioned that the Federal Law supplemented the decree on Budget and Treasury Responsibility article 61 amendment (LFPRH for its acronym in Spanish). It empowers the President so that the savings obtained from the rationality of expenditure included in the Republican Austerity Law (LAR, for its acronym in Spanish) can be directed to any site of the federal administration without any justification before the Ministry of Finance. In other words, the President may make any budgetary reorientations he wishes without needing to prove his motives.

Undoubtedly, in militarization, the presidential May 11, 2020 agreement shows once again how, in the face of the precipitousness that the president has to carry out his government policies, he resorts to these mechanisms to achieve his objectives.<sup>2</sup> This agreement established that the government could have the Permanent Armed Forces carry out public security tasks in an extraordinary, regulated, controlled, subordinate and complementary manner. However, it never establishes a timetable for action nor criteria

<sup>1</sup> Look at: https://www.dof.gob.mx/nota\_detalle.php?codigo=5592205&fecha=23/04/2020#gsc.tab=0

<sup>2</sup> Look at: https://www.dof.gob.mx/nota\_detalle.php?codigo=5593105&fecha=11/05/2020#gsc.tab=0

for the geographical distribution of Armed Forces elements in the national territory, nor how these will

be subordinated to the civil power of the Executive Secretariat of the National Public Security System, nor how their actions and results will be evaluated. On the contrary, the Armed Forces that have administratively, operationally, budgetarily, and strategically controlled the National Guard (then considered a civil institution in the National Guard Law approved in 2019) have not been accountable for the use of the enormous budget they have exercised, nor for their actions in the field of security. This decree was challenged, and although three years have passed since then, the SCJN has resisted studying and providing a ruling in this case, so its applicability remains in force.

#### TABLE 2. LÓPEZ OBRADOR'S MAIN DECREES AND AGREEMENTS

- 1. Decree that reduces fiscal times for radio and television.
- 2. Decree by which all federal units have an obligation to approve the government's projects under their chairmanship.
- 3. At the same time, the decree of April 23, 2020, which also became an initiative that proposes to modify article 21 of the LFPRH, mandates that because of the health contingency, "75% of the available budget will not be assigned for materials and supplies".
- 4. November 22, 2021: The president published in the Official Gazette of the Federation the decree that declares "of public interest and national security" the completion of projects and works related to hydraulic infrastructure, communications, telecommunications, customs, environment, tourism, railways, health and all those considered "priorities and, or strategic for national development."
- 5. July 29, 2022: Faced with the water crisis in Nuevo León, López Obrador issued a decree to guarantee the water supply for the entity for the next eight to ten years. It orders temporary use of water concessions "as a question of public utility, interest and a matter of national security."
- 6. August 8, 2022: By presidential agreement and without waiting for the approval of the constitutional amendment, the Ministry of Defense will assume control of the National Guard. Likewise, the Secretariat of Public Security and Citizen Protection will be restructured to add a special function dedicated to justice.
- 7. An agreement was provided for the Standing Armed Forces to carry out public security tasks in an extraordinary, regulated, controlled, subordinate and complementary manner.

Source: In-house elaboration with information from Segob (n.d.).

#### **INSTITUTIONS AS A SPUR**

This government has also been accused of making discretionary political use of Mexican state institutions. Perhaps the most obvious cases are those involving the Financial Intelligence Unit (FIU, for its acronym in Spanish), the Tax Administration Service (SAT, for its acronym in Spanish), and the Attorney General's Office (FGR, for its acronym in Spanish). Which legally has independence from the federal executive but whose action has raised questions about its political independence. These three institutions have played a central role in the government's strategy of political control since they allow it to mobilize resources either to maintain impunity for some or to persecute its political opponents. Whether formal, such as members of political parties, or informal, such as the business class, civil society, or organized crime. There are several known cases in which the FIU has served as an incentive to discipline those who oppose executive decisions.

The action of the FIU is illustrative since the institution's activities reports show that with the entry of the new government, significant growth was reported in the identification of unusual operations, understood as activities, behaviors, or conducts that do not







Images: A. Gertz Manero head of FGR at www.elpais.com; P. Gómez, head of FIU. Photo: A. Murcia/Cuartoscuro at www.publimetro.com.mx and R. Buenrostro, head of SAT (until October 7, 2022) at www.debate.com.mx.

agree with the background or known or declared by the respective clients of the financial institutions and other obliged subjects, or with their usual pattern of transactional behavior. However, there are very few cases that it has managed to prosecute and conclude with convictions against those accused of violating financially, fiscally, or in any other field of the law. This depends on the amount, frequency, type, or nature of the transaction without a reasonable justification for such behavior (FIU, 2022).

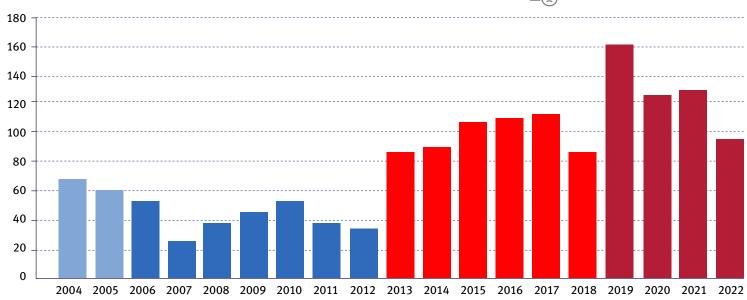
The FIU (2022) reported that in 2018, the year in which the government of Enrique Peña Nieto presented the largest number of reports for this category, 318,802

unusual operations were recorded. A year later, with López Obrador in the presidency, the accounts for these operations reached their all—time high with a total of 590,682. Likewise, the current administration is the one that has filed the most complaints through the FIU, with 809 as of August 2022. The year 2019 is the one that maintains the historical maximum with a total of 161 complaints.

The crimes for which the largest number of complaints have been filed between January and August 2022 are embezzlement, tax fraud, and crimes against health and illicit enrichment (FIU, 2022). As shown, all these crimes are usually associated with people, organizations, or companies that do not necessarily represent an average citizen but are charged with those who meet the profile of those whom the president has pointed out as his administration's enemies. The FIU experienced a striking hyperactivity

**GRAPH 1. COMPLAINTS FILED BY FIU** 





Source: In-house elaboration with information from UIF (2022) (p.15).

that coincided with the declarations of various sectors accused of persecution for opposing this government's policies (Monroy, 2021).<sup>3</sup>

It is also striking that the president has not criticized the acts of corruption of members of his political movement but has made a special effort to investigate and punish his political opponents or members of other administrations that serve as examples of an alleged fight against corruption by federal institutions.

The most obvious case of protection by López Obrador to a member of his government who was proven to have committed acts of corruption is that of the former secretary of public education, Delfina Gómez. Although it was shown that the official illegally withheld 10% of the salary of more than a hundred Texcoco mayoral workers when she headed it (Cisneros & Rubí, 2022), neither the Special Prosecutor's Office for Electoral Crimes nor the Secretariat of the Public Service of the federal government, nor the Morena party opened an investigation into

TABLE 3. PRECEDENT CRIMES IN THE JANUARY-AUGUST 2022 REPORTS PREVIOUS CRIME COMPLAINTS REPORTED 27 Embezzlement 364 Tax Fraud 94 28 Crimes against health 16 94 Illicit enrichment 7 73 Fraud 5 25 Offenses Committed in connection with 8 1 hydrocarbons, petroleum, or petrochemicals Dispossession 1 7 **Human Trafficking** 1 6 No predicate offense 1 4 Bribery 1 3 **Against biodiversity** 1 3 Smuggling 1 3 human trafficking 1 3 **Kidnapping** 1 2 **Organized Crime** 1 1 Unlawful access to computer systems and 1 equipment **TOTAL** 94 690

Source: In-house elaboration with information of Segob (n.d.).

<sup>3</sup> See also https://elcomentario.ucol.mx/acusa-movimiento-ciudadano-uso-electoral-de-uif/, https://www.reforma.com/aplicacioneslibre/preacceso/articulo/default.aspx?\_\_rval=1&urlredirect=https://www.reforma.com/acusan-uso-politico-de-uif-en-conflicto-de-chihuahua/ar2030842?referer=--7 and https://mvsnoticias.com/nacional/2020/9/15/acusa-pan-uso-politico-de-uif-en-disputa-por-el-agua-en-chihuahua-449044.html



the matter. The INE (National Electoral Institute, for its acronym in Spanish) accredited that at least 2,264,612 pesos were used for the ordinary operation of Morena, so it was intended to hide in this way the actual destination of the resources withheld from municipal employees (El Financiero, 2022b).

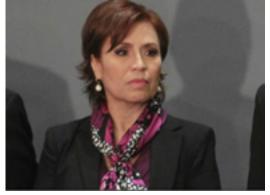
On the other side of the coin, federal justice institutions have not hesitated to open investigation files against outspoken opponents of the regime. Perhaps the two most famous cases are Ricardo Anaya, accused of receiving bribes from Emilio Lozoya to approve the energy reform emanating from the so-called Pact for Mexico, and Rosario Robles, charged with operating the plot of corruption known as the "Estafa Maestra" (master scam).

Apart from the innocence or guilt of both characters, the procedure followed for both politicians to be investigated, and in the case of the latter, Rosario Robles, it is very striking that a judge was able to keep her in preventive detention for just over three years. In this case, the former federal official was held in preventive detention because Felipe Delgadillo Padierna, the control judge assigned to her case. Coincidentally, the nephew of Dolores Padierna, a known political enemy of Rosario Robles (García, 2019), was considered an escape risk the submission of a driver's license in the name of Rosario Robles where a different address was indicated to that of her residence. In addition, the existence of two driver's licenses in the name of Robles was accused, although, over time, it was shown that one of the licenses did not exist (Ferri, 2022).

#### Images:

Delfina Gómez at www.politica.expansion.mx; Ricardo Anaya at www.forojuridico. mx y Rosario Robles at www.infobae.com.





#### **CONTRACTS BREACHED**

Together with the government by decree and the factional use of Mexican state institutions to reward and punish allies and opponents of the regime, this administration has decided to violate a series of contracts with the private initiative that have generated uncertainty and unease among domestic and foreign investors. The conditions that have been created over the past three years have undermined the certainty of property rights and reduced investor confidence in the medium and long term.

Beyond the cancellation of dozens of contracts, the decision to resort to popular consultations outside the law to reverse macro-project contracts such as the New Mexico City International Airport (NAIM, for its acronym in Spanish) or the Constellation Brands brewery, together with the international disputes arising from the effects on the electricity market – generated by the approval of the Electricity Industry Law (LIE, for its acronym in Spanish)—, has had a direct impact on gross fixed investment (IFB, for its acronym in Spanish) (Signos Vitales, 2020d).

As of July 2022, the greatest impact component on investment since the beginning of López Obrador

As of July 2022, the greatest impact component on investment since the beginning of López Obrador administration has been construction, with a reduction of -17.2%, followed by the import of transport equipment with a variation of -12.9%.

administration has been construction, with a reduction of -17.2%, followed by the import of transport equipment with a variation of -12.9%. Regarding construction, the most affected sector was residential, with a year-on-year growth of 0.93%. Despite the slight increase in investment between February 2020 and June 2021 (1.1%), the current investment level is preceded by May 2011. But the month of May 2020 has only the level of investment of October 1997 as a background (INEGI, National Institute of Statistics and Geography for its acronym in Spanish 2022e).

It is worth mentioning that the cancellation of various projects has also had a significant budgetary impact. It is estimated that the cancellation of the NAIM, for example, had an actual cost of 120 billion pesos without counting the value and use of the land currently occupied by the Mexico City International Airport (AICM, for its acronym in Spanish) or the cost of the Felipe Ángeles International Airport (AIFA, for its acronym in Spanish). It is also important to note that the allocation of the AIFA construction and operation project has been marked by irregularities that, although difficult to calculate, impact public finances. Since 2018, the Superior Audit of the Federation informed in its annual report that Sedena did not verify an expense of at least 389 million pesos for constructing the perimeter fence of Texcoco airport. In addition, journalistic works managed to document that the same perimeter fence of Texcoco airport was built at a surcharge of 89% and that the companies in charge of the work were found to be shell corporations (Barragán, 2018). Triangulation of money is presumed. The fence project was budgeted for one billion 547 million pesos but ended up costing 2.93 billion (Signos Vitales, 2020d).

*Image*: International Airport Felipe Ángeles at www.unoma-suno.com.mx.

DIRECT COST OF NAIM CANCELLATION:

\$120 BILLION PESOS

IRREGULARITIES
IN AIFA CONSTRUCTION

SEDENA HAS NOT VERIFIED EXPENDITURES: \$389 MILLION PESOS OF THE EXTERNAL WALL (PLUS 89% OVERPRICING) BY FAKE BUSINESSES. ONLY THE WALL COST:

\$2.930 BILLION PESOS



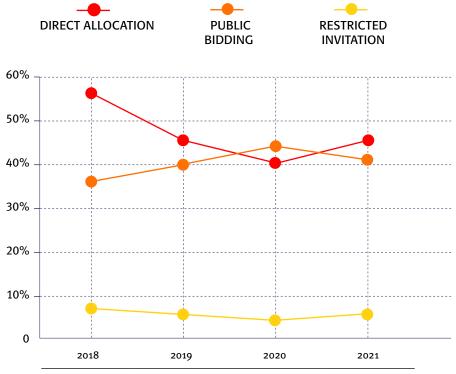
DIAGNOSIS OF MEXICO: DARK PERSPECTIVES :: 42

## IMPLICATIONS OF CONTEMPT FOR THE LAW ON CORRUPTION, IMPUNITY, TRANSPARENCY, AND ACCOUNTABILITY

Failure to respect the law also has implications in the field of transparency. It facilitates corruption, maintains traditional levels of impunity in Mexico, and empowers the government to be more arbitrary and unjust. Regarding corruption, it has been identified that irregularities have marked government behavior. In the area of public procurement alone, the Public Policy Research Center (IMCO, for its acronym in Spanish) (2022) reported, through its 2022 Corruption Risk Index, that four out of ten pesos exercised were allocated without competition mechanisms, and 4% was spent through restricted invitations. The same document shows that 9,797 million pesos were awarded to risky suppliers, including newly created, penalized, or shell companies.

In addition, the index shows that the Health Institute for Wellness, Mexican Social Security Institute, Administration and Finance of the Institute for Social Security and Services for State Workers and Conasupo Industrialized Milk (Insabi, IMSS, ISSSTE, and Liconsa for their acronyms in Spanish respectively) are among the institutions with the highest risk of

GRAPH 2. FEDERAL GOVERNMENT PUBLIC PROCUREMENT DISTRIBUTION 2018–2021



Source: In-house elaboration with information from IMCO (2022).

corruption. For example, in almost all the purchases made by Insabi (98%), there is no access to information in the data standards for open contracts provided by law Data Standard for Open Contracting (EDCA for its acronym in Spanish). In the case of Liconsa, 83% of purchases were allocated through direct awards or restricted invitations, thus canceling the competition. Another constant was the opacity in investments in the health sector. In 2021 alone, both the National Institute of Cancerology (INCAN for its acronym in Spanish) and the IMSS refrained from publishing information on public procurement under

the EDCA model. In the first case, there were 64 public tenders in which the complete documentation was not published, while in the second example, 61% of the cases were in the same state (IMCO, 2022).

This type of institutional behavior places Mexico at 124 out of 180 in the Corruption Perception Index of Transparency International, with a score of 31 on a scale of 100, where the value of zero is total corruption, and the value of one hundred is the absence of corruption. Mexico is worse evaluated than Zambia, Nepal, Sierra Leone, El Salvador, or Colombia (Transparency International, 2021).

1

70 60 50 40 30 20

**GRAPH 3. CORRUPTION RISK INDEX** 

Source: In-house elaboration with information from IMCO (2022).

0

DECUNSA SEMAR

.

In the field of impunity, things do not look much better, and Mexico is positioned in equally bad places. Historically, the levels of impunity in the country seem to reflect an implicit renunciation of the procurement and delivery of justice by the Mexican State. That reality has not improved in recent years. As reported by the organization Impunidad Cero (Zero Impunity), the probability that a crime will be reported and solved in Mexico is just 1% (Impunidad Cero, 2022). This is due to low public trust in prosecutors and judges, the minimal investigative capacity of public prosecutors, and high levels of criminal incidence.

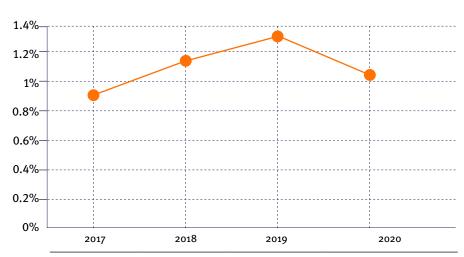
The probability of a crime being solved at the sub—nationally is not much higher than at the national level. The state in which there is the most significant probability of clarification is Guanajuato, with only 2.99%, followed by Baja California, Chiapas, and Queretaro, with 2.77%, 2.42%, and 2.16%, respectively. In contrast, in Guerrero, Quintana Roo, and Aguascalientes, there is a lower probability that a crime will be clarified, with 1.10%, 0.25% and 0.26%, respectively (Impunidad Cero, 2021).

The probability that a crime will be reported and solved in Mexico is just 1%.

Impunidad Cero, 2022

**GRAPH 4. CRIME CLARIFICATION PROBABILITY** 

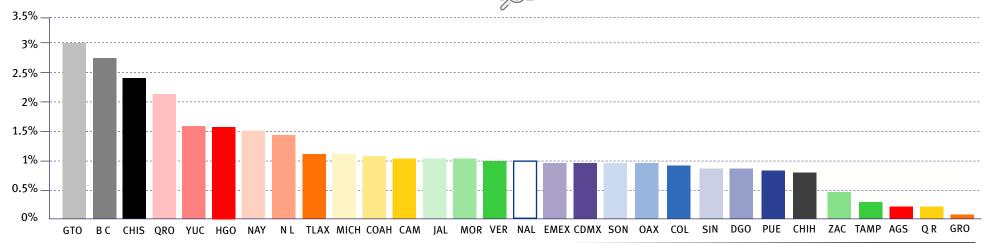




Source: In-house elaboration with information from Impunidad Cero (2021) (p.31)

#### **GRAPH 5. CRIME CLARIFICATION PROBABILITY**





Source: In-house elaboration with information from Impunidad Cero (2021) (p.32).



*Images*: People arrested in Guanajuato, Querétaro and Baja California states, respectively at: www.boletines.guanajuato.gob.mx; www.lasillarota. com; www.fgebc.gob.mx.

Another area of government action in which unlawful behavior has been detected during the term of office of López Obrador is that of social programs. It has indeed been identified that all federal and local governments in Mexico have made a clientele use of the transfers of public resources for some social programs. However, this government, contrary to what was repeated again and again by the president, has not been different. Even though the ten states with the highest levels of poverty coincide with the states with the highest percentages of people in extreme poverty, the distribution of social programs does not seem to correspond to the level of vulnerability of people. The most significant number of interventions of social programs are led by states led by the governments of Morena (Coneval, n.d.).

Finally, within the context of the COVID-19 pandemic, the lack of rigorous monitoring and respect for the law had genuinely catastrophic consequences. Even though by constitutional mandate, the national health authority in extraordinary moments such as a pandemic is made up of the General Health Council and the Ministry of Health, these actions were late and uncoordinated. Although the WHO recognized the pandemic on March 11, 2020, the General Health

The distribution of social programs does not seem to correspond to the level of vulnerability of people. The most significant number of interventions of social programs are headed by states led by the governments of Morena.

Coneval 2020



*Image*: "19,620 'Servidores de la Nación' promote social programs of the federal government" at www.politica. expansion.mx.

### TABLE 4. TEN STATES WITH THE HIGHEST PERCENTAGES OF POVERTY AND EXTREME POVERTY IN MEXICO

| STATE    | POVERTY | EXTREME POVERTY |
|----------|---------|-----------------|
| Chiapas  | 75.5    | 29.0            |
| Guerrero | 66.4    | 25.5            |
| Puebla   | 62.4    | 12.7            |
| Oaxaca   | 61.7    | 20.6            |
| Tlaxcala | 59.3    | 9.8             |
| Veracruz | 58.6    | 13.9            |
| Tabasco  | 54.5    | 13.7            |
| Morelos  | 50.9    | 8.4             |
| Hidalgo  | 50.8    | 8.1             |
| Campeche | 50.5    | 12.0            |

Source: In-house elaboration with data from Coneval (2020).

Council did not meet until March 19 to recognize the scope of the problem and act on it. The publication of the authority's determination to treat COVID-19

as a priority care disease was presented in the Official Journal of the Federation on March 23, and the declaration of COVID-19 as a health emergency did

not happen until March 30. A series of contradictory

TABLE 5. NUMBER OF SOCIAL PROGRAMS PER PERSON LIVING IN POVERTY (POVERTY AND EXTREME POVERTY)

| STATE               | BY PERSON | POLITICAL PARTY |
|---------------------|-----------|-----------------|
| Nayarit             | 4.39      | Morena 🛑        |
| CDMX                | 3.60      | Morena 🛑        |
| Zacatecas           | 2.91      | Morena 🛑        |
| Tlaxcala            | 2.82      | Morena 🛑        |
| Durango             | 2.78      | PRI 🛑           |
| Colima              | 2.54      | Morena 🛑        |
| Baja California Sur | 2.32      | Morena 🛑        |
| Sinaloa             | 2.30      | Morena 🛑        |
| EMEX                | 2.18      | PRI 🛑           |
| Chihuahua           | 2.10      | PAN •           |

Source: In-house elaboration with data from Coneval (2020).

decisions accompanied the government's temporary disadvantages in dealing with the health crisis due to a lack of leadership. Among the various agreements issued by the government to face the pandemic, the one of April 21, 2020, stands out, with which a previous agreement published on March 31 was modified. In this document, hospital conversion was established throughout the country. It was clarified that the Ministry of Health would issue guidelines for hospital collaboration for social confinement, ways to record cases, and other particularities. Contrary to this, on May 13, a signed agreement by the General Council of Health was published in the Official Journal of the Federation (DOF, for its acronym in Spanish), staggering classes return. The same was deleted so that a new agreement on the same matter was uploaded the next day, but with a different index and signed by the Ministry of Health. As can be seen, the government decided to isolate an essential part of the national health authority and concentrate the decisions on a few who seemed to meet more political than technical criteria. This had no minor consequences.





Images: Jorge Alcoce Varela, secretary of Health at www.cobertura36o.mx, and Hugo López–Gatell Ramírez, subsecretary for Prevention and Health Promotion at www.contralinea.com.

| T.    | TABLE 6. CONSEQUENCES OF POOR HEALTH AND ECONOMIC RESPONSE TO THE PANDEMIC                                      |  |  |  |  |  |  |
|-------|---|--|--|--|--|--|--|
| - Adv | INDICATIVE EVIDENCE   | CONSEQUENCE  |  |  |  |  |  |
|       | Slow declaration of the pandemic as a health emergency  | Present the highest excess deaths within OECD countries in 2021  |  |  |  |  |  |
|       | Decrease in Health System coverage due to the elimination of Popular Insurance and the implementation of Insabi | Lack of access to health services increased by 12% from 2018 to 2020, leaving 15.6 million people without health services.   |  |  |  |  |  |
|       | Shortage of medicines and, or medical treatments  | The number of prescriptions not effectively filled by the IMSS (51% affiliation) (INEGI, n.d.) by 2020 tripled the number of prescriptions not filled on time, from 5 million in 2019 to 15.9 million in 2020 and just over 22 million in 2021(Cero Desabasto, 2022)   |  |  |  |  |  |
|       | Vaccination neglect   | In 2021, only 1 in 3 children of one year of age in the country (27.5%) had a complete immunization schedule, and a third of the children of one and two years of age had a scheme of at least four vaccines (35.8%) (National Health and Nutrition Survey, ENSANUT, for its acronym in Spanish, 2021)   |  |  |  |  |  |
|       | Screening tests, pap smears, diabetes, and hyper-<br>tension  | Significant decreases in screening tests for these conditions. In the case of Papanicolaou, it went from 44.3% in 2012 to 28.9% in 2018 and 21.4% in 2021. These decreases also occurred in the case of diabetes (23.7% in 2012, 15.3% in 2018, and 9.6% in 2021). Finally, decrease in hypertension (28.4% in 2012, 12.9% in 2018, and 7.5% in 2021) (Ensanut, 2021). |  |  |  |  |  |

Source: In-house elaboration with information from Shamah–Levy et. al (2021), Cero Desabasto (2022) and INEGI (n.d.). .

## TABLE 7. EXCESS MORTALITY FROM ALL CAUSES DURING THE COVID-19 EMERGENCY, MEXICO, 2020 – 2022, ACCORDING TO THE METHOD OF ESTIMATING EXPECTED DEATHS

CUMULATIVE SUMMARY 2020 - 2022 (MODEL)\*\*\*

| YEAR | EPIDEMIOLOGIC<br>WEEK | CUMULATIVE<br>EXPECTED<br>DEATHS | OBSERVED<br>(CUMULATIVE)<br>DEATHS | ACCUMULATED<br>EXCESSIVE DEA-<br>THS | % ACCUMULATED EXCESS DEATHS | ASSOCIATED COVID-19 (ACCUMULATED RENAPO*) | % OF EXCESS<br>ASSOCIATED<br>WITH COVID-19 | DEFUNCIONES<br>COVID-19<br>(ACCUMULATED-<br>SISVER**) |
|------|-----------------------|----------------------------------|------------------------------------|--------------------------------------|-----------------------------|---|--|---|
| 2022 | 31                    | 2 025 339                        | 2 678 167                          | 652 828                              | 32.2%                       | 500 760                                   | 76.7%                                      | 328 320   |
|      | 2020 SUMMARY          |                                  |                                    |                                      |                             |   |  |   |
| 2020 | 53                    | 770 762                          | 1 083 572                          | 312 810                              | 40.6%                       | 214 772                                   | 68.7%                                      | 151 435   |
|      |                       |                                  |                                    | 2021 SUMMA                           | RY                          |   |  |   |
| 2021 | 52                    | 777 860                          | 1 091 037                          | 313 177                              | 40.3%                       | 248 719                                   | 79.4%                                      | 152 699   |
|      |                       |                                  |                                    | 2022 SUMMA                           | RY                          |   |  |   |
| 2022 | 31                    | 476 717                          | 503 558                            | 26 841                               | 5.6%                        | 37269                                     | 138.9%                                     | 24 186  |

*Note*: \*Renapo National Population Registry, for its acronym in Spanish. \*\*SISVER Surveillance System of Epidemiological Respiratory Diseases, for its acronym in Spanish. \*\*\*Updated: July 18, 2022.

Source: In-house elaboration with information from Government of Mexico (n.d.2).

From the beginning of the pandemic in 2020 to week 31 of 2022, the government of Mexico reported 328 thousand 320 deaths from COVID-19 in Mexico, not counting the excess deaths associated with this disease. If accounting for the excess deaths is carried

out, in the same period, 652,828 more deaths were reported, and 500,760 were Covid—19 associated, which places Mexico among the countries with the most deaths due to the pandemic. The late attention to the health crisis and the lack of legal rigor to face

it brought incalculable human losses. Thousands of families lost loved ones who were sometimes a fundamental part of the family income, so the impact was doubled.

## CONTEMPT FOR THE LAW, THE ETERNAL LOSERS: AS A CONCLUSION

The different implications of the systematic violation of the Mexican legal and constitutional framework that have been detailed above have their main effects on the country's most vulnerable sectors. The factious use of institutions to persecute opponents has increased the costs of those who wish to participate in the country's public life, either through the electoral channel or through business and social participation. In this sense, Mexican democracy has been depreciating.

Similarly, in the field of militarization, it is noted that this phenomenon has increased levels of violence. The most alarming indicator is intentional homicides, mainly affecting young people and adults (those between 20 and 35 years of age). The negative impact this has on the country's future is difficult to calculate.

As far as investment is concerned, the lower the investment, the lower the economic growth. The management of the Mexican economy and the effects of the COVID-19 pandemic have marginalized the country's economic growth, and with it, they have decreased the opportunities for social mobility for the lowest deciles of the Mexican income distribution.

It should not be overlooked that the high levels of corruption and impunity and the opacity in public spending represent substantial opportunity costs for Mexican society, whose resources transferred through direct and indirect tax payments end up being spent irregularly and without having significant positive externalities. On the contrary, the government's opaque spending, the very high levels of impunity, and the lack of trust in public institutions raise the price that individuals pay to guarantee access to certain services, among which public safety and health stand out.

000



# WEIGHTS \*\* WITHOUT COUNTERWEIGHTS

ounterweights within a democratic system are understood as the limits and competencies that each public power maintains, intending to make the functioning of the State efficient while establishing locks so that an individual or a factual group cannot make arbitrary and discretionary decisions. The traditional division of public powers provides for the existence of an executive, a legislative, and a judiciary. In Mexico, moreover, there are Constitutionally Autonomous Bodies (OCA, for their acronym in Spanish) that were created during the last three decades to introduce a further counterweight to the executive power, particularly in especially relevant areas that have been considered issues of the State and not necessarily of government.

Recognizing various flaws that Mexican institutions have presented in recent decades, it can be presumed that the progressive gaining of independence of Mexican state powers concerning the federal executive meant a democratizing process now under threat. Symptoms of the President of Mexico's intention to eradicate any constitutional, legal or institutional barrier that may be placed in front of his political project are budget cuts, public attacks on various institutions, pressure from the federal executive on the judiciary, on constitutionally autonomous bodies such as: –the National Electoral Institute (INE), the Federal Economic Competition Commission (COFECE, for its acronym in Spanish), or the Federal Institute for Access to Public Information and Data Protection

(INAI, for its acronym in Spanish), the disappearance of institutions such as the National Institute for Educational Assessment (INEE, for its acronym in Spanish)— attacks on journalists, persecutions against political rivals, accusations against legislators of opposition for treason, and even the disqualification of members of the movement itself that unites Morena but that have disagreed with the opinions of López Obrador.

While it is to be expected that all Heads of Government and State will vigorously seek to advance their programmatic platform, it is also to be expected that they will do so within the appropriate legal framework and assuming the rules of the democratic game. As previously published in the Signos Vitales reports, one of the most visible characteristics of this federal administration has been the weakening of weights and counterweights through three channels:

1) budget weakening, 2) colonization of autonomous powers, and 3) pressure and attack on institutions, organizations, and people that the president considers adversaries.

## ACTIONS OF THE FEDERAL EXECUTIVE AGAINST PEOPLE AND INSTITUTIONS

#### **BUDGET CUTBACKS**

#### PUBLIC ATTACKS TO INSTITUTIONS

PRESSURES ON JUDICIAL POWER

INE

COFECE

INAI

#### DISAPPEARANCE OF INSTITUTIONS

INEE

**AGRESSIONS** AGAINST JOURNALISTS

PERSECUTIONS POLITICAL OPPONENTS

ACCUSATIONS AGAINST OPPONENT LEGISLATORS

**DISQUALIFICATION** TO MORENA MEMBERS WHO HAVE DISAGREED

#### **THE GOVERNMENT'S BUDGET ATTACK**

The power of presidents in Mexico around budget management is broad. Despite the exclusivity that the Chamber of Deputies has to approve the budget year after year, López Obrador has had a majority since the beginning of his mandate that allows him to approve the Federation's Expenditure Budget without needing the votes of the opposition deputies. In addition, during the first years of his mandate, the President accumulated several budgetary capacities that have allowed him to make discretionary use of them. When reviewing the fiscal evolution of the Constitutionally Autonomous Bodies, it is observed that between 2021 and 2022, five institutions of this type suffered budget reductions. The most affected Autonomous Constitutional Bodies were the INE (-31%9), the COFECE (-4%), the IFT (-4%), and the National Human Rights Commission (CNDH, for its acronym in Spanish) (-4%) (Department of Finance and Public Credit. SHCP, for its acronym in Spanish) 2021b;2022d). As is publicly known, the President has pointed out that these institutions are very costly and inefficient; he has even proposed their disappearance to transfer their responsibilities to the federal public administration and the Judiciary of the

Between 2021 and 2022 five constitutional autonomous bodies suffered from budget cutbacks.

The most affected were:

| INE    | -31% |
|--------|------|
| Cofece | -4%  |
| IFT    | -4%  |
| CNDH   | -4%  |

Federation.<sup>4</sup> In addition, the amount approved for the INE in the Federation Expenditure Budget (PEF, for its acronym in Spanish) for 2022 was 20% less than the amount the institution requested in The Budgetary Project of the Nation Expenditure (PPEF, for its acronym in Spanish).

<sup>4</sup> Look at: https://politica.expansion.mx/presidencia/2019/02/15/López Obrador-centra-sus-dardos-enlos-organismos-autonomos

## TABLE 8. EVOLUTION OF BUDGETS AND PROJECT BUDGETS OF CONSTITUTIONALLY AUTONOMOUS BODIES MILLION PESOS

| SECTION | PPEF 2017 | PEF 2017 | PPEF 2018 | PEF 2018 | Variation<br>PPEF – PEF | Annual Varia-<br>tion PEF% | PPEF 2019   | PEF 2019                     | Variation<br>PPEF – PEF | Annual Varia-<br>tion PEF% |
|---------|-----------|----------|-----------|----------|-------------------------|----------------------------|-------------|------------------------------|-------------------------|----------------------------|
| INE     | 15 071    | 14 790   | 25 015    | 24 215   | 800                     | 63,7%                      | 15 631      | 14720                        | -910                    | -39,2%                     |
| INAI    | 956       | 897      | 1 098     | 1 098    | 0                       | 22,5%                      | 898         | 862                          | -35                     | -21,5%                     |
| COFECE  | 537       | 513      | 618       | 618      | 0                       | 20,6%                      | 558         | 558                          | 0                       | -9,7%                      |
| IFT*    | 1 980     | 2111     | 1 998     | 1 998    | 0                       | -5,4%                      | 1 706       | 1437                         | -268                    | -28,1%                     |
| INEGI   | 7 034     | 6 832    | 7 589     | 7 789    | 200                     | 14,0%                      | 12 101      | 11622                        | -479                    | 49,2%                      |
| CNDH    | 1 729     | 1687     | 2 033     | 2 033    | 0                       | 20,5%                      | 1 889       | 1734                         | -155                    | -14,7%                     |
| FGR**   |           |          |           | 16 244   |                         |                            | 15 328*     | 14 709                       | 14 709                  | -9,4%                      |
| RAMO    |           |          | PPEF 2020 | PEF 2020 | Variation<br>PPEF – PEF | Annual Varia-<br>tion PEF% | PPEF 2021   | PEF 2021                     | Variation<br>PPEF – PEF | Annual Varia-<br>tion PEF% |
| INE     |           | •        | 16 458    | 15 463   | -995                    | 5,0%                       | 24 822      | 24 042                       | -780                    | 55,5%                      |
| INAI    |           | •        | 861       | 814      | -46                     | -5,6%                      | 824         | 812                          | -12                     | -0,3%                      |
| COFECE  |           | •        | 547       | 539      | -8                      | -3,4%                      | 537         | 537                          | 0                       | -0,5%                      |
| IFT     |           | •        | 1 606     | 1 430    | -175                    | -0,5%                      | 1 354       | 1 354                        | 0                       | -5,4%                      |
| INEGI   |           | •        | 15 382    | 15 382   | 0                       | 32,3%                      | 6 944       | 6 944                        | 0                       | -54,9%                     |
| CNDH    | •         | •        | 1 774     | 1 739    | -34                     | 0,3%                       | 1 506       | 1 506                        | 0                       | -13,4%                     |
| FGR     |           | •        | 16 894    | 15 502   | -1 392                  | 5,4%                       | 15 549      | 15 486                       | -64                     | -0,1%                      |
| RAMO    |           |          | PPEF 2022 | PEF 2022 | Variation<br>PPEF – PEF | Annual Varia-<br>tion PEF% | PPEF 2023** | Annual Varia-<br>ción PPEF%* |                         |                            |
| INE     |           | •        | 20 637    | 16 524   | -4 113                  | -31,3%                     | 19 708      | -4,5%                        |                         |                            |
| INAI    |           | •        | 823       | 823      | 0                       | 1,4%                       | 851         | 3,4%                         |                         |                            |
| COFECE  |           |          | 516       | 516      | 0                       | -3,9%                      | 551         | 6,7%                         |                         |                            |
| IFT     |           |          | 1 306     | 1 306    | 0                       | -3,5%                      | 1 341       | 2,6%                         |                         |                            |
| INEGI   |           |          | 9 306     | 9 306    | 0                       | 34,0%                      | 7 881       | -15,3%                       |                         |                            |
| CNDH    |           |          | 1 442     | 1 442    | 0                       | -4,2%                      | 1 435       | -0,5%                        |                         |                            |
| FGR     |           |          | 15 042    | 15 042   | 0                       | -2,9%                      | 15 125      | 0,6%                         |                         |                            |

Notes: \*IFT (Federal Telecommunications Institute for its acronym in Spanish). \*\* Attorney General's Office budget project for the former Procuraduría General de la República.

Source: In-house elaboration with information from SHCP (2017;2018;2019;2020;2021;2022).

These budget reductions have had a direct impact on the function of the institutions. One of the bestknown examples was the lack of resources for the INE to organize the mandate revocation consultation on April 10, 20225. Despite the request for 3,830 million pesos by the INE, the Chamber of Deputies, and later the Department of Finance and Public Credit (SHCP) exceptionally refused to grant additional resources (INE, 2022; Secretariat of the Interior, Segob, for its acronym in Spanish 2022). The government and the majority bloc in the lower house argued that the amount requested by the electoral body was disproportionate. The electoral authority was forced to reorganize its budget to approach the necessary amount since it reported that, in principle, it had 1,567 million pesos to organize this participation exercise (INE, 2022). After the widespread consultation in which the lack of budget prevented the installation of the same polling stations as in regular elections, the government and the Morena party accused the INE of sabotaging the mandate revocation exercise.

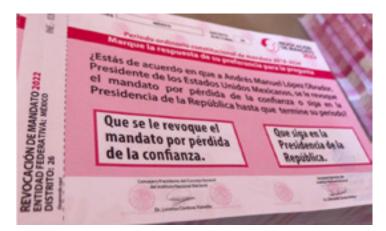




Image: "Mandate revocation: ¿what is the question that will appear in the ballot?" Photo: Crisanta Espinosa/Cuartoscuro at www.politica.expansion.mx; "Mandate revocation ¿Success or failure of López Obrador?" Photo: Marcos González/BBC Mundo at www.bbc.com.

<sup>5</sup> Look at https://centralelectoral.ine.mx/2022/02/01/lamenta-ine-negativa-de-la-shcp-de-otorgar-recursospara-la-revocacion-de-mandato/

#### **COLONIZATION OF AUTONOMOUS POWERS**

The effective division of public powers is an indispensable requirement for a State to be considered democratic. The logic of balancing public powers against each other is aimed at preventing the full power of the State from being concentrated in a single individual. In Mexico, article 49 of the Constitution establishes that under no circumstances can two or more powers be deposited in a single person, and the period of political pluralism that began in 1997 with the loss of the majority in the Chamber of Deputies that the PRI suffered forced the president to negotiate the legal and political transformations of the country. The arrival of López Obrador with an unusual majority in the short period of democracy in Mexico increased the effectiveness with which the presidency can impose people in autonomous institutions and successfully pressure the other public powers. The behavior of various OCAS, the Supreme Court of Justice, and the legislature has demonstrated this.

So far this sexennium, members of governing/executive bodies have been replaced in practically all areas of the Mexican State: the Energy Regulatory Commission (CRE), the National Human Rights Commission (CNDH), the Federal Institute for Access to

Public Information, and Data Protection (INAI), the Bank of Mexico, the National Institute of Statistics and Geography (INEGI), the defunct National Institute for the Evaluation of Education (INEE), the Federal Economic Competition Commission (COFECE), the powerful Attorney General's Office (FGR), the Federal Telecommunications Institute (IFT), the National Electoral Institute (INE) and the National Supreme Court of Justice (SCJN).<sup>6</sup> As previously reported, many of these appointments were made through allegedly or evidently illegal procedures, such as Rosario Piedra Ibarra, whose appointment as head of the CNDH presented voting irregularities, or the selection of four CRE commissioners who did not meet the legally required profile, as well as the current governor of the Bank of Mexico for the same reason or Minister Yazmín Esquivel for conflicts of interest, among others.7 Some of these appointments have been chal-

<sup>6</sup> Look at https://signosvitalesmexico.org.mx/rb/wp-content/uploads/2020/10/Reporte-2-Me%CC%81xico-enfermo-Completo.pdf y https://signosvitalesmexico.org.mx/gobernanza/la-erosion-constitucional/

<sup>7</sup> For more details, see Mexico sick: with indications of a totalitarian regime, Vital Signs, pp.144–147 https://signos-vitalesmexico.org.mx/rb/wp-content/uploads/2020/10/Reporte-2-Me%CC%81xico-enfermo-Completo.pdf

lenged or pointed out by the opposition or civil society organizations, who have accused the followed processes of being illegal.8

These impositions on strategic sectors of the Mexican State have not been harmless. On the contrary, on more than one occasion, the institutions have been found to lose autonomy, jeopardizing their legal and constitutional action. Perhaps the most obvious case has been that of the CNDH, whose behavior has been marked by submission to the Executive power in the issues that interest the latter, despite the documentation of extensive Constitutional violations over the last few years. This may be due to this autonomous body resistance that has had to combat the abuses of the federal government and the majority group in the legislative power.

Perhaps the paradigmatic case was the statement by which the CNDH affirmed that it would not present an action of unconstitutionality for the reforms that transfer control of the National Guard to the Army since it understands the emergency and exceptionality that justifies the changes. In this way, the pro-

The CNDH affirmed that it would not present an action of unconstitutionality for the reforms that transfer control of the National Guard to the Army. In other words, the protection of human rights in Mexico body renounced its obligation specified in the Constitution and in international treaties.

tection of human rights in Mexico body renounced its obligation under article 105, section II, paragraph g, of the Political Constitution of the United Mexican States (CPEUM, for its acronym in Spanish) to challenge the federal entities or laws of federal nature, international treaties concluded by the Federal Executive and approved by the Senate of the Republic. This violates international treaties with Mexico as a party and the human rights enshrined in this Constitution. It is worth mentioning that this decision was criticized by 8 of the nine members of the advisory council of the CNDH (Animal Político, 2022a).

In addition to OCAS, the president has publicly pressured the judiciary and legislative branches to accede

itarizacion-dice/?utm\_source=aimtell&utm\_medium=push&utm\_campaign=campaign-2091

<sup>8</sup> Look https://signosvitalesmexico.org.mx/rb/wp-content/uploads/2020/10/Destruccion-institucional.pdf

<sup>9</sup> Look https://aristeguinoticias.com/1309/mexico/cndhno-impugnara-pase-de-gn-al-ejercito-ya-no-hay-mil-

|             | TABLE 9. APPOINTMENTS INDICATED OR CHALLENGED BY THE OPPOSITION |  |   |  |  |  |  |  |
|-------------|---|--|---|--|--|--|--|--|
| INSTITUTION | ITUTION THE NUMBER OF INCONSISTENCIES MEMBERS REPLACED          |  | DISSATISFIED<br>IN THE OPPOSITION   |  |  |  |  |  |
| CRE         | 5   | Even though the first three candidates sent by the president to the Senate were rejected, the second three repeated 11 of the 12 initial candidates. The president ended up imposing the commissioners. The applicants did not answer correctly the multiple questions asked during their presentations in the Senate energy committee.  | the president of imposing the commissioners and not seeking                     |  |  |  |  |  |
| CNDH        | 1   | Although the three candidates sent by the president were rejected in the Senate, the same trio was re-proposed twice. There were inconsistencies in the final vote. Rosario Piedra Ibarra did not meet the legal requirements to aspire to the presidency of the CNDH.   |   |  |  |  |  |  |
| SCJN        | 2   | Minister Yazmín Esquivel arrived at the SCJN despite the conflict of interest she maintained because she was the wife of a friend of the president who has benefited from multiple government contracts in the administration of López Obrador.  Loretta Ortiz was a founding member of Morena and has assisted López Obrador throughout his political career. She is married to José Agustín Ortiz Pinchetti, head of the Fiscalía Especializada en Delitos Electorales (FEDE), close to López Obrador. | conflict of interest.  Opposition in the Senate complaint about the designation |  |  |  |  |  |
| BANXICO     | 1   | Victoria Rodríguez Ceja was reported not to comply with the legal requirements to occupy a seat at the Bank of Mexico. This, led opposition senators to deny its ratification, but the ruling party had the necessary votes to appoint her.  | that the nominee did not  |  |  |  |  |  |

Images: www.milenio.com; www. eluniversal.com.mx; www.es.wikipedia.org
Source: In-house elaboration with information from Notimex (2019), Rivera (2019), WOLA (2019) and Fernández (2021).

to his demands. The case of the Court is particularly worrying, as it is the last dam that democracy usually has to maintain the constitutional order of a country. The SCJN is the body in charge of constitutional control in Mexico. Its work is crucial for maintaining the rule of law as it is the last resort capable of moderating legislative impulses against the rights framed in the Magna Carta. Naturally, this institution is the target of various pressures from formal and informal power groups that seek to derive their own benefits.

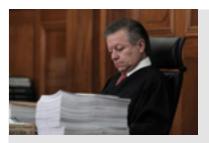
The President has directly pressured the Court. Knowing the unconstitutional nature of several of the government actions of his administration, López Obrador has been responsible for attacking the judiciary, including its leadership, with the aim that it rules in his favor or, in the worst case, lengthens the discussion of issues of very high relevance to the government. There are plenty of cases to show this. For instance, the President of Mexico himself agreed to have intervened in a decision of the Court to prevent 35 billion pesos from being returned to the Modelo company (Presidencia de la República, 2019b); he has also pressured the Court to declare informal preventive detention constitutional as a precautionary measure for various crimes (Carrillo, 2022). Even in the context of the debate on the constitutionality of informal preventive detention, he went so far as to say that he had been mistaken in the appointments he made to the SCJN since those who, thanks to him, occupy seats in the country's highest Court no longer follow his transformation project (El Financiero, 2022a). This explicit acceptance of the executive's interference in tasks strictly limited to the judicial field seems to have had its fruits.

The highest constitutional Court has not ruled on a comprehensive catalog of issues that seem to be at the heart of the so-called Fourth Transformation project.

Since 2019, the Court has not ruled on issues that, due to their implications in the field of human rights, are of great national importance. Constitutional actions and disputes against the legal framework on which the accelerated process of militarization of the country has been supported stand out; specifically, the challenges against the Use of Force National Law, the National Guard Law, the National Law of the Registry of Detentions, and the presidential agreement of May 11, 2020 (Integralia Consultores, 2022).

In addition, the Court's inaction has left adrift challenges against legal systems in numerous areas of public policy that cut across the educational, budgetary, administrative, energy, and environmental spheres. Constitutional controversies and actions of unconstitutionality must be added to thousands of constitutional protection lawsuits promoted by various actors. Many of these challenges are natural responses to government decisions that have affected particularly vulnerable groups, such as mothers who used children's stays.

It is important to note that the disputed and contested provisions, which the SCJN has not resolved, remain in force; therefore, the inaction of the country's highest Court is not a secondary issue. On the contrary, the constant postponement of decisions by the Court de facto validates, for a specific span, the legal and constitutional framework that the current government has built. Although it can be reversed in the future, it is expected that the majority of the entire current six—year period will go by without the government being deterred from violating the constitution.





*Images*: Arturo Zaldívar minister president of the Supreme Court (SCJN). Photo: Alex Cruz/EFE at www.elpais.com; The court in session at www.aplausos.es

## TABLE 10. ACTIONS OF UNCONSTITUTIONALITY AND CONSTITUTIONAL DISPUTES PROMOTED AGAINST LAWS AND AGREEMENTS IN FAVOR OF MILITARIZATION

| MEANS<br>OF CONTEST   | PROMOTER  | THE CONTESTED ORDER  | OUTSTANDING SINCE | PRESENTATION               |
|---|---|--|-------------------|----------------------------|
| Unconstitutionality<br>action (Al, for its<br>acronym in Spanish)<br>Al 46/2016 | CNDH  | Decree amending, adding, and repealing several provisions of the Code of Military Justice and enacting the Military Code of Criminal Procedures.   | 15–June–2016      | LUIS MARÍA AGUILAR MORALES |
| Al 62/2019  |   | Decree enacting the National Guard Law.  | 26-June-2019      | JAVIER LAYNEZ POTISEK      |
| Al 63/2019  |   | Decree enacting the National Detention Registry<br>Law and against the Fifth Transitory Article of the<br>decree reforming several provisions of the Fede-<br>ral Constitution regarding the National Guard. | 26–June–2019      |                            |
| Al 64/2019*   |   | Decree enacting the National Law on the Use of Force.  | 26–June–2019      | NORMA LUCÍA PIÑA HERNÁNDEZ |
| Constitutional controversy (CC, for its acronym in Spanish) CC 85/2020          | Municipality of Colima,<br>Colima                                       | An agreement whereby the Permanent Armed Forces to carry out public security tasks in an extraordinary, regulated, supervised, subordinated and complementary.   | 29-May-2020       | MARGARITA RÍOS-FARJAT      |
| CC 87/2020  | Executive Branch of the Sta-<br>te of Michoacán de Ocampo               |  | 12-June-2020      |                            |
| CC 91/2020  | Municipality of Pavilion of<br>Arteaga,<br>Aguascalientes               |  | 26-June-2020      |                            |
| CC 90/2020  | Chamber of Deputies   |  | 23-June-2020      |                            |
| Constitutional protection lawsuit in Revision 282/2020**                        | United Mexico Against the Delinquency (MUCD for its acronym in Spanish) | Law on the National Guard: concerning the recruitment of the GN and the operations and agreements in which it can participate.   | 4–July–2019       | LORETTA ORTIZ AHLF         |

Source: In-house elaboration with information from Integralia Consultores (2022) (p.18).

#### TABLE 11. MOST RELEVANT LEGAL RESOURCES PROMOTED DURING THE CURRENT ADMINISTRATION 1/5

| CHALLENGE  | IMPACT   | CHALLENGE   | IMPACT  |
|--|--|---|---|
| nority of the Senate of the Republic and the   | It affects the labor rights of State<br>workers and reduces institutional<br>capacities by dispensing with ex-<br>perienced workers. | 4. Indirect constitutional protection law-<br>suits of various organizations against<br>the budget reduction of Children's Stays  | Women and children who were beneficiaries of the program were left without this service. The closure of Children's stays transfers temporary and financial costs to families. |
| <ol> <li>The action of unconstitutionality presented<br/>by the National Electoral Institute against the<br/>budget cut of the 2019 Expenditure Budget.</li> </ol> |  | 5. Constitutional protection lawsuit filed by the company Ethan Gas Oil against PE-MEX that involves the payment of 365 million 549 thousand pesos that it received as an advance for the acquisition of 700 tankers for Pemex. | Budgetary impacts on the Mexican State  |
| ties and senators of the National Action Party (PAN, for its acronym in Spanish), the Institu-   | Increases the centralization of federal executive power, displaces governors in budgetary tasks, and undermines federalism.          | 6. Indirect constitutional protection law- suits prompted by citizens against the Memorandum of López Obrador by which he orders non-compliance with the provisions of the laws on education.                                   | The legal procedure for modifying the Mexican regulatory framework is violated.   |

| TABLE 11. MOST RELEVA   | ANT LEGAL RESOURCES PROMOT   | ED DURING THE CURRENT ADMINISTRATIO  | ON 2/5   |
|---|--|--|--|
| 7. Deputies of the Congress of Chihuahua against the Law of Income and Budget of Expenditures filed the action of unconstitutionality.  | The funds allocated to the states and municipalities are reduced. Government tasks are centralized within the federal government.  | 12. Investigation procedure initiated by the CNDH in which information is requested from the Ministry of National Defense, Petróleos Mexicanos, the government of the state of Hidalgo, and the municipality of Tlahuelilpan, about its actions in the events related to the explosion of a clandestine gasoline extraction site that caused the death of more than one hundred people in the municipality of Tlahuelilpan, Hidalgo. | At least 137 deaths and dozens of injuries were reported.              |
| 8. A Senate of the Republic minority against the Reform of the Law on Remuneration filed an action for unconstitutionality.   | It affects the labor rights of State workers, reduces institutional capacities by dispensing with experienced workers, and reduces the legal certainty of workers in various institutions. | 13. Action for unconstitutionality filed by the CNDH against the Forfeiture Proceedings National Law.  | Individuals' legal certainty<br>and private property are af-<br>fected |
| 9. Action for unconstitutionality filed by the CNDH against the Reform of the Remuneration Act  | It affects the labor rights of State workers, reduces institutional capacities by dispensing with experienced workers, and reduces the legal certainty of workers in various institutions. | 14. Unconstitutionality action filed by the CNDH against the National Guard Law.   | It violates several human rights, including legal certainty.           |
| 10. The Bank of Mexico filed constitutional controversies, the Federal Telecommunications Institute and the Federal Economic Competition Commission (COFECE) against the Remuneration Act.  | It affects the labor rights of State workers, reduces institutional capacities by dispensing with experienced workers, and reduces the legal certainty of workers in various institutions. | 15. Unconstitutionality action filed by the CNDH against the National Law on the Use of Law Enforcement.   |  |
| 11. Indirect constitutional protection lawsuit proceedings were filed by the Specialized Drugs Group (GRUFESA) against the determination of the Federal Executive (SHCP Chief Officer) for vetoing it from participation in drug tenders. A stay against the claimed act was obtained |  | 16. Indirect constitutional protection law-<br>suits prompted by citizens against the<br>Memorandum of López Obrador by<br>which he orders non-compliance with<br>the provisions of the laws on education.   |  |

| TABLE 11. MOST RELEVANT LEGAL RESOURCES PROMOTED DURING THE CURRENT ADMINISTRATION 3/5  |   |  |  |  |  |  |
|---|---|--|--|--|--|--|
| 17. The constitutional controversy was filed by the Governor of Michoacán against the Organic Law of the Federal Public Administration since he considers that the superdelegates' figure undermines the Federal Entity's autonomy.   | the territorial and budgetary control of the federal government is    | 21. Unconstitutionality action filed by the CNDH against the National Detention Registration Law.  | Security officers, including<br>the Armed Forces and the NG,<br>can arrest and investigate<br>individuals violating due pro-<br>cess.  |  |  |  |
| 18. Constitutional controversy bought by the National Institute of Statistics and Geography (INEGI) against the 2019 Expenditure Budget for the budget reduction that prevents it from carrying out all its programs and surveys.   | tution to carry out the tasks that constitutionally correspond to it, | 22. Unconstitutionality action filed by the CNDH against the General Law of the National Public Security System.   | Both the right of access to public information and the principle of maximum publicity are violated.  |  |  |  |
| 19. Constitutional controversy filed by the municipal president of Hidalgo de Parral, Chihuahua, against the decrease of the federal budget for Children's stays in the Expenditure Budget. a. Extension of the constitutional controversy against the reduction of the budget for Children's stays due to the publication of the 2019 operating rules of the now-called support program for the well-being of children, children of working mothers. | affected women and children who were beneficiaries of this social     | 23. The CNDH, INE, PAN, PRI, PRD, MC, and PBC (Baja California Party for its acronym in Spanish) filed unconstitutional actions against the "Bonilla Law."                   | The then-governor sought to extend his mandate unconstitutionally and without the need to go to the polls.   |  |  |  |
| 20. The constitutional dispute brought by the National Institute for Educational Assessment (INEE) against the Expenditure Budget for the reduction of almost 50% of its budget.  | , 0   | 24. Actions of unconstitutionality filed by the CNDH, the State Human Rights Commission (CEDH, for its acronym in Spanish) of Tabasco, and the MC against the "Garrote Law." | Freedom of speech was violated, and job security for journalists was reduced. This was a law with which the then governor of Tabasco, Adán Augusto López, tried to control the press in his state. |  |  |  |

| TABLE 11. MOST RELEVANT LEGAL RESOURCES PROMOTED DURING THE CURRENT ADMINISTRATION 4/5  |   |   |   |  |  |  |
|---|---|---|---|--|--|--|
| 25. Constitutional controversies promoted individually by the governor of Chihuahua, 23 mayors of municipalities of Chihuahua and Sonora against the Income Law and the Expenditure Budget that allowed the federal executive to receive the fund that was destined for mining and that was under the administration of the municipalities                            | Reducing federal funds for municipalities has further centralized governmental tasks in the federal executive on core issues. This way, the municipal capacity to carry out public policies in relevant matters such as public security is reduced. | 29. Unconstitutionality action filed by the CNDH against the Law on the Citizen Security System of Mexico City.   | The guarantee of disci-<br>plinary hearings and de-<br>tentions in Mexico City is<br>affected.  |  |  |  |
| 26.Constitutional controversy promoted by the governor of Michoacán, Silvano Aureoles, against the General Education Law regarding the decentralization of the federal education system that obliges the state administration to take charge of basic education and the determination of the rules of distribution of national resources for the payment of teachers. |   | 30.Unconstitutionality action filed by the CNDH against the reform that equates certain tax crimes with organized crime.  | It violates legal certainty and breaks the proportionality of the penalty. This way, thousands of people could be equated with well-organized criminal groups.  |  |  |  |
| 27.Constitutional controversy and subsequent claim of the Governor of Baja California Sur for not including his state among those benefited by the Decree of Fiscal Stimuli that decreased VAT and revenue income tax (ISR, for its acronym in Spanish).  |   | 31.Constitutional protection lawsuit filed by indigenous communities calling themselves 12 indigenous peoples of Tecámac against the construction of Saint Lucia Airport in their territories | The construction of the Felipe Angeles International Airport (AIFA for its acronym in Spanish) had significant environmental impacts, and the original people were not consulted on the feasibility and relevance of the project. |  |  |  |
| 28. Constitutional controversy filed by the government of the state of Michoacán against the General Guidelines for the Coordination and Implementation of Comprehensive Development Programs, which state that the economic and in-kind benefits of the programs will be delivered directly and without intermediaries to the beneficiaries.                         | as intermediaries in the distribu-<br>tion of social programs. Govern-<br>ment tasks are again centralized  | 32.Citizens filed more than 2000 constitu-<br>tional protection lawsuits against the<br>National Forfeiture Proceedings Law   | Individuals' legal certainty<br>and private property are af-<br>fected  |  |  |  |

| TABLE 11. MOST RELEVANT LEGAL RESOURCES PROMOTED DURING THE CURRENT ADMINISTRATION 5/5   |   |  |  |  |
|--|---|--|--|--|
| 33. Constitutional controversy filed by the former governor of Baja California, Francisco Vega, against the Bonilla Law.   | The then-governor sought to extend his mandate unconstitutionally and without the need to go to the polls.        | 38.Indirect constitutional protection lawsuit proceedings filed by legislators and civil associations against the appointment of Rosario Piedra as head of the CNDH  | The procedure for appointing the head of the CNDH was violated through an unruly and non-transparent vote.   |  |
| 34. Indirect constitutional protection lawsuit of various public servants of the Judiciary of the Federation, the National Electoral Institute, the Bank of Mexico, the CNDH, and COFECE against the Remuneration and Expenditure Budget Law 2019  | workers, reduces institutional capacities by dispensing with expe-  | 39. Trial for the protection of the presented citizen political-electoral rights before the Electoral Tribunal of the Judiciary of the Federation by the Employers Confederation of the Mexican Republic (Coparmex, for its acronym in Spanish) concerning the Bonilla Law.  | The then-governor sought to extend his mandate unconstitutionally and without the need to go to the polls.   |  |
| 35. Indirect constitutional protection lawsuit filed<br>by individuals against the order to close pipe-<br>lines of Petróleos Mexicanos that caused the<br>shortage of fuels in the country  | The gasoline shortage affected large swathes of the Mexican population and involved significant economic effects. | 40. Senator Xóchitl Gálvez filed the complaint before the Secretariat of the Public Service against the head of the Federal Electricity Commission for the possible commission of severe administrative offenses.  |  |  |
| 36. Individuals filed more than 150 indirect constitutional protection lawsuits against the cancellation of the Mexico City Texcoco Airport (NAIM, for its acronym in Spanish) in Texcoco, alleging non-compliance and the right to a stable and, or healthy national economy and against the construction of Saint Lucia Airport. | The cancellation of the NAIM has represented one of the highest budgetary costs during this administration.       | 41. The lawsuit by 49 opposition senators of the Decree on National Guard and Public Security was published in the Official Gazette of the Federation on September 9, 2022.  | Article 21 of the Constitution states that the NG shall be a civil institution registered with the Secretariat of Security and Civilian Protection (SSPC, for its acronym in Spanish) is violated. |  |
| 37. Constitutional protection lawsuit of the NGO Derechos Humanos y Litigio Estratégico Mexicano, A.C. vs. the appointment of the Anti-Corruption Prosecutor for not following the constitutional procedure established for this purpose or allowing the participation of civil society, as established by law                     | The legal procedures established for appointing members of autonomous bodies are violated.                        | 42.Popular complaint on environmental matters promoted by the Mexican Center of Environmental Law, A.C. before the Agency of Security, Energy and Environment against the clearing and, or logging of plant species in the property intended for the construction of the Dos Bocas Refinery in the municipality of Paraiso, Tabasco. | Large-scale environmental impacts have been shown, and consultation processes with social groups that have defended the land have been violated.   |  |

 $\textit{Source} : In-house \ elaboration \ with \ information \ from \ Casar \ (2020) \ and \ Animal \ Político \ (2022b).$ 

## PRESSURES AND ATTACKS ON THE 4T NON-ALIGNED

In addition to the budgetary assaults and federal executive pressure on the autonomous bodies, another feature of this administration has been the disqualification and discrediting of any organ, party, institution, media, or individual that expresses disagreement with the government, its ways of behaving and its public policies in general. The targets of the offenses and attacks have been journalists, civil society organizations, political competitors, government authorities, academics, members of the judiciary, and international agencies, among others.

Although these attacks are not new, they have intensified in recent weeks. The leaks that occurred due to the hack against Sedena, known as #Sedenaleaks, brought to light the use of Pegasus malware by the government of López Obrador against journalists and human rights defenders (Tourliere, 2022). Among the cases that stood out was that of Ricardo Raphael, who was a victim of espionage (as corroborated by the expert report carried out by Citizen Lab) through the infection of his cell phone on four different occasions during the years 2019 and 2020. The journalist also narrated the threatening messages his 12-year-old

son received this year. In response, President López Obrador dismissed the fact and accused Raphael of being a sympathizer of the conservative right and slandering him (Raphael, 2022).<sup>10</sup>



*Image*: "Ricardo Raphael denounces Sedena of spying. Photo: Mario Jasso/Cuartoscuro at www.sdpnoticas.com.

<sup>10</sup> Look at: https://www.proceso.com.mx/nacional/2022/10/2/gobierno-de-LópezObrador-espio-periodistas-defensores-de-derechos-humanos-con-spyware-pegasus-294412.html

#### **AGRESSIONS TO JOURNALISTS**

| December 2018 – August 2022 | 36 journalists murdered                                   |  |
|-----------------------------|---|--|
| January – July 2022         | 331 agressions against journalists and mass communication | 51.8% more than in the same equivalent period of Peña Nieto's presidency |
| The State is the aggressor  | Was the perpetrator of 38.6% (128) of these aggressions   |  |
| Artículo 19, 2022           |   |  |

This occurs in a context where attacks against journalists in Mexico remain alarming. Article 19 (2022b) reported that from December 2018 to August 2022, at least 36 journalists were killed for reasons related to their work. In 2022, eleven have been reported, making 2022 the second fullest year with this type of homicide in the 21st century in Mexico, only after 2017. The same organization reported that between January and July 2022, it counted 331 attacks against journalists and the media, 51.83% more than in the equivalent period of the government of Enrique Peña Nieto. The constant is that the primary aggressor is the State which was the perpetrator of 38.6% of these attacks (128) (Article 19, 2022b).

In addition to the attacks on the press, the Mexican Chief Executive has sustained his attacks against other social groups, such as civil society organizations, including Mexicans Against Corruption and Impunity, the Public Policy Research Center (IMCO, for its acronym in Spanish), Mexico Evaluates or Signos Vitales. He even asked the US government to stop funding some of these<sup>11</sup>. The president has also pointed out that the opposition mobilizes groups such as parents of children with cancer. Furthermore, a leaked doc-

<sup>11</sup> For more information look: https://www.dw.com/es/ López Obrador-critica-el-financiamiento-de-ee-uu-aong-mexicana/a-57734707, https://www.angulo7.com. mx/2020/08/28/acusa-López Obrador-a-ongs-recibirdinero-para-oponerse-al-tren-maya/ y https://www. youtube.com/watch?v=dGhTw9J9na8







Images: "Families reproach López-Gatell words against those who are sure of medicine scarcity" at www.poresto.net. "Demonstration against the murder of the activist Samir Flores, a year after." Nurphoto (Getty) at www.elpais.com. "Protest against closing the Children's Stay in Neza" at www.digitalmex.mx

ument in the #Sedenaleaks shows how the government, through Sedena, considers potentially risky for the completion of this government's flagship infrastructure projects, such as: Felipe Ángeles International Airport, those same parents of children with cancer who have demonstrated against the lack of drugs, as well as groups of land activists, users of the extinct Children's stays centers or feminist collectives, to the extent of comparing them with terrorist groups such as Hezbollah or drug trafficking cartels such as the Jalisco New Generation Cartel (CJNG, for its acronym in Spanish) or the Beltran Leyva Cartel (Crail, 2022).

All these attacks have increased the cost of those trying to exercise their profession and rights to oversee the political and budgetary work of the government that has not necessarily met the desired standards. For example, in corruption and impunity, the indicators show no improvement compared to past Governments.<sup>12</sup>

In addition to the aggressions against civil society, the movement calling itself the fourth transformation was dedicated to pointing out as traitors to the homeland all the legislators who opposed the elec-

<sup>12</sup> Look at https://www.impunidadcero.org/articulo. php?id=160&t=indice-estatal-de-desempeno-deprocuradurias-v-fiscalias-iedf-2021

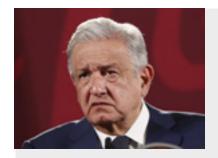
## TABLE 12: GROUPS WITH THE POSSIBILITY OF COMMITTING AN ACT OF UNLAWFUL INTERFERENCE

| GROUP   | LEVEL OF THREAT | GROUP  | LEVEL OF THREAT |
|---|-----------------|--|-----------------|
| Al Qaeda  | 12              | 12 indigenous peoples of TECAMAC   | 8               |
| Hezbolla  | 10              | Islamic State of Iraq and Levant   | 8               |
| Jalisco Nueva Generación Cartel   | 10              | Caballeros Templarios Cartel   | 8               |
| Libertad Union  | 10              | Guerreros Unidos Cartel  | 8               |
| Magisterium (dissident group of the National Coordinator of Education Workers CNTE, for its acronym in Spanish) | 10              | Beltrán Leyva Cartel   | 8               |
| National Peasant Confederation  | 10              | Front of indigenous peoples in defense of water                                | 7               |
| Feminist Collectives  | 10              | National Coordinator of the Ayala Plan   | 7               |
| Students of the rural teachers' school Raúl Isidro<br>Burgos  | 10              | Del Centro Cartel  | 6               |
| Front of peoples united in defense of the Land  | 10              | Unión Tepito Cartel  | 6               |
| Antorcha Campesina  | 9               | Family members of children with cancer   | 6               |
| La Familia Cartel   | 9               | Mothers who made use of the government Children's stays                        | 5               |
| Popular Front for the Liberation of Palestine –<br>General Command  | 9               | Former members of the extinct Federal Police (P.F. For its acronym in Spanish) | 5               |
| Collectives demanding peace and social justice  | 9               |  |                 |

Source: In-house elaboration with information from Crail (2022).

tricity reform promoted by the president. Specifically, in his morning conference of April 25, López Obrador accused those who prevented the approval of his initiative of being traitors to the homeland, and the leader of Morena, Mario Delgado, supported him and filed criminal complaints against the legislators referred to for the crime of treason, which for a long time merited execution by firing squad.¹³ It is worth mentioning that even before the vote on the government–proposed electricity reform, the president accused those who disapproved of his initiative of being traitors to the homeland 86 times (SPIN, 2022). This behavior has been repetitive and constant and is already a usual way for the government to act.

The attacks have increased the cost of those trying to exercise their profession and rights to oversee the political and budgetary work of the government.





Images: "López Obrador accuses congress deputies of 'treason' because they rejected the electricity reform" at www.esus.deportes.yahoo.com. "Morena confirms that will denounce of treason to those congress deputies who opposed" at www.politica.expansion.mx.

<sup>13</sup> For more references, look at: https://elpais.com/mexico/2022-05-31/Morena-denuncia-por-traicion-a-la-patria-a-los-diputados-que-votaron-contra-la-reformaelectrica.html

# CONSEQUENCES OF THE WEAKENING OF FORMAL AND INFORMAL WEIGHTS AND COUNTERWEIGHTS SYSTEM

The consequences of the progressive blurring of the counterweights to the federal executive power are diverse. Perhaps the most visible is the compaction of the rights of members of Mexican society. However, having formal means of protection, it is challenging to activate them because the institutions do not maintain high levels of efficiency, and many of these, as observed, do not respond to the interests of society but of the current administration. This vocation for power without limits affects democracy as a political organization that is supported, on the one hand, by the society's representation within the public authorities and, on the other, by respect for human rights. The fact that the federal executive branch does not brake on its power implies that the president and his team can push any decision regardless of whether it violates the Mexican regulatory framework, affects vulnerable groups, or infringes the separation of powers.

As already mentioned, this government has excluded Congress from real budgetary control, thus preventing a horizontal control of power and increasing opac ity levels. It has interfered in procuring and delivering justice, increasing the possibility that the government politically litigates justice against those it considers adversaries, and it has left certain vulnerable groups wholly unprotected. This is the case, for example, of women who benefited from Children's stays. Due to the program elimination of the "Child stay Program to Support Working Mothers," many spaces that depended on this budget have been forced to close—mainly affecting those mothers, fathers, and caregivers who do not have labor benefits and do not have access to the initial education services provided by the IMSS, ISSSTE, and other institutions.

Children's stays covered more than 320,000 children, at least 70% of whom were in the mother's care. Based on the determination to eliminate the budget for these sites, they faced the crossroads of finding a place to leave their children with the assurance that they would be protected.

|      | TABLE 13. BUDGET VARIATION AND COVERAGE OF CHILDREN'S STAYS |                |                   |  |  |
|------|---|----------------|-------------------|--|--|
| YEAR | BUDGET IN MILLION PESOS<br>(MDP)                            | REAL GROWTH    | TARGET POPULATION |  |  |
| 2018 | 332.590.434   | -              | -                 |  |  |
| 2019 | 1.620.268.922   | -5.128.335.766 | 188 097           |  |  |
| 2020 | 1.059.894.625   | -3.458.526.477 | 113 010           |  |  |
| 2021 | 1.232.750.906   | 1.630.881.751  | 141 903           |  |  |
| 2022 | 370.788.949   | 2.007.817.292  | 211 090           |  |  |

Source: In-house elaboration with información from Government of Mexico (n.d.).

|      | TABLE 14.CHANGES IN THE BUDGET AND COVERAGE OF CHILDCARE SERVICES |                  |                               |                    |                       |        |
|------|---|------------------|-------------------------------|--------------------|-----------------------|--------|
| YEAR | BUDGET (MDP)  | REAL GROWTH RATE | NUMBER OF<br>CHILDREN'S STAYS | ENROLLED<br>MINORS | CHILDREN CARED<br>FOR | , ,    |
| 2018 | 14 320.74   | _                | 1 418                         | 194 094            | 203 106               | 77.50% |
| 2019 | 14 014.08   | -2.14            | 1 422                         | 207 168            | 217 541               | 83.00% |
| 2020 | 14 008.48   | -0.04            | 1 414                         | 164 131            | 126 929               | 66.00% |
| 2021 | 13 900.26   | -0.77            | 1 408                         | 162 379            | 178 097               | 64.00% |
| 2022 | 14 450.33   | 3.96             | -                             | _                  |                       |        |

Source: In-house elaboration with information from IMSS (2020;2021;2021) and ISSTE (2022).

Failure to enforce counterweights to presidential power reduces the democratic quality of society and leaves it helpless against the arbitrariness of power. In this regard, it is worth looking at two concrete examples of the consequences that the lack of checks and balances has on people's lives: 1) the economic effects of breaches of contracts and 2) the violation of the presumption of innocence as a government policy.

In the economic field, the lack of effective counterweights has been shown to have financial implications that could escalate progressively. A clear example of how the absence of a checks and balances system for the presidential power has relevant economic costs is the decision that the SCJN made in April 2022 not to declare unconstitutional the Electricity Industry Law approved on March 3, 2021, by Congress. This fact gives competitive advantages to the CFE compared to other players in the Mexican energy market and, in addition, prioritizes the most polluting energies. This violates provisions included in the USMCA that have caused the United States government to activate a dispute settlement mechanism under the regulatory umbrella of that treaty, which could result in solid trade sanctions for Mexico, which some analysts estimate to be close to 30 billion dollars.14

Mexico will lose the litigation if the consultations requested by the United States and to which the government of Canada adhered lead to an international panel of disputes. It could be expected that the industries and products that are the subject of tariffs would lose market viability and therefore be replaced by players from other countries, and the competitiveness of Mexican exports would decrease (by up to 8%, according to analysts<sup>15</sup>). Or that the tariffs be imposed on oil exports which would lead to more significant losses for Pemex with fiscal effects for all. The consequences on employment associated with the base of exporting companies would be important as formal jobs disappear, especially in agro-industrial goods sectors.<sup>16</sup>

Regarding the presumption of innocence, the public and institutional debate on the conventionality and constitutionality of informal preventive detention as a precautionary measure in Mexico cannot be ignored.

<sup>14</sup> Look at https://www.reporteindigo.com/reporte/scjn-no-

alcanza-votos-para-declarar-inconstitucionalidad-dela-ley-de-industria-electrica/

<sup>15</sup> Look at https://www.elfinanciero.com.mx/opinion/enrique-cardenas/2022/08/11/con-el-t-mec-lopez-obrador-hara-historia/

<sup>16</sup> Look at https://www.elfinanciero.com.mx/opinion/enrique-cardenas/2022/08/11/con-el-t-mec-lopez-obrador-hara-historia/

Although preventive detention is a legal instrument that is not new in Mexico, since it has been available in one way or another since the 1917 Constitution, in 2019, the Congress of the Union approved, through the article 19 reform of the Constitution, to increase the number of crimes for which informal preventive detention is applied as a precautionary measure. Eleven were the new crimes added to the repertoire. This was despite the extensive national and international criticism of this precautionary measure, mainly because it flagrantly violates the presumption of innocence. Later, this reform was embedded in the regional debate on the conventionality of informal preventive detention in Mexico because of the case "García Rodríguez and others versus Mexico," which originated from the 17-year imprisonment of Daniel García Rodríguez and Reyes Alpízar Ortiz, accused of homicide, without a guilty verdict.

In this context, the SCJN opened a debate on the constitutionality of this legal construct that resulted in the discussion of two draft sentences, Minister Norma Piña and Minister Luis María Aguilar. The Court's plenary debated the latter's draft since September 5, 2022, but after the ministers' conflicting positions, it was decided to formulate a new draft. This comes after the open pressure of the president of Mexico, who



*Image*: "Daniel and Reyes versus Mexico: a trial after 17 years of being in jail without a sentence" at www.elpais.com.

publicly advocated maintaining the figure of informal preventive detention since, in his opinion, the Court would invade the area of competence of the legislative power if it annulled article 19 of the Constitution as proposed by Luis María Aguilar (Guillén, 2022). The president assured that the decision to keep a person in prison should not be left to a judge, even though the judges alone have constitutional and legal competence to do so.

This pressure by the executive on the judiciary has enormous and extremely delicate implications. Con-



*Image*: "Minister Luis María Aguilar presents new project on preventive detention" Photo: Claroscuro at www.elsoldemexico.com.mx.

trary to what López Obrador asserted in his morning conference on September 6, 2022 (Guillén, 2022), informal preventive detention has affected chiefly people with low incomes, unable to afford the expenses associated with the judicial defense of a person. 70% of persons deprived of liberty maintain an income below the poverty line (Signos Vitales, Human Rights Report). INEGI (2022a) has reported that only 6% of people in preventive detention have higher education, and only 8.9% work as professionals or technicians. This shows a huge disparity in access to jus-

tice, as an individual's economic position correlates with their ability to defend themselves legally. For example, 60.7% of accused persons with a private lawyer were found not guilty. This proportion is only 27% in the case of persons with legal aid lawyers. This can be due to the workload of public defenders since each public defender attends around 300 cases simultaneously (Intersecta, 2021).

Another declaration made by López Obrador on the morning of September 5, 2022, which is clearly questionable, is that the declaration of unconstitutionality of informal preventive detention would throw off much of the security strategy of the federal government (Presidency of the Republic, 2022). Even though only 6.8% of the total crimes were reported with an investigation folder initiated, and 93.2% of crimes were not reported, or an investigation folder was not created (INEGI, 2022b). Although about 100,000 people have been jailed since the 2019 amendmentmore than the last 15 years count—it is not translated into a crime incidence reduction. There is no evidence to affirm that increasing the incarceration of people through preventive detention will solve a problem that involves trust in institutions, the investigative capacity of public prosecutors, and the independence of judges.

In addition, it should not be overlooked that in Mexico, people are innocent until proven guilty through the courts. Nevertheless, Mexico is in 13th place out of 34 countries on the American continent, with the most prisoners without sentences (Signos Vitales, 2021b). Until 2021, 42.8% of those incarcerated were in preventive detention. As of January 2022, 93,188 people were reported to be imprisoned without a conviction nationwide (SSPC, 2022).

In addition, as informed by the organization Intersecta (2021), in its report La condena sin sentencia: el uso abusivo de la prisión preventiva en México durante la pandemia (Conviction without sentencing: the abusive use of preventive detention in Mexico during the pandemic) in 2020 there was the largest average increase in the rate of incarceration since 2005 (3.1%, equivalent to 14,000 inmates more than the previous year). Although between 2015 and 2019, there was a decrease in the prison admission rate, the 2019-2020 period showed an increase that can be explained by the expansion of preventive detention, which is the most used among the precautionary measures. In 2020 alone, 85% of people who entered prison did so without trial or sentencing. Moreover, over half of the women incarcerated have no sentence (52%) (Ortega

#### PEOPLE IN PREVENTIVE DETENTION

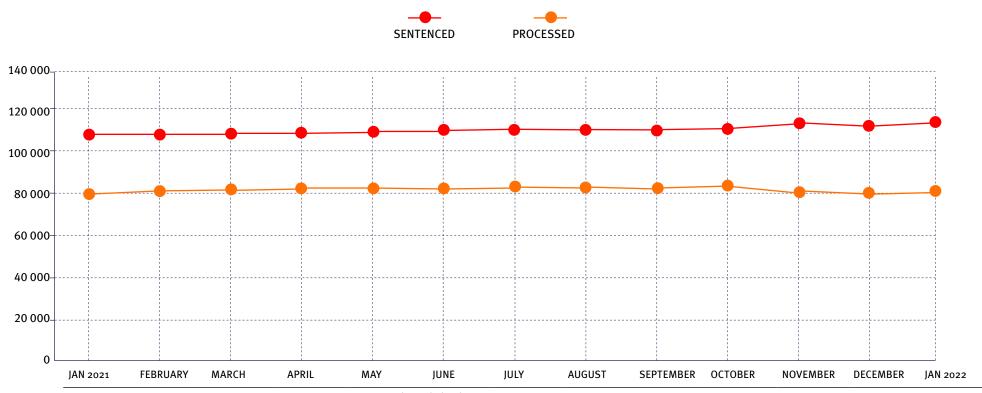
| 70%   | Income below poverty line   |                    |
|-------|---|--------------------|
| 6%    | Higher studies  |                    |
| 8.9%  | Professional or technician  |                    |
| 60.7% | With private defender   | Declared innocents |
| 27%   | With public defender.<br>Every attorney assists 300<br>cases simultaeously. | Declared innocents |

Signos Vitales, 2022; INEGI, 2022; Intersecta, 2021

## GRAPH 6. BEHAVIOR OF THE POPULATION DEPRIVED OF LIBERTY BY COMMON JURISDICTION AND LEGAL SITUATION

JANUARY 2021–JANUARY 2022



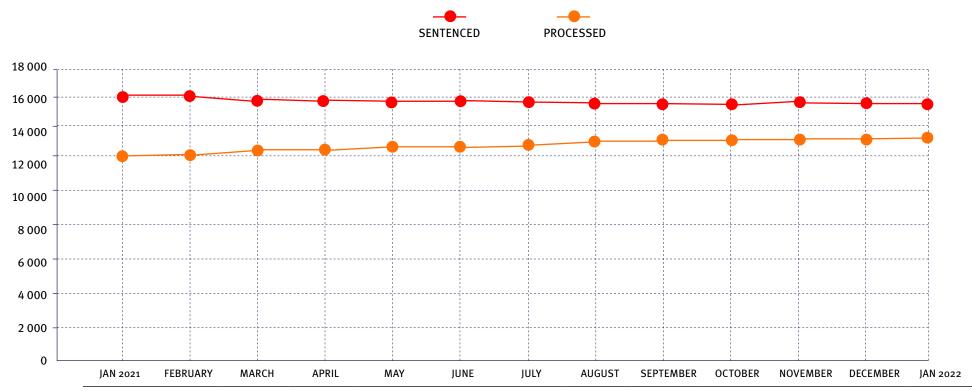


Source: In-house elaboration with information from SSPC (2022) (p.9).

#### GRAPH 7. BEHAVIOR OF THE POPULATION DEPRIVED OF LIBERTY BY COMMON JURISDICTION AND LEGAL SITUATION

JANUARY 2021-JANUARY 2022





Source: In-house elaboration with information from SSPC (2022) (p.9).

& Atuesta, 2021). This situation indicates that the levels of injustice in Mexico can be enormous.

In conclusion, the counterweight reduction to the Executive has been progressive in the last three and a half years. Legal and constitutional reforms and presidential decrees and agreements have undermined institutional and social resistance to the abuse of presidential power. The colonization of autonomous bodies and the enormous pressure on the judiciary have kept in force a series of actions of open unconstitutionality; the consequences are not minor; on the contrary, they affect, as is usually the case, the most unprotected people. The damage of this enormous concentration of power in the executive branch on the members of Mexican society still cannot be calculated accurately, but at least the economic field and the jurisdictional field already show worrying results.

In that connection, it is worth wondering how the lack of a system of checks and balances would affect the country's immediate and medium—term future. While this government has shown a tremendous vocation, discipline, and ability to bend the institutional and social obstacles presented, it is worth distinguishing between decisions that can be reversed and those



*Image*: "Sentence plus being a mother in jail" Photo: Julio César Aguilar at www.elpais.com

# THERE IS NO RELATIONSHIP BETWEEN PREVENTIVE DETENTION AND INCREASE OF VIOLENCE

| 100,000 | People in jail, since 2019 reform                     |
|---------|---|
| 93,188  | People WITHOUT SENTENCE in January 2022               |
| 52%     | More than half of incarcerated women have no sentence |

SSPC, 2022; Intersecta, 2021; Ortega y Atuesta, 2021

that cannot. In the justice field, for example, it is observed that this government's inheritance to Mexico will be damaging if it consolidates its normative project at the expense of the law and the constitution itself. The precedents that the Court's action will leave will be crucial for subsequent resolutions. The potential decision of the country's highest Court to endorse human rights violations would serve as a reference so that possible authoritarian impulses in the future can find interpretative recesses to continue undermining democracy.

However, in other areas, the actions carried out by this government can be modified again if the distribution of party-political forces becomes more symmetrical again. The powers and faculties of the Congress of the Union are such that it can regain the lost autonomy of some institutions, strengthen the OCAs budget and counterbalance the appointments of officials in key institutions for democracy. However, it must be recognized that the lost time implied by the progressive institutional destruction observed during this administration is not minor. Especially in a country that has taken decades to design and build an institutional base that, with all its shortcomings,

achieved the establishment of a plural system that progressively increased the civil and political rights of the members of Mexican society. This six—year period lost for democracy will have its consequences in the short, medium, and long term.



DIAGNOSIS OF MEXICO: DARK PERSPECTIVES :: 84



# MILITARY Money & power

the Signos Vitales reports, Mexico is experiencing a process in which the Armed Forces (FFAA, for its acronym in Spanish) have been inserting themselves more visibly in various government tasks that should, in principle, correspond to the bodies of civilian officials. While the involvement of the Army and Navy in security—related activities dates back several decades and experienced abrupt growth during Felipe Calderón's six—year period, it is with this government that the Armed Forces have registered the most significant political and economic empowerment ever observed.

Perhaps more than ever, the country now has a genuinely worrying civic—military relationship that could involve the subordination of the civil sphere to the military one. In this case, one could assume the disappearance of a democratic regime of law in which the popularly elected representatives, within the constitutional and legal framework, make the public decisions of the Mexican State. The consequences of circumventing the force with which the Army and Navy show their dominance in the budgetary, administrative, judicial, and even legislative fields, are of a scope that can jeopardize the peaceful and free coexistence of Mexican society.

Several indicators make it reasonable for Mexican society to ask whether what the country is experiencing is a process of militarization or, rather, one of militarism. Understanding the first is the use of the Permanent Armed Force in tasks unrelated to national defense through actions that involve military-grade procedures and weapons that may threaten the integrity of the members of a society (Hall & Coyne, 2013). Militarism, on the other hand, can be understood as the influence of the military apparatus on the orientation of state power (Fernández & Martínez, 1984). In this sense, militarism implies the influence or the predominance of military control over civilian power in public decisions in general and not only in defense or security. We let the reader know that this section does not reach a definitive conclusion. However, it does point out concrete actions that are limited to the field of militarization while others are to the entirely militaristic area.

Many signs allow us to get an idea of the real power that the Armed Forces have accumulated during this administration. The significant increase in the budgets of the Secretariat of National Defense (Sedena) and the Secretariat of the Navy (Semar), the increase in tasks delegated to the Armed Forces in a wide variety of public policy areas ranging from the control

of ports, airports and the construction of infrastructure megaprojects to intervention in the country's scientific policy and social policy; the operational and administrative transfer of the National Guard (GN) to Sedena through an obviously unconstitutional procedure, the opacity in public contracts carried out by the army and the public and private pressures of the Secretary of National Defense against opponents of the government. Each of these indicators is reviewed below.

#### ¿Militarization or militarism?

*Militarization:* use of the permanent Armed forces

in tasks unrelated to national defense.

*Militarism:* influence or predominance of the military

apparatus on the orientation of state power.

# MILITARY IN COMMAND: THE CONTROL OF POSITIONS AND STRATEGIC TASKS FOR THE MEXICAN STATE

In recent years, the government has ceded positions within the federal public administration (APF, for its acronym in Spanish) to active and retired military personnel. The Observatory of the National Guard and the Armed Forces (OGN, for its acronym in Spanish) (2022) reported that, between January 2018 and May 2022, at least 163 positions both in the APF and in civilian positions of subnational governments that corresponded to civilians had been taken over by military personnel. In these terms, the institutions that have suffered the greatest administrative takeover by the military are the state and local public security secretariats (51), the National Institute of Migration (44), the ISSSTE (18), customs (17), and the Integral Port Administration (17). The fact that the Armed Forces formally control several strategic sectors for the functioning of the Mexican State as a whole result in a growing political power on the part of the military groups.

As can be seen, the army is performing more and more tasks belonging to the government and fewer tasks of the State. National defense is a task of the

# TABLE 15. CIVILIAN INSTITUTIONS WITH POSITIONS HELD BY MILITARY PERSONNEL

2018-2022

| INSTITUTION   | FREQUENCY |
|---|-----------|
| Secretariats of State and/or Municipal<br>Public Security | 51        |
| National Migration Institute                              | 44        |
| ISSSTE  | 18        |
| Customs   | 17        |
| Comprehensive Port Administration                         | 17        |
| Municipal Police  | 3         |
| CDMX International Airport                                | 3         |
| Federal Civil Aviation Agency                             | 1         |
| Birmex laboratories                                       | 1         |
| Traffic Police Directorate                                | 1         |
| State Police  | 1         |
| Others  | 6         |
| TOTAL   | 163       |

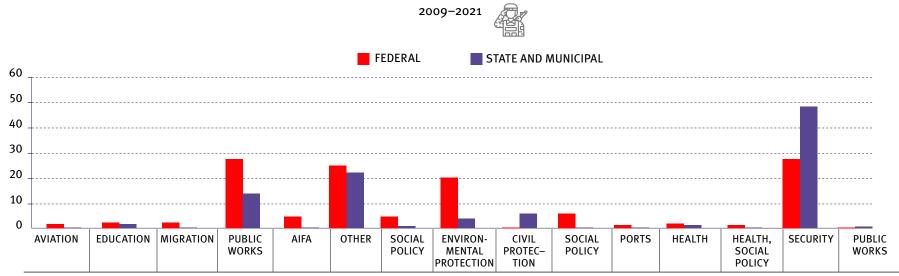
Source: In-house elaboration with nformation from OGN (2022) (p. 21).

State since it does not depend on the party-political force that governs at any given time but is a permanent responsibility of the state institutions. On the contrary, public security, the distribution of social programs, and the construction of infrastructure projects are government tasks that strictly depend on the programmatic platforms of the political actors competing to control state power legitimately. In this sense, by integrating Sedena and Semar into civilian government, they are automatically circumscribed in the tensions of everyday politics, understood in partisan and programmatic terms. The risks posed by this

fact threaten an essential democratic principle: the complete exclusion of the armed forces from political action and, even more so, from electoral action.

As shown by the National Inventory of the Militarized that was carried out by the Drug Policy Program of the Centre of Research and Higher Education Specializing in Social Sciences (CIDE for its acronym, in Spanish), between 2007 and 2021, at least 28 federal institutions delegated functions or budgets to the Armed Forces. In general, over the past ten years, at least 227 civilian tasks have been transferred to the

**GRAPH 8. ARMED FORCES ASSIGNED TASKS** 



Source: In-house elaboration with information from CIDE (2021).

Armed Forces, including the NG. 53% of these functions were assigned to the military, navy, and national guards during the current administration (CIDE, 2021).

As previously reported, the tasks detached from a national defense that both Sedena and Semar hoard cross a wide range of areas of public policy. The Observatory of the National Guard and the Armed Forces has reported that there are at least eight areas of public policy in which the Army and the Navy have acted: the fight against fuel theft, migration, control of ports and customs, building projects, supporting social groups resource distribution programs, COVID-19 health emergency care, management of civil public charges, and public safety, victim protection and care (OGN, 2022). All these responsibilities represent strategic sectors for the government and the Mexican State, especially those related to internal security, migration, ports, and customs, which mean the control of entry and exit from the country of people and goods. The fact that the armed forces take over these sectors increases their indispensability and empowers them vis-à-vis civilian power. The control of the information and operation of the State by the military may imply greater autonomy. The military has refused to be controlled politically and budgetarily, as seen below.

# NATIONAL GUARD, ARMY AND NAVY PERFORMANCE IN EIGHT PUBLIC POLICY AREAS

- 1. FIGHT AGAINST FUEL THEFT
- 2. MIGRATION
- 3. PORTS AND CUSTOMS CONTROL
- 4. BUILDING PROJECTS
- 5. SUPPORTTING SOCIAL GROUPS RESOURCE DISTRIBUTION
- 6. ASSISTANCE TO COVID-19 EMERGENCY CARE
- 7. MANAGEMENT OF CIVIL PUBLIC CHARGES
- 8. PUBLIC SECURITY, PROTECTION AND VICTIMS ASSISTANCE

OGN, 2022

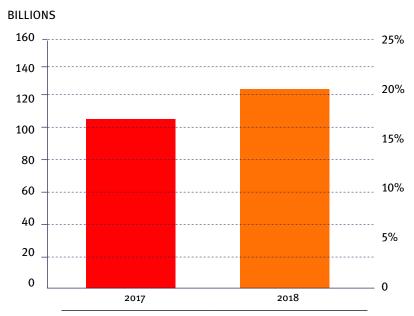
#### THE BUDGETARY WEALTH OF THE ARMED FORCES

Naturally, the increasing involvement of the Armed Forces in civil liabilities has been accompanied by a significant increase in the programmable budget granted to them, which went from 112.327 million 679 thousand 9 pesos in 2018 to 141.858 million 96 thousand 663 pesos in 2022, which represented an increase of 26.3% in real terms (SHCP, 2018a;2022d). It is essential to mention that in addition to the enormous budgets allocated to the military and navy, there are also the cost overruns that they have presented and the budget transfers through agreements made by both the federation and the federal entities.

As shown in the public accounts from 2012 to 2021, Sedena has systematically exercised more than it budgeted. During the first three years of this administration, this institution spent 24.9% more than it was budgeted for in the legislative branch. In other words, instead of receiving the 300,256 million 50,312 pesos approved, Sedena received 374,740 million 509,534 pesos. For its part, between 2019 and 2021, the Navy spent 11.826 billion 797.848 pesos more than it was budgeted for (MUCD, 2022). Concerning the agree-

**GRAPH 9. BUDGET FOR MILITARY** 





Source: In-house elaboration with information from SHCP (2018;2022).

# TABLE 16. NOMINAL AND REAL BASE 2012 APPROVED AND MODIFIED BUDGET. SEDENA AND NAVY 1/2 MILLION PESOS

## APPROVED AND MODIFIED BUDGET (NOMINALES)

# APPROVED AND MODIFIED BUDGET (ACTUAL, BASIS: 2012)\*

| (    |           |           | (10111111111111111111111111111111111111 |          |           | (1616/12, 5/13/3, 2012) |  |
|------|-----------|-----------|---|----------|-----------|-------------------------|--|
|      |           |           | SEDENA                                  |          |           |                         |  |
| YEAR | APPROVED  | MODIFIED  | APPROVED                                | MODIFIED | VARIATION |                         |  |
| 2012 | \$55,610  | \$61,364  | \$55,611                                | \$61,364 | 10.3%     |                         |  |
| 2013 | \$60,810  | \$63,047  | \$58,894                                | \$61,059 | 3.7%      |                         |  |
| 2014 | \$65,237  | \$66,780  | \$60,470                                | \$61,899 | 2.4%      |                         |  |
| 2015 | \$71,274  | \$73,536  | \$64,100                                | \$66,135 | 3.2%      |                         |  |
| 2016 | \$72,251  | \$74,361  | \$63,324                                | \$65,174 | 2.9%      |                         |  |
| 2017 | \$69,408  | \$74,419  | \$58,092                                | \$62,286 | 7.2%      |                         |  |
| 2018 | \$81,022  | \$80,946  | \$64,249                                | \$64,189 | -0.1%     |                         |  |
| 2019 | \$93,670  | \$111,618 | \$71,172                                | \$84,809 | 19.2%     |                         |  |
| 2020 | \$94,029  | \$124,177 | \$69,203                                | \$91,392 | 32.1%     |                         |  |
| 2021 | \$112,557 | \$138,945 | \$80,012                                | \$98,769 | 23.4%     |                         |  |
| 2022 | \$104,108 | ND        | \$69,119                                | ND       | NA        |                         |  |

DIAGNOSIS OF MEXICO: DARK PERSPECTIVES :: 92

# TABLE 16. NOMINAL AND REAL BASE 2012 APPROVED AND MODIFIED BUDGET. SEDENA AND NAVY 2/2 MILLION PESOS

| APPROVED AND MODIFIED BUDGET (NOMINALES) |          |          | APPROVED AND MODIFIED BUDGET (ACTUAL, BASIS: 2012)* |          |           |
|--|----------|----------|---|----------|-----------|
|  |          |          | NAVY  |          |           |
| YEAR                                     | APPROVED | MODIFIED | APPROVED  | MODIFIED | VARIATION |
| 2012                                     | \$19,680 | \$21,407 | \$19,680  | \$21,407 | 8.8%      |
| 2013                                     | \$21,865 | \$23,937 | \$21,176  | \$23,183 | 9.5%      |
| 2014                                     | \$24,603 | \$27,052 | \$22,805  | \$25,076 | 10.0%     |
| 2015                                     | \$27,026 | \$30,534 | \$24,306  | \$27,461 | 13.0%     |
| 2016                                     | \$27,401 | \$32,120 | \$24,016  | \$28,152 | 17.2%     |
| 2017                                     | \$26,337 | \$34,133 | \$22,043  | \$28,568 | 29.6%     |
| 2018                                     | \$31,306 | \$35,582 | \$24,825  | \$28,216 | 13.7%     |
| 2019                                     | \$32,083 | \$33,995 | \$24,377  | \$25,830 | 6.0%      |
| 2020                                     | \$33,558 | \$36,135 | \$24,698  | \$26,595 | 7.7%      |
| 2021                                     | \$35,477 | \$42,814 | \$25,218  | \$30,435 | 20.7%     |
| 2022                                     | \$37,750 | ND       | \$25,063  | ND+A1    | NA        |

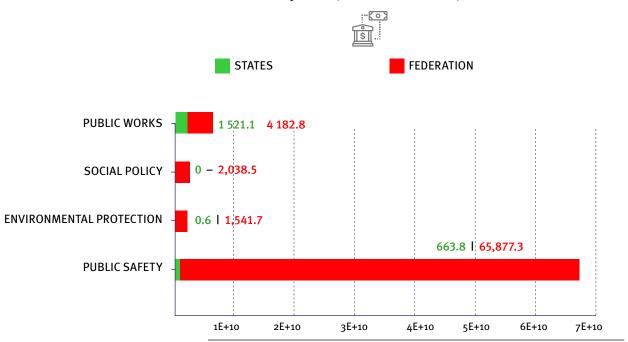
Source: In-house elaboration with information from Federation Expenditure Budget 2012-2022 and Cuenta Pública 2012-2021.

ments signed between different levels of government and the Armed Forces, the Inventory of the Militarized reported that between 2009 and 2021, the federation transferred 73.64 billion 200.625 pesos and the federal entities 2.185 billion 469.746 pesos. As expected, public security is the field of public poli-

cy representing the most budget transferred through contracts with the Armed Forces, a total of 66.541 million 125 thousand 253 pesos (CIDE, 2021).

GRAPH 10. BUDGET TRANSFERRED THROUGH AGREEMENTS FROM THE FEDERATION
AND THE STATES TO THE ARMED FORCES

2009-2021 (MILLONES DE PESOS)



Source: In-house elaboration with information from SHCP (2018; 2022).

#### THE ARMED FORCES, THE REALM OF OPACITY

As Benitez Manaut comments in his essay The Military Transition in Mexico 2000-2020, the Mexican Armed Forces have been historically opaque. Its substantial exclusion from national politics implied a series of privileges and benefits for the military institutions. The transition to democracy and the alternation in the republic's presidency, however, did not transform military institutions into ones of a properly democratic nature (Fescol, 2021). On the contrary, the increasing use of these for tasks unrelated to national security has made them more powerful and essential for the State to fulfill specific critical responsibilities, including security, which is not necessarily public, but rather the protection of the State and its institutions. As shown above, the budget increase that came with this expansion of the Armed Forces in the government has made the militarization-militarism process a great business challenge to quantify. Sedena and Semar have overshadowed billions of public pesos through direct awards, restricted invitations, and public trusts. In addition, they have abused national security regulations and access to information to avoid being controlled, as they should be in any democracy.

In its report, The Business of Militarization, Mexico United Against Crime (MUCD) showed that the General Administration Directorate (DGA, for its acronym in Spanish) of Sedena -in charge of administering and supervising the budget of the institution- exercised, in 2019 alone, 22.741 billion pesos, even though the budget approved by the legislative was less than 8 billion pesos. This practice was repeated in 2020 and 2021 when it exercised 26,476 million and 48,741 million pesos, respectively. In none of these years did the budget allocated in principle for the DGA reach 8 billion. That is to say, at this time, the DGA presented, on an annual average, cost overruns equivalent to 347%. MUCD also showed, in the same report, that most of this money was directed to public trusts contributions that, despite not presenting programmed resources in the budget, have exercised 81.8 billion pesos directed to the Administration and Payment of Military Equipment Public Trust (FPAPEM, for its acronym in Spanish), between 2019 and 2021, multiplying its available budgeted amount from the beginning of this government.

The income of the FPAPEM between 2019 and 2021 amounted to 122,510 million pesos. Between 2018

and 2021, the amount was multiplied by 37. The disbursements of the same trust between 2020 and 2021 reached the figure of 45,336 million pesos. It is worth mentioning that in 2021 alone, when the FPA-PEM reported its maximum yield, these amounted to 408 million pesos (MUCD, 2022). Due to the opacity with which this trust is handled, the Superior Audit of the Federation (ASF, for its acronym in Spanish) has indicated that Sedena has not registered various contracts on public works correctly and has no administrative measures to remedy these irregularities.

A very significant number of resources from FPAPEM has been used to carry out López Obrador's megaprojects, such as the Tren Maya, Felipe Ángeles International Airport, and Tulum International Airport, without these expenses having to pass through the Chamber of Deputies, which is responsible for each year's budget approval. This means that the López Obrador government has exploited, perhaps like no previous president, the budgetary adjustments to exercise the public resources of the Mexican State in an absolutely discretionary manner. In addition, the operation and administration of several mega-projects mentioned above will be carried out by a Sedena company, and 75% of its profits will be directed to pay pensions for soldiers and marines (MUCD, 2022).

|        | TABLE 17: MOST IMPORTANT WORKS OF DGI* 2019-2021 (MILLION PESOS)  |                     |  |  |  |
|--------|---|---------------------|--|--|--|
| NUMBER | PROJECT   | AMOUNT IN PESOS     |  |  |  |
| 1      | Construction of the AIFA  | \$57,029,484,523.54 |  |  |  |
| 2      | 2nd Phase of modernization of the<br>Heroic Military College (Tlalpan,<br>CDMX)   | \$802,041,382.82    |  |  |  |
| 3      | Sedena High-Performance Equine<br>Reproduction Center (C.R.E.A.R. for its<br>acronym in Spanish)  | \$80,469,224.11     |  |  |  |
| 4      | Construction of facilities to increase<br>the accommodation capacity of<br>military personnel and beneficiaries in<br>transit at the CDMX | \$47, 792,683.17    |  |  |  |
| 5      | Construction of a sports center for<br>the benefit of users of the Military<br>Housing Unit "Chihuahua                                    | \$218, 240,662.04   |  |  |  |

Note: \* the General Innovation Directorate for its acronym in Spanish Source: In-house elaboration with information from MUCD (2022) (p.70).

It should not be overlooked that this enormous budgetary power in the hands of the Armed Forces is given in a context of little transparency in which the Navy, for example, does not usually award contracts through internationally recognized good practices. In 2020, Semar did not organize a single public tender, directly awarded 1.9 billion pesos (72% of its budget), and granted 671 million through restricted invitations (MUCD, 2022).

In addition to the above mentioned, this government has withheld information on matters of great public interest that include the major presidential works such as the Felipe Ángeles International Airport, the Maya Train, contracts related to the purchase of vaccines for COVID and other diseases, actual data on COVID deaths, supplies of sodium heparin in a Pemex hospital, the Tlahuelilpan oil pipeline explosion case, information on the raffle of the presidential plane and even the failed Ovidio Guzmán arrest operation. Much of this information, by the way, is known through leaks resulting from the cyberattack suffered by Sedena, that an alleged group of hackers obtained documents on security, contracts, and even the president's health of Mexico.

# UNLIMITED CAPABILITIES FOR THE ARMY AND NAVY AND COMPLICITY WITH THE LEGISLATIVE POWER

The functional and budgetary enlargements for the Armed Forces have been accompanied by legislative actions that have implied, at least, an apparent militaristic attempt in Mexico in the last five decades. Capacity increase for the Armed Forces has been a constant in all Mexican governments in the twenty–first century. This elasticity in the faculties of the military corporations often went through legislative attempts that involved making various capacities of the Armed Forces permanent, many of which violate human rights. It should be noted that it was precisely during the current administration that these attempts were most successful.

Again, the National Inventory of the Militarized showed that from 2007 to 2021, 47 legislative initiatives were presented to the Congress of the Union to increase the Armed Forces' powers. The years 2019 and 2020 are the years in which the largest number of initiatives of this nature were presented, twelve and eight, respectively. To these, we must add the initiative that materialized the operational and administrative transfer of the GN to the Sedena, as well

as the controversial initiative presented by the PRI deputy Yolanda De la Torre, <sup>17</sup> with which the period in which both military and marine can carry out public security tasks was extended until 2028.

Both initiatives were presented in 2022, and although the first one was approved expeditiously, it contradicts Article 21st of the Constitution, which clearly establishes that public security institutions, including the National Guard, will be civilian, disciplined, and professional, and that it will be attached to the Secretariat of Public Security, which will formulate the National Public Security Strategy and the respective programs, policies, and actions.

The second initiative, approved on September 14th, 2022, in the Chamber of Deputies, was approved in the Senate until October 4th of the same year, after the majority group suspended the first vote when it realized it did not have the necessary votes for its approval. For that reason, the opinion returned to the united commissions of Constitutional Points and Legislative Studies to undergo minimal modifications. Subsequently, it was presented and approved in the Senate and the Chamber of Deputies plenary.



*Image*: "Yolanda de la Torre, deputy from PRI who promoted the extension of the Armed Forces on th streets, asked for license" at www.formato7.com

It is worth mentioning that the creation of the GN (National Guard for its acronym in Spanish) in 2019 and the formalization of military action in the public safety field since the same year have given rise to a legal framework that was primarily challenged. Whose resolution has been detained since then in the Supreme Court of Justice of the Nation (SCJN for its acronym in Spanish.) This new regulatory framework has empowered the Armed Forces, including

<sup>17</sup> Look at: https://politica.expansion.mx/presidencia/2022 /09/06/iniciativa-pri-quiere-a-militares-en-calles-hasta-2028-López Obrador-propone-consulta

the GN, among other things: to conduct crime prevention investigations, carry out verification tasks to prevent administrative infractions, request the georeferencing of mobile equipment, request the interception of communications, gather information in public places, request and require information from authorities and individuals, analyze and process information, use weapons against those who participate in demonstrations or public meetings that are qualified, without clear grounds by the authority, as not peaceful or lacking a lawful purpose. In addition, the entities in charge of guaranteeing public security are allowed to use all levels of public force, including firearms and lethal force, in cases in which, in the judgment of the executors of the force, the demonstrations are violent. Likewise, the permanent Armed Forces are authorized to carry out and record arrests (Vital Signals, 2020e).

| TABLE 18. NEW CAP                                 | ABILITIES OF THE ARMED FORCES AND THE NATIONAL GUARD IN PUBLIC SAFETY MATTERS  |
|---|--|
| REGULATORY<br>FRAMEWORK                           | CAPABILITIES   |
| General Law<br>of the National<br>Public Security | To reserve in an absolute, indeterminate, and prior manner all the information contained in the databases of the National Information System in the National Registries. |
| System  | Prohibit the public from accessing the information contained in the databases of the National Information System in the National Registries.                             |
| National Guard Law                                | Conduct research in the field of crime prevention.   |
|   | <ul> <li>Carry out verification tasks to prevent administrative infractions.</li> </ul>  |
|   | • Request the georeferencing of mobile equipment.  |
|   | • Request the interception of communications.  |
|   | • Collect information in public places.  |

Analyze and process information.

and the use of lethal force.

individuals.

· Require and request information from authorities and

Use of all levels of public force, including the use of firearms

Use weapons against those participating in demonstrations or public gatherings that are qualified, without clear grounds by the authority, as non-peaceful or lacking a lawful purpose

TABLE 40 NEW CARABILITIES OF THE ARMED FORCES AND THE NATIONAL CHARD

Source: Signos Vitales (2022) (p. 53).

Use of Force

**National Law** 

# MILITARY PERSONNEL, POLICY, AND THE FAILURE OF SECURITY IN MEXICO:

#### AN AFFRONT TO THE DEMOCRATIC STATE OF LAW

Finally, it is worthwhile to dwell on the political efforts promoted by the federal government to formally subordinate the NG to Sedena (Secretariat of National Defense for its acronym in Spanish). Extend the presence of the FFAA (Armed Forces for its acronym in Spanish) in public security tasks until 2028. Although the reform that gave birth to the GN in 2019 established that this institution would be of a civilian character and would belong to the Security Secretariat and Citizen Protection (SSPC, Security Secretariat and Citizen Protection for its acronym in Spanish) since its conformation to its verticality in command it has been in charge of the military corporations. Although the GN was always an army institution (Vital Signals, 2021f), the reforms to the Organic Law of the Federal Public Administration, the Law of the National Guard, the Organic Law of the Mexican Army and Air Force, and the Law of Promotions and Rewards of the Mexican Army and Air Force formalize the operational and administrative control of the Sedena over the NG, thus violating Article 21st of the Constitution.

On the other hand, after a series of documented pressures against the national president of the PRI, Alejandro Moreno, by the acting constitutional governor of Campeche, Layda Sansores, as well as express requests from the military leadership, the PRI presented a constitutional reform initiative to modify the fifth transitory article of the NG reform to extend from May 2024 to 2028<sup>18</sup> the Armed Forces participation in public security activities. This fact and a series of declarations from the military leadership seem to suggest a specific political activism on the part of the army. They highlight the participation of the commander of the NG in a promotional event for the recall referendum organized by Morena, 19 as well as statements made by the Secretary of National Defense, Luis Cresencio Sandoval. One during the parade for the 111th anniversary of the Mexican Rev-

<sup>18</sup> Look at https://politica.expansion.mx/presidencia/2022/09 /06/iniciativa-pri-quiere-a-militares-encalles-hasta-2028-López Obrador-propone-consulta

<sup>19</sup> Look at https://www.eluniversal.com.mx/nacion/denuncian-presencia-de-jefe-de-guardia-nacional-y-uso-deavion-en-acto-de-Morena

olution in which, making a clear allusion to Morena, he commented that as Mexicans, it is necessary to be united in the national project that is underway because far from the differences of thought that may exist, we are united by history and love for the land where we were born.<sup>20</sup>

Another controversial statement was made on September 13th, 2022, when, amid the debate on the permanence of the Armed Forces in public security tasks, he stated that there is a biased comments campaign against the Armed Forces, which respond to private interests to distance them from the citizenship. Those who integrate the institutions have the commitment to veil for national unity and must discern from those who, with tendentious comments coming from their interests and ambitions, before the national interests pretend to isolate the Armed Forces from the confidence and respect granted by the citizenship (García, 2022).

In this framework which attempted (usually with success) to increase the legal protection of the army through shady legality legislation and unconstitutionality, there were legislators like senator Emilio Álva-



Image: "Álvarez Icaza: 'Demand the Armed Forces that asking to be transparent is not lack of respect'" at www.centralfmequilibrio.com

rez Icaza. Who accused an informal veto power of the Armed forces in the legislative process after the rejection of the military leadership of the alternative judgment to the one Morena, PRI (Institutional Revolutionary Party for its acronym in Spanish), PT (Work Party, for its acronym in Spanish), and PVEM (Green Environmentalist Mexican Party, for its acronym in Spanish) pushed to manage the military permanence in public safety tasks until 2028. That fact is not insignificant since, if true, it means a clear affront against the democratic state of law. As a result of the leaks known as #Sedenaleaks, it was made public that it was the

<sup>20</sup> Look at https://aristeguinoticias.com/2011/mexico/la-4t-esta-haciendo-realidad-el-sueno-de-justicia-con-el-que-nacio-la-revolucion-López Obrador/

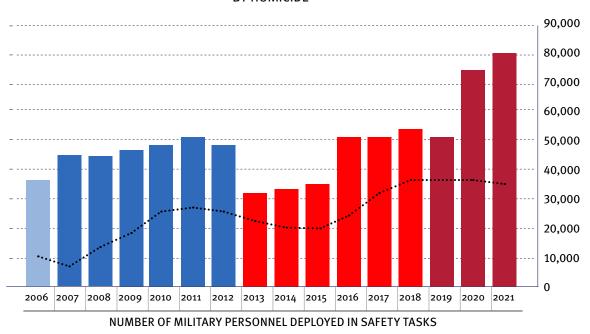
army through their Legal Affairs Unit that on July 1st, 2022, presented to the Office of the Judicial Council of the Federal Executive the two options for the reform in this matter. The first, marked as "Option A," poses a reform to the 21st Constitutional Article, while the second, "Option B," was the one that was taken established reforms at the legal level (San Martín, 2022). This situation credits the legislative activity to the FFAA, which openly infringes on the constitution.

The terrible results it has left are the most appealing of these enormous efforts to keep the FFAA on the head of public safety matters on security grounds. As it has been said on several occasions, the increment in military deployment brought with it the rise of the incidence of certain crimes amongst are highlighted intentional homicides. While in 2007, the intentional homicide rate per one hundred thousand inhabitants was 8.1; by 2009, it was 18, and by 2021, 27 (INE-GI, 2021b), despite a 215% increment in military deployment. During the current administration, a more significant number of military deployments on the national territory has been reported to comply with public safety tasks (208 thousand 478 up to 2021) (Integralia Consultores, 2022), so much so that the intentional homicide indicators have peaked historical max reaching 28 for each one hundred thou-

# GRAPH 11. VARIATION OF INTENTIONAL HOMICIDES AND THE NUMBER OF MILITARY PERSONNEL DEPLOYED IN SECURITY TASKS

2006-2021

## DEATHS .....BY HOMICIDE



*Source*: In–house elaboration with information from Integralia Consultores (2022) and INEGI (2021).

sand inhabitants between 2019 and 2021 (Causa en Común, 2022).

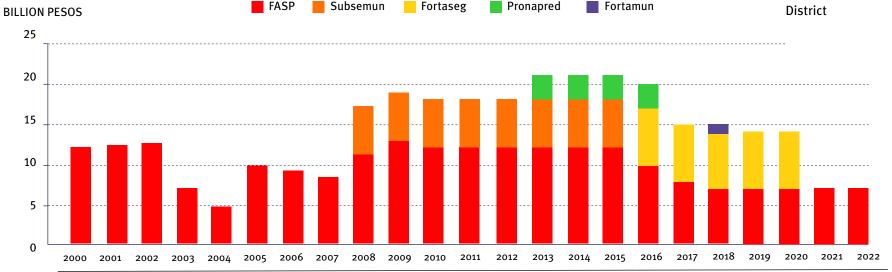
In tandem with the militarization of public safety, the federal government substantially reduced the resources destined to strengthen the subnational police corporations. This, even though the seventh transitory of the constitutional reform on NG matters, establishes that in 180 days after its commencement, the 32 federative entities should present a diagnos-

tic and increment program of their respective states of force and the institutional capabilities of their police forces. Counterintuitively, the budget allocations have eliminated funds designated for strengthening the subnational police forces, highlighting FORTASEG, which came to allocate around 4 billion pesos (MUCD, 2022). For the 2022 budget, the central five funds, including federal transfers, were for security tasks on the sub–national level; only the Public Safety Contribution Fund remains. (MUCD, 2022).

- FASP Fund for contributions for public safety
- Subsemun
  Subsidy for municipality safety
- Fortaseg
  Program for security
  strengthening
- Pronapred
   Natinal program for social prevention of violence and crime
- Fortamun
  Fund for contibutions for
  strengthening municipalities
  and territorial areas of Federal
  District

#### GRAPH 12. FEDERAL TRANSFERS TO PUBLIC SECURITY

2000-2022 (BILLION PESOS)



Source: In-house elaboration with information from Integralia Consultores (2022).

As far as police training is concerned, the Observatory of the National Guard and the Armed Forces reported that according to a GN report, up to November 2021, the Initial Training Course given to new members of the corporation was taken by 2,274 elements (OGN, 2022). The report states that specialized training was provided to 16,916 elements in subjects that include police sciences, gender perspective, the National Anticorruption System, the Accusatory Criminal Justice System, and Human Rights, as well as the study of command and leadership, femicide, and human development. The report does not detail the reasons why the rest of the military elements have not taken the courses mentioned above. even though they represent around two-thirds of the corporation. In addition, the security report presented in May 2022 noted that 8,198 new members and 2,405 veterans were undergoing initial training, while 6,975 elements were undergoing continuous training (OGN, 2022).

#### TRAINING OF THE NATIONAL GUARD (GN)

IT IS KNOWN THAT...

IN JANUARY 2022, THE NATIONAL GUARD HAD 113,833 ELEMENTS (CAUSA EN COMÚN, 2022)

#### The Report says that the GN unit! November 2021 had:

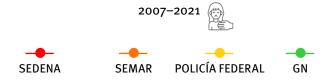
| ELEMENTS<br>IN TRAINING               | TRAINING<br>COURSE         |  |
|---------------------------------------|----------------------------|--|
| 2,274 new admission                   | Initial Training Course    |  |
| 16,916                                | Specialized training       |  |
| In May 2022:                          |                            |  |
| 8,198 new admission<br>2,405 veterans | Initial Training Course    |  |
| 6,975                                 | Continuing Training Course |  |
|                                       |                            |  |

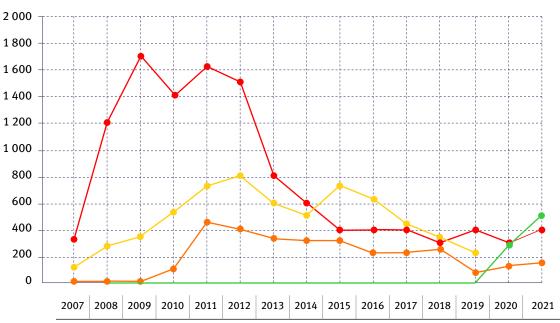
AND.... THE OTHER 2/3 OF THE CORPORATION?

#### THE CONSEQUENCES OF MEXICAN MILITARIZATION

Naturally, the military behavior described here has specific consequences for the lives of members of Mexican society. One of the most apparent consequences has to do with human rights violations. As Signos Vitales (2021b) reported in its report "Negative Balance: Human Rights in Mexico," human rights violations by the military have been a constant and not an exception, as President López Obrador has tried to make people believe.21 In general terms, it can be said that complaints against the military and federal police have skyrocketed since the six-year period of Felipe Calderón. Although they have progressively decreased during the administration of Enrique Peña Nieto, they continue to occur in significant volumes, in addition to the fact that the accounts of various victims show the qualitatively violent nature of the Armed Forces. For its part, the GN during 2020 and 2021, the first year in which complaints against this new institution were registered, received more complaints than the Federal Police in its last year of existence.

# GRAPH 13. NUMBER OF COMPLAINTS FOR ALLEGED HUMAN RIGHTS VIOLATIONS AGAINST PUBLIC AND FEDERAL SECURITY INSTITUTIONS





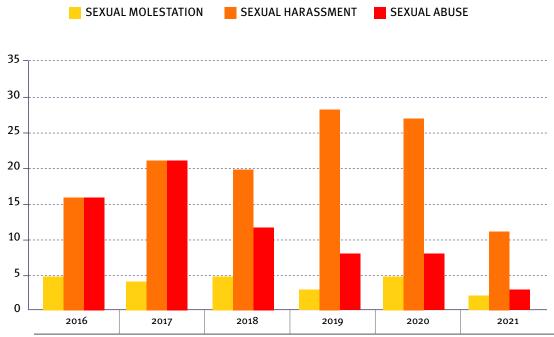
Source: In-house elaboration with information from Integralia Consultores (2022) (p. 15).

<sup>21</sup> Look at https://www.eluniversal.com.mx/nacion/asesinato-de-nina-de-4-anos-no-tiene-que-ver-con-la-actuacion-responsable-de-la-Sedena-dice-López Obrador

Accusations of human rights violations and illegal actions against the Army and the Navy have been a constant over the last three decades. These institutions have exceeded their functions and exercised excessive force. Although López Obrador promised to end these abuses, in recent months, at least two cases showed an x-ray of the illegalities carried out by the Armed Forces. Highlights The Ayotzinapa case regained public notoriety after the publication of the COVAJ (Commission for Truth and Access to Justice in the Ayotzinapa Case for its acronym in Spanish) report, and the illegal spying by Sedena stands out.

The Ayotzinapa case, in vogue in recent weeks due to the presentation and public discussion of the report of the Ayotzinapa Truth Commission (COVAJ), serves as a paradigmatic example of the dangers of using the Armed Forces in almost any governmental task, especially those related to public safety. As stated in both the report of the Interdisciplinary Group of Independent Experts (GIEI for its acronym in Spanish) and the COVAJ report, there is evidence to link members of the Armed Forces with criminal groups. In August 2022, the Special Investigation and Litigation Unit for the Ayotzinapa Case (UEILCA) requested

GRAPH 14. COMPLAINTS OF ARMY ELEMENTS RELATED TO SEXUAL ASSAULTS 2016-2021



Source: In-house elaboration with information from Integralia Consultores (2022) (p. 15).

at least 83 arrest warrants. <sup>22</sup> Several against military personnel. Surprisingly, at the end of September of the same year, the FGR (Attorney General's Office for its acronym in Spanish) requested the suspension of 21 of these arrest warrants, 16 of which were against military members and fifteen accused of forced disappearance and organized crime. The judge in charge of the case agreed to cancel them. As of the closing of this report, the FGR has only reported the execution of 4 of the 83 arrest warrants. Various media outlets have suggested that this may be a consequence of pressure from the military leadership not to involve the Army in the criminal activities of the night of September 26th and early morning of September 27th, 2014, in Iguala and its subsequent cover—up.

Recently, the cyber-attack on Sedena's information system, known journalistically as #Sedenaleaks, has brought to light a series of illegal or potentially illegal actions carried out by the military institution and the federal government. The spying on activists and journalists with the famous Pegasus malware, the monitoring and categorization as pressure groups, and potentially subversive of feminist movements and organizations such as the Prodh Center, which

has provided monitoring and advice to the families of the missing students in the Ayotzinapa case, stand out so far.

The Digital Rights Defense Network, Artículo 19, and SocialTIC, with the help of Citizen Lab, Animal Político, Aristegui Noticias, and Proceso, presented the investigation #EjércitoEspía. They show, with various documentary evidence, that between 2019 and 2021, human rights defenders and journalists interested in cases involving the Army were attacked with the

Image: "SedenaLeaks: Selling Army weapons to criminals; asked for 26 thousand pesos for a granade" Photo: Archive/Cuartoscuro at www.aristegui.com



<sup>22</sup> Look https://elpais.com/mexico/2022-09-25/la-fiscal-ia-cancela-al-menos-21-de-las-83-ordenes-de-deten-cion-del-caso-ayotzinapa-que-pidio-en-agosto.html

Pegasus malware. Where they show, this information was confirmed by Citizen Lab, which specializes in cyber-attacks. In addition, Citizen Lab assured that at least one Pegasus operator is active in Mexico. As mentioned in the investigation, Pegasus is a product that can only be sold to governments and not to private parties.

Contrary to the evidence, both López Obrador and Sedena denied having purchased or used this software without presenting any proof. On October 5th, 2022, Sedena published a communiqué in which it assures that it has not carried out activities related to espionage or intelligence against activists or journalists and mentions that it is empowered to carry out intelligence tasks against criminal groups (Sedena, 2022). The organizations that conducted the investigation published a communiqué as a reply. They warned that Sedena does not have intelligence powers in any case and demanded the government and Sedena: "...prove their investigation disqualifications, make public any judicial authorization granted to Sedena for private communications intervention, request NSO Group (creator of Pegasus), Israel government to make public their clients list in Mexico, and show evidence proving Citizen Lab's expert reports are incorrect..." (Artículo 19, 2022a.)

#### **AS A CONCLUSION**

In sum, it can be observed how the Army, which has always been a real interest group, has been politically and economically empowered to levels that call into question civilian supremacy over the military in Mexican democracy. The military's ability to concentrate powers, obtain enormous resources through various means, and influence Mexican legislation, together with the abuses committed by both the Army and the Navy, and the National Guard, make the riddle of who controls the controllers, i.e., who can set actual limits to the Armed Forces, difficult to decipher.

So far, neither the SCJN (National Supreme Court of Justice for its acronym in Spanish) nor the local governments nor the Congress of the Union has shown a vehement intention to keep the military's actions within the country's democratic normative framework. The consequences that this may have are of the utmost relevance. The first is that democracy as an organization system becomes less and less viable since an institution that is not voted for but is part of the federal government gradually acquires autonomy from it. Thus, breaking the representation chain between the citizenry and the public decision—makers that every democracy must maintain. A second im-

portant implication is the reduction of civil and political liberties. The more activists, journalists, and opposition members are afraid to carry out their professional activities, express their opinions and exercise their freedom of expression because of government spying, the less accountability will be achieved. If the Army has also made opacity a modus operandi, it can be said that Mexican society has lost the right to know about the actions of its armed forces.

Finally, it is no small matter that the Army has been able to perpetrate a state crime, as the federal government itself has recognized, and the judicial consequences are minor. The capacity of the Armed Forces to remain unpunished is proportional to the political power they have accumulated. The Ayotzinapa case is just one of many events in which military bodies have been accused of flagrantly violating human rights. Although López Obrador has insisted that this will no longer happen during this administration, the documented evidence shows precisely the opposite. The progressive advance of militarization may have no return if the institutions of the Mexican State do not show their capacity to contain it.





*Images*: "The survivors from Ayotzinapa: with bullets in their bodies escaped from death but with wounds in their soul" Photo: Luis Cortés/Reuters at www.infobae.com.

"The Ayotzinapa case: Four years of pain and uncertainty". Photo: Sashenka Gutierrez/EPA, vía Shutterstock at www.nyt.com.





# **PUBLIC FINANCES**

# **Execution of the budget and crisis**

■his section analyzes the main macroeconomic aspects affecting Mexico's economic growth trajectory, from which the main risks to the country's financial stability can be deduced. These are mainly due to public sector inertial spending, which adds to non-contributory pensions and the financing mechanism the federal government has decided to use. This includes the replacement of foreign investors by nationals; this mechanism is driven by domestic savings, in which the pensions of formal workers play a decisive role. It shows how the main labor reforms (labor subcontracting and social security), together with the wage policy, which is not linked to labor productivity, have been aimed at feeding this mechanism, i.e., they have a tax collection rather than a social purpose.

<

The main problem in the short term is the opportunity cost that Mexicans (workers and businessmen) assume by financing with the savings of 40% of the country's workers' projects with low social and economic profitability. Such as the Mayan Train, the Dos Bocas Refinery, and the Felipe Angeles International Airport, instead of leveraging projects that benefit companies that can generate the new jobs that we need and that will increase by 3.6 million every year after 2025. From the outset, this may already jeopardize any rational decision in the future, such as the cancellation of these projects, since they will mean losses in the savings of formal workers, so the political cost may be very high among the middle classes, already affected and considerably reduced between 2018 and 2020.

With the federal government extracting resources via taxes and domestic savings, the domestic financing valve is beginning to close at an accelerated rate for companies in Mexico. In addition, credit is becoming more expensive due to rising rates and the disappearance of federal programs aimed at financing companies, which is an obstacle to the growth of many companies. The distrust and insecurity atmosphere in which businesses are immersed in Mexico has led to the cancellation of several investments. For their part, the armed forces emerge as entrepreneurs and guarantors of national security after the federal government deliberately weakens police forces at the local level; the armed forces capture the fresh resources injected by the federal government into the economy for the most emblematic projects.

In the meantime, the federal government is balancing the public finances. Given its consistent track record, it is highly predictable that it will continue to implement this policy for as long as necessary. Such a policy is not serious, but to achieve it, it has had to remain indifferent amid the great confinement (allocating only 0.7% of GDP). Exhausting public sector savings, extinguishing and weakening autonomous bodies, and adjusting the budget at the cost of decreasing physical and human capital investment, as

well as medicines, vaccines, and other indispensable expenses. However, all of the above has been insufficient. The expansion of spending in this federal administration has not been offset by the weak revenue growth and the net loss generated by Pemex. All this is under an international context where Mexico is abusing its luck, being in a better financial position than many of its emerging peers, primarily due to its pandemic inaction, but it also continues to waste great opportunities.

Financing for businesses have halted because the government crowds out resources from internal savings and high interest rates.

# PERMANENT BUDGETARY CUTS TO ALL ACTIVITIES BUT THE FLAGSHIP PROJECTS AND THE FFAA

So far, during the administration of Andrés Manuel López Obrador, the federal government has maintained a balanced budget through four mechanisms:

- 1. Budget cuts to various agencies, autonomous bodies, and administrative areas.
- 2. Use of domestic savings, including public and private resources. The exhaustive use of the Budgetary Income Stability Fund (FEIP, for its acronym in Spanish) and the trust funds is noteworthy.
- 3. Extinction and weakening of autonomous organs. E.g., the National Institute for the Evaluation of Education (INEE, for its acronym in Spanish)
- 4. Debt increase

The purpose of this has been to maintain the country's financial stability at any cost and to execute the federal executive's emblematic projects: National Guard (GN), Mayan Train (TM, for its acronym in Spanish), Dos Bocas Refinery (RDB, for its acronym in Spanish) and Felipe Angeles International Airport (AIFA, for its acronym in Spanish). Foreign debt has also been substituted for domestic debt (to provide

exchange rate stability). In addition, capital contributions have been made to improve Pemex's financial position and expand the National Refining System (SNR for its acronym in Spanish).

The inertia of government spending and the inability of public finances to increase revenues in line with the population's needs have led to systematic budgetary imbalances with social impacts.

# TABLE 19. INCOME AND EXPENDITURE INCREMENTS OF THE PUBLIC SECTOR 2018–2021 (ACCUMULATED BILLION PESOS)

Between 2018 and 2021, the public sector budgetary income had an accrued growth of 1.34 billion pesos (bdp, for its acronym in Spanish)

In the same years, the public sector expenditure grew to 1.76 bdp

The expenditure growth minus the income leads us to an accrued budgetary unbalance of -414.8 thousand million pesos (mmdp, for its acronym in Spanish).

Nevertheless, by subtracting the FEIP use (204 mmdp) and the public trust funds extinctions (55.3 mmdp), public income has only had an accrued growth of 1.08 bdp.

If these resources had not been used, the increase in debt caused by the expansion of spending in the current federal administration would be 674.1 mmdp (SHCP Department of Finance and Public Credit for its acronym in Spanish, 2022b).

In addition to the above, 22.1 billion pesos could be obtained from the net proceeds of oil hedges in 2020 (CEFP, 2020), bringing the figure to 696.2 billion pesos.

Source: In-house elaboration with information from SHCP, 2022b y CEFP, 2020.

Between December 2018 and December 2021, the differential of the Historic Balance of the Public Sector Financial Requirements (SHRFSP, for its acronym in Spanish) was 2.55 bdp (SHCP, 2022b). The increase in debt is greater than the deficit generated so far in the recent federal administration. This means that the inertia of public spending is already such that, without its expansion in the last three years and considering the growth of revenues, the latter would still be insufficient to meet the needs of the public sector. This means that just the operation of the most basic functions of the federal public sector absorbs most of the budget, which continues to increase year after year. We call this spending inertial expenditure, which results from the most pressing obligations of the federal public sector, i.e., whoever governs will have to assume these obligations.

A distinction should be made between inertial public sector expenditure and the cumulative expansion in spending over the last three years. In the first block is the incremental growth of the Mexican Social Security Institute's (IMSS, for its acronym in Spanish) contributory pension expenditures (463.8 billion pesos). (430.5 mmdp), federal contributions for federal entities and municipalities (209 billion pesos), the Institute for Social Security and Services for State

Between December 2018 and December 2021, the public debt has increased 2.55 billion pesos (balance SHRFSP). The increase in debt is greater than the deficit generated so far in the recent federal administration.

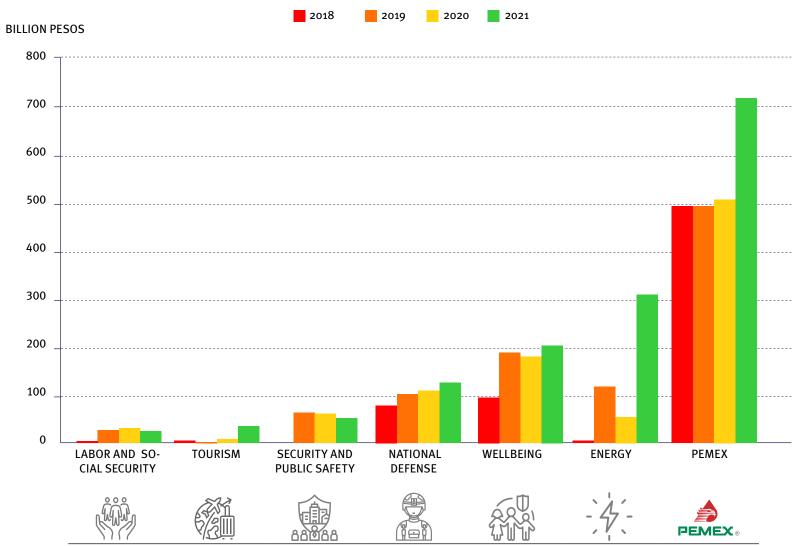
SHCP, 2022

Workers (ISSSTE, for its acronym in Spanish) (204.4 billion pesos), the financial cost of debt (194.4 billion pesos), federal participation (108.1 billion pesos) and Federal Electricity Commission (CFE, for its acronym in Spanish) (58.7 billion pesos) (SHCP, 2022b).

For its part, the cumulative expansion of spending in the first three years of López Obrador's administration (2019–2021) resides in a handful of secretariats and Mexican Petroleum (Pemex, for its acronym in Spanish). The preceding is because they are the entities in charge of implementing the emblematic projects of the federal executive branch. Referencing 2018, the most emblematic cases are: Energy (482.3 mmdp), Welfare (284.4 mmdp), Security and Citizen Protection (178.3 mmdp), National Defense (120.2 mmdp), Public Education (115.3 mmdp), Health (83.3 mmdp), Labor and Social Welfare (64.1 mmdp), Tourism (24.6 mmdp) and Pemex (257.8 mmdp) (SHCP, 2022b).

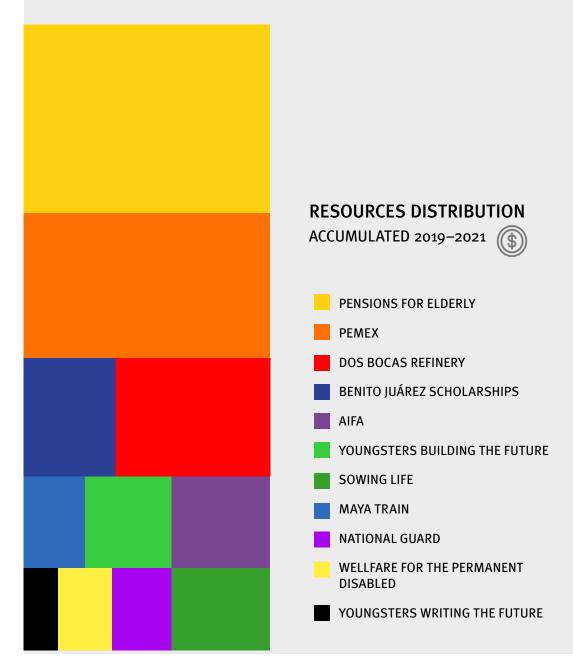
## GRAPH 15. EXPENDITURE BY FEDERAL AGENCIES AND PEMEX

2018-2021



Source: In-house elaboration with information from SHCP (2022b).

In these same three years, the resources corresponding to the TM (46.8 billion pesos), RDB (153.3 billion pesos) (IMCO Mexican Institute for Competitiveness for its acronym in Spanish, 2022), and AIFA (77.1 billion pesos) have been executed through the agencies as mentioned above (SHCP, n.d.). While in the social area, the main drivers of spending are Pensions for the Welfare of the Elderly (PPAM) and the Welfare of the Permanently Disabled (non-contributory pensions) (391. 2 mmdp and 36.6 mmdp, respectively), Youngsters Building the Future (67.3 mmdp), Benito Juárez Universal Scholarship for Higher Education Students (90.1 mmdp), Youngsters Writing the Future (23.5 mmdp), and Sowing Life (69.4 mmdp) (SHCP, 2022c). In financial matters, the so-called strengthening of Pemex implies a large inflow of resources from the public treasury (close to 300 billion pesos in patrimonial contributions, discounting RDB). Finally, the militarization of public security is the guiding principle of this government in this area, which has been institutionalized in the National Guard (operation of the NG) (40.9 billion pesos). (SHCP, 2022b).



# BUDGETARY ADJUSTMENTS AND SOCIAL UNBALANCES

To compensate for the increase in spending and not to resort to more financing, the federal government has reallocated the federal budget, but this does not mean that these are savings, but rather that it has stopped allocating the budget or discretionally decreased it. To do so, between 2018 and 2021, it has had to cumulatively affect different agencies, autonomous bodies, and general branches by 1.2 billion pesos. This reallocation has ranged from the downward adjustment in the respective budgets of the agencies, the disappearance of budgetary programs, the disappearance of autonomous bodies, and the reengineering of health and public security, which have resulted in considerable lags around public health and clear violations of human rights. It should be recalled that as long as revenues do not grow in line with expenditures, budget reallocation implies a zero-sum game.

In this sense, the big losers are the federal entities due to the loss of resources from branch 23 (salary and economic provisions). The accumulated loss concerning 2018 is -447.3 billion pesos of this size is the infrastructure backlog in the federal entities and will

continue to increase as observed in the 2022 budget year and the Federal Expenditure Budget (PEF, for its acronym in Spanish) 2023. With the simple majority of the ruling party in Congress, the approval of the PEF will continue to be subject to López Obrador's designs. If this trend continues, the state's infrastructure investment deficit will be close to one trillion pesos by the end of 2024.

A lower allocation to this area also means a hard political blow to the opponents of the federal executive since federal deputies and governors used to be the managers of this budget to execute it in their corresponding electoral districts or entities. To a large extent, this branch contained funds to meet objectives endorsed in international agreements, such as Human Development. Excluding the subsidy for domestic electricity consumption (also budgeted in branch 23), 75.9% of this budget is allocated to capital expenditures (SHCP, 2022c). It should also be recalled that the Natural Disaster Fund Trust Fund (Fonden, for its acronym in Spanish) and the Natural Disaster Prevention Fund (Fopreden, for its acronym in Spanish) are also part of this branch. The former

The big losers are the federal entities of –447.3 billion pesos, which can be seen in the infrastructure backlog. If this trend continues, the states' infrastructure deficit will be close to one trillion pesos by 2024.

was created to mitigate the effects of a disturbing natural phenomenon, while Fopreden was created as a financial mechanism for ex–ante integrated risk management. (CEFP. Center for Public Finance Studies for its acronym in Spanish, 2022).

In addition to branch 23, the cumulative loss concerning 2018 has spread to various economic and social sectors, where the following stand out: Infrastructure, Communications, and Transportation (SICT, for its acronym in Spanish) (-232.1 mmdp), Interior (Segob, Government Secretariat for its acronym in Spanish) (-213.2 mmdp), Agriculture and Rural Development (Sader, for its acronym in Spanish) (-52 mmdp), Agrarian, Territorial and Urban Development (Sedatu, for its acronym in Spanish) (-13. 2 billion pesos), National Council for Science and Technology (Conacyt, for its acronym in Spanish) (-12.6 billion pesos), Secretariat of Environment and Natural Resources (Semarnat, for its acronym in Spanish) (-10 billion pesos), Presidency of the Republic (-9 billion pesos) and Foreign Affairs (SRE) (-4.5 billion pesos). (SHCP, 2022b).

The reductions to the budgets of the SICT and SEGOB were related to the suspension of the construction of the New Mexico City International Airport (NAICM, for its acronym in Spanish) and the transfer of public security functions from SEGOB to the Ministry of

## **CUMULATIVE BUDGET LOSS SINCE 2018**

| SECTORS                                      | BILLION PESOS |
|--|---------------|
| INFRASTRUCTURE, COMUNICATIONS AND TRANSPORTS | -232.1        |
| INTERIOR (SEGOB)                             | -213.2        |
| AGRICULTURE AND RURAL DEVELOPMENT            | -52           |
| AGRARIAN, TERRITORIAL AND URBAN DEVELOPMENT  | -13.2         |
| CONACYT                                      | -12.6         |
| ENVIRONMENT AND NATURAL RESOURCES            | -10           |
| PRESIDENCY OF THE REPUBLIC                   | -9            |
| FOREIGN AFFAIRS                              | -4.5          |
| SHCP, 2022                                   |               |

Public Security (SSP, for its acronym in Spanish). The cancellation of the NAICM has had an approximate cost of between 163.5 and 332 mmdp (Van Bedolla, 2021), which has as collateral the income generated by the TUA (Airport Use Tax) of Mexico City's Benito Juarez International Airport (AICM) (200 million dollars per year). If the TUA of this airport did not cover this amount, the TUA of the Toluca International Airport (AIT) would have to be taken as a guaran-

tee, and the AIFA as a last resort (Grupo Funcional de Desarrollo Económico, 2019). Although with this mechanism, there are perverse incentives to substitute the AICM for the AIFA, the air degradation safety represents an obstacle for the latter to displace the AICM as soon as possible. It should be clarified that the armed forces administer AIFA under the corporate name of AIFA S.A. de C.V. (Segob, 2020).

Under the banner of savings in the public sector, with minor effects in the aggregate but no less important in the institutional sphere, the INEE (National Institute for the Evaluation of Education, for its acronym in Spanish) disappeared. Various autonomous bodies of great relevance had budget cuts that have led to the de-professionalization of many of them, such as the Energy Regulatory Commission (CRE, for its acronym in Spanish) (-1. 2 billion pesos), the National Human Rights Commission (CNDH, for its acronym in Spanish) (-1.1 billion pesos), the National Institute of Transparency, Access to Information and Protection of Personal Data (-719.8 million pesos), the National Hydrocarbons Commission (CNH, for its acronym in Spanish) (-346.4), and the Federal Telecommunications Institute (IFT, for its acronym in Spanish) (-146.1 million pesos) (SHCP, 2022b). In the first case, the INEE disappearance is seen as a concession

#### **BUDGET CUTS**

| ENERGY REGULATORY COMMISSION  | −1.2 BP*    |
|---|-------------|
| NATIONAL HUMAN RIGHTS COMMISSION  | −1.1 BP     |
| NATIONAL INSTITUTE OF TRANSPARENCY, ACCESS TO INFORMATION AND PROTECTION OF PERSONAL DATA | −719.8 MP   |
| NATIONAL HYDROCARBONS COMMISSION  | -346.4 MP   |
| FEDERAL TELECOMMUNICATIONS INSTITUTE  | −1 461.1 MP |
| * DILLION DECOC (DD) ** MILLION DECOC (MD)  |             |

\* BILLION PESOS (BP) \*\* MILLION PESOS (MP)

SHCP, 2022

to the National Coordination of Education Workers (CNTE, for its acronym in Spanish.) The same group to which the federal executive recently offered the basification (assignment of positions) of 50 thousand teachers (Matías, 2022.) If the INEE had maintained the spending inertia of 2018, it would have exercised three mmdp, barely 2% of the RDB's spending exercise in the following three years.

# INSUFFICIENT INCOME AND THE FORMAL LABOR MARKET

The cumulative growth in budget revenues does not match the increase in spending pressure. Relative to 2018, non-oil gains have largely boosted collection (cumulative 1.6 bdp) (SHCP, 2022b) despite the abysmal performance of the Mexican economy.<sup>23</sup> For their part, so far, oil revenues subtract instead of adding (-217.1 mmdp) (SHCP, 2022b), as they barely began to show good results in 2021, mainly due to the increase in hydrocarbon prices (6.4% between 2018 and 2021) (Sener, Ministry of Energy for its acronym in Spanish, n.d.), not so for the increase in the volume

of oil production. Oil revenues were already lower in 2019 (a fundamental change of -5.7% vs. 2018).

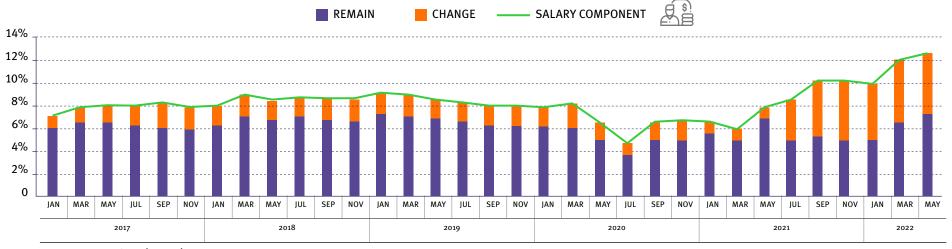
Within non-oil revenues, tax revenues, such as Income Tax (ISR, for its acronym in Spanish), Value Added Tax (VAT), and the Special Tax on Production and Services (IEPS, for its acronym in Spanish), have contributed 98.3% of cumulative growth. During the first half of the sexennium (2019 to 2021), the tax revenue increase was 80% due to VAT collection, which increased in real terms by 7.6%, corresponding to 79.2 billion pesos. On the other hand, ISR, the most significant tax in taxation, only increased in real terms by 0.6%, equivalent to 10.7 billion pesos in three years. The ISR had a considerable increase in 2021, but it is not clear that this will show a change in trend. It is worth noting, following México Evalúa, that an opposite behavior was observed between economic activity and ISR.24

We observe an increase in withholding taxes on wages paid of 27 billion pesos in three years. We estimate that this increase is related to the combined effect of the minimum wage policy (an actual increase of 12.2% in the last year) (Minimum Wage National Commis-

<sup>23</sup> In 2019, prior to COVID-19, economic growth was already null.

<sup>24</sup> For more details look: https://www.mexicoevalua.org/ senales-de-debilidad-recaudacion-tributaria-a-mitadde-sexenio/

GRAPH 16. BREAKDOWN OF THE ANNUAL VARIATION OF THE AVERAGE GBS (%)



Source: Banxico, (2022c).

sion and Banxico, 2022) and the labor subcontracting reform, which in turn have had an impact on the Base Contribution Wage (SBC, for its acronym in Spanish) of the insured population (formal workers).

Both mechanisms have increased the IMSS' collection of labor–employer contributions. A little more than a year after the implementation of this reform, in the accumulated period January–August 2022, the IMSS has collected 7.3% more in real terms than the same period last year (42.6 billion pesos), higher growth than the same public sector budget revenues (a real variation of 4.4%) (SHCP, 2022b). Also, net income

tax withholdings on wages and salaries increased 7.2% in real terms concerning the first half of 2021 (69.3 billion pesos), while business support services considerably reduced their withholdings (–33.5 billion pesos) (SHCP, 2021a), the same economic sector in which companies engaged in labor subcontracting are classified (SHCP, 2022c).<sup>25</sup>

It is estimated that the variation of the minimum wage (SM, for its acronym in Spanish) by one unit (in real terms) between December and January has an impact of 0.97 cents on the SBC in the same time-

<sup>25</sup> Business support services and waste management and remediation services.

frame.<sup>26</sup> However, wage policy is decoupled from labor productivity and the international economic context, where the former has continued to fall after the confinement (–5.1% concerning the last quarter of 2019) (INEGI, 2013–2020). According to Banco de México, by June 2021, 69.6% of the increase in the SBC was determined by those workers who did not change employers and only 9.7% by those who changed employers simultaneously.<sup>27</sup> After this date, the participation in the SBC increase is 49.2% (rest of the workers), and 50.8% of those who changed employers (simultaneously and non–simultaneously) (Banxico, 2022a).

Meanwhile, VAT collection growth is determined by the weak private consumption reactivation after the great confinement and the appreciation of the peso against the dollar, which contributes to the increase in the consumption of imported goods. Both VAT and import taxes risk slowing down in 2023 due to monetary restrictions and the rise in prices, although the stability of the exchange rate will somewhat cushion this.

## **FUNDING: AFORES AND DEBT**

Public sector debt continues to increase, and there is no way it will stop growing as long as the increase in public spending is greater than the increase in revenues. After exhausting savings, extinguishing trusts, eliminating budgetary programs (reduction of the programmatic structure) with the subsequent institutional consequences, and adjusting the budget, the only thing left to do is to increase the amount of debt. The PEF 2023 makes it clear that the debt will continue to increase at a rate of 1.17 billion pesos. This estimate seems to be underestimated since it assumes that Mexico will grow at 3% next year.

It should be noted that Mexico's public deficit as a GDP percentage of (-3.8%) remains at comparatively low levels compared to other Latin American (-4.2%) or emerging economies (-7.3) (IMF, 2022b). The federal government's incipient intervention in the economy during the health crisis made it possible to maintain the fiscal balance of which the federal executive boasts so much. According to the International Monetary Fund (IMF), countries such as Turkey and Mexico held comparatively small changes in primary balances since fiscal support related to the pandemic was lower, only 0.7% of GDP in the case of

<sup>26</sup> SV estimate with data from IMSS (n.d.2) and Banxico (2022e).

<sup>27</sup> Simultaneous are considered as changes of employer (from one employer to another) of 20 or more employees carried out in the payrolls of the companies.

Mexico (IMF, 2022a). Instead, the federal government decides to use the expansion of its spending on flagship works and to implement these works, and it will require debt.

To make this borrowing possible, the federal government is capitalizing domestically, and we expect this trajectory to continue. The composition of the debt market by the holder has changed rapidly over the past four years. As of August 2022, of the total outstanding government securities (9.36 bdp), the private sector accounts for 32%, 24.2% is in the hands of afores, and commercial banks hold 17.6%. The presence of these participants has grown since November 2018, going from 22.8%, 21.6%, and 15.9% (Banxico, 2022a), respectively. In contrast, the most extensive loss in VGC holdings is presented by residents abroad, who have gone from 30.7% to 16% in the same time interval (net balance of –575.7 billion pesos) (Banxico, 2022a).

In sum, there is a higher holding of domestic securities (84%) compared to the month before the start of López Obrador's administration (69.3%) (Banxico, 2022a). The behavior of securities by an instrument is similar to that of the 2008–2009 financial crisis, where investment in equities (denominated in

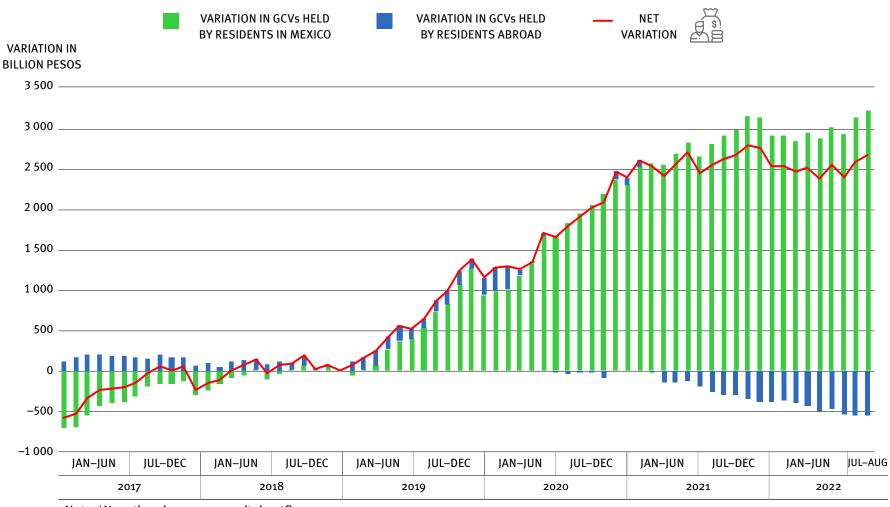
The composition of the debt market by the holder has changed rapidly over the past four years. As of August 2022, of the total outstanding government securities (9.36 bdp), the private sector accounts for 32%, 24.2% is in the hands of afores, and commercial banks hold 17.6%.

UDIS)<sup>28</sup> continues to grow (26.1% of the total portfolio) (Banxico, 2022a). These positions in equities are held in both domestic and foreign securities. This shows that inflation expectations of an eventual depreciation of the exchange rate remain, a condition that, if maintained, will have serious financial consequences for the following administrations, as it will put upward pressure on the economic cost of debt (Banxico, 2022a).<sup>29</sup>

<sup>28</sup> Debt instrument indexed to inflation. As of October 2022, the three-year UDIS rate is 4.49% plus inflation.

<sup>29</sup> The terms of the Udibonos are 3, 5, 10, 20 and 30 years.

## GRAPH 17. VGC HOLDINGS BY RESIDENCE CHANGE COMPARED TO DECEMBER 2018\*



Note: \*Negative sign means capital outflows.

Source: In-house elaboration with information from Banxico, (2022a).

# LACK OF PRIVATE INVESTMENT, LOW GROWTH, UNEMPLOYMENT, POVERTY, AND MIGRATION

Gross fixed capital formation (FBKF, for its acronym in Spanish) has fallen 215.2 billion pesos (-5.9%) since the beginning of the recent federal administration. By type of investor (public or private), the public sector already showed a downward trend since its historical peak (first quarter of 2009) (916.9 mmdp). With an average quarterly growth rate (TMCT, for its acronym in Spanish) of -1.5%, which decelerated even more in the period from the last quarter of 2018 to the first quarter of 2020 (-2.4%) (Banxico, n.d.) (before the health crisis) to reach 448.7 mmdp (-51.1% below the historical peak). Despite the slow rebound observed since the beginning of the great confinement to date (TMCT of 0.4%), this has not been enough to recover the lag that has been dragging since the beginning of the recent federal administration (variation of -8.1% concerning the last quarter of 2018) (-41 mmdp) (Banxico, n.d.). If the current trend continues, we estimate that by the end of 2024, public sector investment will be between 473 and 484.5 billion pesos<sup>30</sup> (Banxico, n.d.). In other words, in the best-case scenario, public investment will be -4.3% below what it was at the close of 2018. In this sense, the expenditure policy has mainly been responsible for two reasons:

- 1. Focusing too many investments on few projects.
- 2. Reducing budget allocations for public investment, mainly to the states through branch 23.

The concentration of public investment is not only a financial problem but also one of the relative prices. Other public goods and services are sacrificed in exchange for building President López Obrador's flagship projects. For example, for every peso invested in education, health, and road infrastructure, 4.5 pesos are invested in hydrocarbons (Vital Signals, 2022c). Therefore, these works do not address the country's most pressing and relevant public issues, especially considering the international situation. We detect that most of these issues are energetic, but not because the federal executive understands it (hydrocarbons), but concerning the national electricity system and all that this implies, mainly because of its impact on the environment and public health.

We estimate that
by the end of
2024, public sector
investment will be
between 473 and
484.5 billion pesos
(Banxico, n.d.). In
other words, in the
best-case scenario,
public investment
will be -4.3% below
what it was at the
close of 2018

<sup>30</sup> Signos vitales estimate with seasonally adjusted series and data from Banxico, (n.d.).

Despite being so criticized, branch 23 (R23, for its acronym in Spanish) was one of the primary mechanisms for financing works at the local level, given the budgetary insufficiency of federal entities and municipalities, especially those in the south, which barely have availability of between 6.8 and 7.8% of their total budget (Vital Signals, 2022c). The main characteristic of many of the budgetary programs in this area was that the interested parties (municipalities or entities) and the federation were co-participants in the projects. That is, both invested (almost always, to a greater extent, the federation), so the loss comes from at least two financing sources. Indeed, discretionality (38% of R23 spending) (Signos Vitales, 2022c) subtracted much of the progress made in this area. However, for the most part, budget allocation was based on clear operating rules that allowed any municipality to participate in the federal budget; it was perhaps one of the most democratic investment redistribution mechanisms available up to that time, with its drawbacks that could be repaired with greater transparency and by involving the beneficiaries.

Meanwhile, private investment was barely sustained until the third quarter of 2015, when it reached its historical maximum (3.2 bdp) (Vital Signals, 2022c). Such investment had poor growth until 2018 (tmct of





Images: "Public works is concentrated in two states: builders in Edomex" at www.elsoldetoluca.com.mx; "Jantetelco takes public works to communities" at www.elsoldecuautla.com.mx

1%), but to date, we are not even close to such a rate (tmct of 0.1% between 2020 first quarter and the second quarter of 2022). Therefore, the slow progress of both components, especially private investment (representing 86.4% of GFCF) (Banxico, n.d.), prevents the country's long-term growth potential from being triggered.

Now, Gross Fixed Investment (IFB, for its acronym in Spanish) by private parties has grown due to the increase in machinery and equipment (MyE, for its acronym in Spanish) acquisitions, mainly imported ones. MyE purchases of national origin show stagnation (variation of 0.3% compared to December 2018) (INEGI, 2022d). In this sense, MyE imports have most likely returned to their long-term path<sup>31</sup> and are estimated to be between -o.6% (worst-case scenario) and 1.8% (INEGI, 2022d) concerning that trajectory (optimistic scenario). Given the above, it is likely the negative trend that started in the recent administration and remained until before the great confinement start –(–8.6% concerning December 2018) – has been broken (INEGI, 2022d). It is worth noting that the acquisition of machinery is the only IFB item that has kept the capital stock afloat in the country and is the most resilient amid the health crisis. This trend is due



Image: "Main products that Mexico imports and where they come from" at www.dripcapital.com.

<sup>31</sup> December 2018 was considered the baseline.

to adjustments in global supply chains and precautionary issues and not a result of the management of the national economy.

The other component of the IFB, construction, has been performing poorly for years. After the great financial crisis of 2008-2009, it remained stagnant for a decade. To date, it continues to be the most affected component within investment (-17.2% compared to December 2018) and has remained without progress since the last months of 2020, at levels close to those of October 2003 (INEGI, 2022d). The activity trajectory is similar to that observed after the 1994-1995 crisis, so there is still a long way to go, at least 17 months to recover from the level observed before the health crisis. Since the beginning of the current administration, the accumulated loss in the value of private construction is -217.4 billion pesos and 143.2 billion pesos in terms of public sector investment. If this trend continues, by the end of the sexennium, the backlog will be approximately -656.9 billion pesos.32

Three situations that affected the trajectory of construction activity (mainly from the private sector) before Covid—19 stand out:

- Construction Cancellation of the NAICM and the Constellation Brands plant in the country's north, as well as the subsequent loss of confidence on the part of the private sector.
- 2. Army in construction work. With the military participating in the construction activity, around 2.5 thousand construction companies have had to close (Hernández, 2022).
- 3. Energy counter-reform in the facts that included administrative measures contrary to the law. It is estimated that between 2014 and 2018, 16.6 billion dollars were invested in electricity generation in the country. From 2019 to 2022, investment fell to 7.4 billion dollars (Aguilar, 2022).

Following the COVID—19 pandemic and the energy crisis, we are facing several supply and demand shocks contributing to the deterioration in activity. The increase in the price of inputs and their subsequent containment through the rise in interest rates can halt construction in some sectors of the economy. However, in some regions and states of the country, especially in the north, the demand for industrial space has increased to equalize the available supply, mainly due to the relocation of global supply chains. These investment inflows will partially cushion the effects of the probable contraction in the United States.

<sup>32</sup> SV estimate with data from ENEC

As of the second quarter of 2022, gross domestic product (GDP) is –306.7 mmdp away from the value of production in the last quarter of 2018 (Banxico, n.d.), and from the demand side, the variable that is most affected in this lag is precisely the FBKF (70.2%) (–215.2 mmdp) (Banxico, n.d.). Low investment limits the country's economic growth. Export capacity may also truncate its trajectory or limit its expansion due to the probable contraction of the U.S. economy and the inability to provide the necessary infrastructure. We estimate that a 1% increase in private FBKF could increase exports by 0.4% (about 29.2 billion pesos, 0.2% of GDP)<sup>33</sup>, but without the appropriate conditions for this investment to bear its first fruits, it will not be possible to achieve it either.

The drop in investment and output is also due to factors not precisely caused by macroeconomic conditions, such as insecurity. In 2019, 5.5% of the economic units (UE) in the country (273.9 thousand UE) canceled investments, and expenses in protection and losses as a result of crime are equivalent to 0.92% of GDP (Banxico, 2022g). The Bank of Mexico estimates that if insecurity were to decrease to the levels of the southern region (the least insecure), the investment would grow by 6.1%, and output would

grow by 1.6% (Banxico, n.d.). Of all the country's regions, the center would benefit the most from such a decrease by increasing investment by 13.4% and output by 3.5% (Banxico, n.d.). Insecurity is also experienced daily by carriers when five out of every ten companies consider transporting goods by road an insecure activity, and only 24 out of every 100 thefts are reported. This insecurity can lead to price distortions, especially for food products.

The weakening or dismantling of police forces at the local level since the disappearance of the Program to Strengthen Security (Fortaseg) (the source of financing for these police forces), together with the decrease in the public security budget of civilian entities at the federal level, are mainly responsible for the increase in insecurity. Such budgetary measures open the way for entities and municipalities to be forced to demand the NG or the army services. In the last year in which Fortaseg operated (2020) (3.9 mmdp), its coverage was 286 municipalities, where 90.2% of the high-impact crime incidence was observed (Security Secretariat and Citizen Protection and Executive Secretariat of the National System of Public Security, 2021). The budgetary resources managed by the armed forces (considering the NG as part of its budget) are 271% (149 mmdp) higher than civilian entities (Attorney The Bank of Mexico estimates that if insecurity were to decrease to the levels of the southern region (the least insecure), the investment would grow by 6.1%, and output would grow by 1.6%.

Banxico, n.d.

<sup>33</sup> Signos Vitales estimate with data from Banxico (n.d.).

General's Office, SSPC, and Segob). This gap was only 18% in 2018 (20 mmdp) (Campos *et al.*, 2022).

In addition to the economic impact of insecurity, the deterioration of public infrastructure, such as drainage and sanitation, is causing forced displacements of people to the country's interior. In addition, the search for better living conditions, linked to opportunities in the labor market, encourages the removal of workers from the south to the border areas of the country and the United States.

Weak economic growth, and inefficient public sector spending, coupled with the uncertainty facing investment in the country, have continued to fuel precarious labor conditions. From the third quarter of 2015 to the first quarter of 2019, the labor gap, the



Image: "Theft, the crime that most affect the enterprises Mexico: KPMG" at forbes.com.mx

broadest concept of unemployment, had a marked downward trend to a low of 18%. After the great confinement, such a gap has trended to the historical average (21%), at 21.7% in the first half of 2022. Despite being close to this average, the precarious labor condition has expanded by 21.7% (an increase of 2.6 million people) in the recent federal administration. The most disadvantaged age group is people aged 60 and over. To date, 34 out of every 100 people in this age group are in precarious working conditions,<sup>34</sup> a situation observed at the height of the great financial crisis of 2008–2009. With the increase in life expectancy and the 78%<sup>35</sup> of the population that will not be able to count on a decent pension, this pressure on the labor market will continue to rise.

Precarious labor conditions has expanded by 21.7% (an increase of 2.6 million people) in the present federal administration.

<sup>34</sup> Unemployed, do not have sufficient working hours or believe that they do not have opportunities to enter the labor market.

<sup>35</sup> Own estimate, assuming that 55% of the formal working population will not have a pension, and considering that the informal population (close to 60%) will only have the PPAM.

## "LIT CARTRIDGE" (DIXIT URZÚA) FOR THE NEXT GOVERNMENT

Public sector spending is already such that even without emblematic works, revenues are barely sufficient. Through administrative measures, the federal government has closed the door to potential extraordinary gains, especially from oil, in the context of rising oil prices. Its policy of strengthening the SNR has thrown away all past efforts to improve Pemex's financial position. The spending pressure caused by the economic cost of the debt and pensions (contributory and non-contributory) will considerably reduce the room for maneuvering of the following federal administration, and the fiscal space in 2023 will barely be 2% of GDP (-0.1% lower than in 2022) (MCV, 2022), 4.7 thousand pesos per capita (-2.8% lower than expected in 2022) (CIEP, 2022). In addition, public sector capital spending is inefficient and will not be returned to citizens in the form of revenues.

To finance itself internally, the federal government has opted to increase the use of private savings, taking funds away from the rest of the economy, which negatively affects economic growth and productivity. The wage policy will soon reach its limit, and we will know when it generates inflationary pressures.

As Edna Jaime mentions, the ways [of taxation] are exhausted, referring to taxes (such as income tax), extortion, or excessive pressure on certain taxpayers (Jaime, 2022). Moreover, given the strangulation of the federal entities in capital spending and the short return on their collection, they may cause polarization to continue to increase, which puts the fiscal pact in jeopardy. The only thing that has kept the Mexican economy afloat in the last four years is the T–MEC and the proximity to the United States through investment, labor, and taxes, which are now at risk.

If the uncertainty for private investment remains constant, cumulative growth throughout López Obrador's sexennium will be at most 1.3%, reaching 18.78 bdp in the last quarter of 2024. If output had continued on its long-term trajectory, the production value would be 20.23 bdp in the same quarter of 2024. GDP will move 7.2% away from that path (-1.3 bdp). To measure the size of the gap, the difference between observed and long-term output will be the equivalent of the remittances that will enter Mexico in the whole of 2022.



Image: "Urzúa: the main problem that Mexico faces in economic terms is that there is no public money" Photo: Henry Romero/Reuters at www.elpais.com.

As public financing with private savings increases, the federal government makes credit more expensive for the rest of the (private) companies. Internal savings, especially those contained in the afores, are increasingly destined for unprofitable projects, such as the TM, RDB, and AIFA. In this situation, the growth of many companies will stop because they will stop investing and generating employment.

## LONG-TERM AND LABOR PARTICIPATION GAP

If the long-term trajectory, already poor, were to continue, 57.6 million people would be employed. Of these, 22.1 million would be formally employed, and 35.4 million would be informally employed. The reality is different: to date, there are 193.2 thousand people employed below the number that should be (INEGI, n.d.c). The most severe problem is that reaching this trajectory would not be enough to cover the labor supply that is added year after year because while the economy generates 1.3 million jobs per year at the most<sup>36</sup>, there are not enough to cover the labor supply that is added year after year (INEGI, n.d.c..) The potential population between 15 and 29 years of age will grow by 3.6 million people annually between

2025 and 2035 (Rodriguez & Foncerrada, 2022). If the right economic conditions are not created, each year, 2.3 million more young people will find themselves in the same condition as the 14.5 million people currently suffering from some form of unemployment.

Labor participation fell sharply amid the confinement, as there was a massive outflow of people from the labor market. Historically, and for various reasons, it has been women who have participated to a lesser extent than men, such that the non-economically active population (PNEA, for its acronym in Spanish) is mainly composed of women (72.4% as of the second quarter of 2022) (INEGI, n.d.c). One of the most considerable advances in labor matters in the last three lustrums had been the increase in women's participation in the economy, such that women outside the labor force (PNEA) had been declining. Unfortunately, as of June 2019, this population remains stagnant (72.7%) (INEGI, n.d.c). In mid-2022, there are 28.8 million women outside the labor force, and of these, 4.6 million are declared available. However, the vast majority (4.5 million women) (INEGI, n.d.c) consider that they have no chance of getting a job, while the rest have given up looking for one. Evidence suggests that after the great confinement, many men returned to their work activities, but not women.

<sup>36</sup> Signos Vitales estimate with data from ENOE y ETOE.

Regionally, we observe that the wage bill increases faster in the north than in the south. We estimate that for every 20 billion pesos of the additional wage bill, working poverty is reduced by approximately 3%, which is at 38.3% as of the second quarter of 2022 (Coneval, Council for the Evaluation of Social Development Policy for its acronym in Spanish, 2022). Between 2018 last quarter and the second quarter of 2022, the wage bill in the country's north has grown by 28.4%, while in the south, the growth is 15.9% (Coneval, 2022). These differences, in turn, generate different rates of progress between regions, widening the existing gaps between one another.

# REMITTANCES. TO WHOM, WHERE, LINKED TO ORGANIZED CRIME?

As of the second quarter of 2022, the current account balance is barely negative (0.2% of GDP, –704 million dollars) (Banxico, 2022d), but it could be worse. Of the capital inflows, those related to structural changes, such as nearshoring and the flow of people abroad and from abroad to Mexico, stand out. The sudden increase in remittances has reduced the pressure on the balance of payments. If the long–term trajectory continued, Mexico would receive between 3.2 and

3.9 billion dollars instead of the 5.1 billion dollars it acquired in August 2022. We are talking about a gap (excess) of between 31% and 59%. We also estimate that Mexico could have received between 36.8 and 43.7 billion dollars in 2021 instead of the 51.6 billion dollars it received that year. If we return to the long-term path, the fall in remittances may cause a considerable imbalance in the balance of payments in the short term, leaving Mexico at levels close to our emerging peers, such as Thailand (-0.8% of GDP) and Brazil (-1.3% of GDP) (IMF, 2021c). In this sense, personal transfers (recorded as remittances) have been a source of distrust among economic analysts, and no wonder, between 2018 and 2021, they grew 53.2% (\$17.9 bdd) (Banxico, n.d.e). The question that has arisen is: is drug trafficking behind remittances?

As has been shown, without remittances, private consumption would be lower, especially in the central—northern and southern regions of the country (Signos Vitales, 2021a) (1.7% and 1.2%, respectively) (Banxico, 2021c). Notably, remittances sent to Mexico are almost equal to the wage bill. In some entities or regions of the country, they have a more significant share of household income. In principle, the suspicions are well—founded since such income could considerably reduce poverty levels or increase the GDP of entire regions.

However, several clarifications must be made regarding personal transfers to enrich the debate:

#### TABLE 20. PERSONAL WIRE TRANSFERS AND REMITTANCES

- Personal transfers, also known as remittances, are transactions recorded in the current account of the balance of payments and refer to those transfers made between individuals who, regardless of their nationality, the recipient of the remittance is considered a resident of the host economy (in this case Mexico).
- The family remittances referred to in the National Household Income and Expenditure Survey (ENIGH, for its acronym in Spanish) refer to transfers made between Mexican households sent from abroad (i.e., the United States) to homes in Mexico.
- From "1," it follows that the analysis universe is much broader since it considers at least four possible combinations among depositors. On the other hand, item "2" only considers transfers between Mexican households. Therefore, methodologically it is not correct to compare or much less confuse one concept with the other; they are different universes; in any case, "1" contains "2". Regarding databases, "1" corresponds to a many-to-many database (nationalities and geographic regions).
- From "1," two key concepts should be noted: residence and natural person. Any person is a resident of the host economy (Mexico) when they have been residing there for at least one year (regardless of nationality). Moreover, the fact that remittances are between individuals implies that they cannot be transferred from Mexican companies to Mexican households, to cite an example.
- The place where the remittance is registered does not imply that the beneficiary is a native of that place. In addition, the low financial penetration of banks in some entities (especially in the southeast) must be taken into account, as it is easy to run the risk of overestimating the total amount of remittances received in a given place.

Source: Signos Vitales (2022) (p. 53).

Based on the transaction volume, it is easy to see that the average per remittance reveals municipalities where the collection far exceeds the national average (391.4 dollars as of the second quarter of 2022). Of the total number of municipalities in the country where at least one transaction was carried out (2.6 thousand), in 1.3 thousand, the average per remittance exceeds the national average. These municipalities received 8.3 billion dollars out of the 15 billion dollars that were received (55.3% of the total). Nevertheless, suppose we reduce our universe of interest in remittances that are unlikely or very unlikely to be accepted. In that case, we identify 114 municipalities in the country where the average remittance is at least twice the national average. Of these municipalities, 90.4% are concentrated in just three Mexican states: Chiapas (52 municipalities), Oaxaca (45 municipalities), and Veracruz (6 municipalities).37

To cite a couple of examples –somewhere in Mexico City– 22.5 thousand remittances were received, each averaging 865.5 dollars. However, the financial institutions that carried out these transactions did not inform the corresponding authorities of the municipality or municipalities where they were received. In the same city, the municipality of Benito Juarez gets an

<sup>37</sup> Data Information to Banxico. Sheet: CTC-BM-36955

average of US\$522.9 for each remittance sent, one of the wealthiest municipalities in the country. Between January and July 2022, 1.2 thousand foreigners have legally resided in this municipality, and it is the fifth municipality with the highest number of foreign residents in Mexico; only six nationalities make up half of the foreign population (49.4%): Colombia (16.8%), Argentina (8.5%), Venezuela (7.8%), United States (7.3%), Cuba (4.5%), and Spain (4.5%).

The suspicion that something is wrong must rule out any other phenomenon surrounding the deviation from the average. We studied four phenomena that appear to explain this variation: tourism, labor market,<sup>38</sup> aging of the U.S. population, and migration (from countries in the Americas to Mexico). From the above, it is crucial to suggest another question, not dissociated with the issue at hand (money laundering): is drug trafficking involved with massive movements of people from Central and South America to Mexico?

The role Banco del Bienestar (BB, for its acronym in Spanish) is beginning to play is no less critical. At the end of the first half of 2022, this financial institution



*Image*: "Historical récord: remittances increase in Sonora up to 22%" Photo: AFP at www.elsoldehermosillo.com.mx

already manages a considerable volume of remittances (682 million dollars) (2.5% of the total) and transactions (1.1 million remittances) (SHCP and Banco del Bienestar, 2022) despite the short time it has been in the market (three years). In addition, as of June 2022, the average amount per remittance operated by BB was 624.6 dollars, 61.7% higher than the national average (386.3 dollars per operation) at the end of the same month (Banco de México, 2002).

end of the first half of 2022, this financial institution

38 In the first approach, both tourism and the labor market are precursors (motivators) of the longer stays of foreigners in Mexico.

## NON-CONTRIBUTORY PENSIONS

Non-contributory pensions, one of this government's most critical budgetary programs, present several risks for public finances. Even the program's permanence is in question since it does not have a source of financing that would make it viable in the short term. It is also regressive support that may duplicate any other program that pursues similar or common objectives in the federal entities.

It has been found that 112.8 thousand beneficiaries also received contributory pensions (IMCO, 2019). In this sense and as described by México Evalúa, although it is a relevant program for the economy of many people, it is not focused on the poorest. In fact, the Ministry of Finance estimates that the poorest 20% of the population obtains 7.7% of the resources from this program, while the wealthiest 20% obtains 20.9% of its resources (México Evalúa, 2022). By 2023, it will represent 35% of total subsidies and will account for 68% of the increase in the budget for such subsidies and will be equivalent to 1.2% of GDP. This program has also presented several anomalies, such as beneficiaries who do not meet the requirements, duplicate payments, and even accounts of

deceased persons. All irregularities add up to 10.6 billion pesos (CIEP, 2021).

## NON-CONTRIBUTIVE PENSIONS

| % OF POPULATION | RESOURCES |
|-----------------|-----------|
| 20% POOREST     | 7.7%      |
| 20% WEALTHIEST  | 20.9%     |

- IN 2023, PENSIONS WILL REPRESENT 35% OF THE TOTAL SUBSIDIES
- MEANS AN INCREASE OF 68% SUBSIDIES
- IRREGULARITIES (BENEFICIARIES WHO DO NOT COMPLY WITH REQUIREMENTS, DUPLICATE PAYMENTS AND ACCOUNTS OF DECEASED PERSONS) ADD 10.6 BILLION PESOS.

MÉXICO EVALUA, 2022; SHCP, CIEP, 2021; SHCP, 2022

# INTERNAL AND EXTERNAL MIGRATION REASONS FOR THE INCREASE IN MIGRATION TO THE USA

Between March 2015 and March 2020, there were 6.9 million people considered migrants. Among the leading causes of migration are: reuniting with family (2.5 million), looking for work (1.1 million), job change or offer (855.4 thousand), married or united (636.1 thousand), studying (463.2 thousand), criminal insecurity or violence (274.2 thousand) and natural disasters (24.7 thousand), among other causes (IN-EGI, 2020a). Up to the first quarter of 2020, 23.6% of migrants from the south to the United States (US) received government support in the last 12 months; by the third quarter of the same year. This proportion increased to 36% and finally fell to 4.4% of the total in the last quarter of the year. Although it is impossible to determine any trend with these data, government support is indeed insufficient for many Mexicans who have decided to leave their place of origin.

The socioeconomic characteristics of the migrants tell us of a strong urban bias. Most migrants from the south to the US came from municipalities with a meager degree of marginalization (88.4% in the last quarter of 2020). The sending regions from the south



Image: "Violence and poverty expell from the country thousands of Mexicans, denounces migrant directives in United States" at www.eleconomista.com.mx.

were primarily urban; more than 80% were destined for the northern border, and more than 90% were for the US. At a general level, displacements from the south were destined for the northern border (73.7% of the total).<sup>39</sup> This coincides with the middle classes narrowing in Mexico and the fact that they have been pressured to migrate in recent years, mainly to the country's north.

<sup>39</sup> There is no information available for the second quarter of 2020, so the estimate excludes this observation.

# IMMIGRATION CONTAINMENT AND ABUSE OF AUTHORITY

During the last few years, Mexico has registered a considerable increase in the number of people requesting refugee status in Mexico. Between 2018 and 2021,<sup>40</sup> people asking about this status increased from 29.6 thousand to 90.3 thousand (a variation of 204.8%). This trend was only stopped by confinement in 2020 (41.2 thousand requests) (Presidency Pro–tempore Guatemala *et al.* (2021). Despite this, the figure is higher than that recorded in 2018. 74.7% of the requests are registered in Chiapas, and among the main nationalities, Honduras, Haiti, Cuba, El Salvador, and Venezuela stand out (Presidencia Pro–tempore Guatemala *et al.* (2021).

According to the Annual Report of the Regional Integrated Framework for Protection and Solutions (MIRPS 2021), social conflicts, gender-based violence, climate change, and the impact of COVID-19 are emerging factors that have exacerbated underlying vulnerability and accelerated mobility. Natural disasters, floods, and droughts disproportionately

affect people living in poverty and insecure environments (Presidency Pro-tempore Guatemala *et al.* (2021).

At least two experiences can be observed in the migratory flows to Mexico. One is the increase in costs associated with shelter, such as the three-fold increase in the volume of tons of garbage generated in the municipality of Tapanatepec (Oaxaca) (30 tons per day) (El Universal, 2022). Two, the reduction in local police budgets generates an environment of insecurity. Given the experience of Central American residents, it is likely that the living conditions of Central American migrants will not improve since they primarily inhabit populations with low levels of development. These conditions are a source of vulnerability for the local people and the migrants themselves since they can be targets of criminal groups and generate unhealthy conditions in the localities where they temporarily reside. On the other hand, the effects on local labor markets can change labor dynamics, making less skilled jobs cheaper and further impoverishing both populations (settlers and refugees).

<sup>40</sup> Preliminary figure, corresponding to the accumulated January–September 2021.

The NG has been involved in immigration containment in the country's south, another of the functions in which it has been very active. As of July 2022, the deployment of the armed forces in immigration is 17% of the total (28.9 thousand), the second function in which it occupies the second largest number

of elements only after public security (55.8%) (Michael, 2022). Other functions, such as combating huachicol and intensive eradication of illicit crops, use only one-ninth (1.36% and 0.48%, respectively) of the armed forces deployed in immigration (Michael, 2022).



Image: "National Guard improvises barracks to stop migrants" Photo: Carlos Mejía Diario del sur at www.elsoldemexico.com.mx.

## DISPLACED

In 2021 there were 47.6 thousand internally displaced persons in Mexico. Of these displacements, 28.9 thousand correspond to displacements caused by violence. However, criminal violence was the most entrenched, with 95% of the total (IDMC, 2022), mainly in Michoacán, Guerrero, and Chiapas. After several years of downward internal displacement due to violence (2016 to 2019), 2021 sees the highest number of events in the last ten years, comparable to the 2011 figure (26.5 thousand internal displacements). The growth of internal displacement caused by violence in Mexico between 2018 and 2021 is 151.3% (IDMC, 2022b). This figure is much higher than the variation observed at the international level in the same time interval (approximately 33%) (IDMC, 2022a).

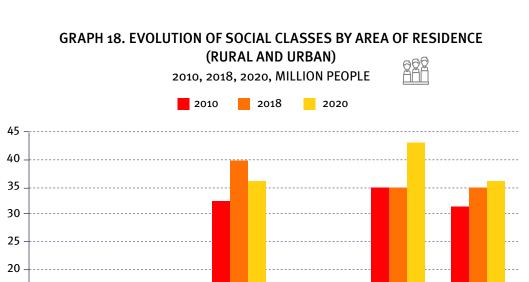
On the other hand, displacements caused by natural disasters have been marginally reduced (-1.6 thousand), more due to a lower occurrence than to climate change adaptation measures by the authorities. In fact, of the 18.7 thousand displacements caused by disasters, about 10 thousand evacuations occurred in the city of Tula, so floods were placed as the leading cause of these displacements (about 70%) (IDMC, 2022b).



Image: "Expert compares forced displaced in Zacatecas with Biblical exodo. There are 30 displaced communities because of insecurity". Photo: Adolfo Vladimir/Cuartoscuro at www.elsoldezacatecas.com.mx.

## IMPOVERISHMENT, SHRINKING MIDDLE CLASSES

The middle classes or middle-income socioeconomic strata have narrowed. In 2018, 42.7% of Mexicans were in the middle class. By 2020, the proportion decreased to 37.2%, the lowest level since the record existed (2010), barely close to what it was in 2012 (38.8%). Between 2018 and 2020, 6.3 million people left the middle class, equivalent to the advance of almost an entire decade (42 out of every 100 households) (INEGI, 2021a). This phenomenon is not unique to one social stratum, as it has also been happening with households and individuals at the highest levels. These have been contracting in the last decade, with the most significant variation in the previous two years for which information is available (-44.4%, equivalent to 816.3 thousand people) (IN-EGI, 2021a). Therefore, the socioeconomic stratum that has strengthened is the lower income stratum, increasing both the number of people that make up this stratum (13.9%, equivalent to 8.76 million people, and households (12.6%, equivalent to 2.5 million households) (INEGI, 2021a). 90.9% of this poor population came from urban areas (8 million more people), mainly in large population centers.



Source: In-house elaboration with information from INEGI (2021).

RURAL

HIGH

URBAN

**MEDIUM** 

RURAL

**URBAN** 

LOW

RURAL

URBAN

#### CONCLUSIONS

The drop in private fixed capital investment seriously blows the country's economic growth since it represents 86 out of every 100 pesos invested in the economy. The growth path was already poor, but it was enough to compensate for the public sector's withdrawal from the economy. Now both are far from the levels observed at the beginning of this federal administration. The most affected component is the construction sector, which, if it does not recover, will mean that this federal administration will close with an accumulated backlog of 657 billion pesos. This backlog largely explains the gap with the long—term trajectory. Deficiencies, lack of rehabilitation, or even the absence of infrastructure have had severe economic and social consequences.

To date, external factors remain fundamental in the economy's performance; without them, our economy would have fallen into a much more profound and severe crisis. Moreover, the only component of investment that supports economic growth, capital imports, would not emerge with greater emphasis than in the past. How much longer will this opportunity remain open for Mexico? It is not very easy to know, but if it closes, we will lose the chance to consolidate



Image: "In-bond industries in Ciudad Juarez and beyond" at www.blogs.lse.ac.uk/

our position as one of the world's largest economies and access better—paying jobs. This will allow families to satisfy their needs, generating income for the state and permitting the financing of health and public safety. This growth has been driven mainly by the country's north and west, regions that are linked, to a greater extent than the rest, to the economic activity of the United States. But this means we are overloading the country's development to a few entities instead of the rest of the country being able to take advantage of it.

In addition to the above, the disappearance or reduction of budgetary programs aimed at promoting

investment and public safety not only reduces the federal entities' room for maneuver, which is already scarce (between 6.8% and 7.8% of their total budgets). It also leaves the population of the municipalities where most of Mexico's high-impact crimes occur (90.2%) exposed so that the only way to access public safety is through the army. Insecurity costs Mexicans almost one percentage point of the GDP.

We have witnessed how the federal government has done everything to overcome the imbalances in the public sector. This has included depleting the sector's savings, adjusting the budgets of various agencies downward, and eliminating autonomous bodies and budget items for specific purposes. This has mainly affected the federal entities through cuts in capital investment, which we estimate will be close to one trillion pesos by the end of this sexennium. All of the above is to redouble its efforts to keep Pemex's finances afloat, given its low cash flow.

Unfortunately, the internal savings of the Mexican economy are being allocated to projects with negative profitability, such as the TM, RDB, AIFA, and the rehabilitation of the already obsolete National Refining System. The military is also involved in these projects to a greater or lesser extent. Sooner or later,

the potential labor force will have to pay for this indebtedness financed with the formal workers' savings. For now, it will mean the private investment displacement by poor quality public investment, which will have costly repercussions on the capitalization of companies. It will cost more to undertake projects that generate well—paid jobs, which will increase at a rate of 3.6 million people on average as of 2025 and remain so for at least the next decade.

The rate at which public sector spending is growing is such that, even without López Obrador's emblematic works, revenues would be insufficient to cover them. Contributory pensions, the financial cost of the debt, and tax revenues will significantly limit the federal government's room for maneuver to less than 2% by 2024. In addition to the above, non–contributory pensions, which this government will inherit to the next administration without a source of financing that will make them viable in the long term, will be added to the above.





## **TIMEBOMB**

### Education and health 🔆



■he social policies implemented by the Federal Government do not significantly impact reducing the shortages faced by the Mexican population. In fact, the government has been a factor that has aggravated the problems by not taking concrete actions to advance toward a Welfare State. Part of the omissions has to do with direct effects on the economic and social development of the country. The passivity with which the government has faced many of the problems implies adverse results in health, food, education, and even the progress of science, which increases inequalities, the lack of social conditions, and the slowing down of social progress.

The consequences of the passivity of the authorities and failed decisions have translated into worse living conditions for Mexicans. The social debt will leave education without direction and generations of students at a disadvantage, a weakened health system, and a scientific and technological sector intimidated with social consequences that, if not addressed today, will ignite the fuse of a time bomb that will be difficult to repair.

### **EDUCATION**

### Problems and implications on Mexican education

for any nation to consolidate the path of economic growth and develop a genuinely democratic and egalitarian society. Education also makes it possible to train individuals capable of overcoming backwardness, unemployment, poverty, violence, and discrimination conditions. In the past, the Mexican education system has significantly increased schooling compared to previous years, reduced educational gaps, and expanded opportunities for millions of Mexicans. Despite these advances, education in Mexico continues to lag behind, reflected in the scourge of inequality and the low quality of the system. Currently, Mexico is going through a time of economic, political, and social tension, where the State has yet to be

able to guarantee the right to quality education for all Mexicans.

The COVID—19 pandemic resulted in major setbacks in all sectors. There has been so much bad news that education has remained in the background for federal authorities, working with plans drawn up in an inertial manner without foreseeing the losses in at least three dimensions: First, the widening of pre—existing inequality gaps. Second, the worsening educational quality and the loss of learning in the affected generations. Third, the abandonment of studies affects the future of millions of children and young people, who will see their future aspirations curtailed in the face of the current government's immobility.

## INCREMENT IN INEQUALITY AND LACK OF EDUCATION CONDITIONS

In previous reports, Signos Vitales has pointed out that the disarticulation of the Education System at the COVID-19 juncture has deteriorated educational conditions and increased inequalities for an entire generation (Signos Vitales, 2021c). The authorities' slowness in readapting the system to the new conditions has not been favorable for maintaining the transmission and retention of learning. The COVID-19 pandemic resulted in three negative impacts on education: a) the widening of educational gaps, b) school dropout, and c) a decrease in the quality of learning (Schmelkes, 2020).

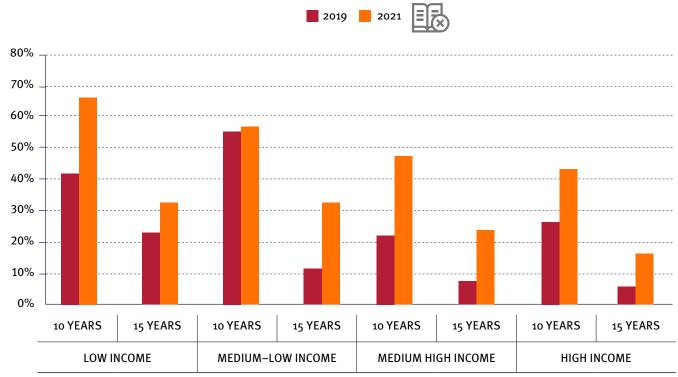
The widening of the gaps has become visible in reality faced by millions of students in Mexico. The decision to close schools during the health contingency and the abrupt interruption of face—to—face teaching and learning meant that many students did not have adequate home space or the electronic media to transition to the new distance learning modality.

Technology access and the internet proved to be determining factors in ensuring the continuity of schooling. However, during the peak of the pandemic in 2020, only 53% of 15-year-old students attending school (62% of 15-year-olds) had a computer, and 68% had access to the internet (ITU, 2019). The comparison between public and private education also reflects the gaps, as 1 in 2 private school students had a device to take their classes online, and only 2 in 10 public school students had access to a device. In addition, almost 100% of students in private schools had internet access (96%), but in public schools, only 72% of students had access (Vieyra *et al.*, 2020).

Another illustrating factor of the educational problem refers to the loss of learning. There is evidence indicating that students lost up to 1.5 years of learning after school closures, and as we have pointed out in Vital Signals (2022d), such losses in learning, such as reading and mathematics, were more profound for the youngest (10 years old) and the poorest (low income), elements that end up undermining the opportunities of those who have the least at the earliest ages (Graphs 19 and 20).

#### GRAPH 19. INCREASED LEARNING POVERTY IN READING

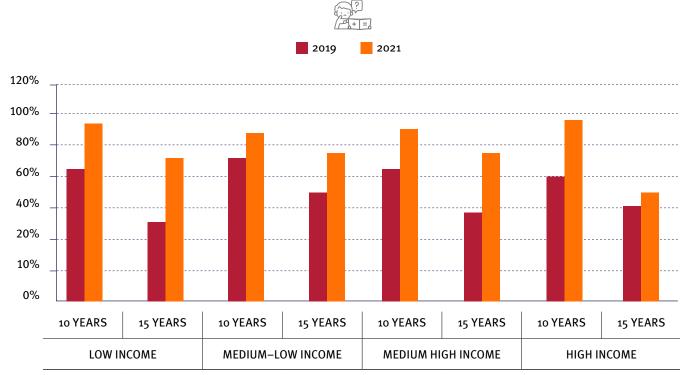
BY SOCIOECONOMIC STATUS AND AGE FROM 2019 TO 2021



Source: In-house elaboration with data from Hevia, et.al., 2022.

#### **GRAPH 20. INCREASE IN LEARNING POVERTY IN MATHEMATICS**

BY SOCIOECONOMIC LEVEL AND AGE FROM 2019 TO 2021



Source: In-house elaboration with data from Hevia, et.al., 2022.

Concerns about the backlog also include the quality of learning for 28.7<sup>41</sup> million children and young people of learning age. If the trend of deterioration continues, there will be greater "learning poverty." That is, complications in reading and understanding a text correctly in the case of reading and, in mathematics case, the incompetence to solve problems with 3–digit divisions in 10–year–olds.

Although the New Mexican School (NEM, for its acronym in Spanish) project incorporates in its model the historically neglected populations under the components of inclusion, equity, gender perspective, and excellence, educational deficiencies and learning loss not only continue but also increase. As a result, recent changes in the education system continue to fail to support the most vulnerable and to solve the problem of school dropout, which shows a historical reduction in school enrollment by educational level.

The Federal Superior Audit Office (ASF, for its acronym in Spanish) reported that in 2021 –after 16 months without on–site classes– of the 23.9 million students registered in basic education schools,

only 53.3% returned to classes at the beginning of the school year (12.7 million). One out of every two students who returned to classes (55%) did so in schools without sanitary conditions and infrastructure (Chamber of Deputies, 2022).

After the closing of schools, more than half a million students dropped out of school. The most significant decrease in school enrollment was in preschool, which decreased by 13%, followed by upper secondary education (7%), primary (4%), secondary (3%), and higher education (1%) (Fernandez et al., 2022). Unfortunately, in the case of higher education, the panorama is no better, as shown by the public protests of medical students of the Welfare Universities due to the lack of campuses, lack of teachers and classes, and even deficiencies of materials in the campuses (Reforma, 2022), even though the implementation of the Welfare Universities has the objective of "offering free and quality higher education services," the graduates of these universities face a legal battle when they receive from the educational authorities degrees that are not valid since they do not have the necessary requirements to obtain their professional licenses (Uresti, 2022).

In the particular case of Higher Secondary Education (EMS, for its acronym in Spanish), the authorities

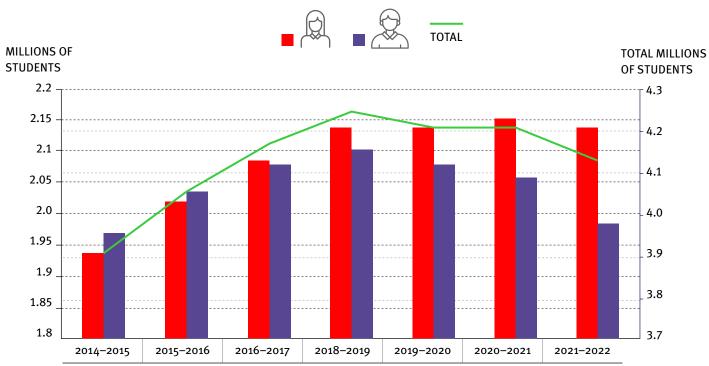
After the closing of schools, more than half a million students dropped out of their studies. The most significant decrease in school enrollment was in preschool,

<sup>41</sup> The total number of children and young people enrolled nationwide in compulsory education (preschool, elementary, middle, and high school) for the 2021–2022 school year in the 2020 Population and Housing Census (Inegi, n.d.).

have recorded a 2.5% drop in enrollment in higher secondary education and a 0.5% drop in higher education for the third consecutive year. This situation affects men (-3.8% in upper secondary and -4.1% in higher education) more than women (-1.2% in upper secondary) (Fernández *et al.*, 2022). Although the

main reason for the drop in school enrollment was the closing of schools, there is evidence that this phenomenon has been observable for some time. As seen in the graph, starting in the 2019–2020 cycle, the drop in EMS enrollment deepened, affecting males to a greater extent (Graph 21).

GRAPH 21. HIGHER MIDDLE EDUCATION ENROLLMENT
PER SCHOOL CYCLE AND SEX

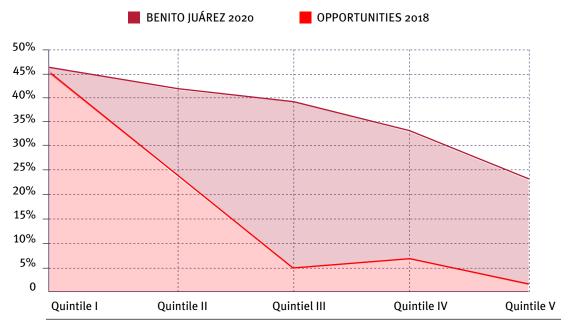


Source:In-house elaboration with data from SEP (Secretariat of Public Education, for its acronym in Spanish) (n.d.)

Although the return to classes in the face—to—face modality has increased by 1.2% for the enrollment of students in the first year of high school and 1.9% in higher education, it has not been enough to cover the 8% drop in high school and 9% in higher education registered in the 2020—2021 school year. México Evalúa and the Tecnológico de Monterrey (2022) point out that the reduction in enrollment has been 366,954 students between 15 and 17 years of age who have not enrolled in middle school since 2019 and, in addition, that 8% of young people who finish middle school do not enter high school (Fernández *et al.*, 2022).

This government has ironically observed a drop in enrollment in higher secondary education. However, the Benito Juárez García Scholarship (BBJG, for its acronym in Spanish) primarily aims to support students in poverty in public schools to continue and conclude their studies. According to the data, practically 20% of the poorest population (quintile I) is receiving the same percentage of the Benito Juarez scholarships as they received in 2018 with the Oportunidades scholarships. Meanwhile, 60% of the wealthiest students in the country (quintiles III to V) are receiving between 39% and 24% of the Benito Juárez scholarships, data that indicates flaws in the design of a program that goes against its objective of favoring the poorest (Fernández *et al.*, 2022) (Graph 22).

## GRAPH 22. HIGHER MIDDLE EDUCATION STUDENTS BENEFITED FROM SCHOLARSHIPS BY INCOME OUINTILE



Source: In-house elaboration with information from Fernández, et.al, 2022.

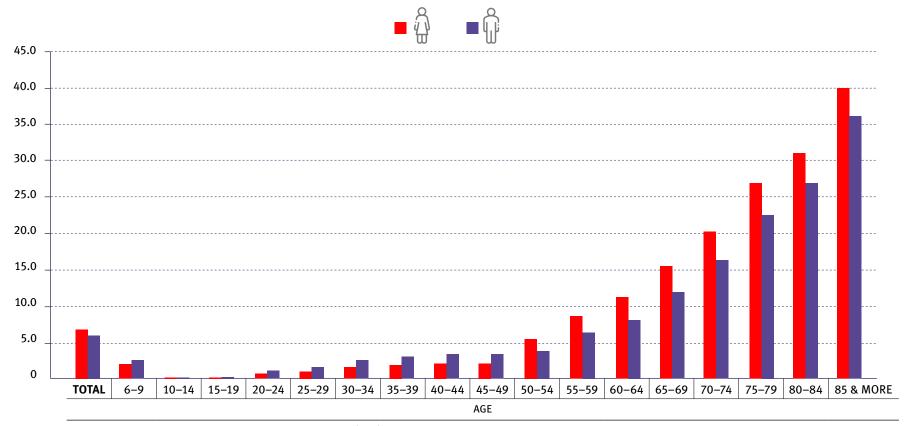
It is clear that educational resources lack targeting, harming the least favored, and that efforts are not aimed at counteracting school dropout, compensating for the loss of learning, and much less at stopping the deepening of the educational and gender gaps faced by today's students with a view to becoming the professionals of the future.

#### **DEEPENING OF GENDER EDUCATIONAL GAPS**

Although in the first years of school, there seems to be a positive balance in terms of schooling in Mexico, as girls and young women grow older, they stop studying, a phenomenon that opens up gender educational gaps. On average, out of every 100 women, 7 (6.8%) have no schooling, while out of every 100

men, 6 (6.0%) have no schooling at all (INEGI, n.d.). Although there is no substantial difference between men and women at the beginning of education, it is after the age of 50 that the gap between the two marks a significant disparity, with women being the most affected by not having any schooling (Graph 23).

GRAPH 23. PERCENTAGE OF MEN AND WOMEN WITHOUT SCHOOLING IN 2020

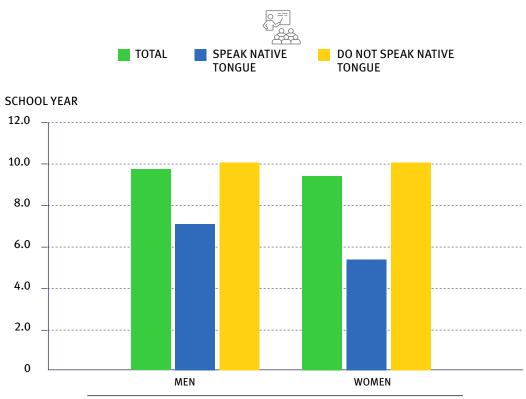


Source: In-house elaboration with data from SEP (n.d.)

Educational gaps in indigenous peoples and communities are also present: the illiteracy rate affects more women (35.6%) than men (17.8%). This is even more alarming because there is a risk that girls will drop out of school at around 10 and 11 years of age when they should be entering secondary school, so the schooling of girls under 15 who speak an indigenous language barely reaches 5.8 grades, while boys do achieve higher levels of education (6.7 grades) (IN-EGI, n.d.). There are even notable differences among women who do not speak an indigenous language, with up to 4.1 more school grades than those who do (INEGI, n.d.) (Graph 24).

Gender inequalities continue to exist in university education and working life. On the one hand, in the choice of science and technology careers, women are underrepresented and, on the other, when they finish university, with entry into formal jobs. According to OECD data (2018), women with tertiary education earn only 66% of the average income of men with the same educational level. The above can be explained at the time of hiring because, culturally, it has been thought that it is more worthwhile to invest in males. After all, women will take care of their homes and leave the working world (Ferreira, 2020).

### GRAPH 24. FIFTEEN-YEAR-OLD AND MORE MEN AND WOMEN SCHOOLING IN 2020



Source: In-house elaboration with data from INEGI (n.d).

In the professional sphere, some gender studies make it clear that there are still problems of segregation, discrimination, injustice, and stereotypes in science, technology, engineering, and mathematics (STEM). According to UNESCO, about half of women worldwide study a bachelor's degree in science, 30% study a bachelor's or master's degree and work in the research profession, 10% hold high academic positions, and only 3% have won a Nobel Prize. Among Latin American and Caribbean countries, in 2017, in Chile, Mexico, and Peru, women still accounted for less than 34% of all researchers (Bello, 2020). In 2021, although the proportion of women in the National System of Investigators (SNI) has increased to close to 35.8%, only 1 out of 4 managed to obtain the highest level (SNI III) (24.4%), while 3 out of 4 men manage to get that level (75.8%) (Conacyt, n.d.).

Although there have been many advances regarding women's equality, both in science and other fields, the Global Gender Report 2022 estimates that to close the gap between men and women completely, it will take 132 years for gender equity to become a reality. Unfortunately, in Mexico, we could be taking regressive steps due to the inadequate targeting of resources, the disarticulation of the National Education System, and the lack of support for science with

the disappearance of trust for the help of scientific research. These setbacks affect men and women alike in their research projects. This situation already reflects stagnation in gender parity scores for 2022, decreasing, in turn, the Opportunities and Economic Participation of women. Mexico, Chile, and Guatemala occupy the lowest places (World Economic Forum, 2022).

To close the gap between men and women completely, it will take 132 years (Global Gender Report 2022). Unfortunately, in Mexico, we are taking regressive steps due to the inadequate targeting of resources, the disarticulation of the National Education System, and the lack of support for science.

## DECAY IN TEACHER TRAINING SCHOOLS: UNTRAINED TRAINERS

A further indication of the neglect of the National Education System is reflected in the abandonment of teachers and the decay of the country's teacher training schools, which have also suffered the ravages of republican austerity, surviving both budgetary and academic neglect, despite their essential role as trainers of thousands of teachers in the country.

Even though the current administration supposed interest is the revaluation of the teaching profession, by 2023, \$1,056 mdp has been labeled for Teacher Professional Development, 79% less than what was allocated in 2018. Regarding the strengthening of Normal schools, although the government called for the formation of the National Strategy for the Improvement of Normal Schools (SEP 2019) with more than 300 actions to strengthen Mexico's teachers, in practice, since 2020, the authorities announced significant budget cuts for the country's Normal schools. After the schools received 447.5 million pesos in 2019, for 2020, the authorities reduced the amount to 272.4 million, i.e., 176 million pesos less, equivalent to a 40% decrease (SHCP, 2020).

In 2021, the amount approved for the teacher training schools was even less, consisting of 170 million pesos in the Federal Expenditure Budget (60% less than in previous years). Under this scheme, what resources would the government implement the 300 actions issued by the national delegates who participated in this improvement strategy in the teacher training schools? Beyond the hopeful discourse, the federal authorities do not seem to be genuinely willing to revalue the teaching profession, nor to strengthen or transform the teacher training schools. Therefore, there is no congruence between the discourse and the budget allocation that limits the needs of a teaching profession already harmed by governmental inaction and budgetary austerity.

| BUDGET | FOR TEA | CHING   | <b>PROFESSIONA</b> | SCHOOLS   |
|--------|---------|---------|--------------------|-----------|
| DODGEL |         | 1011110 | I KULLJJIUKA       | - JCHOOLJ |

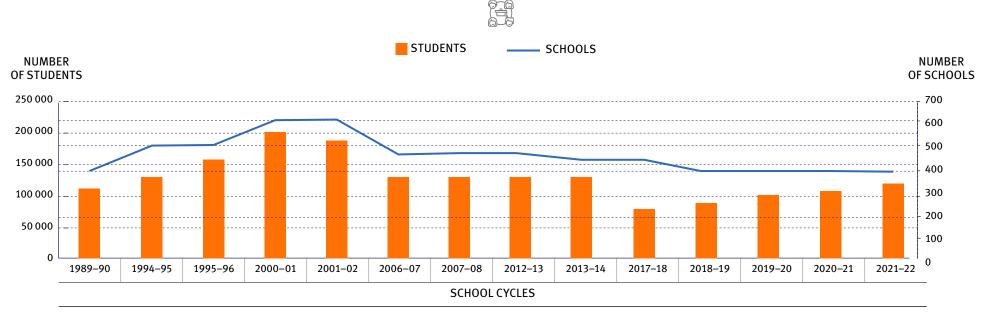
| Teacher professional development | 2023  | 1,056 million<br>pesos (mp) | 79% less > 2018        |
|----------------------------------|-------|-----------------------------|------------------------|
| Schools                          | 2019  | 447.5 mp                    | decrease of 40%        |
|                                  | 2020  | 272.4 mp                    | decrease of 40%        |
|                                  | 2021  | 170 mp                      | 60% less> years before |
| SCHP                             | ••••• |                             |                        |

As much as President Andrés Manuel announced the creation of new public Normal schools for entry to teaching in March 2019 (Presidency of the Republic, 2019a), the number of students in Normal schools (higher education) has increased over the years (Graph 25). However, the same does not occur with the number of schools in function. In addition, the

drop in the number of graduates and graduates since the 2018–2019 cycle reflects the limitations in teacher training (Graph 26). This fact is a consequence of budgetary and institutional deterioration that weakens the teaching profession in general (SEP, n.d.).

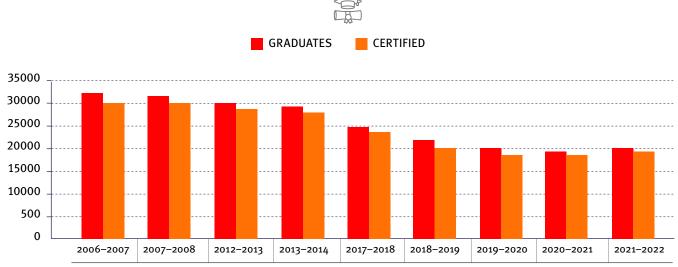
GRAPH 25. TEACHING EDUCATION SCHOOLS AND STUDENTS





Source: In-house elaboration with data from SEP (n.d.).

GRAPH 26. NUMBER OF CERTIFIED AND GRADUATE STUDENTS FROM EDUCATION SCHOOLING
BY SELECTED SCHOOL CYCLES



Source: In-house elaboration with information from SEP (n.d.).

For a government that prioritizes its efforts on the poor, the budgetary neglect of the only agency in charge of providing community education services to high and very highly marginalized localities is incongruent. For 2023, the federal government proposes to increase by 30 million pesos (1%) the budget for the National Council for Educational Development (Conafe, for its acronym in Spanish), which means a total of 5,731 million, a budget lower than the 6,159 million exercised in the last year of President Peña Nieto's administration (Fernández & Herrera, 2022).

The SEP resources and teachers' treatment now seem to be political tools managed by the federal executive. The political instrumentalization of education by the current government threatens to dismantle teacher training institutions in our country (Carro, 2020). The challenges of the pandemic in education in general and in teacher training schools, in particular, hinder the course of the loss of identity of the professional training institutions of today's Mexico from generating the necessary teaching for tomorrow.

### POLITICAL USE OF THE EDUCATIONAL APPARATUS AND ATTACKS ON SCIENCE

As Signos Vitales has pointed out, the federal government's approaches compromise social progress, jeopardize education, and thus hold back scientific progress by politically instrumentalizing positions, appointments, and programs (Signos Vitales, 2021d).

Since the beginning of the current administration, attempts have been made to destroy everything previously built. Such is the case of the 2019 educational counter-reform, which had, among other purposes, the destruction of the National Institute for the Evaluation of Education (INEE, for its acronym in Spanish). However, it became a center of study and proposal on education in Mexico with analysis and studies that gave way to creating indicators that allowed a consistent international evaluation (PISA test). However, its replacement by the National Commission for the Continuous Improvement of Education as a decentralized public agency took away the constitutional autonomy of INEE. Since it was a Constitutionally Autonomous Agency (OCA, for its acronym in Spanish), its nature was to create a counterweight to the government in office. Thus, the guidelines allowed the government to act effectively in educational matters, The current administration attempts to destroy everything previously built. Such is the case of the 2019 educational counter–reform, the destruction of the National Institute for the Evaluation of Education, even though it became a center of study and proposal on education in Mexico.

providing information based on the best evaluation practices in the world. This gave an account not only of the country's state but also of its states and of the educational services offered to historically discriminated populations such as the disabled and, or indigenous people. In other words, one of the country's most important projects was destroyed, with it, the possibility of autonomously governing a monitored, reliable, and systematic National Education System (Backhoff, 2019).

As if this were not enough, the ideology of the new educational model, the changes in the curricula, the institutional weakening, and the arbitrary selection of administrative positions in strategic posts are examples of the prioritization of political ambitions over the fulfillment of educational and social demands. Namely, the proposed adjustments to the basic education curricula have generated debate among various specialists. From the pedagogical point of view, it would imply eliminating and adding subjects in formative fields, which affects the general performance in mathematics and reading comprehension, which, as we have seen, are precisely the most affected areas of learning in the country's children. It is proposed to place the community as the center of learning, not the student. It also relegates the importance of learning assessment and weakens the practical functions of education by orienting the entire educational system solely under the ideological focus of the current administration (Backhoff, 2022).

Ironically, the educational authorities temporarily suspended piloting the new curriculum in basic education for the 960 schools where the program was to be deployed (Gobierno de México, 2022). This suspension has caused controversy since the new regime is not used to comply with injunctions, which shows the possibility that the authorities do not have the new educational project ready yet (Animal Político, 2022c). The Mexican educational model has undergone radical changes, and the pandemic has left significant gaps in terms of school dropout, learning disabilities, and deteriorated infrastructure. Therefore, changing



Image: "Judge stops the pilot of the new SEP educational plan" at www.laverdadnoticias.com

the curricula without first addressing these problems is not operative and leaves havoc on the quality of education, which in turn compromises the advancement of science and technology (Animal Político, 2022c).

Despite the decisive role of scientific advances in the progress of societies, Mexico has a prevailing deficit in Science, Innovation, and Technology (STI) compared to other countries (World Bank, n.d.). According to the Science and Technology Law (LCT), national spending for this sector should be equivalent to 1%



Image: Third secretary of Education Leticia Ramírez Anaya at www.infobae.com.

of GDP. Although such a percentage has never been reached, the budget allocated to Conacyt allowed for stable resources that have represented, on average, 18% of its total spending (Puga & Valderrama, 2022).

The budget for Conacyt has been gradually decreasing; by 2023, the resources allocated (31,655 mdp<sup>42</sup>) are only 2.1 million higher than what was distributed in 2022 and represent only 46% of the 2015 budget and 77.6% of the 2018 budget (Rojas, n.d.). In other words, the authorities allocated budget for 2023 is reduced by about three–quarters of what it was at the beginning of the six–year term. The above fact demonstrates the Mexican government's low priority on scientific development.

According to data from the fourth government report, in 2017, 2,700 projects received funding from Conacyt; however, by 2021, only 108 projects were funded. Scholarships for study abroad dropped from 7,514 in 2015 to 2,087, less than half in 2021 (Conacyt, n.d.). The changes implemented by the current administration in the field of S&T have disarticulated the scientific activity and objectives of Conacyt as the main governing body in innovation and technology in the country.

# TABLE 21. CONACYT ANNUAL BUDGET CONSTANT PESOS BASE 2015

| YEAR | MILLION PESOS<br>(BASE 2015) |  |
|------|------------------------------|--|
| 2015 | 47,071                       |  |
| 2016 | 43,753                       |  |
| 2017 | 30,644                       |  |
| 2018 | 28,108<br>23,688             |  |
| 2019 |                              |  |
| 2020 | 23,082                       |  |
| 2021 | 21,276                       |  |
| 2022 | 21,369                       |  |
| 2023 | 21,822                       |  |

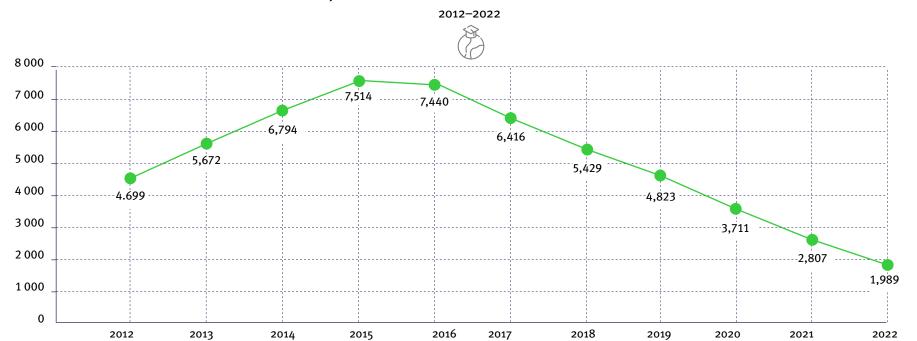
Source: In-house elaboration with information from Rojas (n.d.).



Image: "There is no reduction for 2022, but Conacyt budget is beneath 2018". Head of Conacyt. Photo: Cuartoscuro at www.animalpolitico.com.

<sup>42</sup> Without taking into account the inflationary factor (Current pesos).

#### GRAPH 27. NUMBER OF SCHOLARSHIP BENEFICIARIES ABROAD



Source: In-house eaboraction with data from Conacyt (n.d.).

Even with efforts to promote science before the start of the current administration, Mexico today has nine times less research staff, has published 5.5 times fewer research articles, and its residents have made 20 times fewer patent applications to intellectual property offices (Vital Signals, 2021c).

The actions of the Federal Government have generally worsened the state of Science, Innovation, and Technology in Mexico. Another unfortunate fact has

been the government's actions to the detriment of science with the dismantling of the representation and coordination structure based on two complementary spaces: the Scientific and Technological Consultative Forum (FCCyT) and the National Conference on Science, Technology, and Innovation, both of which operated without interruption until 2019 when they began to be weakened with the elimination of the resources necessary for their operation. Accord-

ing to Puga and Valderrama, the government dismantled both agencies because the new director, María Elena Álvarez–Buylla, was trying to remove from their positions several officials coming from the previous six–year term. In addition, the authorities wanted to dismantle these autonomous representation structures because they hindered the implementation of a much more vertical decision–making model (Puga and Valderrama, 2022).

In 2019, several provisions of Article 3 of the Constitution were reformed by decree in the area of education (Segob, 2019), under which education was given a more comprehensive and inclusive character and established that the State would support scientific, humanistic, and technological research and innovation, in addition to guaranteeing open access to information. To give substance to the modifications, in April 2021, the government proposed the General Law of Higher Education (Chamber of Deputies of the Congress of the Union, 2021a), which, in principle, included researchers and specialists in its elaboration (Gutiérrez, 2021). On the other hand, the draft of the General Law on Science, Technology, and Innovation delivered by December 2020 by the director of Conacyt caused particular concern because it granted absolute decision-making power to a council made up

#### **CONACYT ACTIONS**

## DISMANTLING REPRESENTATION STRUCTURES AND CONACYT COORDINATION:

- 1. Scientific and Technological Consultative Forum (FCCyT)
- 2. National Conference on Science, Technology, and Innovation

#### Reasons:

They hindered the implementation of a much more vertical decision—making model Puga & Valderrama 2022.

## DRAFT OF THE GENERAL LAW ON SCIENCE, TECHNOLOGY, AND INNOVATION

To grant absolute decision—making power to a council made up exclusively of officials of the Executive Branch:

- Establish a scientific agenda
- Limit the relevant areas of research
- Limit resources only for specific projectos.

exclusively of officials of the Executive Branch. With capabilities such as the power to establish a scientific agenda that would limit the relevant areas of research and resources only to those projects that followed the criteria established in the plan. In the new project, based on a highly hierarchical organization, there is no room for science organizations of federal entities, researchers, or higher education institutions (Puga & Valderrama, 2022).

The pre-2018 conditions for the development of science were not perfect, but they satisfied widely accepted principles of academic freedom; peer review; permanent consultation bodies; and allocation of resources by public call under criteria of transparency, quality, and relevance. Contrary to the trend of progress and growing scientific incentives, since 2018, the unilateral practices imposed by the current president limit the sector's capacity and weaken the scientific system. Both facts put the achievements of the past at risk and threaten the dissemination of knowledge, especially among girls, boys, and young people.



*Image*: "Students from Universidad de Colima will represent Mexico in Turkey (2016)" at www.afmedios.com.

### **HEALTH**

### Quality of life gaps and deterioration

Public health has not been high on the current government's agenda. The pandemic derived from COVID-19 proved the fragility of the National Health System. As we have warned in Vital Signs (2022d), the dismantling of an already weakened sector with the destruction of Seguro Popular and the failed implementation of Insabi has increased 12% the lack of access to health services from 2018 to 2020, leaving 15.6 million people without health services (Coneval, n.d).

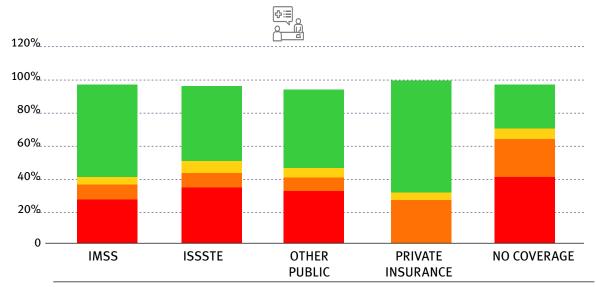
Despite the Government's declared fight against poverty, its dismal decisions indicate that the most affected population has been those under poverty conditions who do not have social security and are attended in units of the Ministry of Health, IMSS—Bienestar, or Insabi. In 2020 the poor population without access to health increased to 23.1%, while by 2018, it was much lower (10%) (Coneval, n.d). Currently, the change of model from Insabi to IMSS—Bienestar is a clear sign of the failure of the health sector, which cannot guarantee universal access to health for 54% of the population without entitlement, according to ENSANUT in 2021. The deterioration in the sector has also deepened the concern on the part of public opinion and civil society because the authorities do not have a clear strategy. So far, there is no pre—designed evaluation with indicators, deadlines, timeframes, controls, or regulations for the entities that voluntarily decided to integrate the changes.

In addition, the dismantling of the Health System, the inability of public services, and the absence of medicines and medical supplies forced millions of affected Mexicans to resort to private medical services and seek care in pharmacies with adjacent doctor's offices (FCA, for its acronym in Spanish). Also, the severe drop in child vaccination coverage due to the lack of biologicals and applications and, finally, the high prevalence of chronic diseases such as hypertension, diabetes mellitus, overweight, and obesity reveal the absence of comprehensive policies and chronic failures in the Mexican Health System.

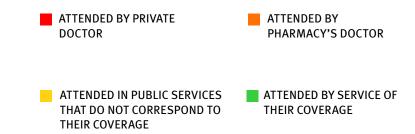
In 2021, many beneficiaries resorted to private health services despite having some social affiliation. In the case of IMSS, 2 out of every five beneficiaries (39%) decided to opt for an adjacent pharmacy office or to see a private doctor. As for ISSSTE, 1 out of every two enrolled (49%) attended private services, and of the without entitlement population (including those affiliated to Seguro Popular in 2018)— who were attached to Ministry of Health Units—, 7 out of 10 were attended in private health services (Shamah *et al.*, 2022) (Graph 28).

GRAPH 28. POPULATION WITH COVERAGE AND PLACE WHERE IT WAS ATTENDED

NATIONALLY DURING 2021



Source: In-house elaboration with data from (Shamah, et.al., 2022).



#### **PUNISHMENT OF EARLY CHILDHOOD**

Children have not escaped the constant violations of their rights to access quality health care. The COVID-19 pandemic caused confinement and the stoppage of economic activities, impacting families' income. Because of this, their ability to access sufficient and varied food was limited (UNICEF, 2022). Unfortunately, in Mexico, social food aid programs have suffered the ravages of the so-called "republican austerity" that affects the welfare of households.

The behavior of social programs related to the guarantee of nutritional care in children between rural and urban localities was revealed to be minimal (Table 22) compared to the flagship programs of the current administration, as in the case of the pension for older adults (73.1% rural and 59.3% urban), followed by the Benito Juarez National Scholarship Program for Welfare (31.9% and 14.5% respectively) (Shamah–Levy et al., 2021).

It is essential to highlight the fact that social food aid programs contribute to the right to food of the population in Mexico and the welfare of households. However, the regional distribution does not seem consistent with the country's poorest regions. In that sense,

TABLE 22. PRESENCE OF SOCIAL PROGRAMS RELATED TO THE GUARANTEE OF NUTRITIONAL CARE FOR CHILDREN BY RURAL AND URBAN LOCALITIES

| PROGRAM   | RURAL | URBAN |
|---|-------|-------|
| Cold school meals from DIF                                    | 12.5% | 4.3%  |
| Social supply of Liconsa milk                                 | 5.8%  | 5.1%  |
| DIF food pantries   | 8.1%  | 2.9%  |
| Hot food DIF  | 5.3%  | 1.1%  |
| Insabi Health   | 2.3%  | 1.3%  |
| DIF soup kitchens   | 0.6%  | 0.3%  |
| The well-being of children of working mothers                 | 0.4%  | 0.2%  |
| Food programs for shelters and, or indigenous school canteens | 0.3%  | 0.0%  |
| Social food assistance during the first 1,000 days            | 0.4%  | 0.0%  |
| Pension for seniors   | 73.1% | 59.3% |
| Benito Juárez National Welfare Scholar-<br>ship Program       | 31.9% | 14.5% |

Source: In-house elaboration with information from (Shamah-Levy et. al, (2021).

Mexico City was the area where social programs have had the most significant presence, with a (51.6%). The regions where social programs are present in more than 40.0% are Center (45.2%), Center–North (40.2%), State of Mexico (42.5%), Peninsula (46.4%), and Pacific–South (51.7%). In contrast, the Pacific–Center (26.3%), Pacific–North (27.0%), and Border (28.4%) regions have fewer households benefiting from any program (Shamah–Levy *et al.*, 2021), which suggests that social programs respond to different objectives than those for which they were created.

It is necessary to recognize past efforts reflected in the decrease in moderate and severe food insecurity categories from 2012 to 2018. However, between 2020 and 2021, an increase of 3.0 percentage points (pp) in moderate food insecurity and 2.3 pp in severe food insecurity occurred in national terms.<sup>43</sup> These elements impair health and condition household nutrition in Mexico (Shamah–Levy *et al.*, 2021).

### INADEQUACY OF THE BASIC VACCINATION SCHEME AND THE DECLINE IN MEDICAL TREATMENT

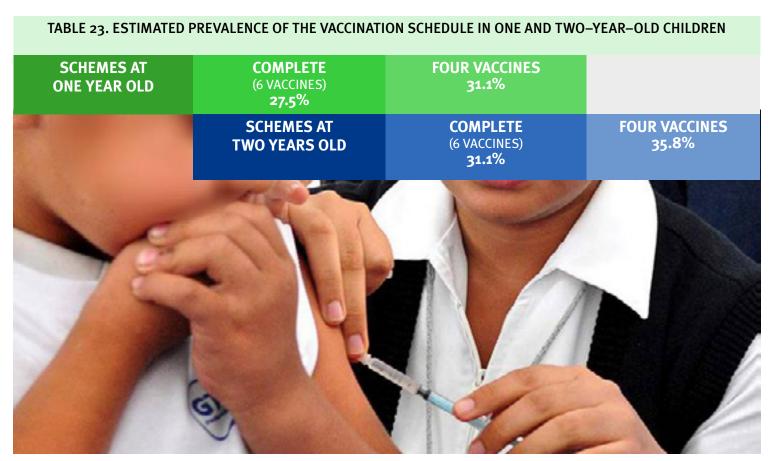
The implementation of vaccines as a public health measure has eradicated several diseases and reduced morbidity, disability, and mortality in different population groups, particularly children. The collapse in the Health System has also caused adverse effects in the insufficiency of the basic vaccination schedule, with 23 million children who did not receive vaccines in 2020, 3.7 million more than in 2019 and the highest number since 2009 (Asociación Mexicana de Vacunología, n.d.).

In 2021, only 1 in 3 children in Mexico (27.5%) one year of age had a complete vaccination<sup>44</sup> scheme, and one—third of children one and two years of age had a scheme of at least four vaccines (35.8%) (Table 23).

Vaccination coverage in Mexico has fallen short and has neglected complete immunization schedules in children up to two years of age, which was only 31.1% for 2021 at the national level. At the regional level, the highest complete vaccination coverage rates, above the national average, are in the Border (53.9%) and

<sup>43</sup> Households classified as mildly food insecure first experience concerns about access to food and, if the lack of access to food is prolonged, sacrifice dietary quality. Moderate food insecurity involves restrictions in the quantity of food consumed while severe food insecurity presents situations where one of the members skips mealtimes or stops eating for an entire day due to lack of money or resources to purchase food, a phenomenon that occurs first in adults and then in children (Shamah-Levy et. al, 2021).

<sup>44</sup> The complete vaccination schedule includes Hepatitis B, Tuberculosis (BCG), Pentavalent, Pneumococcal, Rotavirus, MMR.



*Note:* The complete vaccination scheme includes Hepatitis B, Tuberculosis (BCG), Pentavalent, Pneumococcal, Rotavirus, and MMR. *Source:* In–house elaboration with information from (Shamah–Levy *et. al*, (2021).

Pacific-North (43.4%). Vaccination coverage with full vaccination schemes below the national average includes the regions with the highest poverty states, such as the Peninsula, Pacific-South, and Pacific-Central (19.8%, 20%, and 25.7%) (Shamah-Levy *et al.*, 2021).

In addition, the drop in medical treatment represents one more of the consequences of the collapse of the health sector. Although the direct consequence of the COVID-19 pandemic was the excess mortality in Mexico, there is evidence of the lack of preparedness to face the pandemic in situations such as the late acquisition of supplies and a slow hospital reconversion. These facts also neglect other health problems such as various chronic diseases, diabetes, cancer treatments, and other diseases (Orellana & Guerrero, 2021).

In the context of the pandemic, health authorities prioritized everything related to COVID-19, and medical consultations and treatment of other diseases, among others, took a back seat (Martínez et al., 2021). Even though timely chronic diseases detection and treatment –such as diabetes and hypertension– can reduce the development of conditions and their complications, the use of screening tests for diabetes and hypertension in adults aged 20 years and older decreased from 23.7% in 2012 to 15.3% in 2018, down to 9.6%. In 2021 for diabetes, while for hypertension, it was 28.4% in 2012, 17.9% in 2018, 12.9% in 2020, and dropping to 7.5% in 2021 (Shamah et al., 2022).

Weak health management is also reflected in Chronic Non-Communicable Respiratory Diseases (CNRD) due to poor air quality. These diseases represent 4% of all illnesses and cause 7% of deaths worldwide (CEMDA, n.d.1). In recent years, there has been an increase in deaths from Chronic Obstructive Pulmonary Disease (COPD) due to conditions such as pulmonary emphysema and chronic bronchitis. Globally, it is the third leading cause of death, which in 2019 caused 3.23 million deaths (WHO, 2022). In Mexico, deaths associated with COPD are around 10,400 people each year. These increased due to the late environmental management of recent years. Currently, 21,000 deaths per year are estimated to be associated with pollution, with children being the most vulnerable and susceptible population to developing childhood cancer. It is estimated that 7.6 deaths from childhood cancer per 100,000 inhabitants in Mexico are due to poor air quality (CEMDA, n.d.1)

In Mexico, chronic diseases are highly prevalent, and the Health System has faced the pandemic with a population with high levels of such chronic diseases. For example, in 2021, diabetes mellitus turned out to be the third leading cause of death (INEGI, 2022c), and the mortality rate due to diabetes has increased dramatically from 2019 to 2020, going

from 8 people per 10 thousand inhabitants in 2019 to 12 per 10 thousand in 2020, being higher in women (11.4%) than in men (9.1%).

Unfortunately, 7 out of 10 Mexicans living with diabetes do not achieve control of their disease. One of the main factors that prevent the control of this disease is the shortage of medicines. Between 2020 and 2021, the highest number of reports of shortages occurred with cancer, diabetes, post—transplant, and hypertension treatments. The most reported shortages by transplant patients were tacrolimus, mycophenolic acid, and sirolimus (drugs that prevent transplant rejection). On the other hand, people suffering from diabetes report, for the most part, the lack of metformin, insulin glargine, and sitagliptin, essential drugs for both groups of pathologies, and their lack of supply undermines health and even puts the lives of these people at risk (Cero Desabasto, 2022).

Seven out of 10 Mexicans living with diabetes do not achieve control of their disease, mainly because shortage of medicines.

#### NON-FILLED PRESCRIPTIONS AND MENTAL HEALTH

The dismal health management is reflected in turn in the number of prescriptions not filled by the IMSS, which is the institution that provides the most considerable amount of care with an affiliation of 51% of Mexicans (INEGI, n.d.). By 2020, IMSS tripled the number of prescriptions not filled promptly, from 5 million in 2019 to 15.9 million in 2020 and just over 22 million in 2021 (Cero Desabasto, 2022).

These setbacks, not only in terms of coverage or medications but have also been visible in reducing medical cancer treatments, even though it is one of Mexico's leading causes of death. Fourteen out of 100 Mexicans die from this disease, and the life expectancy of those who suffer it is around 63 years. With this, Mexico is one of the Latin American countries with the highest lag in the score of mastery in health services and workforce to provide services in the stage of cancer treatment (The Economist Intelligence Unit, 2019).

Likewise, the coverage of mental health consultations in specialized Psychiatry and mental health units decreased drastically in 2020. Mental health consultations went from 568 thousand consultations

in 2017 to 530 thousand in 2018 and 546 thousand in 2019, reaching just over 195 thousand in 2020, the year in which the pandemic caused a spike in mental illness (WHO, 2022). This increase affected women more than men and young people aged 20–24 years more than older adults.

Overall, the factors leading to high levels of anxiety and depression were loneliness, fear of infection, fear of suffering and death, both of self and loved ones, grief after bereavement, and financial worries. Among healthcare workers, burnout was a leading cause of suicidal thoughts. In 2021, during one of the peak moments of the pandemic, the federal government proposed to allocate 3 thousand 031 mdp, 2.1% of the total of the Ministry of Health; this represents 9.6% less compared to 2013 and 0.1% less than that approved in 2020, in real terms. (Llanos and Méndez, n.d.) This fact reveals that the budget allocated to mental health treatment in Mexico was limited to reduce the pandemic effects in terms of this type of illness increase, even though the commitment to mental health is an investment in life to ensure a better future for all.



*Image*: "50 million medical prescription have not been supplied in López Obrador's government: Cero Desabasto". Photo: Cuartoscuro at latinus.us.

#### IMPACT ON LIFE EXPECTANCY

COVID-19 has impacted mortality and survival in most countries worldwide, with Mexico being one of the most affected by the pandemic. The limited response capacity of the Mexican Health System highlighted the responsibility and questioned the willingness of the government to face a challenge of significant dimensions.

One of the most severe consequences of this administration's health policy failure during the pandemic is revealed by the decline in life expectancy. 45 Globally, life expectancy declined in all OECD countries for which data are available (Our World in Data, n.d.). However, Mexico shows substantial impacts compared to other countries, even in Latin America.

The trend of growth in life expectancy is due to changes and, or medical improvements that increase the quality of life. However, in Mexico, the decrease reflects up to 4.1 years less compared to 2019 (Graph 29), highlighting the results of the dismal manage-

ment of the pandemic, revealing setbacks in our health system.

In the midst of the pandemic and based on data from the Ministry of Health as of July 2020 (with 41,190 confirmed deaths due to covid–19 and 362,274 confirmed cases at that time), a more significant impact on the reduction of life expectancy was found in men than in women (0.86 and 0.51 reduction, respectively). At the state level, the most significant impacts were in Baja California (1.38 years less for women and 1.74 for men) and Tabasco (1.23 and 1.68 years less for women and men, respectively) (Gallardo 2020).

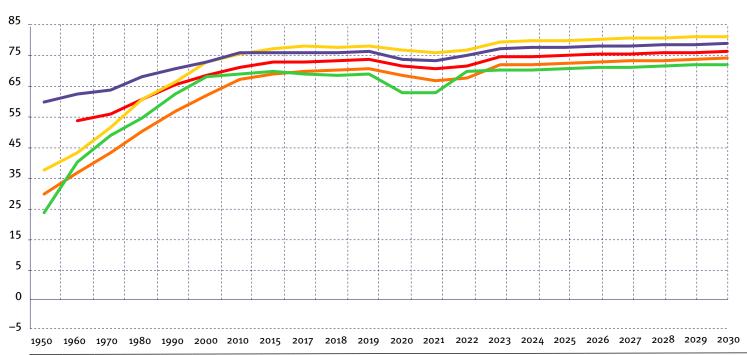
Although Conapo projections indicate an increase of o.5 percentage points from 2015 to 2020 in people's life expectancy, some estimates warn that, by the end of 2021, the Mexican population lost about 2.5 and 3.6 years of life expectancy at birth for women and men, respectively (Conapo, n.d.).

The effects of health management in the face of deaths from both the pandemic and lack of health care include a cumulative excess of 659,491 more deaths than expected from 2020 to 2022 (Govern-

<sup>45</sup> Life expectancy allows us to know how many years a person born in a certain place will live. It is a useful tool for comparing different regions and measuring the progress or regression of their health systems because it reflects the mortality of all age groups in a region (WHO. n.d.).

### GRAPH 29. EVOLUTION OF LIFE EXPECTANCY AT BIRTH. INCLUDING UN PROJECTIONS SELECTED COUNTRIES





Source: In-house elaboration with data from Our World in Data (s.f).

ment of Mexico, n.d.2), highlighting the weak government response under mismanagement and an austerity approach that has taken and will continue to take lives.

Other aspects determine life expectancy and quality of life in terms of health, such as the longed-for universal health coverage that Mexico is far from achieving. In the country, there is a prevailing deficit of medical units for care, and there is a lack of doctors, where access to health specialties seems unrealistic in the short term for a large part of the population in Mexico (Velázquez, 2022), even though having specialized medical care is a human right.



Image: "López Obrador: 'We do not have Mexican doctors, but there are about 50.000 vacants'". Photo: Alfredo Martínez (Getty Images) at www.elpais.com.

# PREDICTION OF FAILURE: INSABI TO IMSS-BIENESTAR IMPLICATIONS OF MOVING THE MODEL

The creation of IMSS-Bienestar as a decentralized public body acknowledges that Insabi has not delivered the expected results. Remember that the transition from The Institute of Health for Well-being (Insabi for its acronym in Spanish), founded in January 2020, promised to solve the problems in health services: lack of medicines, limited coverage, few consultations, etcetera. However, health care did not improve but instead worsened. With barely two years of life, the authorities have already considered Insabi dead (Campos and Cano, 2022).

The hope of guaranteeing universal health care access now rests with the IMSS-Bienestar system, which already provided only limited first and second-level care<sup>46</sup> to the population without social security -especially in marginalized areas (Government of Mexico, n.d.3-. However, the move from Insabi to IMSS-Bienestar should offer administration-improving opportunities, transparency, and health services

<sup>46</sup> The second level includes gynecology-obstetrics, general surgery, internal medicine and pediatrics (Government of Mexico)

governance for the most vulnerable people in Mexico. There is evidence that contrary to their objective, the administrative changes in health leave more and more people without access to health services (Coneval, n.d.).

Transferring health services from the states to IMSS—Bienestar is risky, considering that it has suffered a decline in its operational indicators and the number of consultations, equipment, and infrastructure. Thus, the transition between health systems faces the greatest operational challenge, in which its replacement (IMSS—Bienestar) is not even fully functional at the federal level. IMSS—Bienestar works in 1,328 municipalities (54% of the total) and only in 19 states currently (IMSS, n.d.1).

In order to guarantee universal access to healthcare, this institution should practically double its municipal presence and define the participation scheme in the 13 entities where it does not operate until 2022: Aguascalientes, Baja California Sur, Colima, Mexico City, Guanajuato, Jalisco, Morelos, Nuevo León, Querétaro, Quintana Roo, Sonora, Tabasco, and Tlaxcala. Another challenge is that the infrastructure and equipment of IMSS—Bienestar are in decline. Since 2014, this institution has not increased the number

of hospitals, totaling 80 (5% of the total public hospitals). This will force the government to allocate more resources to implement Mexico's universal health care system.



*Image*: "IMSS-Bienestar registers 87% advance operation in Navarit". Photo: IMSS en www.excelsior.com.mx

Transferring health services from the federal states to IMSS—Bienestar is risky, considering that it has suffered a decline in its operational indicators and the number of consultations, equipment, and infrastructure.

## HOW AND TO WHOM?: INHERITANCE FOR NEW GENERATIONS

Mexico has revealed relatively low total public spending on health as a percentage of GDP. However, it is a question of quantity and public spending quality. Health and education are two strategic areas where there is a need to improve spending efficiency: inequality between different social groups and federal entities reflects incomplete social, educational, and health coverage, fragmentation, and low quality of services received by a large part of the population. Opening gaps in health and education leads to unequal opportunities that affect and condition the quality of life of millions of people.

The impact on the quality of life includes everything that has been unattended in health care from childhood to adulthood. An example of this is the incomplete vaccination of children under two years of age, the lack of efforts to increase the quality of food, especially for the most vulnerable populations, or to compensate for treatments and, or medicines for chronic diseases such as cancer or diabetes, for which it is necessary to spend the equivalent of 4.6% of the GDP in compliance with the essential services

considered by the World Health Organization. However, the government allocates only 2.5% (CIEP, n.d.).

Most alarmingly, by the year 2035, it will be necessary to allocate the equivalent of 10% of GDP to cover spending on primary health coverage, four times more than what the government currently allocates (CIEP, n.d.). In addition, the increase in patients with chronic degenerative diseases puts even more pressure on spending increases, while the government has decreased resources in everything other than its flagship projects, Pemex and the CFE. This fact represents a time bomb for people's health care, making it necessary to encourage prevention and health promotion policies with high incidence levels of cancer, hypertension, and diabetes.

Education is another of the social aspects necessary to achieve a dignified life and have access to more and better opportunities, and it should be fundamental in the government's work. Although the actions of the Federal Government have shown disdain for any effort that represents previous administrations, it is necessary to recognize the advances and impulses of

past administrations and the detriment of the current ones by not promoting the course of quality education and thus hindering scientific advances.

If efforts are not focused on strengthening education, the imminent risks range from educational backwardness in areas such as Spanish and mathematics, school dropout with the risk of not returning to school and the loss of almost two years of learning, as well as a setback in closing gaps in which progress had already been made. These facts could cause the proportion of 15-year-old students without basic skills to increase from 53% to 64%, with a more significant impact on the lower-income population. This will deepen socioeconomic gaps with direct effects on the poverty of millions of Mexican families, given that being born in a poor household continues to result in lower learning with fewer years of schooling. As we have seen, we must add greater vulnerability to the adverse effects of the pandemic.

As if this were not enough, the scientific apparatus and the new administrative modifications disarticulation compromise the progress of Science, Technology, and Innovation in the country. The changes have been implemented through administrative acts, many of which are illegal and unconstitutional, such







#### *Images*:

"UNESCO appealed a social contract in education and transform life that we live.". Photo: UNICEF/UNI235483/Willocq at www.mexico.un.org.

"In México only graduate 25% university students". Photo: Carlos Ramos Mamahua at www.lajornada.com.mx.

"Mexican scientists leave the country because lack of support" published by El Sol de León at www.cobertura36o. mx. as leaving out of the National Innovation Program and withdrawing economic incentives to researchers from private universities of the National System of Researchers (SNI). These acts ended the scientific and technological convergence with the private initiative that operated through the Research Stimulus Programs, which breaks the link between the scientific community and universities and private companies, something vital for the development of applied science and cutting—edge technology. All this directly limits the capabilities of scientists in the social, environmental, political, educational, and health fields.

In conclusion, before the pandemic, Mexico had a social backwardness resulting from historical structural

problems. However, political decisions, administrative management, and the current government's actions have contributed to the accumulation of these backwardnesses. They have threatened the entire exercise of the social rights of Mexicans, which will end up generating more significant problems in the future in education, health, and social conditions, with fewer margins of action to propose solutions. This catalyzes the time bombs of catastrophes that can explode at any moment and where the main culprit will be a weak State with no capacity to act.

000

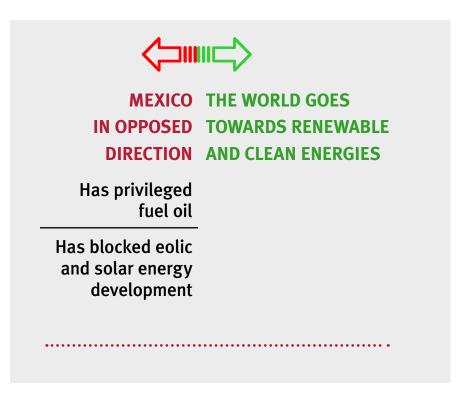




#### INTRODUCTION

exico's energy sector is moving opposite to the major trends in the rest of the world. While there is a rapid transition towards natural gas and renewable and clean energies, Mexico has increased the burning of fuel oil, a waste product of the refining process, despite its high sulfur content and, therefore, environmental pollution. It has neglected or even hindered, the development of wind and solar energy production by private generators, which produce electricity at a cost several times lower than that of fuel oil and natural gas. It has also hindered competition in the importation and final sale of gasoline and diesel.

The current government's energy counter-reform is one of the most critical obstacles to the country's



short and long-term development. This counter-reform has weakened Mexico's energy market's competitiveness, turning it into a quasi-monopoly. It has opted for self-sufficiency (in discourse) to achieve energy security. It has injected fiscal resources into Pemex to allow them to operate despite their low productivity and turn them into state monopolies, distracting necessary resources (from both taxation and internal private savings) to cover essential state obligations such as security, health, education, social welfare, environmental care and the financial cost of the debt.

All this configures a scenario that allows visualizing a dilemma the Mexican State will have to face at some point. So, it either retakes the energy sector's legal status according to the 2014 reform (indeed with greater boldness and depth) to make it viable. And this will weaken the strength of the unions of the public companies with the consequent political opposition—or it will have to procrastinate the decision until an energy crisis breaks out with a profound immediate long—term impact on society and the country's economy. Faced with this looming dilemma, which will have profound repercussions, it will be necessary to act firmly, and the sooner, the better.

#### THE ENERGY OUTLOOK IN THE WORLD AND MEXICO

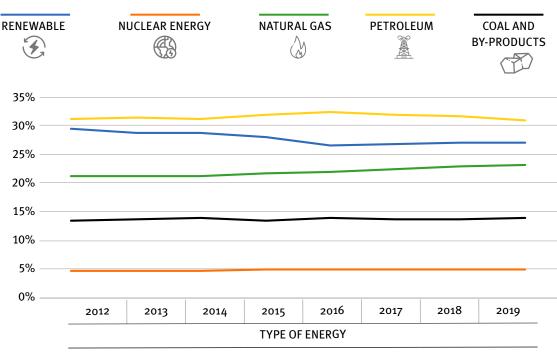
Gradually the world is moving towards renewable and clean energy due to global warming and the deterioration of air, water, and soil due to the massive exploitation of fossil fuels. The Millennium Development Goals propose a series of actions to be taken by all signatory countries to contain the emission of greenhouse gases and other pollutants. There is an increased production of renewable and clean energy worldwide, but its pace is still slow. Various mechanisms have also been devised worldwide to establish a kind of global tax on countries that pollute excessively and try to compensate those countries that contribute to generating a cleaner and healthier environment. As seen in Figure 30, the use of fossil fuels continues to be predominant, but their importance has diminished in recent years. In its place, gas energy has gained some relevance, while renewable energies show only a tiny relative growth.

In Mexico, this transition began with the electricity reform carried out during the administration of Ernesto Zedillo, which allowed cogeneration with the private sector to reduce fuel oil consumption and facilitated investment in renewable energies and selfsupply. The energy reform resulting from the Pact for Mexico was also intended to reinforce the transition to less polluting and renewable hydrocarbon fuels.

This reform was far-reaching: opening to private investment (domestic and foreign) the different phases of production and distribution of oil and petroleum products (which involved auctions of oil fields in which Pemex was given initial preference), the creation of institutions to regulate an energy market with the privileged participation of the CFE for maintaining a monopoly in the transmission and distribution of electricity, the transformation of Pemex and CFE as productive companies of the state (with management, budgetary and patrimonial autonomy and independent board members), as well as the stimulus to the generation of clean and renewable energies, among others (Moreno Brid, Sánchez and Salat 2018). From then on, the generation of clean and renewable energy gradually increased, while oil production by the private sector partially compensated for the drop in Pemex production.

The government of Andrés Manuel López Obrador initiated an energy counter-reform that encompasses administrative, technical, and institutional dimen-

**GRAPH 30. WORLDWIDE ENERGY PRODUCTION PER FUEL** 



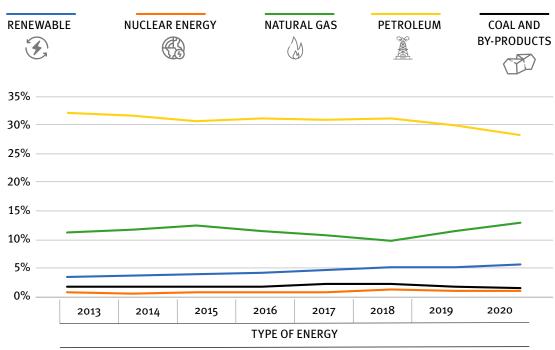
Source: Government of Mexico, (2012-2018).

sions in three activities: electricity generation, oil and natural gas exploration and production, and lithium mining (although the latter has its limitations). The first two actions of significant impact were:

- 1. Cancellation of oil rounds 3.2 and 3.3 for exploration and extraction (oil).<sup>47</sup>
- 2. Cancellation of long-term auctions (electric energy).<sup>48</sup>

The dismantling of the energy market by the current government began by weakening and co-opting the bodies that regulate it (the Energy Regulatory Commission, the National Hydrocarbons Commission, and the National Energy Control Center, among others) and diminishing through these bodies the operation of private sector activities, both ongoing and those planned for the future (Signos Vitales, 2021a). The government also stopped the construction of several gas pipelines, arguing that they were "onerous" contracts, which were renegotiated with the result of

#### **GRAPH 31. MEXICAN ENERGY PRODUCTION PER FUEL**



Source: Government of Mexico, (2014-2020).

<sup>47</sup> Look at https://www.cenace.gob.mx/Docs/MercadoOperacion/Subastas/2018/40%20Acuerdo%20de%20Cancelaci%C3%B3n%20de%20la%20SLP%20N0.1%202018%20v31%2001%202019.pdf

<sup>48</sup> Look at https://www.cenace.gob.mx/Docs/MercadoOperacion/Subastas/2018/40%20Acuerdo%20de%20Cancelaci%C3%B3n%20de%20la%20SLP%20N0.1%202018%20v31%2001%202019.pdf

favoring the construction companies, contrary to the official rhetoric. These pipelines are part of the strategy followed by the Mexican government to provide sufficient natural gas to the entire country, expand the gas entry ports, and reduce energy vulnerability (La Jornada, 2021). According to the Federal Superior Audit Office (ASF), the CFE will end up paying 6.8 billion dollars (mmdd) in addition to those stipulated (157.4% higher than the savings).<sup>49</sup>

The various actions taken by the Federal Executive, the CFE, and the market regulators to reverse the effects of the 2014 energy reform have led to hundreds of constitutional protection lawsuits, most of which were granted in favor of private entities and are still in process (Signos Vitales, 2021a). Rulings in favor of the complaining companies against the Mexican State have already begun to be issued (Vela, 2021). Until 2021, the CFE had a reserve for lawsuits and litigation of 9.6 billion pesos (mmdp). In 2020, this reserve was only 9.8 million pesos (mdp).<sup>50</sup>

From the institutional level, and given the litigiousness of the energy counter-reform, the government passed the Electricity Industry Law through the majority it has in Congress and subsequently reached the Supreme Court of Justice after unconstitutionality actions filed by groups of legislators. The vote did not reach the eight votes necessary to declare it unconstitutional, but it got a simple majority so that subsequent constitutional protection lawsuits and those in the process could proceed in favor of private producers (Signos Vitales, 2022e).

#### **SOME LAW SUITS AGAINST CFE**

9.6 BILLION PESOS

2020 9 MILLION 800 TOUSAND PESOS

T-MEC controversies' resolutions could derive in economic sanctions:

2023-2024: BETWEEN 200 - 600 BILLION PESOS

<sup>49</sup> https://www.asf.gob.mx/Trans/Informes/IR2019b/Documentos/Informes\_simplificados/2018\_ficha\_DE\_a.pdf

<sup>50</sup> https://www.cfe.mx/finanzas/reportes-financieros/Reportes%20Anuales%20Documentos/Reporte%20anual%20 2021.pdf

Also, as a result of alleged breaches of the T–MEC, the United States and Canadian governments began consultations with the Mexican government as a previous step to the constitution of a dispute resolution panel that could result in economic sanctions against Mexico. These sanctions, through tariffs on Mexican exports, could reach between 10 and 30 billion dollars (Energy21, 2022). Up to this moment, consultations have been concluded, and permits have been released to private entities and other matters blocked at the Energy Regulatory Commission, which has partially decreased the tension. The case remains unresolved at the time of writing, and it is very likely that in the event of an unfavorable resolution for Mexico, the following federal administration will pay the price.

It is clear then that the generation of increasingly cleaner energy is being favored globally. Various mechanisms have been devised to promote this transition, with penalties for those who do not make a sufficient effort to reverse the environmental deterioration. There is already talk of taxes or tariffs on those manufacturing and service companies that produce dirty or non-renewable energy to reward countries concerned about promoting clean energy generation. For competitiveness purposes, in the future, it will be necessary for power to be cheap and reliable in its supply, clean and from renewable sources in order not to face sanctions and taxes and to be able to improve the country's export competitiveness, in addition to contributing to the international effort to mitigate climate change.

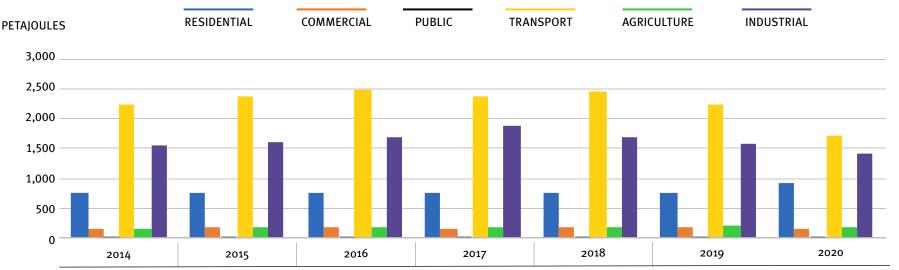
### ENERGY MARKET IN MEXICO

There are multiple obstacles to the operation of the energy market in Mexico. The transition from a market characterized by two monopolistic companies (and monopolistic in some market segments) to an open and competitive market in recent decades has been bumpy and less rapid than expected. This transition, as mentioned above, has been halted by administrative, legal, and institutional measures, or at least has been hindered by the current government, with severe consequences for investment and Mexico's reputation as a country with a reliable rule of law, the outcome of which is still uncertain.

Low economic growth in recent years has marked the low dynamism of energy demand, while international conflicts have affected supply. Natural gas and oil prices have been much higher and more volatile after

**GRAPH 32. ENERGY CONSUMPTION BY SECTOR** 





Source: In-house elaboration with información from Sener (n.d.).

the great confinement (between December 2018 and September 2022, natural gas prices have increased by 95%<sup>51</sup>). However, Mexico continues to enjoy having the United States as its leading natural gas supplier, right next to one of its most important production areas and with access to much cheaper gas than the rest of the world, in addition to the gas pipeline infrastructure installed in past administrations.

The level and destination of energy demand in Mexico are presented below. The transportation sector con-

sumes the most energy in Mexico, followed by the industrial sector and, to a lesser extent, the residential sector. This is why so much emphasis is placed on the energy transition to electric cars and trucks, as the potential for savings is enormous.

In terms of energy consumption for transportation, gasoline is the most relevant in Mexico. Consumption has been declining since 2017 and reached 726 thousand barrels per day (mbd) at the end of 2021. Both because of the pandemic in 2020 and the low dynamism in 2021 and up to the present. Domestic

<sup>51</sup>\_https://www.eia.gov/dnav/ng/hist/rngwhhdM.htm

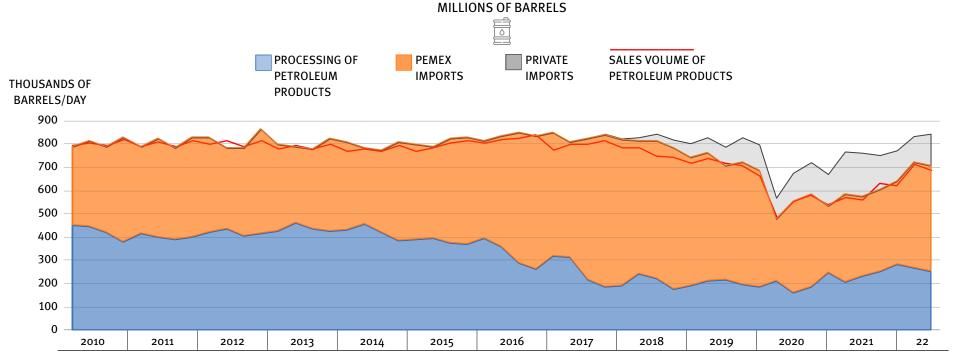
gasoline production went from a peak of 460 MBD in 2014 to 250 MBD in the last quarter of 2021, equivalent to a 45% reduction. With that production level, Pemex barely managed to satisfy 40% of the demand (Graph 33) (Barnés de Castro, 2022).

The rest of the sectors primarily use fundamentally electricity, whose total final consumption has been almost constant since 2018, with a slight reduction in 2020. Graph 34 shows total production and con-

sumption, the difference being the energy loss in transmission and distribution, plus the sector's consumption.

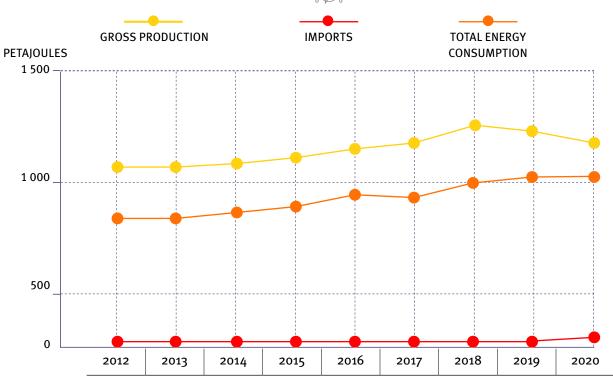
On its side, the energy supply comes from fossil fuels (oil and gas) and alternative sources such as nuclear, hydroelectric, wind, and solar energy. Let us look at the main ones below.

#### **GRAPH 33. PEMEX GASOLINE BALANCE**



Source: In-house elaboration with information from Sener (n.d.).

#### **GRAPH 34. ELECTRICITY**



Source: Government of Mexico, (2012-2018).

Oil production in Mexico has had a downward trend since 2004 due to the depletion of giant oilfields that have not been replenished with new discoveries since investment in exploration is insufficient. According to the same CNH, to increase production from 1.67 to 2.35 mbd during López Obrador's administration (2019–2024), an average of 26.6 billion

dollars (mmdd) should be invested annually. Only Pemex should contribute 19.1 mmdd of the total, and the rest of the private sector (7.5 mmdd).<sup>52</sup> In 2022, the investment will be approximately 16 billion dollars, and in exploration and production, it has fallen

<sup>52</sup> https://www.gob.mx/cms/uploads/attachment/file/514463/Presentacion\_Resultados\_Perspectivas\_Actividades\_Exploracion\_Extraccion\_Hidrocarburos.pdf

extremely short (12.1 billion dollars),<sup>53</sup> only 63.3% of the company's capital requirements. The results of the scarce investment are noticeable. Oil production is barely sustained.

For this reason, and knowing that Mexico has significant reserves located in deep waters, the 2014 energy reform contemplated the auction off access to areas for exploration and, if necessary, exploitation by private companies, given that Pemex does not have the resources (financial and technological) to develop them. It is also known that the exploration of Pemex and production activity has the most significant profit margin in the aggregate, while the refining phase barely had a yield of 3.42 dollars per refined barrel in 2020 and only 0.31 dollars in 2021 (EIA, 2021). Generally, that phase of Pemex's operation, already considering all related company expenses, is loss-making because three of the country's six refineries are not configured to refine heavy crude, the one with the highest production in Mexico. That is why Pemex partnered with the Dutch company Shell in the Deer Park refinery in the United States (specialized in heavy crude), where the latter maintained control of the operation.



Image: "Deep waters, a change of direction" at www.energyandcommerce.com.mx.

<sup>53</sup> https://www.pemex.com/ri/finanzas/Paginas/InversionCifras.aspx

With the construction of the Dos Bocas refinery and the acquisition of the total shares of Deer Park, Pemex's refining capacity (although technically, the refining of crude at Deer Park will be an export of gasoline from the United States to Mexico), including the six existing refineries (Sistema Nacional de Refinación) will have a refining capacity of 2.015 million barrels per day (Mbd) to produce gasoline, diesel, liquefied petroleum gas (LP gas) and fuel oil (and waste), mainly.<sup>54</sup> According to the National Hydrocarbons Commission's estimates, in the best–case scenario, the crude oil production platform will reach a maximum of 2.08 Mbd in 2027, or 1.8 Mbd in its least optimistic projection. From that year onwards, such levels will begin to decrease.

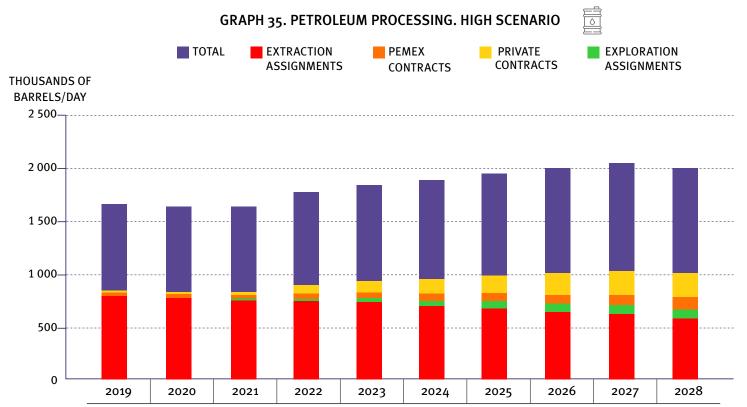
Graph 35 shows that these production levels, paradoxically, can only be increased through the participation of private agents since Pemex's production continues to decline uninterruptedly. According to the National Hydrocarbons Commission (CNH) projections, Pemex will barely produce 1.5 Mbd in 2022 and will be reduced to 1.3 Mbd in 2028, maintaining the downward trend.

Therefore, if these projections materialize, in the best-case scenario, Mexico will be able to use Mexican oil to produce gasoline and diesel until 2027 by using its maximum refining capacity added in this government, which should reach, in the best-case scenario, around 2,015 Mbd.55 After that, and if it can process at total refining capacity, Mexico will have to import oil to supply Pemex refineries with crude oil to produce gasoline and diesel. Therefore, if Mexico wishes to be self-sufficient in gasoline production in the medium term,56 it would have to expand its oil production platform, which would require the resumption of oil rounds and allow the private sector to participate with Pemex, either as a partner or independently, especially to exploit deposits in non-conventional areas. This possibility of exploiting these resources was suspended as soon as President López Obrador's administration began.

<sup>54</sup> This production capacity includes 85% of the capacity of Mexico's six refineries (1,400 Mbd), Deer Park (275 Mbd) and Dos Bocas (340 Mbd).

<sup>55</sup> This figure considers modernization and the best combination of oil to optimize their performance. Currently, the 6 refineries reached 740 mbd, 45% of their nominal capacity (Barnés de Castro, 2022, p. 5).

<sup>56</sup> On the other hand, as the transition to electric vehicles materializes in the medium term, the demand for gasoline would decrease and Mexico would then have to use its surplus refining capacity to export gasoline with imported oil. Would Pemex be competitive enough to be able to do so? It is from this perspective that the criticism of current oil policy and the construction of the Dos Bocas Refinery in particular stems.



Source: CNH (2022).

As for natural gas, Pemex has experienced a systematic drop in its production and therefore has had to rely more and more on imports, which as of July 2022, reached 69% of the national supply, considering Pemex's consumption (89.1% without considering Pemex's demand).<sup>57</sup> The production drop is due mainly because 68.4% of the natural gas extracted

from the subsoil in the country is associated with oil extraction,<sup>58</sup> which has experienced a drop since 2004. Likewise, as of July 2022, Pemex consumes 73.3% of its gas production,<sup>59</sup> so the private sector must import all the gas it requires, much of it for the combined cycle plants that produce electricity, which

<sup>57</sup> https://sih.hidrocarburos.gob.mx/

<sup>58</sup> https://sih.hidrocarburos.gob.mx/

<sup>59</sup> https://sih.hidrocarburos.gob.mx/

is sold to the CFE. Thus, since Pemex is the primary consumer of the gas it makes, it becomes a powerful extractor of energy resources (Table 24).

Although dependence on imported gas is very high, Mexico is fortunate to be next to the world's leading producer of natural gas, which offers it at the lowest prices in the world. The volume imported by Mexico is 33.8% of U.S. exports (EIA, 2021), and it is currently its primary customer despite the effects of the war

| TABLE 24. NATURAL GAS BALANCE  |          |          |          |          |          |          |          |  |  |  |  |
|--|----------|----------|----------|----------|----------|----------|----------|--|--|--|--|
| GAS  | 2015     | 2016     | 2017     | 2018     | 2019     | 2020     | 2021     |  |  |  |  |
| NATURAL GAS AVAILABLE IN THE COUNTRY (MILLION CUBIC FEET PER DAY MMPCD FOR ITS ACRONYM IN SPANISH) | 7 676.28 | 7 886.66 | 7 982.19 | 8 198.24 | 8 369.24 | 8 174.68 | 8 252.44 |  |  |  |  |
| DRY GAS PRODUCTION   | 4 009.98 | 3 540.74 | 3 054.16 | 2 738.01 | 2 615.97 | 2 473.92 | 2 312.31 |  |  |  |  |
| TOTAL GAS IMPORTS  | 3 609.46 | 4 318.55 | 4 924.12 | 5 456.78 | 5 751.96 | 5 692.36 | 5 929.45 |  |  |  |  |
| PEMEX IMPORTS  | 1 415.84 | 1 933.87 | 1 766.05 | 1 316.53 | 9 65.87  | 853.06   | 904.6    |  |  |  |  |
| IMPORTS NOT CARRIED OUT BY PEMEX   | 2 193.62 | 2 384.68 | 3 158.07 | 4 140.24 | 4 786.1  | 4 839.3  | 5 024.86 |  |  |  |  |
| PEMEX TOTAL DEMAND   | 2 236.07 | 2 154.69 | 2 201.12 | 1 993.68 | 1 978.73 | 2 021.83 | 2 057.39 |  |  |  |  |

Source: In-house elaboration with information from Sener (n.d.)

in Ukraine. In addition, the pipeline connection keeps its cost at the lowest possible level. According to the U.S. Energy Information Administration (EIA), the average price of exporting by pipeline to Mexico in July 2022 is US\$6.79 per thousand cubic feet (mpc), while doing so by ship (methane tanker) costs almost twice as much (US\$12.76 per mpc) (EIA, 2021). For this reason, Mexico has promoted a network of gas pipeline creation to provide energy to the country, built over the years. Until 2012, 11,347 km of gas pipelines were operating (9,118 km run by Pemex and 2,229 km operated by third parties); between 2012 and 2018, 4,639 km of gas pipelines were added to the national network (Sener, 2018); by 2019, 1,224 km more were concluded (South Texas - Tuxpan and La Laguna -Aguascalientes), which started in the last administration (Sener, 2019).

As will be recalled, at the beginning of this administration, the CFE forced the renegotiation of existing contracts for constructing and operating new gas pipelines. This led to an international confrontation that resulted in new contracts with a 10-year longer concession duration for the operators<sup>60</sup>. The construction of these pipelines has been very uneven,

At the beginning of this administration, the CFE forced the renegotiation of existing contracts for constructing and operating new gas pipelines. This led to an international confrontation that resulted in new contracts with a 10-year longer concession duration for the operators.



Image: "Gas pipeline La Laguna – Aguascalientes starts operations" at www.globalenergy.mx.

<sup>60</sup> https://www.asf.gob.mx/Trans/Informes/IR2019b/Documentos/Informes\_simplificados/2018\_ficha\_DE\_a.pdf

and only in January 2022 have they started to operate, as is the case of the Guaymas–El Oro pipeline in the state of Sonora. Despite these problems, the CFE continues to consider expanding the gas pipeline network in the country's interior, with the majority participation of foreign companies (Juarez, 2022). Despite progress, the Mexican network is relatively precarious in Mexico. It ranks 46th in the world, with 8.8 kilometers of pipelines per 1000 square kilometers (Global Energy Monitor, 2022), a quarter of the infrastructure in the United States.

The straw that probably broke the camel's back in Mexico–U.S. energy relations in June of this year was the attempt by the CFE and Pemex to gain a monopoly in the commercialization of natural gas.<sup>62</sup> If they were to achieve this, they would have absolute control of the national supply, which would not level the playing field for competitors in the electricity market. It should be remembered that the Mexican electricity industry is natural gas intensive, and CFE would supply natural gas to its competitors. Fortunately, especially for the Mexican economy, this administrative decision did not go forward, and its

The straw that probably broke the camel's back in Mexico-U.S. energy relations in June of this year was the attempt by the CFE and Pemex to gain a monopoly in the commercialization of natural gas.

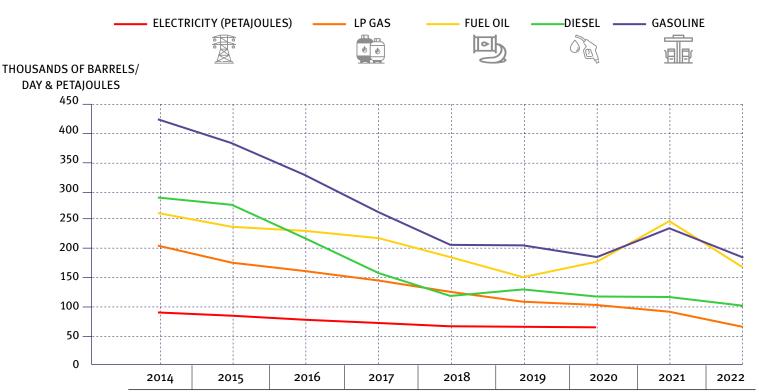
effects and consequences were suspended by the Supreme Court of Justice of the Nation (SCJN) in September of the same year.

It can be seen then that electricity generation had a growing diversification in terms of its origin and the participation of private investors as a consequence of President Ernesto Zedillo's reform. Unfortunately, in the new government, the CFE has continued to send fuel oil to its generating plants and a lesser extent, coal, which is highly polluting since it is close to a third of what our refineries currently produce. It is necessary to reconfigure several old refineries to produce more gasoline and less fuel oil. However, the process has been prolonged, it is highly costly (approximately 6 billion dollars according to specialists consulted by Signos Vitales), and its future is uncertain due to the energy transition that is taking place in the world. The use of renewable energy sources began to grow, but with the counter-reform,

<sup>61</sup> https://app.cfe.mx/Aplicaciones/OTROS/Boletines/bolet-in?i=2452

<sup>62</sup> https://boletin-gestor.cenagas.gob.mx/gestioncomercial/tcps/Sener.100-195-2022.pdf

#### **GRAPH 36. ENERGY SOURCES IN MEXICO**



Source: In-house elaboration with information from Sener (n.d.)

they have stagnated. The lawsuits filed by companies and the results of the consultations and possible panels for alleged violations of the T-MEC convened by the governments of the United States and Canada are still far from being concluded, with an uncertain outcome.

There is no doubt that the future will require a significant increase in the supply of clean, sustainable, and inexpensive energy for environmental and economic reasons, as well as for access and participation in the international community.

## ROLE OF THE ENERGY SECTOR IN PUBLIC FINANCES

Since the seventies of the last century, oil revenues have become very important for public finances. The oil boom of those years, during the presidency of José López Portillo, increased the production platform from around 1 to 3 Mbd. At the same time, the increase in international oil prices gave Mexico oil revenues never seen before. Since then, governments have depended heavily on them to a greater or lesser extent.

Oil revenues come from two primary sources: revenues from the exploitation of oil as a national patrimony, also called rents or rights for the exploitation of a natural resource, and taxes on Pemex as a company, both ISR and VAT, and the special tax on the production of gasoline and diesel (IEPS). The first, rents, are the fees charged by the federal government to companies in the energy sector for exploiting natural resources that are the property of the Nation (See Table 25). The latter are the taxes that must be paid by any company engaged in producing and selling something, regardless of nationality. On the other hand, special taxes on production, which

this year have become subsidies, are paid by the consumer irrespective of whether it is gasoline and diesel produced by Pemex or imported by any other company, domestic or foreign. Throughout the last 50 years and until Enrique Peña Nieto's tax reform, oil revenues (rents and taxes) fluctuated between 25 and 35% of public revenues.

The importance of Pemex and oil revenues in the Federation's income was substantially modified during the administration of Enrique Peña Nieto. In order to properly distinguish Pemex's contribution to the Mexican State's income, and through the conversion of Pemex into a State productive company, it was clearly identified what constituted the income of the national wealth formed by the value of the exploitation of the oil and gas reserves in the subsoil, on the one hand, and the taxes that, like any company, it should cover, on the other. Thus, after the reform, oil revenues, i.e., oil income, reached around 10% of the federal government's budgetary income, which comes from national and foreign companies (Table 25).

TABLE 25. FEDERAL GOVERNMENT BUDGETARY REVENUES, OIL AND NON-OIL MULTI-YEAR CURRENT PESOS (2012–2021), PERCENTAGE STRUCTURE (CUMULATIVE FLOWS)

| CONCEPT   | PERCENTAGE STRUCTURE |       |       |       |       |       |       |       |       |       |       |
|---|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|   | 2012                 | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 2021  | 2022* |
| TOTAL   | 100.0                | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Tankers 1_/   | 37.6                 | 31.9  | 27.0  | 13.0  | 8.6   | 11.4  | 14.0  | 10.8  | 4.9   | 8.4   | 11.7  |
| Transfers from the Mexican oil fund for stabilization and development | 0.0                  | 0.0   | 0.0   | 12.5  | 8.6   | 11.5  | 14.0  | 10.8  | 4.8   | 8.5   | 11.6  |
| ISR of contractors and assignees                                      | 0.0                  | 0.0   | 0.0   | 0.2   | 0.0   | -0.1  | 0.0   | 0.0   | 0.0   | 0.0   | 0.1   |
| Nontankers  | 62.4                 | 68.1  | 73.0  | 87.0  | 91.4  | 88.6  | 86.0  | 89.2  | 95.1  | 91.6  | 88.3  |
| Tax revenues  | 53.6                 | 57.8  | 62.6  | 74.3  | 76.1  | 74.4  | 79.1  | 79.9  | 81.7  | 82.6  | 80.6  |
| ISR-IETU-IDE  | 32.8                 | 35.0  | 33.2  | 38.3  | 39.8  | 40.9  | 43.0  | 42.1  | 43.1  | 43.9  | 48.7  |
| Added Value   | 23.6                 | 20.6  | 23.1  | 22.2  | 22.2  | 21.3  | 23.8  | 23.3  | 24.2  | 26.0  | 26.3  |
| Production and services   | -5.3                 | -0.3  | 3.9   | 11.1  | 11.5  | 9.6   | 9.0   | 11.5  | 11.3  | 9.2   | 1.7   |
| Gasoline and diesel fuels   | -8.3                 | -3.2  | -0.4  | 6.9   | 7.8   | 5.6   | 4.8   | 7.4   | 7.3   | 5.2   | -2.4  |

*Note*: 1\_/It includes the rights over hidrocarbons until 2014. From 2015 on, it includes the transfers from the Mexican Fund for Petroleum Stabilization and Development and taxes paid by contractors and assigned for hidrocarbon exploitation.

Source: In-house elaboration with información from SHCP (2022b).

Between 2019 and September 2022, oil income reached one trillion 411 billion pesos. That is to say, given an extraction of 2,320 million barrels of oil in that same period, each barrel extracted left Mexicans 608 pesos or around 30 dollars. It is, without a doubt, the best business for Pemex and Mexicans.

On the other hand, the federal government has historically contributed to Pemex, especially during López Obrador's administration, to keep its operation afloat. As of the third quarter of 2022, the company barely has 3.1 billion dollars in cash to face short—term financial obligations of 20.7 billion dollars.<sup>63</sup> This type of operation is not exclusive to this administration; under Enrique Peña, in 2014, it was negotiated with the company to contribute an amount equal to the actuarial savings of a pension reform of Pemex workers for future hiring. Pemex negotiated with its union the reform, which, together with the Federation's contribution of 160.7 billion pesos<sup>64</sup> in 2016, managed to reduce the company's labor liability from 1.5 trillion to 1 trillion pesos (Cárdenas, 2018).

During this government, fiscal contributions to Pemex have been increasing, but there has been no commitment from the company to improve its operations' efficiency. In the first four years of this government, the Federation has made equity contributions to Pemex for 792.3 billion pesos for its operation<sup>65</sup>. Of these contributions, 175.8 billion pesos,<sup>66</sup> 22.2%, have been allocated to the Dos Bocas Refinery (RBD) through the Ministry of Energy. Thus, the company's capital needs have been covered with contributions instead of debt, as was the past administration case. In one way or another, the federal government internalizes part of the short–term liabilities in the federal budget, exchanging dollar–denominated debt for pesos.

The construction of the Dos Bocas Refinery is the responsibility of the Ministry of Energy, which has exceeded the original budget of 8 billion dollars. Various sources estimate that this may double due to inadequate strategic planning of the work and the increase in the price of its inputs. The idea that the

<sup>63</sup> https://www.pemex.com/ri/finanzas/Reporte%20de%20 Resultados%20n0%20Dictaminados/Reporte%203T22.pdf

<sup>64</sup> https://www.cefp.gob.mx/publicaciones/nota/2018/notacefpoo32018.pdf

<sup>65</sup> https://imco.org.mx/pemex-en-la-mira-analisis-de-los-resultados-financieros-y-operativos-de-petroleos-mexicanos-al-segundo-trimestre-de-2022/#:~:text=Entre%20enero%20de%202019%20y,ese%20periodo%20 (503.8%20mmdp).

<sup>66</sup> https://imco.org.mx/refineria-de-dos-bocas/

cost may be at least double what was planned is not unreasonable when the work did not include several components of the project since its design, as documented by the ASF, highlighting at least two: access roads and energy sources (natural gas). If this refinery does not have access to energy sources, it will hardly be able to start operations.

Thus, the net oil income from federal contributions to Pemex will reach, between 2019 and September 2022, years in which the average price of Mexican oil was 59 dollars per barrel, 602.1 billion pesos.<sup>67</sup> The extraction of 2,320 million barrels of oil in that same period left each Mexican 4,777.7 pesos or around 235.3 dollars in almost four years. If we calculate the income obtained by the Mexican State for each barrel extracted, with an average price of 59 dollars, the net income extracted from each barrel was 259 pesos, about 13 dollars. Therefore, if oil prices fall below 46 dollars per barrel, the net income would reach zero.

On the other hand, regarding gasoline subsidies, it is necessary to point out that the fall in international oil prices since 2014 had a double effect: on the one hand, revenues from foreign sales decreased, and,

# NET OIL INCOME FROM FEDERAL CONTRIBUTIONS TO PEMEX

2019-SEPT 2022:

The income obtained for each barrel extracted, with an average price of 59 dollars per barrel, was of 13 dollars, equivalent to 259 pesos.

If oil prices fall below 46 dollars per barrel, the net income would be negative.

<sup>67</sup> https://www.banxico.org.mx/SieInternet/consultarDirectorioInternetAction.do?sector=25&accion=consultar-CuadroAnalitico&idCuadro=CA405&locale=es

on the other hand, the costs of gasoline and diesel imports decreased. Since Pemex supplied half of the demand with its production and the other half was imports, its sales cost decreased, almost entirely offsetting the impact of the fall in crude oil prices. It was then that the government decided to eliminate the traditional gasoline subsidy, which had reached a peak of around 1.8% of GDP in 2008, and is highly regressive (it favors those who consume the most gasoline, which is usually the richest). The government decided to keep gasoline prices to the public relatively constant even though its cost had been reduced internationally. The difference between the selling price (of Pemex and any other importer) and the selling price to the consumer then became a tax on gasoline consumption, already foreseen as a special tax on the production of diesel and gasoline. As a result, the IEPS collection on petrol and diesel grew from nothing in 2013 to 187.7 billion pesos in 2018.68 Naturally, as the international price of crude oil rose, so did the price of gasoline, the "gasolinazo," which harmed society and was exploited politically.

Variations in the price of crude oil, and the consequent variations in the price of gasoline, force the

Ministry of Finance to adjust the tax or subsidy (positive or negative IEPS), which impacts the price of gasoline to the consumer. From the increases in the price of oil and imported gasoline, the current government decided to try to keep gasoline prices fixed in real terms (they would only increase by inflation), so the former IEPS on gasoline and diesel, which produced 187.7 mmdp in 2018,69 has become a subsidy that reached 85,708 million between January and September 2022. (Table 25) The government has justified this policy as an instrument to contain the inflationary process. The Ministry of Finance estimated that, in the absence of these subsidies, the inflationary rate would be 2.6% higher than the one we recorded, and the average monthly salary would be 12% lower.70

Thus, from the point of view of public finances, oil revenue contributed 332 billion pesos on average

<sup>68</sup> http://presto.hacienda.gob.mx/EstoporLayout/estadisticas.jsp

<sup>69</sup> http://presto.hacienda.gob.mx/EstoporLayout/

<sup>70</sup> https://www.gob.mx/shcp/prensa/comunicado-no-56-sin-el-apoyo-fiscal-a-los-combustibles-la-inflacion-estaria-2-6-por-arriba-y-el-salario-seria-12-menor#:~:-text=Comunicado%20No.-,56%20Sin%20el%20apoyo%20fiscal%20a%20los%20combustibles%2C%20la%20inflaci%C3%B3n,el%20salario%20ser%C3%ADa%2012%2-5%20menor&text=El%20secretario%20de%20Hacienda%20present%C3%B3,y%20la%20Carest%C3%ADa%20(PACIC).

per year in 2019-2021<sup>71</sup> On the other hand, Pemex and CFE received 484.7 billion pesos of capital contributions from the federal government in the same period, so oil revenues no longer represent a significant lever for Mexico's development. Instead, it seems that the operation of Pemex absorbs fiscal resources that dwarf the Mexican State's capacity to provide public services in quantity and quality for the population and even to promote the production and self-sufficiency of clean and renewable energy. In the Federal Expenditure Budget for 2023, the energy sector absorbs 19.6% of the total (1.17 billion pesos) and is 192.4 billion pesos more than the budget allocated to education, culture, and sports.72 Pemex and CFE (to a lesser extent) are absorbing resources from Mexicans' taxes that could be used for other purposes, such as security, education, health, pensions, communications, transportation, and environmental care.



*Image*: "Pemex brand is sinking among other gas stations in Mexico" Photo: Bloomberg/Mauricio Palos at www.bloomberglinea.com.

<sup>71</sup> http://presto.hacienda.gob.mx/EstoporLayout/

<sup>72</sup> https://www.ppef.hacienda.gob.mx/work/models/8uLX-2rB7/PPEF2023/mo2h2PK/paquete/politica\_hacendaria/ CGPE 2023.pdf

### PEMEX, CFE FINANCES, AND FEDERAL CONTRIBUTIONS

Pemex has been in a highly delicate financial and production situation for years, which motivated the energy reform during the federal administration of Enrique Peña Nieto (EPN). Under the new federal administration, the change, of course, is notorious. At least two strategies can be distinguished that go in totally opposite directions to said reform:

- 1. Clean-up of Pemex's liabilities through internal savings.
- 2. Internalization of domestic oil production (reduction of exports)

Pemex's financial condition is totally opposite to that of the national public finances, with all its inefficiencies and negative social implications in the recent federal administration. Perhaps one of the most striking characteristics is the composition of debt by the holder. Of the government securities, 84% are held by nationals, while approximately 85% of Pemex's debt is in currencies other than the peso, 73% dollars, and 10% euros. Only during the second half of 2022, 78.3% of debt maturities are denominated in currencies other than the peso.

If the federal government's objective is to clean up Pemex's finances, it must restructure its debt, either in terms or in currency.

This condition generates an overexposure of the company to exchange rate variations (especially the peso against the dollar). Debt (short and long-term) makes up 54.5% of the company's liabilities. Therefore, any variation, no matter how small, must be offset by increases in assets or equity contributions. As of the third quarter of 2022, the federal government has made contributions of 3.3 billion dollars. This implies that the federal government has transferred liquid resources to liquidate the short-term debt, which amounted to 72 billion pesos as of the third quarter of the same year; the rest of the company's maturities were refinanced with bank loans (approximately 348 billion pesos). This has resulted in a -5.2% financial debt balance concerning the figure at the end of 2021, but the contraction of short-term debt is almost three times greater (-14.6%).

Therefore, if the federal government's objective is to clean up Pemex's finances, it must restructure its debt, either in terms or in currency. Thus, more excellent stability (stronger peso) allows the same government to pay debt denominated in dollars or euros at a relatively lower cost. This leads us to another conclusion, and the federal government is the most interested in anchoring the exchange rate when it wants to convert debt denominated in other currencies (Pemex's) for peso debt, which also shows that the socalled Pemex bailout will continue in the remainder of 2023 (equity contributions). This strategy allows exchanging short-term debt at a lower cost to the public treasury and, in turn, has a more significant impact on the decrease. For example, if the exchange rate were at 24 pesos per dollar, the reduction in dollar-denominated debt would be 3 billion dollars instead of 3.3 billion dollars, i.e., the reduction would be 10% lower. Another example is what happened in 2020. During the great confinement, the peso depreciation caused the company to have an exchange loss of -122.1 billion pesos (24% of the total net loss in that year).

Given the above, and in line with the policy followed by the federal government itself, we expect that in 2023 this strategy will be much more aggressive than in previous years, i.e., liquidating debt through equity contributions from the Mexican State. In this sense, the fact that the amount of Pemex's debt is so high (2.1 bp) does have implications for the country's growth, given that, in practice, what we are seeing is the internalization of the company's debt in the public treasury (7.5% of GDP as of the first half of 2022). So it is feasible that the amount of debt in dollars will end at a lower level than that observed at the end of 2018. If Pemex continues on this path, it represents the most significant problem and risk for Mexican public finances in the short and long term because it anticipates the consequent continuity of government inaction in different areas of utmost importance for the country's development, given its budgetary restrictions.

The strategy of internally increasing the refining volume is the worst option for the company. The refining process in Mexico (in the SNR) implies producing at a loss since around 30% of the refined product is waste. Given that the market price of this waste is lower than the market price of the same input with which it is produced (oil), the inefficiency that this represents is evident. These wastes have two main destinations: abroad (exports) and CFE. Furthermore, in both cases, the sale value of fuel oil is lower than the value of a barrel of oil.

Since the beginning of López Obrador's administration, oil exports have decreased. As of the fourth two-month period of 2022, exports were 988.2 thousand barrels per day (mbd); in the last two-month period of 2018, they were 1.17 million barrels per day (Mbd) (variation of -15.3%). On the other hand, the volume of crude oil processed in the SNR was 514.8 mbd in the last two-month period of 2018, and as of the fourth two-month period of 2022, this volume is already 819.7 mbd (variation of 59.2%). This variation corresponded to an increase of 46.3% in gasoline production and 52.1% in diesel production. However, waste has increased by 66%. The growth rate of waste is higher for each barrel of crude oil processed compared to products of greater commercialization (and value), which results in losses for the company if the current conditions of the SNR are maintained.

During the last sexennium, there was a certain balance between the federation transfers made to Pemex and CFE; 44% of the investments made by the Ministry of Energy went to Pemex, and another 56% to CFE. Nevertheless, in this six–year term, such investments have been totally turned to the former. So far, during López Obrador's administration, 100% of financial investments have gone to Pemex (188.7 billion pesos on average each year). In 2021 alone, Pe-

#### PETROLEUM IN THE ACTUAL ADMINISTRATION

#### **OIL EXPORTS DOWNWARDS**

July-August 2022 988.2 thousand barrels/day

Nov-Dec 2018 1.17 million barrels/day



Exports decrease of -15.3%

### PETROLEUM PROCESSED IN THE NATIONAL REFINERY SYSTEM

July-August 2022 819.7 million barrels/day

Nov-Dec 2018 514.8 million barrels/day

...... Increase of 46.3% in gasoline production



The wastes have increased by 66%

#### THIS POLICY INCREASES PEMEX LOSSES

mex received 358 billion pesos and, as pointed out by México Evalúa, 307 billion pesos without Congressional approval.<sup>73</sup> In other words, CFE has not benefited

<sup>73</sup> https://www.mexicoevalua.org/estimado-gobierno-deja-

from the federal budget as Pemex has in the current federal administration. With the exception that CFE continues to receive the subsidy for domestic consumption at a rate of 76.6 billion pesos<sup>74</sup> and that, according to the PEF 2023, said the company would receive for the first time in this six–year term an equity contribution of 30 billion pesos.<sup>75</sup> Unfortunately, a little more than 50% of these subsidies do not benefit domestic users<sup>76</sup> since they are intended to cover transmission inefficiencies (losses).

On the other hand, transfers drop, and the abandonment of the national electricity sector is reflected in the fall in investment in this sector, which in turn is reflected in the value of construction reported by INEGI, which is close to historic lows since records began. In this sense, the bad administrative and management decisions made by CFE are assumed by itself, with devastating consequences on the economy, as happened recently due to the cut—off of natural gas from the United States. As Rosanety Barrios comments,

everything indicates that the company speculated<sup>77</sup> the price of this input during the winter, and the consequences were felt in the most prosperous region of the country, the north. According to Banxico, during the first quarter of 2021, interruptions in the supply of natural gas and electricity could have subtracted 0.22% from the country's GDP growth rate concerning the previous quarter. By regions, the highest estimated impact was obtained in the northern region, where an effect of 0.28% is estimated on its quarterly growth rate.<sup>78</sup>

Since EPN's energy reform, Pemex's workforce has been shrinking. The recent administration did not maintain such a trend, it has stagnated, and the growth rate results in 1.2% between 2018 and 2023. Pemex expects the number of jobs for 2023 to be 112.8 thousand,<sup>79</sup> when these were 111.5 thousand in

de-jugar-a-ser-empresario/

<sup>74</sup> https://www.ppef.hacienda.gob.mx/work/models/8uLX-2rB7/PPEF2023/mo2h2PK/paquete/egresos/Proyecto\_Decreto.pdf

<sup>75</sup> https://www.ppef.hacienda.gob.mx/work/models/8uLX-2rB7/PPEF2023/mo2h2PK/docs/18/r18\_ep.pdf

<sup>76</sup> https://www.asf.gob.mx/Trans/Informes/IR2019b/Documentos/Informes\_simplificados/2018\_ficha\_DE\_a.pdf

<sup>77</sup> https://mexicocomovamos.mx/animal-politico/2022/08/reporte-al-2t-2022-de-la-comision-federal-de-electricidad-un-deterioro-esperado/

<sup>78</sup> https://www.banxico.org.mx/publicaciones-y-prensa/reportes-sobre-las-economias-regionales/recuadros/%7 B4C302479-9935-9CC8-7251-84D210B8B76A%7D.pdf

<sup>79</sup> https://www.ppef.hacienda.gob.mx/work/models/8uLX-2rB7/PPEF2023/mo2h2PK/docs/52/r52\_tyy\_appecd.pdf

2018<sup>80</sup> and 126.5 thousand in 2016.<sup>81</sup> The weight of salaries and especially the benefits that these exert on the company's results are significant. As of the third quarter of 2022, workers' pensions represent 29.3% of the company's total liabilities (\$77.3 billion out of \$192.8 billion). However, together with debt, they represent 94.7% (140.9 billion dollars) of the company's long-term liabilities.

However, as we commented, the effect of the exchange rate variation (appreciation) has allowed the company's liabilities to decrease -5.5% in dollars, even though the labor force is almost at the same level or even growing. All of this, even though the suppliers' account (short–term liabilities) has increased by 15.5% in the last year. In fact, Pemex has expanded its commercial debt (suppliers) to a greater extent than the rest of its liabilities, which suggests that to stop the debt from increasing –in addition to the equity contributions and the variation in exchange rates– it has been necessary to take on commercial debt. Despite the company's good results in the previous quarter, it had to exchange commercial debt for

financial debt, which called into question its liquidity despite increasing oil prices.



Image: "Pemex increases refining level"energyandcommerce.com.mx:

Regardless of Pemex good resultsfrom July to septiembre 2022, it had to exchange commercial debt for financial debt, which called into question its liquidity despite increasing oil prices.

<sup>80</sup> https://www.pef.hacienda.gob.mx/work/models/ PEF2018/docs/52/r52\_tyy\_appecd.pdf

<sup>81</sup> https://infosen.senado.gob.mx/sgsp/gaceta/63/3/2018-04-24-1/assets/documentos/PEMEX\_IN-FORME\_ANUAL\_2017.pdf

### COMMENTARY ON THE POLITICAL WEIGHT OF THE UNIONS

Both the Pemex and CFE unions have played a relevant political role in the history of Mexico. Since the expropriation of the oil industry in 1938 by President Lázaro Cárdenas, the Pemex workers' union played a relevant role in the company's operation and reserved a series of perks for itself that, over time, tended to increase and consolidate. The unions of the two companies, and that of the now defunct Compañía de Luz y Fuerza del Centro, the Sindicato Mexicano de Electricistas (SME), were for many years the mainstays of Mexican corporatism.

The union in each company has always had deputies and senators in Congress, has been able to control its operations internally with little adequate access from general management (political rather than technical designation) in many operational decisions, has resisted government attempts to curtail and reduce its personnel, and has adapted to changes in legislation



Image: "The petroleum union struggles against Pemex for vacancies and accidents at work". Photo: Carlos Cabal/Cuartoscuro at www.elpais.com

over the years without losing its strength and mobilization capabilities. Its strength lies in the ever-present threat of stopping energy flow to the country by controlling this strategic sector.

Despite the labor reform that has allowed certain democratization in its internal election processes in the union leadership's recent elections, the great majority of the various sections leaders and the Sindicato de Trabajadores Petroleros de la República Mexicana leadership continue to be the old elite from the PRI years members that have always controlled the state—owned company. Once again, it is managing to resist the legislative changes that they want to impose from outside.

<sup>82</sup> The origin of the union's strength lay in its initial role in keeping the expropriated companies in operation in the months and years following the expropriation decree, and the union was successful in containing the central government's attempts to take full control of Pemex (Cárdenas, 2012).

#### MEXICO'S ENERGY DILEMMA

The situation of the energy sector, state—owned companies, and the current government's energy policy pose a dilemma that the Mexican government will face in a few years. It has become clear that if the current policy continues, without relevant investments in the sector to increase the capacity to generate clean, sustainable, and quality energy at low cost, the availability of energy with the quality required by the country will be insufficient. The eventual revival of the economy, which is essential to make the country viable, will require more energy that is also sustainable and covers the attributes of an economy linked to the exterior.

Mexico also requires an effective energy security policy in a changing and multipolar world. There are no real energy security dilemmas: it requires domestic production and adequate access to a diversity of energy sources from different and multifaceted origins capable of providing energy throughout the country. In other words, multiple ports of entry and a fully integrated distribution network are required. The impact of Russia's invasion of Ukraine has highlighted the characteristics that an energy security policy should include: diversification of energy sources, storage capacity, and affordable costs.

Given the limitations in the national energy supply, to satisfy domestic demand, massive imports of various energy products, both primary and derived, will have to be made, and private investment (domestic and foreign) in hydrocarbons and electricity will have to be increased, including for reasons of national energy security. In order to promote such investment, the energy reform of the Pact for Mexico will have to be recovered, indeed with adjustments to make it more aggressive and audacious. In other words, given the decreases in oil production by Pemex and electricity production by the CFE, and the growing dependence on imported gas, the private sector must enter the

Image: "Pemex raises to maximum the emission of polluted gases" at www. expansion.mx



DIAGNOSIS OF MEXICO: DARK PERSPECTIVES :: 209

fray as it began to do in recent years. It is the only possibility to exploit existing deep water reserves and make exploring new oil and gas fields more efficient and less risky.

The need for fossil fuels, mainly gasoline and diesel, will become less and less due to the energy transition the world is undergoing. European countries are scurrying towards hybrid or flat—electric land transportation similar to what is already being promoted by the U.S. government with President Biden's project. The transition from fossil fuels to renewable energies—due to the climate change already affecting the entire world—will tend to accelerate rather than stop, with additional costs for countries that fall behind in this transition.

While demand for gasoline and diesel will increase less and less and then begin to decline, electricity demand will continue to grow and eventually replace a high proportion of fossil fuel consumption. Therefore, regardless of these trends, Pemex and CFE need private investments for Mexico to achieve these levels of energy availability with its means and take advantage of the natural resources of wind and sun.

For public finances sustainability, which the capital injections have depleted from the Federation into

CFE and Pemex, which will continue if there are no structural changes in the State-owned companies and for minimum principles of competitiveness-Pemex and CFE should be reduced and concentrated in those areas in which they are more competitive and where it is convenient to have State control. Nevertheless, this requires a political negotiation with the three unions (including the SME) to accept this downsizing, which would reduce their union and political strength and relevance. Historically, this has not been possible until now. There is an enormous resistance that is difficult to overcome. Therefore, to resize the state-owned productive enterprises, a great deal of force from the central government (which could include the power of the military) is required to persuade or subtract opposition from the unions, with unpredictable political consequences.

Furthermore, this is where the dilemma that the Mexican government will eventually have to face arises: either it confronts the unions to make the structural changes that Pemex and the CFE need more and more, or they decide to procrastinate the problem in order not to face the difficult situation and try to postpone the solution until an energy crisis breaks out. This crisis could manifest itself in increasingly frequent and prolonged blackouts, shortages of gas-

oline, electricity, and other fuels, fiscal crisis due to the financial weakness of Pemex, and, or CFE, economic contraction due to the lack of energy.)

In the past, the governments in office have generally rejected confrontation with the unions, except for extinguishing the Compañía de Luz y Fuerza del Centro by the government of Felipe Calderón. Instead, governments have preferred to look for alternatives to procrastinate, to "kick the can" as much as possible. As part of that procrastination, a new government could reverse President López Obrador's energy counter–reform and return to the status quo of the 2014 energy reform, but more aggressively. For example, accelerate the orderly resizing of Pemex and CFE. That would give more time to make the required changes (which will require a lot of economic resources) and, hopefully, could minimize the union conflicts that will be costly.

If the counter-reform cannot be reversed, then the only thing left to do is to postpone the outbreak of the crisis as long as possible, and when it happens, the crisis will be much worse. We have numerous examples of the costs of postponing problems, such as those of 1982 and 1994. The seriousness of its repercussions is unpredictable, but an energy crisis, by

The dilema of the Mexican government:
either it confronts the unions to make the structural
changes that Pemex and the CFE need, or they decide
to procrastinate the problem in order not to face
the difficult situation and try to postpone the solution
until an energy crisis breaks out.

definition, implies a drastic deterioration of the economy and social welfare: blackouts with the costs that this implies, companies that lose competitiveness, investments that are driven away from the country, higher gas and gasoline prices, deterioration of public finances that would make them unsustainable as long as Pemex and CFE are not separated from the central finances, and a long etcetera. The repercussions would be enormous.

Historical experience also shows that, once the crisis has erupted with the consequences mentioned above, the government (in office) would have the public legitimacy to reverse the energy reform, negotiate more forcefully with the unions and make the structural transition of the state—owned productive

enterprises to make the energy sector viable in the medium term.<sup>83</sup>

There is always the option that a less radical government than López Obrador's, or by external pressure through the T–MEC, the new government returns to the 2014 energy reform without affecting the unions directly in the short term, as happened in 2013. Nevertheless, as time goes by, the authority will have to find a way to resize Pemex and CFE so that they can survive in an increasingly challenging environment.

#### **LEGACY FOR NEW GENERATIONS**

Limitations in energy production, distribution, and security constitute a brake on the country's development. The operability of the economic system depends on energy; it affects our health and places obstacles to sustainable prosperity and inclusion. The so-called oil wealth is no longer what it was in the last third of the 20th century. The rents it can produce for Mexicans are no longer significant and instead show the need to make the State's productive

enterprises much more efficient and competitive. The constant operating losses, the labor liabilities, and the technical bankruptcy observed in Pemex call for its profound transformation since it is not only cashing in on Mexico's oil wealth, but it is increasingly necessary for the Federation to provide Pemex with capital income. With a relatively high price of 60 dollars on average in the last four years, the net income from federal contributions barely reaches 13 dollars per barrel or a little more than 1200 pesos per inhabitant per year.

In addition, this government's energy policy is bringing the need for such transformation closer. Its operation is becoming increasingly onerous, and its recent concentration in the least profitable product line is refining. As if that were not enough, the current policy that has favored the burning of fuel oil directly affects air quality due to the pollution it produces. By increasingly favoring fossil fuel energy, Mexico is moving further and further away from achieving the goals set out in the Paris Agreement, and its contribution to climate change is practically nil. The impact of reduced investment in sustainable energy wasted solar irradiation, and wind power potential represents a burden for this and future generations.

<sup>83</sup> For example, after the 1982 crisis, there was no alternative but to open up the economy and initiate a course of less State involvement in the economy, which made it unviable in the medium term.

Finally, the course to be followed will necessarily be very eventful. As national energy sources are depleted, it will become more urgent to retake the principles of the 2014 energy reform, which inevitably implies the resizing of Pemex and CFE, with the political obstacles that this means. To the extent that the government in power resists confronting the situation and carrying out the necessary transformations of the companies, the danger of an energy crisis will be imminent, with severe consequences for the Mexican economy and society.

The current policy that has favored the burning of fuel oil directly affects air quality due to the pollution it produces. By increasingly favoring fossil fuel energy, Mexico is moving further and further away from achieving the goals set out in the Paris Agreement, and its contribution to climate change is practically nil.



DIAGNOSIS OF MEXICO: DARK PERSPECTIVES :: 213



# **NOTHING TO MANAGE**

### Disregard for environmental stewardship

#### INTRODUCTION

he implications of the decisions to leave in the background, or perhaps in a third or fourth place, all those environmental and natural resources care, climate change issues, or issues related to pollution, have placed Mexico at a considerable disadvantage, both internally to promote development projects in the country, as well as in its ability to negotiate at the international level.<sup>84</sup> Without the government having had fair and orderly environmental planning, the decisions it has been implementing for almost four years have had an impact on the qual-

ity of life of millions of Mexicans who still lack a good education, an adequate and complete health system, economic stagnation reflected in fewer job opportunities and family savings depletion.

Although the government's narrative has been openly oriented to downplay the environmental, climate change, or pollution problems, the reality presents a desolate panorama, with water tables depletion in almost the entire country, irreversible devastation of jungles and forests, or a high level of water, soil, and air pollution. In addition, this scenario is compounded by components that do not allow the achievement of governmental goals, such as the conditions in

<sup>84</sup> Look https://www.eluniversal.com.mx/opinion/editorial-el-universal/mexico-incertidumbre-ambiental#:~:text=M%C3%A9xico%2oha%2osido%2omotivo%2ode%2opreocupaci%C3%B3n%2opara%2oel,en%2osus%2oproyectos%2ode%2oenerg%C3%ADas%2olimpias%2oo%2orenovables.

which environmental institutions are found,<sup>85</sup> which are weakened, ailing, with meager budgets, and decision—makers with enormous practical and intellectual deficiencies. As if to leave a stamp of the government, it is likely that, to date, this government is the one that has shown the slightest interest in these issues and the one that has most degraded and diminished the institutional capacities to attend to the country's natural environment.<sup>86</sup>

The country's reality is so critical that not even the government's actions are sufficient to provide a diagnosis that genuinely reflects the dimension of the problem and the level of urgency that all environmental issues require. In the search to guarantee economic growth and social well-being, actions are being carried out from the public sphere, contributing to an ever-increasing process of environmental deterioration (Signos Vitales, 2022d, p.170). Even though the State should provide the necessary tools to face the problem, it has sunk into a narrative based on

Mexico's development policies have been inefficient. Growth levels have been low, environmental degradation is increasing, and growth rates do not justify ecological degradation and do not reflect an increase in social welfare. Due to increased economic—environmental dependence, Mexico's route to encourage growth is flawed. When international trends "try to decouple economic growth from environmental degradation, increase resource efficiency and promote sustainable lifestyles" (UN, n.d.), Mexico clings to following the same route of environmental dependence, with high costs, which has not yielded results and will bring consequences that fall on the most vulnerable population (Vital Signals, 2022b, p.3).

half-truths and the imposition of an ideology at the national level. This situation has demerited everything that has to do with a green agenda. As a result, Mexico's capacity for environmental governance is ultimately nil. From a national and international perspective, the transformation and transition towards sustainability are deteriorating and increasingly far from being achieved (Vital Signals, 2022d, p.170).

<sup>85</sup> Look at https://www.sinembargo.mx/o5-o6-2020/3798070

<sup>86</sup> Look at https://www.forbes.com.mx/el-medio-ambiente-no-es-prioridad-para-López Obrador-organis-mos-tienen-recortes-de-37/#:~:text=El%2omedio%20 ambiente%2ono%2oes%2oprioridad%2opara%2oLópez Obrador%3B,37%25%2oen%2oeste%202021%2ocon%20 respecto%20a%202018.

# WHAT ARE THE IMPLICATIONS? NON-COMPLIANCE WITH COMMITMENTS AND GOALS

The increase in global warming and environmental deterioration have contributed to a larger scale increase in the effects of climate change due to the increasing levels of Greenhouse Gas (GEI, for its acronym in Spanish) emissions and their concentration in the atmosphere. The development of global agreements to mitigate the effects of climate change, seeking the conservation and preservation of the environment to create a transitional process towards sustainability, has led Mexico to the incorporation and conclusion of international agreements and treaties on the subject, acquiring a series of commitments that in general will contribute to a higher level of welfare and social development (Signos Vitales, 2022a, p.3).

Mexico is not complying with the international agreements it has signed. The current scenario is unfavorable for fulfilling the commitments acquired due to a national economic growth policy that is incongruent and inefficient with global environmental and development trends. Political action must be rethought, establishing a different, efficient, and

sustainable ecological and growth policy that contributes to fulfilling these commitments if we really want to guarantee the well-being of society (Signos Vitales, 2022a, p.3).

The failure to develop, implement, and monitor environmental public policies in the country generates non-compliance with the objectives of international projects. By 2021, data indicate that from 232 to beachieved goals in current projects, 135 (58%) were met on time, 40 (17%) were met late, and 57 (25%) have not been met, according to UNEP (2022.) The Mobility Without and Low Emissions project has the highest number of unfulfilled commitments, with 26 total.

Unfortunately, the country's actions and policies do not respond to the commitments previously acquired in the country, much less to those signed at the international level. Environmental projects under the United Nations Environment Programme (UNEP) are running out. In Mexico, of the 11 projects in the country, three were completed between 2020 and 2021, one was financially closed, and at the end of 2022,

three of the four current projects will conclude, and two more will end in 2023 (UNEP, 2022). The result of this governmental negligence will affect not only Mexico's image in the world but also the environmental conditions in which Mexican society will continue to develop, highlighting the dangerous and growing governmental negligence. As of 2022, data from the Atlas of Environmental Justice places Mexico in third place internationally as one of the countries with the highest number of environmental conflicts (197 conflicts), only behind India (349) and the United States (201). This data reflects the high level of dismantling and insufficient institutional capacity promoted by the current administration under the austerity law (Atlas of Environmental Justice, n.d.).

The government's neglect of any issue that does not generate electoral bonuses, such as environmental issues, has led to increased ecological conflicts throughout the country. According to the Atlas of Environmental Justice (n. d.), the main ecological conflicts in the country stem from mineral extraction and construction materials, fossil fuels and climate/energy justice, and water management. However, private and public actions have generated conflicts in many of the country's territories caused by a lack of natural

# ENVIRONMENTAL PROJECTS UNDER THE UNITED NATIONS ENVIRONMENT PROGRAMME INDICATE MEXICAN COMMITMENTS TOWARDS 2021

#### OF 232 OBJECTIVES TO BE ACHIEVED:

| 135 | Have been complied punctually | 58% |
|-----|-------------------------------|-----|
| 40  | Were complied late            | 17% |
| 57  | Have not been complied        | 25% |

#### MOBILITY WITHOUT AND LOW EMISSIONS PROJECT

26 Highest number with UNFULFILLED commitments

#### From 11 projects:

- 3 Have been completed (2020-2021)
- 1 Has been financially closed
- 3 Out of 4 have been concluded
- 2 Will be finished by 2023

MEXICO, 3RD PLACE WORLDWIDE WITH HIGHEST NUMBER OF ENVIRONMENTAL CONFLICTS (197)

resources and their misuse or irrational use. In the future, Mexico is expected to be one of the focal points of attention in terms of environmental conflicts, especially in the Metropolitan and north-central areas of the country.<sup>87</sup>

The country's low capacity for environmental legislation and justice contributes to actions and violations that threaten sustainability and social well—being. As of 2021, data from the Ministry of the Environment and Natural Resources (Semarnat) points to more than thirty environmental conflicts requiring "urgent" attention. Among them is the water management of the Zapotec peoples in the Central Valleys of Oaxaca, the Port of Topolobampo in Sinaloa, the Constellation Brands brewery in Baja California, the Transisthmian Corridor in Oaxaca, the Mayan Train in Yucatan and Campeche (Ramirez, 2021).

| TABLE 26. WORLDWIDE ENVIRONMENTAL CONFLICTS 2022 |  |                     |  |
|--|--|---------------------|--|
| RANKING  | COUNTRY  | NUMBER OF CONFLICTS |  |
| 1  | INDIA  | 349                 |  |
| 2  | UNITED STATES  | 201                 |  |
| 3  | MEXICO   | 197                 |  |
| 4  | BRAZIL   | 174                 |  |
| 5  | CHINA  | 160                 |  |
| 6  | COLOMBIA   | 133                 |  |
|  | TOTAL  | 1 214               |  |
| тот  | TOTAL, IN THE WORLD (168 COUNTRIES): 3,763 PRESENTED CASES |                     |  |

Source: In-house elaboration with information from the Environmental Justice Atlas (n.d).

<sup>87</sup> Look at https://www.milenio.com/sociedad/sequia-ennuevo-leon-2022-esto-sabemos-de-la-crisis-del-agua y https://www.excelsior.com.mx/nacional/cual-es-la-situacion-del-agua-en-mexico/1509852

#### **DISMANTLING OF STATE CAPACITIES**

During the time of the current administration, at least three tactics have been identified to weaken certain counterweights of the executive power: the first is to subtract budget from the most uncomfortable institutions, the second is to colonize the directive bodies of the autonomous branches, and the third and most radical, to disappear or structurally subordinate the institutions to the Federal Executive (Vitales Signos, 2020b, p4). Environmental institutions have not been exempt from this decision that limits and conditions the rule of law and the possibility of living in a country with robust and solid institutions. The disdain for this sector is reflected in the current state of Mexico's environmental agencies.

One of the main effects of this simulation of environmental governance in the country begins with the obligation to produce and update statistical information related to environmental data and indicators that show the state of Mexico. This governmental neglect means that many decisions in ecological matters are made without support and an adequate and pertinent diagnosis. In Report o: Mexico's Symptoms of Signos Vitales (2020c), it is mentioned that the National Environmental Information System (SNIA, for its acro-

nym in Spanish) has not been updated since 2017. Similarly, 86% of the variables found on the site of the National System of Environmental Information and Natural Resources (SNIARN, for its acronym in Spanish) have disappeared.

Environmental organizations are not the only ones affected; this policy of disregarding and manipulating information is reflected in practically all government sectors. However, this information's importance lies in the fact that environmental, natural environment care, and protection issues; have an expansive effect on other areas. Neglect in this area has almost immediately impacted economic development, energy, and social problems such as increased poverty, food security, education, and public health, among others. The fact is that it is increasingly evident that the country has a limitation in the production, updating, and monitoring of environmental information, which results in a deficiency in the honest overview of what is happening in environmental matters in Mexico and in the social limitation to allow better decision-making.

Institutional dismantling is one of many headings well earned by this government. In the Signos Vital-

|     | TABLE 27. INDICATORS AND OTHER OUTDATED DATA ON ENVIRONMENTAL IS                                     | SSUES IN MEXICO |                       |
|-----|--|-----------------|-----------------------|
| NO. | INDICATOR  | LAST UPDATE     | SOURCE OF INFORMATION |
| 1   | Wastewater receiving treatment   | 2019            | Semarnat              |
| 2   | Land use change in forest areas  | 2014            | Semarnat              |
| 3   | National firewood consumption  | 2017            | Semarnat              |
| 4   | Contribution of aquaculture to national fish production  | 2017            | Semarnat              |
| 5   | Soil degradation according to level in Mexico  | 2014            | Semarnat              |
| 6   | Hydrocarbon spills and leaks   | 2012            | Semarnat              |
| 7   | National emissions of greenhouse gases and compounds   | 2015            | Semarnat              |
| 8   | Total and per capita generation of municipal solid waste   | 2012            | Semarnat              |
| 9   | Industrial facilities decommissioned as a result of environmental audits                             | 2010            | Semarnat              |
| 10  | Environmentally-adjusted net domestic product  | 2020            | INEGI                 |
| 11  | Consumptive use by Hydrological-Administrative Region  | 2018            | Semarnat              |
| 12  | Final disposal of urban solid waste  | 2012            | Semarnat              |
| 13  | National inventory of greenhouse gas emissions from the burning of fossil fuels                      | 1990            | Semarnat              |
| 14  | Reforested area by the federative entity   | 2018            | Semarnat              |
| 15  | National livestock population  | 2018            | Semarnat              |
| 16  | Livestock population by the federative entity  | 2017            | Semarnat              |
| 17  | Annual average of daily concentrations   | 2017            | Semarnat              |
| 18  | Degree of pressure by Hydrological-Administrative Region   | 2017            | Semarnat              |
| 19  | Sulfur Content in Gasoline   | 2016            | Semarnat              |
| 20  | Estimated renewable water (average natural water availability) by Hydrological-Administrative Region | 2017            | Semarnat              |

Source: In-house elaboration with information from Semanat (n.d.) and INEGI (2020b).

es Alert (2020a), Amputation of government capabilities: quality civil servants at risk, it is mentioned that despite the progress that has been made in terms of professionalization, the current administration has undertaken a set of actions that ended up weakening the formation of government talent, mainly in areas that require highly qualified personnel. Among the main actions are:

- » Temporary restrictions on public servants to work in the private sector,
- » Salary cuts,
- » The disappearance of positions and excessive and unplanned savings.

The reality that the current government has not been able to locate is that the institutional dismantling of it has put the environment at risk. The current scenario presents budgetary decreases of great caliber, followed by a weakening of the presence and capacity to act in the territory, with cuts of more than 40% of the personnel in the state delegations and, finally, the disarticulation of the management systems for the issuance of acts of authority. In 2019, it was decided to disappear the Undersecretariat of Management for Environmental Protection, which was the most robust and powerful of the Semarnat) (Ramirez, 2020).

One of the most alarming cases of deterioration of environmental institutions is the resignation of José Sarukhán from the National Commission for the Knowledge and Use of Biodiversity (Conabio, for its acronym in Spanish). The reasons, stated in the public letter and which have caused such a stir in the academic community, point to differences with the head of the Ministry of Environment and Natural Resources (Semarnat, for its acronym in Spanish), María Luisa Albores, who appointed a new executive secretary without taking into account the scientist's criteria. "The decision really corresponded to him as national coordinator, as stated in the internal regulations of the Commission," warns biologist Rodrigo Medellín, one of the expert voices that have risen against Sarukhán's unexpected departure (Arratibel, 2022).

Conabio not only represented one of the few environmental institutional totems in Mexico but was also a guide and a light for many environmental organizations in the rest of the world, mainly Latin America. Conabio reproduces precisely the example of what is happening in the rest of the institutions: prioritization of partisan models instead of high-level specialists, cuts in funds destined for the conservation of Natural Protected Areas (Cullell, 2020),

massive layoffs of high-level scientific personnel, and suspension of projects that benefit the Mexican population (Arratibel, 2022).

The example of Conabio not only shows how interested this government is in environmental issues but also allows us to foresee, given its modus operandi, that the extinction of this Commission is already being planned. With a similar fate are the National Institute of Ecology and Climate Change (INECC, for its acronym in Spanish) and the Mexican Institute of Water Technology (IMTA, for its acronym in Spanish). Regarding the former, it is known that López Obrador himself has launched a proposal to eliminate it.88 Although INECC is a crucial research body for coordinating national policy on biosafety, sustainable development, environmental protection, air quality reporting, preservation and restoration of ecological balance, as well as ecosystem conservation and climate change, it is the only public research body noted for its work on water management, preservation, and rehabilitation. The second is the only public

Image: José Sarukhán Kermez. He was national coordinator of the Comisión Nacional para el Conocimiento y Uso de la Biodiversidad (Conabio), responsability that he held until September 2022. At www.laderasur.mx.

research organization registered for its work in water management, conservation, and restoration.<sup>89</sup>

Good environmental and institutional performance guarantees comprehensive management of resources and the environment. Mexico's international environmental performance is deficient. As of 2022,

<sup>88</sup> Look at: https://www.eluniversal.com.mx/opinion/observatorio-nacional-ciudadano/la-desaparicion-de-inecc-ysus-implicaciones-para-el-mercado-de-plaguicidas-ilegales

<sup>89</sup> Look at: https://www.google.com/url?q=https://tinyurl. com/bddnsns3&sa=D&source=docs&ust=1666896075221 904&usg=AOvVaw2NwjFLy4Tz3E7k9U\_zehkY

according to the Environmental Performance Index, Mexico ranked 73rd in the world, with a score of 45.5 out of 100. Mexico's performance, comparable to that of Colombia, Costa Rica, or Armenia, is the result of the progressive institutional deterioration that exists in the country (Yale Center for Environmental Law & Policy, 2022).

The lack of environmental governance in Mexico has complicated environmental conditions and projects a panorama of environmental insecurity if we continue on the current path of institutional dismantling, budget reductions, and lack of environmental governance, putting at risk the fulfillment of national and international environmental projects. Environmental projects under the United Nations Environment Program (PNUMA, for its acronym in Spanish) are running out of funds. The panorama around international commitments is equally murky. Of the nine projects in force in 2018-2019 in environmental matters, with international coordination, only four remain in force to 2022 and one for 2023, and despite the support of international institutions, the ecological conditions represent minimal results of these programs (PNUMA, 2022). Despite this reality, the government does not show availability and interest in generating

| TABLE 28. ENVIRONMENTAL PERFORMANCE INDEX RANKING 2022 |                |       |
|--|----------------|-------|
| RANKING  | COUNTRY        | SCORE |
| 1  | Denmark        | 77.9  |
| 2  | United Kingdom | 77.7  |
| 3  | Finland        | 76.5  |
| 4  | Malta          | 75.2  |
| 5  | Sweden         | 72.7  |
| 6  | Luxembourg     | 72.3  |
| 7  | Slovenia       | 67.3  |
| 8  | Austria        | 66.5  |
| 9  | Switzerland    | 65.9  |
| 73   | Mexico         | 45.5  |

Source: In-house elaboration with data from Yale Center for Environmental Law & Policy (2022).

actions contributing to sustainability by considering achievements and goals reached in projects of this magnitude.

#### SPECIFIC ANTI-ENVIRONMENTAL POLICIES

The success of environmental public policies lies in making a good diagnosis and having an adequate budget, having an unbeatable design, and, finally, having an excellent implementation and follow—up. Currently, Mexico has opted for a policy of austerity that has involved reducing the budget and spending allocated to the environmental area, i.e., contrary to the righteous path of a public policy, and it is necessary to have a good diagnosis and an adequate budget.

When analyzing the budget allocated to Semarnat by the administrative unit, each of these agencies has presented significant budget cuts. Among the most affected dependencies are the Undersecretariat of Planning and Environmental Policy, with a reduction of 83.1% (458.6 MDP) of its budget in 2021 concerning 2018, the Undersecretariat of Management for Environmental Protection presented a –69.8% (–470.8 MDP), and the National Agency for Industrial Safety and Environmental Protection of the Hydrocarbons Sector of –50.1% (–307.9 MDP) (Semarnat, 2021).

At the close of 2021, the agencies with the most extensive absolute budget cuts were the National Water Commission with 2,448.2 MDP (40.1%) and

the National Forestry Commission with 1,629 MDP (40.8% concerning 2018.) Relevant institutions such as the National Commission of Natural Protected Areas (23.5%), the Mexican Institute of Water Technology (21.7%), and the National Institute of Ecology and Climate Change (24.3%), are also part of the budget cuts of the current policy, generating consequences that accumulate and contribute to the environmental decline in Mexico (Semarnat, 2021).

While the vast majority of countries in the world are making robust investments in diagnostics and improvements in policies and projects to ensure a healthy environment and combat climate change, our country is stagnating and moving backward. One example is the effort made by the United States to sign last August (August 9, 2022), the most important law passed in this country against climate change, which provides the most significant investment in the history of that country to combat this scourge: about US\$369,000 million. The legislation is part of a larger US\$700 billion package that includes measures related to health care and improved tax collection (BBC News, 2022).

### TABLE 29. BUDGET ALLOCATED TO SEMARNAT BY ADMINISTRATIVE UNIT (MILLION PESOS) 2018–2021

| ADMINISTRATIVE UNIT  | 2018       | 2019       | 2020       | 2021       |
|--|------------|------------|------------|------------|
| National Agency for Industrial Safety and Environmental<br>Protection in the Hydrocarbons Sector | \$614.7    | \$397.1    | \$324.7    | \$306.8    |
| National Commission of Natural Protected Areas   | \$1,132.0  | \$843.6    | \$869.5    | \$866.4    |
| National Water Commission  | \$27,369.8 | \$23,727.2 | \$22,985.3 | \$24,921.7 |
| National Forestry Commission   | \$3,991.4  | \$2,765.2  | \$2,586.2  | \$2,362.3  |
| SEMARNAT's Federal Delegations   | \$600.0    | \$505.8    | \$529.9    | \$530.0    |
| Mexican Institute of Water Technology  | \$256.9    | \$224.4    | \$205.0    | \$201.2    |
| National Institute of Ecology and Climate Change   | \$221.4    | \$170.8    | \$178.0    | \$167.7    |
| General Counsel  | \$709.0    | \$570.3    | \$0.0      | \$0.0      |
| Office of the Secretary and other areas  | \$387.8    | \$295.3    | \$229.1    | \$227.1    |
| Federal Attorney General's Office for Environmental Protection                                   | \$989.0    | \$796.2    | \$793.1    | \$742.1    |
| Undersecretary of Environmental Promotion and Regulation   | \$82.6     | \$62.9     | \$48.9     | \$50.0     |
| Undersecretariat of Management for Environmental Protection                                      | \$674.2    | \$510.8    | \$301.7    | \$203.4    |
| Undersecretariat of Planning and Environmental Policy  | \$551.7    | \$151.0    | \$92.0     | \$93.0     |
| Finance and Administration Unit  | \$0.0      | \$0.0      | \$726.0    | \$676.4    |
| TOTAL BUDGET   | \$37,580.6 | \$31,020.5 | \$29,869.5 | \$31,348.2 |

Source: In-house elaboration with information from Semannat (2021).

DIAGNOSIS OF MEXICO: DARK PERSPECTIVES :: 226

Environmental Protection Expenditure (GPA, for its acronym in Spanish) is insufficient and decreasing in Mexico. According to INEGI (2020b), in 2018, GPA represented 0.6% of GDP (126 billion 176 million pesos). Since that year, spending has presented downward trends. In 2019, it was down 17,650 MDP (–14%) compared to 2018. For 2020, the amount was –7,227 MDP (–6.7%) concerning 2019, accumulating a reduction of 24,877 MDP (19.7%) from 2018 to 2020.

Political priorities focused on developing macro projects that threaten the environment, go against global guidelines to mitigate the effects of climate change, move us away from sustainability, and lead us to non-compliance with international treaties. The energy sector plays a decisive role in national policy. Legislative reforms in energy matters, constitutional reform initiatives in the electricity sector, and refinery projects are the basis of the federal government's actions, which, along with projects such as the Mayan Train and Sowing Life, implement structural measures that put the country's environmental security at risk (Signos Vitales 2022d, p.194).

By 2022, based on the Federal Expenditure Budget (PEF) 2022, the total programmed expenditure on Environment and Climate Change (Transition and Use

of Cleaner Technologies and Adaptation and mitigation of the effects of climate change) in the country is 76,710.9 MDP (Chamber of Deputies of the H. Congress of the Union, 2021b), that is, 65,321.2 MDP less than that allocated only to the Mayan Train, Sowing Life and Dos Bocas Refinery projects.



*Image*: "Sowing life": what is López Obrador's program that plans to stop migration from Central America (and which results has in Mexico)". Photo: Getty Images at www.bbc.com.

### GRAPH 37. SPENDING ON MACRO PROJECTS, ENVIRONMENT AND CLIMATE CHANGE IN MEXICO (MILLION PESOS) 2022

INIVECTATENIT

| PROJECT  | INVESTMENT  |
|--|-------------|
| TRANSITION TO AND USE OF CLEANER TECHNOLOGIES AND FUELS          | \$10,168.5  |
| ADAPTATION TO AND MITIGATION OF<br>THE EFFECTS OF CLIMATE CHANGE | \$66,542.4  |
| DOS BOCAS OIL REFINERY   | \$49,145.2  |
| MAYA TRAIN   | \$62,942.0  |
| SOWING LIFE  | \$29,944.9  |
| ENVIRONMENT AND CLIMATE CHANGE<br>TOTAL                          | \$76,710.9  |
| MACROPROJECTS TOTAL  | \$142,032.1 |

DDOLLCT



Source: In-house elaboration with information from SHCP (2022).

The Sembrando Vida program has promoted deforestation and lacks environmental impact indicators. The World Resources Institute (WRI) has correlated the program to the loss of 72,000 hectares of forest cover, mainly in the country's south (Carabaña, 2021b). The Maya Train causes the deforestation of 2,500 hectares of wet and dry forests, has generated

social conflicts over land tenure (53% of the route of the Maya Train is located on ejido land) and impacts Natural Protected Areas, habitat loss, among others, also lacking indicators and Environmental Impact Statement (CEMDA, for its acronym in Spanish, n.d.). The Dos Bocas project lacks environmental risk analysis and specific mitigation measures to counteract environmental impacts (Garcia, 2021). A study by the Auditoría Superior de la Federación (ASF) in 2021 expressed doubts about its economic, technical, legal, and environmental viability, as it did not consider the externalities due to the environmental and social impact that will be generated during the construction and operation of the refinery (Tourliere, 2021). Despite the many environmental risks associated with these projects, the government has chosen to ignore them (Carabaña, 2021a).

The mega projects that have marked the only actions the federal government has implemented are marked by budgetary excesses and discontent on the part of a large part of the population that will have to sustain them over time. However, more importantly, they are plagued by various and different irregularities in environmental matters. While good money is allocated to destructive, environmental projects, like many others, end up being second—class passes for the Mexican population.

Indeed, by not having the correct environmental approvals and falling prey to national and international criticism, these projects contribute to climate change

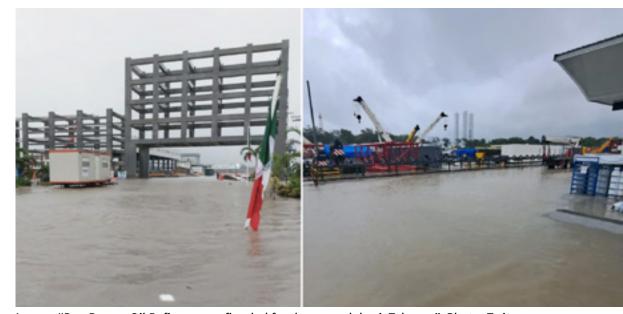


Image: "Dos Bocas, Oil Refinery was flooded for the second day inTabasco". Photo: Twitter/@AXL\_tw at www.infobae.com.

and non-compliance with the Paris Agreement. A treaty that gives shape and meaning at the international level, both the implications and the achievements in environmental matters that the signatory countries are achieving year after year. In Mexico's case, the weak actions and its passivity have managed to draw the attention of the great public defenders of the environment in the world, putting the country in a dilemma for having ignored the implications and risks of an inefficient environmental policy brings with it.

#### CONSEQUENCES. HOW IT AFFECTS?

Mexico's degradation and neglect of environmental issues have advanced tragically in recent years. It is increasingly evident that many of the areas, once considered environmentally optimal by the authorities and society itself, are on the verge of collapse. Practically all Mexicans know of an example of a lake that has dried up, a river that has been polluted, a forest that has been cut down, or endemic wildlife that we no longer see.

The consequences of an environmentally negligent government are vast, dangerous, and very costly. The most notorious and impacting are those that directly affect people's quality of life immediately, such as health, increased poverty, increased food insufficiency, unemployment, higher prices of essential products, or family economic stagnation. Mexico's Environmental Performance Index shows that, in terms of environmental health, the country has problems in every area: Heavy Metal Exposure (101), Air Quality (Rank 94), and the Sustainable Nitrogen Management Index (90) position the country above the value obtained in the General Index (73). The condition is equally poor for Biodiversity and Habitat (Rank 57), Ecosystem Services (60), Fisheries (63),

| TABLE 30. ENVIRONMENTAL PERFORMANCE INDEX AND CATEGORIES |       |       |
|--|-------|-------|
| CATEGORY   | PLACE | SCORE |
| Environmental Performance Index                          | 73    | 45.5  |
| Air Quality  | 94    | 34.2  |
| Sanitation and Drinking Water                            | 73    | 52.9  |
| Exposure to heavy metals                                 | 101   | 45.1  |
| Biodiversity and Habitat                                 | 57    | 69.8  |
| Ecosystem Services                                       | 60    | 32.7  |
| Fishing  | 63    | 19.8  |

*Source*: In-house elaboration with data from Yale Center for Environmental Law & Policy (2022).

and Sanitation and Drinking Water (73) (Yale Center for Environmental Law & Policy, 2022).

As a whole, environmental performance in terms of pollutant emissions, air quality, biodiversity and habitat, ecosystem services, waste management, sanitation, and drinking water, is a clear example of the harsh reality that Mexican society constantly faces, which generates a loss of wellbeing.

According to information from INEGI (2020b), the Total Costs for Environmental Depletion and Degradation (CTADA, for its acronym in Spanish) in the country have exceeded one trillion pesos in recent years. In 2018 the CTADA amounted to 1,041,050 (MDP) (4.5% of GDP). In 2019, 1,107,162 (MDP) (4.5%), and for 2020, they were 1,066,853 (4.6%), the latter representing a variation of +0.2% of GDP and +2.5% concerning the 2018 CTADA. The CTADAs reflect high levels of environmental deterioration in the country. By 2020, Depletion by Hydrocarbons (60,810.6 MDP), together with degradation by Air Emissions (611,306.8 MDP) and soil degradation (164,295.4 MDP), are the leading causes of environmental depletion and degradation, generating high economic costs and loss of productivity (INEGI, 2020c).

WATER

It is practically impossible to begin a discussion of environmental issues and not start with the most vital and critical one, water. Access to water is decreasing, and water stress at the national level is increasing. In 2019, Mexico ranked 24th internationally and second in Latin America as one of the most water–stressed countries (WRI, 2019). In 2020, the country maintained its position in Latin America (Statista, 2020), reflecting the increasing problems of availability, access, and water supply for society in the country, a condition comparable to that of African and Arab countries.

The information presented above is not flattering; on the contrary, the upward trend of this indicator points to more significant complications and problems within the country in environmental matters. The hope that, at some point, it would be possible to change course and improve environmental results has vanished. The government will not change its approach to the country's serious problems, so the current and incoming governments must be prepared to face the political and economic consequences of an international system struggling to improve envi-

ronmental quality worldwide. Despite the United Nations' statements that "contaminated water and lack of basic sanitation hinder the eradication of extreme poverty and that unsafe water and poor sanitation are the main causes of infant mortality" (United Nations, n.d. 1), the Mexican government's strategy to overcome these conditions is simply non-existent.

Internationally, as of 2022, the Bravo River ranked fourth as one of the ten most polluted branches in the world (Aquae Fundación, 2022). At the national level, "70% of the rivers and lakes in Mexico are polluted" (Excélsior, 2021), with clear examples being the Atoyac (Puebla), Santiago (Jalisco), and Lerma (State of Mexico) rivers (EFE Verde, 2020). An environment without water or poor quality is bound to slow down the region's economic growth, deteriorating health conditions, decrease food production and exacerbate poverty in many countries (World Bank, 2019a), with industrial and municipal discharges of untreated wastewater being significant causes of water pollution. According to the FAO (2020), Mexico ranks eighth internationally among the countries with the highest levels of untreated municipal wastewater for 2018-2022.

Analyzing the 2008–2017 period, the amount of untreated water decreased from 4.15 to 3.92 (Km<sup>3</sup>/

## MEXICO'S INTERNATIONAL PERFORMANCE IN WATER CARE

| 2019 &<br>2020<br>2020 | 24th worldwide place in water stress 2nd place in Latin America Bravo River 4th place of the 10 most contaminated rivers in the world.             |
|------------------------|--|
| 2021                   | 70% of rivers and lakes in Mexico are polluted.  |
| 2018–2022              | 8th worldwide place of countries with highest levels of untreated municipal wastewater •••• stagnation of 3,000 billion cubic annual meters.       |
| 2021                   | Deficit of plants for both water treatment and potabilization.   |
| 2022                   | Investment and expenditure in drinking water, sewerage, and sanitation infrastructure decreased 18.1% (1,411.8 Million Pesos) in relation to 2018. |

92ND WORLDWIDE PLACE IN EFFICIENT WATER USE

year) and maintained the same level (3.92 Km<sup>3</sup>/year) for the 2018-2022 period. There is a stagnation in wastewater management in the country, equivalent to more than 3 billion liters of municipal wastewater going untreated annually and contributing to environmental deterioration (FAO, 2020). The implication of the above is devastating; more than half of the wastewater generated is not treated. In 2019 only 49.1% of the wastewater was treated – a variation of -0.5% concerning 2018 (49.6%)-. This is despite the number of wastewater treatment plants increasing in the country (Semarnat, 2019).90 There is a deficit of plants for both water treatment and potabilization, and the existing ones (2,786), as of 2021, "are not sufficient to meet the general needs" (Rodriguez, 2021).

The low levels of investment in water and sanitation have contributed to the permanent contamination and inefficient use of water in the country in recent years. Investment and spending on Mexico's drinking water, sewerage, and sanitation infrastructure decreased by 18.1% (1,411.8 MDP) in 2022 concern-

90 When trying to update this information, Semarnat's website continues without following up on it, so the data remains static without being able to carry out the corresponding studies and analysis in a pertinent and appropriate manner.

ing 2018 (SHCP, 2018b; 2022d). In terms of integrated water management and administration, Mexico ranks 92nd internationally in the ranking of efficient water use (out of 168 countries) (FAO, 2020). The economic value per cubic meter of water use amounts on average to only US\$13.07 in 2022 (variation of +0.77% from 2013–2017 to 2018–2022), being 83.9 times lower than the value in Luxembourg (1,096.77 US \$/m³) (FAO, 2020). The increase in water pollution levels and the downward trend in the ranks of investment and spending to ensure water security, along with the increase in water stress in the country and the low levels of efficiency in the use of this vital resource, reveal minimal progress, stagnation, and setbacks regarding water.



Image: www.reforma.com.mx



According to the World Health Organization (WHO), air pollution threatens health in all countries but affects people in low— and middle—income countries the most (PAHO, 2021). High levels of air pollution are mainly attributable to the burning of fossil fuels, which are characterized by contributing approximately two—thirds of global CO2 emissions (United Nations, n.d.2). Mexico and Brazil are the only Latin American countries in the ranking of the 15 countries that emit the most Carbon Dioxide (CO2) in the world. China, the United States, India, Russia, and Japan lead the ranking internationally, and Brazil and Mexico in Latin America (BBC News, 2019).

The air pollution scenario is critical. In the country, about 48 thousand people die each year from health problems related to air pollution (Mimus, 2021), a figure even higher than that of homicides. PM10, PM2.5, and smaller particles, categorized by the WHO as carcinogenic in the long term, are the most harmful (Maguey, 2019). This condition has contributed to particulate air pollution being ranked as the fifth health risk factor for the number of premature deaths, reflecting the frequent non–compliance with air quality stan-



Image: pollution in Mexico City at www.bbc.com

DIAGNOSIS OF MEXICO: DARK PERSPECTIVES :: 234

dards, mainly affecting large cities and metropolitan areas of the country (INECC and Semarnat, 2016).

Air quality in Mexico is alarming and affects millions of people. Data from the 2020 Air Quality Report shows that, of the zones and cities evaluated with the PM10 norm, only 7 meet the standards (Purísima del Rincón, Tula de Allende, Tepeji del Río. Of the zones and cities evaluated with NOM PM2.5, only five complied with the standards (San Luis de la Paz, San Miguel de Allende, Pachuca, Tulancingo, and Zacatecas), 24 did not comply with any of the standardized limits (Guanajuato, Tula de Allende, Xalapa, Querétaro's Metropolitan area, Morelia, among others). In 20, it was impossible to evaluate compliance with the standard (Aguascalientes, Torreón, Monclova, Huichapan, Veracruz, Mérida, and others) (INECC, 2021). In 2021, Mexico ranked as the fourth country in Latin America with the highest air pollution, only behind Peru, Chile, and Guatemala. Of the 100 cities evaluated with the highest levels of pollution in the North American region (NOM PM2.5), 20 are Mexican:91 Metepec, Guadalajara, General Escobedo, Guadalupe, Santa Catarina, Azcapotzalco, Mexico City, Pátzcuaro, Tlalnepantla, San Pedro Garza, Zapopan, Monterrey, San Nicolás de Los Garza, Ecatepec, Álvaro Obregón, Salamanca, Celaya, Gustavo A. Madero, Coyoacán y Cuernavaca. Eight of the Mexican cities assessed did not comply with the NOM in 2019, and in 2021 (ZMG), it was impossible to determine compliance (IQAir, 2021).

Spending allocated to Environmental Material and Air Quality shows the country's setback in ensuring environmental safety. The Spending on Environmental Regulation decreased in 2018 was 1022.4 (mdp), while in 2022, it was 880.6(mdp). There was also a decrease in planning, direction, and evaluation between 2018 from 708.4 (mdp) to 2022 from 600.9 (mdp). The minimum budget (0.3 mdp from 2020) allocated to air quality and vehicle verification programs disappeared in 2021 (SHCP, 2018b; 2022d).

Spending on Environmental Regulation has been decreasing: 1,022.4 (million pesos) in 2018 to 880.6 (million pesos) in 2022.

The minimum budget (0.3 million pesos from 2020) allocated to air quality and vehicle verification programs disappeared in 2021.

SHCP, 2018

<sup>91</sup> Information as of October 30, 2022.

Land uses contribute to deforestation, deterioration, and contamination of Mexican soil. From 2016 to 2018, Mexico lost 2,555.4 Km² (– 0.39%) of forest area, ranking 17th internationally among the territories with the most significant loss. When territories such as Aruba (+18.39%), Qatar (+10.78%), or Paraguay (+7.80%) have chosen to protect the environment, the country ignores the problem (World Bank, 2020b). From 2016 to 2018, the percentage variation of protected land areas was only 0.23% (33.9 times lower than Paraguay's), placing the country in 44th place internationally (World Bank, 2020b).

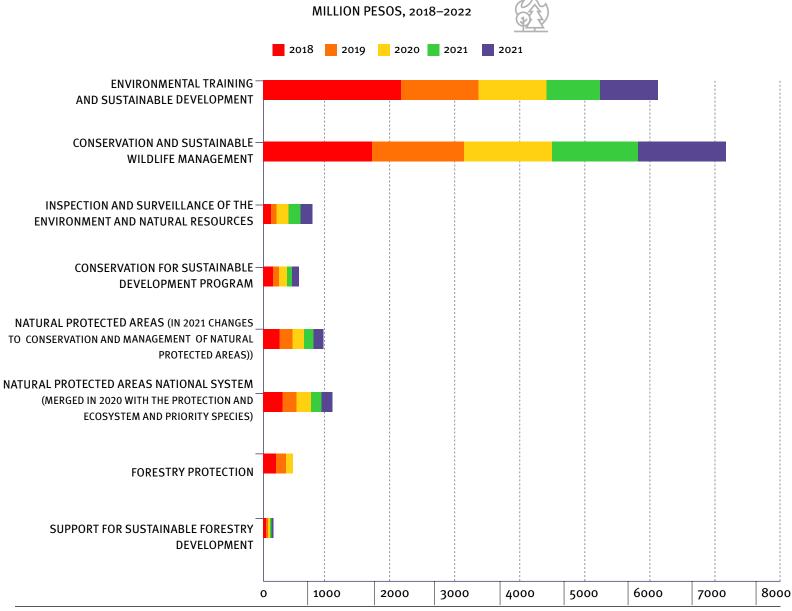
The expansion of the primary sector is the leading cause of deforestation and forest fragmentation and the associated loss of forest biodiversity (FAO and UNEP, 2020). According to data from the World Bank (2020b), during the period 2016–2018, arable land presented an increase of 17,380 Km² (a loss of 14 824.6 Km² of forest area when considering the loss of jungle area (– 2,555.4 Km²) as part of this increase), placing the country in second place internationally of territories with the greatest loss of natural surfaces due to agricultural use, only below Colom-



bia (42, 648 Km²). In 2019 and 2020, Mexico entered the top ten countries that lost the most virgin forest worldwide (BBC News, 2020). In Latin America, it has maintained its position as the fifth territory with the most significant loss. This area's loss has increased considerably from 2018–2020, with an annual variation of +45.2% and +51% in 2019–2020, concerning 2018 (1 342.5 Km² cumulative loss between these

Image: "Worsens water stress in Mexico: 8 of 13 regions suffer from it". Photo: EFE at www.elfinanciero.com.mx.

#### GRAPH 38. FEDERAL SPENDING ON THE ENVIRONMENT AND NATURAL RESOURCES



Source: In-house elaboration with information from SHCP (2018c;2022e).

DIAGNOSIS OF MEXICO: DARK PERSPECTIVES :: 237

years) (WRI, 2020). The panorama of environmental degradation in the country, due to the increase in the loss of forests and jungles, is becoming increasingly critical and increases the risks of climate change. Despite this, federal spending on environmental protection and care has decreased in the last four years (2019–2022). Support for Sustainable Forestry Development decreased by 59.13% (–1,239.2 MDP) in 2022 compared to 2018. Spending on Forest Protection decreased by 17.95% (–295.1 MDP). In the area of Inspection and Surveillance of the Environment and Natural Resources, the amount allocated was contracted by 41.9% (–124 MDP) in 2022 concerning 2018 (SHCP, 2018b;2022d).

As was to be expected, the federal government has minimized the catastrophic effects of its actions, especially those that result in the depletion of natural resources and a deteriorated environment. Spending levels to promote sustainable development are insufficient and continue to decline, contributing to the loss of forests, jungles, biodiversity, and natural capital, essential elements to achieving sustainable development, which is promised daily in the country, posing a style of governance that is efficient in discourse, but unsustainable in reality.

### WHO IS AFFECTED, AND HOW MUCH? HEALTH, EDUCATION, AND VULNERABLE GROUPS

According to the UN, the world is far from meeting the goal of slowing down global warming. The Climate office of this body released that its estimate, based on the national emission targets of 193 countries, contemplates an increase of 2.5 degrees Celsius (4.5 Fahrenheit) concerning the pre-industrial era average by the end of the century. That is one degree above the ambitious target of the Paris pact to limit warming to 1.5 degrees (2.7 F). (Latinus, 2022).

The effects of climate change are seriously endangering the lives of billions of people, and the Mexican government seems to lack sensitivity to this fact. The human rights of Mexicans are being violated, from the rights to health, food, water, housing, education, and cultural life, to the rights to development and life itself, generating even more acute consequences for people and groups in vulnerable situations (ECLAC, 2019).

In 2021, the World Health Organization (WHO) COP26 Special Report on Climate Change and Health (2021) published that air pollution causes 13 deaths per minute worldwide, mainly from burning fossil fuels.

While the First Assessment of Air Quality Laws and Regulations (GAAPL, for its acronym in Spanish), prepared by the United Nations Environment Programme (PNUMA) (2021), revealed that 31 percent of countries are still adopting air quality standards and 43 percent lack a legal definition for air pollution.

When analyzing the water and air situation, the World Resources Institute (WRI) (2019) stated that Mexico ranked 24th internationally and second in Latin America in the National Ranking of Water Stress, while nationally, it has been reported that one in four aquifers in Mexico is overexploited, according to data from the Conagua. Until August 2021, there were 653 aguifers in the country, of which 157 presented overexploitation; the figure for 2020 was the same. However, in 2019 there were 115 aguifers under this condition (Rodriguez, 2022). Concerning emissions and air pollution, as of June 2019, "nine states in the country were declared in environmental contingency due to high pollution indexes" (Martínez, 2019), while by 2022, at least five environmental contingencies have been activated in the CDMX, in March, May, and June (El Financiero, 2022c). It is essential to mention that the mortality rate due to cardiovascular diseases, cancer, and chronic respiratory diseases, related to air pollution and the environment, as of 2019, represented 15.6%, increasing 0.2% from 2011 to 2019 in the country. (World Bank, 2019b).

## ECONOMY, REGIONAL AND NATIONAL DEVELOPMENT

According to the World Bank (2021), in economic terms: "natural disasters cost low— and middle—income countries around USD 18 billion annually, and cause widespread disruption to households and businesses, resulting in a cost of at least USD 390 billion annually". In social terms, "if left unchecked, climate change will push 132 million people into poverty in the next ten years and cause the displacement of 216 million people within their respective countries by 2050, with internal migration hotspots emerging as early as 2030, spreading and intensifying after that" (World Bank, 2021).

Economic costs and lost productivity rise as environmental deterioration increases. In 2020, the country's GDP presented a negative variation of -1,095,918 MDP concerning 2019. As a consequence of the pandemic effects, an amount almost comparable to CT-ADA of 2020 (1,066,853 MDP), which together would represent a productivity drop for a value of 2,162,771

MDP, resulting from the negative impact that environmental degradation has on the economy, reflected in the PINE, and the affectations by COVID-19 to productivity in various sectors (INEGI, 2020c).

In Mexico, the total costs of natural resource depletion (CTARN, for its acronym in Spanish) amounted to 156,887.6 million pesos in 2020. The CTARN presented an increase of 30% from 2003 to 2020, with an average annual depletion growth rate of 7.15% (2004-2020). In 2020, CTARNs presented a variation of +0.1%, corresponding to 0.7% of GDP, higher than the stable 0.6% from 2016 to 2019. Hydrocarbons have represented an annual average of 68.32% (119,534 mdp in 2003-2020) of the CTARN, groundwater 28.18% (44,323 mdp), and changes in the volume of timber forest resource 14.49% (22,438 mdp) for the same period. Depletion costs for hydrocarbons have maintained an average annual growth rate of 3.12%, for groundwater depletion of 9.63%, and for changes in the volume of timber forest resources of 43.89% (2004–2020) (INEGI, 2020b).

From 2004 to 2020, Land Degradation Costs (CDS, for its acronym in Spanish) maintained an average annual growth rate of 7.6%. The CDSs have presented an average yearly cost of 83,494 MDP (2003–2020). The

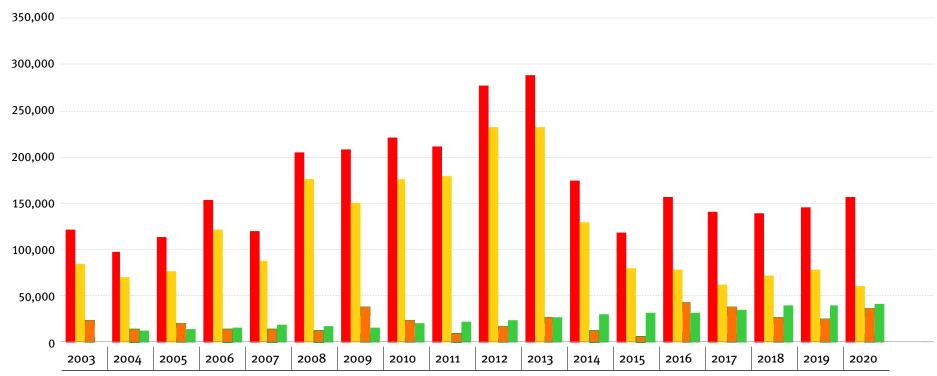
GPA per environmental activity for water and soil, biodiversity, and waste management corresponded to 20,563 MDP in 2020, when the CDS amounted to 163,807 MDP for the same year. In 2020, the CDS are 7.97 times higher than the GPA for this resource, reflecting the country's soil degradation and contamination levels (INEGI, 2020b). (Alert environmental deterioration and economic growth, 2022, p. 11). Air Emission Costs (AEC) are the main contributors to the country's ADC. From 2003–2020, the CEA contributed, on average, 72.8% (463,299 MDP) to the CTDA. In 2020, the GPA in air–environment and climate protection was 39,101 million pesos, while the costs of emissions amounted to 611,235 million pesos, 15.6 times higher (INEGI, 2020b).

The simulation of environmental governance to which the federal government has fallen prey is a stigma that will be difficult to eliminate. This mark has also been extended to state and municipal governments, which, to follow their ideological leader policies, have given up and relegated hundreds of projects that, in another moment, could have contributed to the improvement of some component of the country's environmental quality. How regional development impacts and strengthens national development is evident when this process stagnates or

#### GRAPH 39. TOTAL COSTS DUE TO NATURAL RESOURCE DEPLETION



#### MILLION PESOS



Source: In-house elaboration with data from INEGI (2020).

is eliminated. Mexico, in this sense, is tied to a sustainable model that in no way contributes to good environmental governance and degrades and destroys the steps that precisely encourage the country's sustained economic growth. Ecological degradation, depletion, and neglect have inevitably impacted Mexican society.

The fact is that the level of economic growth in Mexico is low when the costs of environmental depletion and degradation are high. The level of ecological degradation in percentage terms presents a large differential margin to that of economic growth, a condition that translates into society's low level of economic development.

The country presents a co-dependence on economic growth and environmental degradation. The growing trends of the NIP and the CTADA are evidence of this, as production increases and the costs of environmental degradation grow, limiting the development process and, consequently, social welfare. Like other developing countries, Mexico tends to be more dependent on natural resources as its primary source of income, and its ability to achieve development benefits and poverty reduction often depends on access to natural resources (EU–UN Partnership, n.d.).



Image: Atoyac River in Puebla contaminated at www.elquintanaroo.mx

Mexico is tied to a sustainable model that does not encourage the country's sustained economic growth. Ecological degradation, depletion, and neglect have inevitably impacted Mexican society.

#### **LEGACY FOR NEW GENERATIONS**

Environmental problems have, by definition, an enormous impact on any living being on the planet. The consequences of poor management of the environment and natural resources, climate change, or pollution–related issues affect society and condition the future of millions of people. As we have seen throughout this chapter, Mexico has not been able to understand that the country required (requires) a change, not a political or ideological one, but one that could lead society to have a better coexistence with the environment that the country has.

The costs that we inherit to future generations for not considering the environment as an axis of development in the country are enormous and critical in the short term. In terms of environmental governance, the destruction, dismantling, and weakening of practically all the institutions directly related to environmental protection brings Mexico close to the precipice of an enormous catastrophe that also drags other sectors down. The lack of institutional solidity limits the country to having a fixed and well-defined course, allowing for clear goals in programmed times. The current federal government's lack of environmen-



Image: "Accelerated degradation of the environment in Mexico and in the world" at www.eldictamen.mx.

tal vocation, replicated in the state governments, sets the opposite path to what a green government should promote, do and respect.

With an ever-decreasing budget compared to the previous year, the institutions are trying to survive to have still something to contribute in terms of environmental care and climate change. In addition, there is little capacity in terms of specialized human resources, which have been eliminated over the last four years by vote generators from the ruling party, thus limiting the generation of efficient, effective, and transparent environmental public policies. This reflects a Mexico without a policy that distinguishes it as an environmental model, limiting green invest-

ments and with less impact, in the long term, on the natural environment.

In international matters, the Mexican scenario is even more critical since, at the national level, it has been possible to hide recurrently, through official messages and with misleading content, the severe errors in environmental strategy and management that the government has made; however, at the international level, the delay and mismanagement that is being done are increasingly evident. This dramatically limits how Mexico can interact with the rest of the world on environmental issues, climate change, or any other issue that opens a channel to a better society. As a result, the image of the country and the government is perceived to have deteriorated.

Issues such as water access and quality are increasingly critical throughout the country. Water stress at the national level is increasing in metropolitan and rural areas where deforestation levels have devastated Mexican soil. Without a law or a government to protect and limit the consumption of millions of citizens, this resource has become the country's most valuable asset.

The lack of interest in addressing water issues is the same as in air or soil quality. The expenditure allocat-

ed to reverse air pollution is only evidence of the lack of interest in controlling many of the most polluted areas in the Americas. The air quality in hundreds of Mexican cities is already alarming and affects millions without the authorities taking the appropriate measures. In Mexico (as of 2014), 9,300 deaths per year were associated with poor air quality. These increased due to the late environmental management in recent years. Currently, 21,000 deaths per year are estimated to be associated with pollution, with children being the most vulnerable and susceptible population to developing childhood cancer. It is estimated that 7.6 deaths from childhood cancer per 100,000 inhabitants in Mexico are related to air pollution (CEMDA, n.d.).

In terms of soil contamination, the expansion of agriculture is the leading cause of deforestation, forest fragmentation, and the associated loss of forest biodiversity. Arable land has increased by thousands of square kilometers, a situation that is reflected in the loss of thousands of kilometers of forest and jungle area as part of the indiscriminate growth of the primary sector.

The decision to favor fossil fuel generation over renewable energy puts Mexico on a path even more inconsistent with the Paris Agreement. Its plans for the electricity sector, especially the decision to continue investing in coal, stand in stark contrast to what is required to reach the limit of 1.5°C. According to the United Nations, the goal will not be achieved shortly and is projected to be 2.5° instead of the scheduled target.

An average temperature increase of 1.0°C could reduce national per capita GDP growth by between 0.77% and 1.76%. The cumulative costs of climate change for Mexico during this century would be comparable to losing between 50% and more than two times Mexico's 2010 GDP. The costs of climate change in the agricultural sector would be similar to losing about two years' worth of agricultural production in Mexico. A climate scenario of inaction would imply increases in the costs of three analyzed groups of diseases: between 62 and 100% for heat stress diseases, between 10 and 12% for gastrointestinal illnesses, and between 25 and 31% for vector-borne diseases. By the year 2050, an average increase in electricity consumption of 4% is expected, with a total annual cost of 1,075 million dollars, and could reach an increase of 12% by 2100. This increase would represent a total yearly cost of approximately US\$4,367 billion in that year.

The sum of all these problems shown throughout the environmental chapter of this report shows, in the first instance, the transversality, impact, importance, and integrality of the environment and climate change in Mexican society. Although these problems continue to be minimized by federal and state authorities, they will undoubtedly determine the new challenges the nation will face. The enormous capacity of these problems to spread and influence other sectors will decide in the short term that many of them will have to reorient and readjust their development routes and plans to take environmental considerations into account. Mexico is not only going through a crisis of governance through the attempt of an old, failed, and environmentally adverse ideological imposition, but thanks to the destruction and disappearance of crucial organizations, it is in a vulnerable position to face the short and long-term challenges.







In this report, Signos Vitales has demonstrated the prolongation of seven problems that could lead to Mexico's economic, social and political collapse. In the last four years, the current government has deepened the problems it originally proposed to combat: insecurity, corruption, inequality, and poverty. Throughout these pages, Signos Vitales has demonstrated with facts and data the generalized worsening in seven areas: the rule of law, political counterweights, civil—military relations, sound public finances, the education sector and public health, the energy issue, and the environment.

The lack of a proper rule of law in Mexico not only compromises the capacities of the weakened justice system but also facilitates the normalization of impunity practices in all social spheres. For example, in terms of public procurement, the current government has allocated four out of every ten pesos exercised without using competition mechanisms, therefore, without transparency on the use of the federal budget. In addition, the authorities awarded nine billion pesos to risky suppliers, such as ghosts or newly created companies. The prevailing opacity perverts all governmental decisions regarding the use of the budget, money belonging to all Mexicans. In the current scenario of high impunity, it is not surprising that the UIF recorded just under 600,000 unusual financial transactions, twice as many as in the pre-

The lack of a proper rule of law in Mexico not only compromises the capacities of the weakened justice system but also facilitates the normalization of impunity practices in all social spheres.



vious year. When the authorities do not respect the law, they tend to modify arbitrarily and, at their convenience, the norms and legal codes that govern the nation. In 2019, the ruling bloc in the federal congress changed the constitution 55 times, the third year with more reforms since 1917.

The lack of political checks and balances threatens to facilitate the reinstatement of a hyper-presidential system and the resurgence of authoritarian practices that people thought were extinct since the democratic transition. Furthermore, without checks and balances, there is no defense of human rights and individual guarantees established in the Mexican Constitution. The most obvious evidence of the violation of individual rights is the massive number of people imprisoned without sentences and the increasing use of preventive detention. This measure corrupts the legitimacy of the due legal process and represents a dark legacy of authoritarian regimes. Slightly less than half of those imprisoned were in pretrial detention, that is, without receiving a conviction. Mexico is one of the countries in the Americas with the highest number of people imprisoned without a conviction.

If there is one problem that concerns everyone, it is militarization, a process that has completely destabilized the balance of civil-military relations that has existed since the 1940s. In recent years, 28 federal institutions have delegated functions and budgets to the Armed Forces. The strengthening of the military corporation is based on the transfer of 227 tasks from civilian jurisdiction. In addition, the current government has deployed the largest number of military elements in the national territory to carry out public security tasks, an area that should only correspond to civilian authorities. The military offensive strategy against organized crime has not only proven ineffective in the last decade, but the number of intentional homicides remains at historic highs, so it is logical to infer that military deployment has ended up exacerbating violence at unprecedented levels throughout the country.

The worsening of public finances has had as a direct result the weakening of the Mexican State's capacities and the dismantling of institutions and social programs. Although between 2018 and 2021, public revenues grew by 1.34 trillion pesos, expenditures increased even more to 1.76 trillion pesos. The government has financed this imbalance of –414 billion pesos by acquiring debt. Despite the increase in spending, the so–called "republican austerity" has eliminated several social programs and created others, cut the

Everybody is concerned with militarization.
This government has desployed the largest number of military to carry out public security tasks, an area that should only correspond to civilian authorities.

The military offensive strategy against organized crime has not only proven ineffective in the last decade



budget of autonomous institutions and agencies, and eliminated a series of trusts that responded to specific demands of Mexican society. In addition, a significant percentage of families are increasingly dependent on international remittances to maintain their essential private consumption in the face of stagnation or reduction of salaries and incomes and the disappearance of a series of trusts that responded to specific demands of Mexican society.

Education and health are the two essential public services provided by current states. Both sectors have suffered significant erosion from the pandemic effects and its mismanagement and the budgetary austerity policies of the current government. In 2020 we had the data that 3.6 million young people abandoned their studies to generate an income (INEGI, 2020d). After 16 months without face-to-face classes in 2021, it was reported that of the 23.9 million students enrolled in primary education, only 53.3% returned to classes (12.7 million) and 1 out of every two students who returned to classes (55%) did so in schools that did not have the necessary conditions. In the case of Secondary Higher Education (EMS), more than 366 thousand students did not enroll in upper secondary since 2019, and 8% of young people who finish secondary school do not enter high school

(Fernandez et al., 2022). The worsening dropout rate demonstrates the government's inability to address the most basic needs of the new generations, despite the scholarship programs that have proliferated in this government. For example, in 2021, the authorities cut over half the budget to Normal schools, institutions that train the primary education teacher corps. Inadequate teacher training undermines educational quality in the medium term, widening inequalities and condemning millions of Mexicans to remain in poverty. The health system has been dismantled on a larger scale, forcing millions of affected Mexicans to resort to private services. In addition, child vaccination coverage, one of the greatest pride of the contemporary Mexican State, has suffered a severe drop in the inability of the public health system to provide infants with their vaccinations. In 2021, only 1 in 3 children in Mexico had a complete vaccination schedule.

As in the rest of the world, energy in Mexico is essential to promote and foster economic development. However, the direction taken by the country's energy policy has undermined the progress made in the sector. With a nationalistic and paternalistic vision towards the country's two leading energy companies, Pemex and CFE, growth and free competition have





Education and health have suffered significant erosion from the pandemic effects and its mismanagement as well as the budgetary austerity policies of the current government.



been severely limited to the actors that the President of Mexico has allowed to participate. Oil rents are no longer significant but show the need to make the state-owned productive enterprises much more efficient and competitive, stimulating private sector participation. It does not make sense to invest tax resources in producing energy that someone else can do more efficiently. The constant operating losses, the labor liabilities, and the technical bankruptcy observed in Pemex call for its profound transformation since not only is it cashing in on Mexico's oil wealth, but it is increasingly necessary for the Federation to provide it with capital income. With a relatively high price of 60 dollars on average in the last four years, the net income from federal contributions barely reaches 13 dollars per barrel or a little more than 1,200 pesos per inhabitant per year.

With a nationalistic and paternalistic vision towards the country's two leading energy companies, Pemex and CFE, growth and free competition have been severely limited to the actors that the President of Mexico has allowed to participate. This government has been in charge to destroy the oil wealth of Mexico which now is part of the past.

The environmental problems presented in the report show the cross-cutting nature, impact, and importance of the environment and climate change in Mexican society. Although these problems continue to be minimized by federal and state authorities, they will undoubtedly determine the new challenges the nation will face. In the short term, the enormous capacity of these problems to spread and influence other sectors should determine that many of these sectors adjust their development plans and routes to consider environmental considerations.

The environmental problems show the cross-cutting nature, impact, and importance of the environment and climate change in Mexican society.

Due to the destruction and disappearance of critical agencies, Mexico is going through a severe governance crisis and is vulnerable to short—and long—term challenges.







#### **REFERENCES**

- ADN 40. (07 de mayo, 2017). 6 de cada 10 ríos en México están contaminados. Agua. Available at: <a href="https://agua.org.mx/6-10-rios-en-mexico-estan-contaminados/">https://agua.org.mx/6-10-rios-en-mexico-estan-contaminados/</a>
- Aguilar, B. (2022). La cuarta transformación y la inversión en el sector eléctrico. Available at: <a href="https://www.elfinanciero.com.mx/opinion/imef/2022/08/16/la-cuarta-transformacion-y-la-inversion-en-el-sector-electrico/">https://www.elfinanciero.com.mx/opinion/imef/2022/08/16/la-cuarta-transformacion-y-la-inversion-en-el-sector-electrico/</a>
- Animal Político. (16 de diciembre, 2021). Organizaciones acusan desmantelamiento ambiental con propuesta de AMLO de desaparecer institutos. Animal Político. Available at: <a href="https://www.animalpolitico.com/2021/12/organizaciones-desmantelamiento-ambiental-amlo-institutos-cambio-climatico/">https://www.animalpolitico.com/2021/12/organizaciones-desmantelamiento-ambiental-amlo-institutos-cambio-climatico/</a>
- Animal Político. (15 de septiembre, 2022a). Consejeros de la CNDH le reclaman por no impugnar la reforma que pasa la Guardia Nacional a la Sedena. Animal Político. Available at: https://www.animalpolitico.com/2022/09/consejeros-cndh-reclaman-no-impugnar-reforma-guardia/
- Animal Político. (11 de octubre, 2022b). 49 senadores de oposición impugnan ante la Corte que Guardia Nacional pase a la Sedena. Animal Político. Available at: <a href="https://www.animalpolitico.com/2022/10/senadores-oposicion-impug-nan-corte-guardia-nacional-pase-a-sedena/">https://www.animalpolitico.com/2022/10/senadores-oposicion-impug-nan-corte-guardia-nacional-pase-a-sedena/</a>
- Animal Político. (19 de octubre, 2022c). La SEP acepta suspender programa piloto del nuevo plan de estudios para educación básica; lo defenderá en tribunales. Available at :https://www.animalpolitico.com/2022/10/sep-acepta-suspender-programa-piloto-plan-estudios/
- Aquae Fundación. (2022). Los 10 ríos más contaminados del mundo. Available at: <a href="https://www.fundacionaquae.org/">https://www.fundacionaquae.org/</a> wiki/rios-mas-contaminados-mundo/

- Arratibel, A. (o1 de septiembre, 2022). La salida de José Sarukhán de la Conabio pone el foco en la política ambiental del Gobierno. El país. Available at: La salida de José Sarukhán de la Conabio pone el foco en la política ambiental del Gobierno I EL PAÍS México (elpais.com)
- Artículo 19. (05 de octubre, 2022a). Exigimos al gobierno y a la SEDENA probar sus descalificaciones a la investigación #EjércitoEspía. [Comunicado de prensa]. Available at: https://articulo19.org/exigimos-al-gobierno-y-a-la-sedena-probar-sus-descalificaciones-a-la-investigacion-ejercito-espia/
- Artículo 19. (2022b). La impunidad y negación ante la violencia extrema contra la prensa persiste: Primer semestre de 2022. Available at: <a href="https://articulo19.org/wp-content/uploads/2022/08/Informe-primer-semestre-2022.pdf">https://articulo19.org/wp-content/uploads/2022/08/Informe-primer-semestre-2022.pdf</a>
- Asociación Mexicana de Parques Industriales Privados, A.C. (AMPIP). (s.f.). El sector inmobiliario industrial en México. Available at: <a href="https://www.ampip.org.mx/sector-inmobilia-rio-industrial/">https://www.ampip.org.mx/sector-inmobilia-rio-industrial/</a>
- Asociación Mexicana de Vacunología (AMV) (s.f). *Bajas Coberturas de Vacunación de México*. Blog de Vacunología. Available at: <a href="https://vacunacion.org/old/ver\_entrada/71-Ba-jas+coberturas+de+vacunaci%C3%B3n+en+M%C3%A9xico">https://vacunacion.org/old/ver\_entrada/71-Ba-jas+coberturas+de+vacunaci%C3%B3n+en+M%C3%A9xico</a>
- Atlas de Justicia Ambiental. (s.f.) *Mapa Mundial de Justicia Ambiental*. Available at: https://ejatlas.org/?translate=es.
- Backhoff, E. (17 de mayo, 2019). La muerte del INEE: los tiempos de la 4T. El Universal. Available at: <a href="https://www.eluniversal.com.mx/columna/eduardo-backhoff-escudero/nacion/la-muerte-del-inee-los-tiempos-de-la-4t">https://www.eluniversal.com.mx/columna/eduardo-backhoff-escudero/nacion/la-muerte-del-inee-los-tiempos-de-la-4t</a>
- Backhoff, E. (15, 05, 2022). En qué se fundamenta la propuesta curricular de AMLO. El Universal. Available at: <a href="https://www.eluniversal.com.mx/opinion/eduardo-backhoff-es-cudero/en-que-se-fundamenta-la-propuesta-curricu-lar-de-amlo">https://www.eluniversal.com.mx/opinion/eduardo-backhoff-es-cudero/en-que-se-fundamenta-la-propuesta-curricu-lar-de-amlo</a>

- Banco de México (Banxico). (s.f.). Indicadores de oferta y demanda agregadas (CR196). Available at: <a href="https://www.banxico.org.mx/SieInternet/consultarDirectorioInternetAction.do?sector=2&accion=consultarCuadro&idCuadro=CR196&locale=es">https://www.banxico.org.mx/SieInternet/consultarDirectorioInternetAction.do?sector=2&accion=consultarCuadro&idCuadro=CR196&locale=es</a>
- Banco de México (Banxico). (s.f.a). Balanza comercial de mercancías de México (sin apertura de maquiladoras) Millones de dólares. Available at: <a href="https://www.banxico.org.mx/SieInternet/consultarDirectorioInternetAction.do?sector=1&idCuadro=CA176&accion=consultarCuadroAnalitico&locale=es">https://www.banxico.org.mx/SieInternet/consultarDirectorioInternetAction.do?sector=1&idCuadro=CA176&accion=consultarCuadroAnalitico&locale=es</a>
- Banco de México (Banxico). (s.f.b). Balanza de pagos con base en MBP6 (a partir de 2002) (CE174). Available at: <a href="https://www.banxico.org.mx/SieInternet/consultarDirectorioInternetAction.do?sector=1&accion=consultarCuadro&idCuadro=CE174&locale=es">https://www.banxico.org.mx/SieInternet/consultarDirectorioInternetAction.do?sector=1&accion=consultarCuadro&idCuadro=CE174&locale=es</a>
- Banco de México (Banxico). (s.f.c). Componentes de inversión extranjera directa en México (Principio direccional) (CE131). Available at: https://www.banxico.org.mx/SieInternet/consultarDirectorioInternetAction.do?accion=consultarCuadro&idCuadro=CE131&sector=1&locale=es
- Banco de México (Banxico). (s.f.d). Índices de Términos de Intercambio, Valor Unitario y Volumen Implícito (CE187). Available at: <a href="https://www.banxico.org.mx/SieInternet/consultarDirectorioInternetAction.do?sector=1&accion=consultarCuadro&idCuadro=CE187&locale=es">https://www.banxico.org.mx/SieInternet/consultarDirectorioInternetAction.do?sector=1&accion=consultarCuadro&idCuadro=CE187&locale=es</a>
- Banco de México (Banxico). (s.f.e). Ingresos por Remesas (CE81). Available at: https://www.banxico.org.mx/SieInternet/consultarDirectorioInternetAction.do?accion=consultarCuadro&idCuadro=CE81&locale=es
- Banco de México (Banxico). (2002). Balanza de pagos. Sistema de Información Económica (SIE). Available at: <a href="https://www.banxico.org.mx/SieInternet/consultarDirectorioInternetAction.do?sector=1&accion=consultarDirectorioCuadros&locale=es">https://www.banxico.org.mx/SieInternet/consultarDirectorioInternetAction.do?sector=1&accion=consultarDirectorioCuadros&locale=es</a>

- Banco de México (Banxico). (2021a). *Dinámica de los Puestos de Trabajo Afiliados al IMSS ante la Reforma a la Subcontratación*. Available at: <a href="https://www.banxico.org.mx/publicaciones-y-prensa/informes-trimestrales/recuadros/%7BD-D53353A-8A8C-9497-E40F-E9B51B89CCE1%7D.pdf">https://www.banxico.org.mx/publicaciones-y-prensa/informes-trimestrales/recuadros/%7BD-D53353A-8A8C-9497-E40F-E9B51B89CCE1%7D.pdf</a>
- Banco de México (Banxico). (2021b). La Reforma del Sistema de Pensiones de México: Posibles Efectos sobre las Jubilaciones, la Dinámica del Ahorro Obligatorio y las Finanzas Públicas. Available at: <a href="https://www.banxico.org.mx/publicaciones-y-prensa/informes-trimestrales/recuadros/%7B-097F33DE-A56A-DA9E-9620-7A9CDC32AA8B%7D.pdf">https://www.banxico.org.mx/publicaciones-y-prensa/informes-trimestrales/recuadros/%7B-097F33DE-A56A-DA9E-9620-7A9CDC32AA8B%7D.pdf</a>
- Banco de México (Banxico). (2022a). Circulación y Tenencia de Valores Gubernamentales (Definición Económica) (CF478). Sistema de Información Económica (SIE). Available at: <a href="https://www.banxico.org.mx/SieInternet/consultarDirecto-rioInternetAction.do?sector=7&accion=consultarCuadro&i-dCuadro=CF478&locale=es">https://www.banxico.org.mx/SieInternet/consultarDirecto-rioInternetAction.do?sector=7&accion=consultarCuadro&i-dCuadro=CF478&locale=es</a>
- Banco de México (Banxico). (2022b). Efectos en la Inversión y Producción de las Unidades Económicas Ante un Fortalecimiento de la Seguridad Pública. Available at: <a href="https://www.banxico.org.mx/publicaciones-y-prensa/reportes-sobre-las-economias-regionales/recuadros/%7B-75BADo68-FDEF-3F04-F790-EB8C91D9C519%7D.pdf">https://www.banxico.org.mx/publicaciones-y-prensa/reportes-sobre-las-economias-regionales/recuadros/%7B-75BADo68-FDEF-3F04-F790-EB8C91D9C519%7D.pdf</a>
- Banco de México (Banxico). (2022c). Evolución Reciente de los Salarios Nominales de los Trabajadores Afiliados al IMSS. Available at: <a href="https://www.banxico.org.mx/publica-ciones-y-prensa/informes-trimestrales/recuadros/%7B9D-C846E0-5893-6A92-B6BB-72287B7BDD02%7D.pdf">https://www.banxico.org.mx/publica-ciones-y-prensa/informes-trimestrales/recuadros/%7B9D-C846E0-5893-6A92-B6BB-72287B7BDD02%7D.pdf</a>
- Banco de México (Banxico). (2022d). La Balanza de Pagos en el Segundo Trimestre de 2022. Available at: <a href="https://www.banxico.org.mx/publicaciones-y-prensa/balanza-de-pagos/%7B12F71511-17E8-B3EE-DB03-1907B87BADD0%7D">https://www.banxico.org.mx/publicaciones-y-prensa/balanza-de-pagos/%7B12F71511-17E8-B3EE-DB03-1907B87BADD0%7D</a>. pdf
- Banco de México (Banxico). (2022e). *Posición de No Residentes en Títulos de Renta Variable 1/- (CF448*). Available at:

- https://www.banxico.org.mx/SieInternet/consultarDirectorioInternetAction.do?sector=1&accion=consultarCuadro&idCuadro=CF448&locale=es
- Banco de México. (Banxico). (2022f). Monto operado a través de tarjetas (CF888). Available at: <a href="https://www.banxico.org.mx/SieInternet/consultarDirectorioInternetAction.do?sector=21&accion=consultarCuadro&idCuadro=C-F888&locale=es">https://www.banxico.org.mx/SieInternet/consultarDirectorioInternetAction.do?sector=21&accion=consultarCuadro&idCuadro=C-F888&locale=es</a>
- Banco de México (Banxico). (2022g). Reporte de Estabilidad Financiera. Available at: https://www.banxico.org.mx/publicaciones-y-prensa/reportes-sobre-el-sistema-financie-ro/%7BCA27B414-CC15-A42D-099B-DBAA4A38A8F2%7D.pdf
- Banco Mundial. (s.f). Gasto en investigación y desarrollo (% del PIB) OECD, members. Datos. Available at: <a href="https://datos.bancomundial.org/indicador/GB.XPD.RSDV.GD.ZS?locations=OE">https://datos.bancomundial.org/indicador/GB.XPD.RSDV.GD.ZS?locations=OE</a>
- Banco Mundial. (2019a). El deterioro de la calidad del agua reduce en un tercio el crecimiento económico en algunos países, según el Banco Mundial. Available at: <a href="https://www.bancomundial.org/es/news/press-release/2019/08/20/worsening-water-quality-reducing-economic-grow-th-by-a-third-in-some-countries">https://www.bancomundial.org/es/news/press-release/2019/08/20/worsening-water-quality-reducing-economic-grow-th-by-a-third-in-some-countries</a>
- Banco Mundial. (2019b). Mortalidad provocada por enfermedades cardiovasculares, cáncer, diabetes o enfermedades respiratorias crónicas entre las edades exactas de 30 y 70 años (%). Available at: https://datos.bancomundial.org/ indicador/SH.DYN.NCOM.ZS
- Banco Mundial. (2021). *Cambio Climático*. Available at: <a href="https://www.bancomundial.org/es/topic/climatechange/overview#1">https://www.bancomundial.org/es/topic/climatechange/overview#1</a>
- Banco Mundial. (2020a). *Crecimiento del PIB per cápita (% anual) México*. Available at: <a href="https://datos.bancomundial.org/indicator/NY.GDP.PCAP.KD.ZG?locations=MX">https://datos.bancomundial.org/indicator/NY.GDP.PCAP.KD.ZG?locations=MX</a>

- Banco Mundial. (2020b). *Indicadores del desarrollo mundial*. Available at: <a href="https://datos.bancomundial.org/indicador">https://datos.bancomundial.org/indicador</a>
- Banco Mundial Blogs. (28 de marzo, 2022). ¿Estamos preparados para la oleada de crisis de la deuda que se aproxima? Available at: <a href="https://blogs.worldbank.org/es/voices/estamos-preparados-para-la-oleada-de-crisis-de-la-deuda-que-se-aproxima">https://blogs.worldbank.org/es/voices/estamos-preparados-para-la-oleada-de-crisis-de-la-deuda-que-se-aproxima</a>
- Barnés de Castro, F. (2022). Sistema Nacional de Refinación Available at: <a href="https://energia.org.mx/wp-content/uploads/2022/03/SistemaNacionalRefinaciónFBarnesPrimeraParte.pdf">https://energia.org.mx/wp-content/uploads/2022/03/SistemaNacionalRefinaciónFBarnesPrimeraParte.pdf</a>
- Barragán, S. (25 de marzo, 2018). Sedena encareció 89% barda de Nuevo Aeropuerto y utilizó empresas fantasma. Aristegui Noticias. Available at: https://aristeguinoticias.com/2503/mexico/sedena-encarecio-89-barda-de-nue-vo-aeropuerto-y-utilizo-empresas-fantasma/
- BBC News. (04 de junio, 2020). *Deforestación: los 10 países que perdieron más bosque virgen en el mundo (y 5 están en América Latina)*. BBC News. Available at: <a href="https://www.bbc.com/mundo/noticias-52915114">https://www.bbc.com/mundo/noticias-52915114</a>
- BBC News. (23 de diciembre, 2019). Cambio climático: los gráficos animados que muestran los 15 países que más CO2 emitieron en los últimos 20 años. BBC News. Available at: https://www.bbc.com/mundo/noticias-internacional-50811389
- BBC News. (12 de agosto, 2022). 4 claves de la ambiciosa ley contra el cambio climático aprobada por Estados Unidos.

  BBC News. Available at: 4 claves de la ambiciosa ley contra el cambio climático aprobada por Estados Unidos BBC

  News Mundo
- Bello, A. (2020). Las mujeres en ciencias, tecnología, ingeniería y matemáticas en América Latina y el Caribe. ONU Mujeres. Available at: <a href="https://lac.unwomen.org/es/digiteca/publicaciones/2020/09/mujeres-en-ciencia-tecnologia-in-genieria-y-matematicas-en-america-latina-y-el-caribe">https://lac.unwomen.org/es/digiteca/publicaciones/2020/09/mujeres-en-ciencia-tecnologia-in-genieria-y-matematicas-en-america-latina-y-el-caribe</a>

- Cámara de Diputados. (2021). *Reformas Constitucionales por Periodo Presidencial*. Available at: <a href="https://www.diputados.gob.mx/LeyesBiblio/ref/cpeum\_per.htm">https://www.diputados.gob.mx/LeyesBiblio/ref/cpeum\_per.htm</a>
- Cámara de Diputados. (2022). Informe Individual del Resultado de la Fiscalización Superior de la Cuenta Pública 2021. Desarrollo Social. Available at: https://informe.asf.gob. mx/Documentos/Informes\_simplificados/2021\_ficha\_ DS\_a.pdf
- Cámara de Diputados del H. Congreso de la Unión. (20 de abril, 2021a). *Ley General de Educación Superior*. Diario Oficial de la Federación (DOF). Available at: <a href="https://www.diputados.gob.mx/LeyesBiblio/ref/lges.htm">https://www.diputados.gob.mx/LeyesBiblio/ref/lges.htm</a>
- Cámara de Diputados del H. Congreso de la Unión. (2021b).

  Presupuesto de Egresos de la Federación para el Ejercicio

  Fiscal 2022. Available at: <a href="https://www.diputados.gob.mx/LeyesBiblio/pdf/PEF\_2022.pdf">https://www.diputados.gob.mx/LeyesBiblio/pdf/PEF\_2022.pdf</a>
- Campos, A., Álvarez, L. y Cano, J. (2022). Seguridad Pública en el PEF 2022: más gasolina para la militarización. México Evalúa. Available at: <a href="https://www.mexicoevalua.org/seguridad-publica-en-el-pef-2022-mas-gasolina-para-la-mi-litarizacion/">https://www.mexicoevalua.org/seguridad-publica-en-el-pef-2022-mas-gasolina-para-la-mi-litarizacion/</a>
- Campos, M. y Cano, J. (2022). *IMSS-Bienestar: maquillando el fracaso en salud*. Animal Político. Available at: <a href="https://www.animalpolitico.com/lo-que-mexico-evalua/imss-bienestar-maquillando-el-fracaso-en-salud/">https://www.animalpolitico.com/lo-que-mexico-evalua/imss-bienestar-maquillando-el-fracaso-en-salud/</a>
- Carabaña,C. (30 de junio, 2021a). El Tren Maya no debe atravesar la Reserva de Calakmul. The Washington Post. Available at: <a href="https://www.washingtonpost.com/es/post-opinion/2021/06/30/tren-maya-ruta-reserva-calakmul-selva-impacto-ambiental/">https://www.washingtonpost.com/es/post-opinion/2021/06/30/tren-maya-ruta-reserva-calakmul-selva-impacto-ambiental/</a>
- Carabaña,C. (29 de noviembre, 2021b). Sembrando Vida no es un programa ambiental. El gobierno mexicano debería investigarlo y corregirlo. The Washington Post. Available at: https://www.washingtonpost.com/es/post-opi

- nion/2021/11/29/sembrando-vida-amlo-deforestacion-chocolates-aristegui-mexico-2021/
- Cárdenas, E. (2012). *Pemex y la macroeconomía mexicana,* 1938-2011. En Pemex 75 años. La empresa, su gente y la economía mexicana, México, Quinta Chilla.
- Cárdenas, E. (2018). *Política hacendaria en México de 2013 a 2017*. Una primera aproximación al sexenio. El Trimestre Económico, Vol. LXXXV (4).
- Cárdenas, E. (14 de julio, 2022). iCuidado! El sector externo está estancado. El financiero. Available at: <a href="https://www.el-financiero.com.mx/opinion/enrique-cardenas/2022/07/14/cuidado-el-sector-externo-esta-estancado/">https://www.el-financiero.com.mx/opinion/enrique-cardenas/2022/07/14/cuidado-el-sector-externo-esta-estancado/</a>
- Carrillo, E. (o6 de septiembre, 2022). Sí se presiona a la Corte sobre la necesidad de la prisión preventiva oficiosa: AMLO. Forbes. Available at: <a href="https://www.forbes.com.mx/si-se-presiona-a-la-corte-sobre-la-necesidad-de-la-prision-pre-ventiva-oficiosa-amlo/">https://www.forbes.com.mx/si-se-presiona-a-la-corte-sobre-la-necesidad-de-la-prision-pre-ventiva-oficiosa-amlo/</a>
- Carro Nava, A. (2020). El presupuesto 2021 para las escuelas normales: ¿crónica de un desmantelamiento anunciado? Faro Educativo, Apunte de política N° 20. Ciudad de México: INIDE de la UIA. Available at: <a href="https://faroeducativo.ibero.mx/">https://faroeducativo.ibero.mx/</a> wp-content/uploads/2020/11/Apuntes-de-politica-20.pdf
- Casar, Ma.A. (2020). *La ilegalidad y el presidente*. Nexos. Available at: <a href="https://nexos.com.mx/?p=47085">https://nexos.com.mx/?p=47085</a>
- Causa en Común. (28 de junio, 2021). *Y sigue la mata dando:* el asalto a la ley desde el gobierno federal. Nexos. Available at: <a href="https://eljuegodelacorte.nexos.com.mx/y-sigue-la-mata-dando-el-asalto-a-la-ley-desde-el-gobierno-federal/">https://eljuegodelacorte.nexos.com.mx/y-sigue-la-mata-dando-el-asalto-a-la-ley-desde-el-gobierno-federal/</a>
- Causa en Común. (2022). Análisis de los datos sobre denuncias y víctimas reportadas por el Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública. Available at: http://causaencomun.org.mx/beta/wp-content/uploads/2022/09/2022.09.27\_AnalsisIncidencia\_VF.pdf

- Centro de Estudios de las Finanzas Públicas (CEFP). (2020). *Coberturas petroleras 2008 – 2020*. Available at: <a href="https://www.cefp.gob.mx/publicaciones/nota/2021/notace-fp0132021.pdf">https://www.cefp.gob.mx/publicaciones/nota/2021/notace-fp0132021.pdf</a>
- Centro de Estudios de las Finanzas Públicas (CEFP). (2022). Fondo de Desastres Naturales "Fonden", 2022. Available at: https://www.cefp.gob.mx/publicaciones/nota/2022/notacefpo122022.pdf
- Centro de Investigación Económica y Presupuestaria (CIEP). (s.f). Sistema Universal de Salud. Retos de cobertura y financiamiento. CIEP. Available at: <a href="https://saludenmexico.ciep.mx/images/sistema-universal-de-salud.pdf">https://saludenmexico.ciep.mx/images/sistema-universal-de-salud.pdf</a>
- Centro de Investigación Económica y Presupuestaria, A.C (CIEP). (2021). Pensión universal para adultos mayores. Una revisión necesaria. Available at: <a href="https://ciep.mx/wp-content/uploads/2021/04/Pensión-BAM.pdf">https://ciep.mx/wp-content/uploads/2021/04/Pensión-BAM.pdf</a>
- Centro de Investigación Económica y Presupuestaria, A. C. (CIEP). (2022). *Implicaciones del Paquete Económico 2023*. Available at: <a href="https://ciep.mx/implicaciones-del-paquete-economico-2023/">https://ciep.mx/implicaciones-del-paquete-economico-2023/</a>
- Centro de Investigación en Política Pública (IMCO). (29 de junio, 2022). *Refinería de Dos Bocas*. Available at: <a href="https://imco.org.mx/refineria-de-dos-bocas/">https://imco.org.mx/refineria-de-dos-bocas/</a>
- Centro de Investigación y Docencia Económicas (CIDE). (2021). *Una radiografía de los procesos de militarización en Méxi- co*. Plataforma de Proyección de Datos Abiertos (PPData). Política de Drogas CIDE. Available at: <a href="https://ppdata.">https://ppdata.</a>
  politicadedrogas.org/#ppd.inm
- Centro Mexicano de Derecho Ambiental (CEMDA). (s.f.). *Todo lo que tienes que saber sobre el Tren Maya*. Available at: <a href="https://www.cemda.org.mx/tren-maya/">https://www.cemda.org.mx/tren-maya/</a>
- Centro Mexicano de Derecho Ambiental (CEMDA). (s.f.1).Impactos de la calidad del aire y en la economía en México.

- Available at: <a href="https://www.cemda.org.mx/wp-content/uploads/2014/07/respira-mexico-baja-resolucion.pdf">https://www.cemda.org.mx/wp-content/uploads/2014/07/respira-mexico-baja-resolucion.pdf</a>
- Centro Nacional de Información de Hidrocarburos (CNIH). (2021). Sistema de Información de Hidrocarburos (SIH). CNIH. Available at: https://sih.hidrocarburos.gob.mx
- Centro Nacional de Información de Hidrocarburos (CNIH). (2022). *Prospectiva de producción del petróleo. Actualización al cierre del cuarto trimestre 2021*. Available at: reporte-prospectiva-4to-trim.pdf (hidrocarburos.gob.mx)
- Cero Desabasto. (2022). Radiografía del desabasto. Informe de Transparencia en Salud 2017–2021. Available at: <a href="https://www.razon.com.mx/uploads/files/2022/03/02/Radiografia-desabasto-2017-2021.pdf">https://www.razon.com.mx/uploads/files/2022/03/02/Radiografia-desabasto-2017-2021.pdf</a>
- Cisneros, V. y Rubí, M. (19 de enero, 2022). Las pruebas del "diezmo" de Delfina a Morena. Mexicanos Contra la Corrupción. Available at: <a href="https://contralacorrupcion.mx/las-prue-bas-del-diezmo-de-delfina-a-morena/">https://contralacorrupcion.mx/las-prue-bas-del-diezmo-de-delfina-a-morena/</a>
- Climate Action Tracker. (2021). *México*. Available at: <a href="https://climateactiontracker.org/countries/mexico/">https://climateactiontracker.org/countries/mexico/</a>
- Comisión Económica para América Latina y el Caribe (CE-PAL). (2019). *Cambio Climático y Derechos Humanos*.
  Contribuciones desde y para América Latina y El Caribe.
  Available at: <a href="https://repositorio.cepal.org/bitstream/hand-le/11362/44970/4/S1901157\_es.pdf">https://repositorio.cepal.org/bitstream/hand-le/11362/44970/4/S1901157\_es.pdf</a>
- Comisión Federal de Competencia Económica (Cofece). (20 de noviembre, 2020). *COFECE emite opinión sobre propuesta para regular las comisiones que cobran las Afores*. Available at: <a href="https://www.cofece.mx/cofece-emite-opinion-sobre-propuesta-para-regular-las-comisiones-que-cobran-las-afores/">https://www.cofece.mx/cofece-emite-opinion-sobre-propuesta-para-regular-las-comisiones-que-cobran-las-afores/</a>
- Comisión Nacional de Salarios Mínimos y Banco de México. (2022). Sistema de Información Económica (SIE). Available at: https://www.banxico.org.mx/SieInternet/consultarDi

- rectorioInternetAction.do?sector=10&accion=consultarCuadroAnalitico&idCuadro=CA6o1&locale=es
- Consejo Nacional de Ciencia y Tecnología (Conacyt). (s.f). Investigadores vigentes 2021. Archivo Histórico. Sistema Nacional de Investigadores (SIN) Conacyt. Available at: https://conacyt.mx/sistema-nacional-de-investigadores/ archivo-historico/
- Consejo Nacional de Evaluación de la Política de Desarrollo Social (Coneval). (s.f). *Medición de la Pobreza*. Coneval. Available at: <a href="https://www.coneval.org.mx/Medicion/MP/Paginas/Pobreza\_2020.aspx">https://www.coneval.org.mx/Medicion/MP/Paginas/Pobreza\_2020.aspx</a>
- Consejo Nacional de Evaluación de la Política de Desarrollo Social (Coneval). (2022a). El Coneval presenta información referente a la pobreza laboral al cuarto trimestre de 2021. Available at: https://www.coneval.org.mx/SalaPrensa/Comunicadosprensa/Documents/2022/COMUNICA-DO\_002.2022\_ITLP\_CUARTO\_TRIMESTRE\_2022.pdf
- Consejo Nacional de Evaluación de la Política de Desarrollo Social (Coneval). (2022b). El Coneval presenta información referente a la pobreza laboral al segundo trimestre de 2022. Available at: <a href="https://www.coneval.org.mx/Medicion/Paginas/ITLP-IS\_pobreza\_laboral.aspx">https://www.coneval.org.mx/Medicion/Paginas/ITLP-IS\_pobreza\_laboral.aspx</a>
- Crail, A. (o6 de octubre, 2022). Al Qaeda, CJNG y colectivos feministas entre los "riesgos" que la Sedena encontró para el AIFA. El Universal. Available at: https://www.eluniversal.com.mx/nacion/al-qaeda-cjng-y-colectivos-feministas-entre-los-riesgos-que-la-sedena-encontro-para-el-aifa
- Cullell, J. (16 de junio, 2020). Los guardaparques de las áreas naturales mexicanas se movilizan frente a la asfixia presupuestaria. El país. Available at: Los guardaparques de las áreas naturales mexicanas se movilizan frente a la asfixia presupuestaria | Sociedad | EL PAÍS (elpais.com)
- DW. (2019). Alemania anuncia un plan de 54.000 millones para combatir la crisis climática. Available at: <a href="https://www.dw.com/es/alemania-anuncia-un-plan-de-54000-mi-">https://www.dw.com/es/alemania-anuncia-un-plan-de-54000-mi-</a>

- llones-para-combatir-la-crisis-clim%C3%A1ti-ca/a-50509903#:~:text=El%20Gobierno%20alem%-C3%A1n%20anunci%C3%B3%20este%20viernes%20%2820.09.2019%29%20un,en%20energ%C3%A-Da%2C%20transporte%2C%20construcci%C3%B3n%20e%20innovaci%C3%B3n%20y%20desarrollo.
- Economist Intelligence Unit (EIU). (2021). *Democracy Index* 2021: the China challenge. EIU. Available at: Democracy Index 2021 Economist Intelligence Unit (eiu.com)
- EFE Verde. (09 de marzo, 2020). México desarrolla un plan de vigilancia de la contaminación de los ríos en tiempo real.

  EFE Verde. Available at: https://efeverde.com/mexico-desarrolla-plan-vigilancia-la-contaminacion-los-rios-tiempo-real/#:~:text=Investigadores%20mexicanos%20trabajan%20para%20crear%20un%20sistema%20piloto,vigilar%C3%A1%20la%20contaminaci%C3%B3n%20y%20calidad%20de%20sus%20r%C3%ADos.
- El Ceo. (3 de agosto, 2022). Sanborns se une a 14 empresas que se van de la BMV en lo que va del gobierno de AMLO. Available at: https://elceo.com/mercados/sanborns-se-une-a-14-empresas-que-se-van-de-la-bmv-en-lo-que-va-del-gobierno-de-amlo/
- El Financiero. (o2 de septiembre, 2022a). AMLO, 'arrepentido' por nombramientos a la Corte: 'Me equivoqué con ministras'. El Financiero. Available at: https://www.elfinanciero.com.mx/nacional/2022/09/02/amlo-arrepentido-por-nombramientos-a-la-corte-me-equivoque-con-ministros/
- El financiero. (12 de enero, 2022b). Caso Delfina Gómez: ¿Por qué sancionan a Morena por los 'diezmos' millonarios?.

  El Financiero. Available at: <a href="https://www.elfinanciero.com.mx/nacional/2022/01/12/recuento-del-caso-delfina-go-mez-por-que-sancionan-a-morena/&lang=en/">https://www.elfinanciero.com.mx/nacional/2022/01/12/recuento-del-caso-delfina-go-mez-por-que-sancionan-a-morena/&lang=en/</a>
- El Financiero. (23 de octubre, 2022c). CDMX libra la contingencia ambiental: vientos y nubosidad le 'echan la mano'. El Financiero. Available at: https://www.elfinanciero.com.

- mx/cdmx/2022/10/23/cdmx-libra-la-contingencia-ambiental-vientos-y-nubosidad-le-echan-la-mano/
- El Universal. (15 de octubre de 2022). *Tapanatepec, un "cuello de botella" que deja varados a miles de migrantes en Oaxaca*. Available at: <a href="https://oaxaca.eluniversal.com.mx/estatal/tapanatepec-un-cuello-de-botella-que-deja-varados-miles-de-migrantes-en-oaxaca-1">https://oaxaca.eluniversal.com.mx/estatal/tapanatepec-un-cuello-de-botella-que-deja-varados-miles-de-migrantes-en-oaxaca-1</a>
- Energy21. (11 de agosto, 2022). Pagaría México hasta 30 mil mdd por violar obligaciones del T-MEC.

  Energy21. Available at: https://energy21.com.mx/
  politica-y-normatividad/2022/08/11/pagaria-mexico-hasta-30-mil-mdd-por-violar-obligaciones-del-t#:~:text=Pagar%C3%ADa%20M%C3%A9xico%20hasta%2030%20mil%20mdd%20por%20violar,y%20t%C3%A9rminos%20establecidas%20en%20el%20acuerdo%20internacional%20tripartito.
- European Comission. (14 de septiembre, 2022). 2022 State of the Union Address by President von der Leyen. Available at: <a href="https://ec.europa.eu/commission/presscorner/detail/en/speech\_22\_5493">https://ec.europa.eu/commission/presscorner/detail/en/speech\_22\_5493</a>
- Excelsior. (27 de octubre, 2021). Según SEMARNAT el 70% de los ríos y lagos en México están contaminados. Excelsior. Available at: Según SEMARNAT el 70% de los ríos y lagos en México están contaminados (excelsior.com.mx)
- Fernández, J. (24 de noviembre, 2021). Victoria Rodríguez no cumple los requisitos para ser gobernadora de Banxico. WRadio. Available at: <a href="https://wradio.com.mx/radio/2021/11/25/nacional/1637801837\_109474.html">https://wradio.com.mx/radio/2021/11/25/nacional/1637801837\_109474.html</a>
- Fernández, A., Hernández, D., Herrera, L. y Reyes, S. (2022). Restando oportunidades: caída en la matrícula de la media superior y superior. IEEC. Escuela de Gobierno y Transformación Pública del ITESM y México Evalúa. Available at: https://www.ieec.mx/posts/restando oportunidades ieec
- Fernández, M. y Herrera, L. (2022). Los pesos de la educación: la propuesta de inversión para 2023. Nexos. Available at:

- https://educacion.nexos.com.mx/los-pesos-de-la-educa-cion-la-propuesta-de-inversion-para-2023/
- Ferreyra, Beltrán. M.C. (2020). *Desigualdades y brechas de género en tiempos de pandemia*. *Consejo Mexicano de Ciencias Sociales (COMECSO)*. Available at: <a href="https://www.comecso.com/las-ciencias-sociales-y-el-coronavirus/desigualdades-brechas-genero-pandemia">https://www.comecso.com/las-ciencias-sociales-y-el-coronavirus/desigualdades-brechas-genero-pandemia</a>
- Ferri, P. (08 de agosto, 2022). *Delgadillo Padierna, un 'sheriff', un juez*. El País. Available at: <a href="https://elpais.com/mexico/2022-08-08/delgadillo-padierna-un-sheriff-un-juez.html">https://elpais.com/mexico/2022-08-08/delgadillo-padierna-un-sheriff-un-juez.html</a>
- Fondo de las Naciones Unidas para la Infancia (UNICEF). (2022). Fondo de las Naciones Unidas para la Infancia, Estado Mundial de la Infancia 2021: En mi mente: Promover, proteger y cuidar la salud mental de la infancia. UNICEF, Nueva York, enero de 2022. Available at: https://www.unicef.org/media/114641/file/SOWC%202021%20Full%20 Report%20 Spanish.pdf
- Fondo Monetario Internacional (FMI). (2013). Manual de Balanza de Pagos y Posición de Inversión Internacional Sexta edición (MBP6). Available at: <a href="https://www.imf.org/external/pubs/ft/bop/2007/bopman6.htm">https://www.imf.org/external/pubs/ft/bop/2007/bopman6.htm</a>
- Friedrich-Ebert-Stiftung en Colombia (Fescol). (2021). *Militares y gobernabilidad*. Bogotá.
- Gallardo, A. (2020). Efecto del covid-19 en la expectativa de vida al nacer en México. Taller de datos. Hallazgos. Nexos. Available at: <a href="https://datos.nexos.com.mx/efecto-del-covid-19-en-la-expectativa-de-vida-al-nacer-en-mexico/#\_ftn2">https://datos.nexos.com.mx/efecto-del-covid-19-en-la-expectativa-de-vida-al-nacer-en-mexico/#\_ftn2</a>
- García, C. (16 de agosto, 2019). 2004, el año en que surgió el pleito entre Dolores Padierna y Rosario Robles. El Universal. Available at: <a href="https://www.eluniversal.com.mx/nacion/politica/2004-el-ano-en-que-surgio-el-pleito-entre-dolo-res-padierna-y-rosario-robles">https://www.eluniversal.com.mx/nacion/politica/2004-el-ano-en-que-surgio-el-pleito-entre-dolo-res-padierna-y-rosario-robles</a>
- García, J. (13 de septiembre, 2022). El jefe del Ejército reprocha a quienes critican a las Fuerzas Armadas en medio del

- debate sobre la militarización del país. El País. Available at: https://elpais.com/mexico/2022-09-14/el-jefe-del-ejer-cito-reprocha-a-quienes-critican-a-las-fuerzas-arma-das-en-medio-del-debate-sobre-la-militarizacion-del-pais. html
- García, K. (22 de febrero,2021). Dos Bocas, sin análisis de riesgos ambientales y 75 millones de pesos por aclarar: ASF. El Economista. Available at: <a href="https://www.eleconomista.com">https://www.eleconomista.com</a>. <a href="mailto:mx/empresas/Dos-Bocas-sin-analisis-de-riesgos-ambienta-les-y-75-mdp-por-aclarar-20210222-0009.html">https://www.eleconomista.com</a>.
- Global Energy Monitor. (2022). *Pipeline Statistics*. En Summary Tables. Available at: <a href="https://globalenergymonitor.org/projects/global-gas-infrastructure-tracker/summary-tables/">https://globalenergymonitor.org/projects/global-gas-infrastructure-tracker/summary-tables/</a>
- Gobierno de México (s.f.1). Apoyo para el Bienestar de las Niñas y Niños, Hijos de Madres Trabajadoras. Programas para el Desarrollo. Padrón Único de Beneficiarios. Available at: https://pub.bienestar.gob.mx/v2/pub/programasIntegrales/12/2003
- Gobierno de México. (s.f.2). Exceso de Mortalidad en México. Available at: <a href="https://coronavirus.gob.mx/exceso-de-morta-lidad-en-mexico/">https://coronavirus.gob.mx/exceso-de-morta-lidad-en-mexico/</a>
- Gobierno de México (s.f.3). *IMSS- Bienestar*. Available at: http://www.imss.gob.mx/imss-bienestar#:~:text=El%20 Programa%20IMSS%2DBIENESTAR%2oproporciona%20 servicios%2ode%2osalud%2ogratuitos%2oa,m%C3%A9dica%2oy%2ola%2oacci%C3%B3n%2ocomunitaria.
- Gobierno de México. (s.f.4). *Padrón Único de Beneficiarios del Gobierno Federal*. Available at: https://pub.bienestar.gob.mx/pub
- Gobierno de México. (2013-2017). *Balance Nacional de Ener-gía*. Available at: <a href="https://www.gob.mx/sener/documentos/balance-nacional-de-energia">https://www.gob.mx/sener/documentos/balance-nacional-de-energia</a>

- Gobierno de México. (2018-2020). *Balance Nacional de Ener-gía*. Available at: <a href="https://www.gob.mx/sener/documentos/balance-nacional-de-energia-2019">https://www.gob.mx/sener/documentos/balance-nacional-de-energia-2019</a>
- Gobierno de México (19 de octubre, 2022). Boletín SEP No. 248. Available at: https://www.gob.mx/sep/es/articulos/boletin-sep-no-248-presenta-sep-a-autoridades-educativas-estatales-estrategia-para-inhibir-uso-de-vapeadores?idiom=es
- Gómez, T. (14 de enero, 2020). Los desafíos ambientales de México para el 2020. MONGABAY. Available at: <a href="https://es.mongabay.com/2020/01/los-desafios-ambienta-les-de-mexico-para-el-2020/">https://es.mongabay.com/2020/01/los-desafios-ambienta-les-de-mexico-para-el-2020/</a>
- Gonzáles, L. (11 de agosto, 2019). México, segundo país con mayor estrés hídrico en América Latina. El Economista. Available at: <a href="https://www.eleconomista.com.mx/arte-seideas/Mexico-segundo-pais-con-mayor-estres-hidri-co-en-America-Latina-20190811-0077.html">https://www.eleconomista.com.mx/arte-seideas/Mexico-segundo-pais-con-mayor-estres-hidri-co-en-America-Latina-20190811-0077.html</a>
- Greenpeace. (2020). *Tracking the Cost of Air Pollution*. Available at: <a href="https://www.greenpeace.org/international/campaign/tracking-cost-air-pollution/">https://www.greenpeace.org/international/campaign/tracking-cost-air-pollution/</a>
- Grupo Funcional Desarrollo Económico. (2019). Auditoría a la Suspensión y Cierre del Proyecto del Nuevo Aeropuerto Internacional de la Ciudad de México (Texcoco). Available at: https://www.asf.gob.mx/Trans/Informes/IR2019c/Documentos/Auditorias/2019\_1394\_a.pdf
- Guillén, B. (o6 de septiembre, 2022). La Suprema Corte aplaza la decisión final sobre la prisión preventiva oficiosa en pleno pulso con el Gobierno. El País. Available at: <a href="https://elpais.com/mexico/2022-09-06/la-decisiva-se-sion-sobre-la-prision-preventiva-oficiosa-mantiene-el-pulso-del-gobierno-con-la-suprema-corte.html">https://elpais.com/mexico/2022-09-06/la-decisiva-se-sion-sobre-la-prision-preventiva-oficiosa-mantiene-el-pulso-del-gobierno-con-la-suprema-corte.html</a>
- Gutiérrez, R. (11 de mayo de 2021). Las claves de la Nueva Ley General de Educación Superior. Gaceta UNAM. Available at: https://www.gaceta.unam.mx/ley-general-de-educacion-superior-a-punto-de-entrar-en-vigencia/

- Hernández, E. (19 de octubre de 2022). *Obras del Ejército han llevado a la quiebra a 2,500 constructoras: CMIC*. Forbes México. Available at: <a href="https://www.forbes.com.mx/obras-que-construye-el-ejercito-han-llevado-a-la-quiebra-a-2500-constructoras-cmic/">https://www.forbes.com.mx/obras-que-construye-el-ejercito-han-llevado-a-la-quiebra-a-2500-constructoras-cmic/</a>
- Hevia, F. J., Vergara-Lope, S., Velásquez-Durán, A., & Calderón, D. (2022). Estimation of the fundamental learning loss and learning poverty related to COVID-19 pandemic in Mexico. International journal of educational development, 88, 102515. Available at: <a href="https://doi.org/10.1016/j.ijedu-dev.2021.102515">https://doi.org/10.1016/j.ijedu-dev.2021.102515</a>
- Impunidad Cero. (2021). Índice Estatal de Desempeño de Procuradurías y Fiscalías (IEDF) 2021. Available at: <a href="https://www.impunidadcero.org/uploads/app/articulo/160/conte-nido/1649369674T53.pdf">https://www.impunidadcero.org/uploads/app/articulo/160/conte-nido/1649369674T53.pdf</a>
- Impunidad Cero. (2022). *Percepción de Impunidad 2022*. Available at: <a href="https://www.impunidadcero.org/uploads/app/articulo/170/contenido/1661453368W61.pdf">https://www.impunidadcero.org/uploads/app/articulo/170/contenido/1661453368W61.pdf</a>
- Infobae. (03 de noviembre, 2021). Pese a cobertura de 98.8% aún existe un acceso desigual al agua potable en México. Infobae. Available at: https://www.infobae.com/america/mexico/2021/11/03/pese-a-cobertura-de-988-aun-existe-un-acceso-desigual-al-agua-potable-en-mexico/
- Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado (ISSSTE). (2022). *Informe Financiero y Actuarial 2022*. Available at: <a href="https://www.gob.mx/issste/documentos/informe-financiero-y-actuarial-ifa">https://www.gob.mx/issste/documentos/informe-financiero-y-actuarial-ifa</a>
- Instituto Mexicano del Seguro Social (IMSS) (s.f). *Programa IMSS-Bienestar*. Municipios e infraestructura. Available at: <a href="https://www.imss.gob.mx/sites/all/statics/imssBienestar/infraestructura/InfraestructuraTotal.pdf">https://www.imss.gob.mx/sites/all/statics/imssBienestar/infraestructura/InfraestructuraTotal.pdf</a>
- Instituto Mexicano del Seguro Social (IMSS). (s.f.). Puestos de Trabajo Registrados por los Patrones en el Instituto Mexicano del Seguro Social. Available at: https://public.tableau.

- com/app/profile/imss.cpe/viz/Histrico\_4/Empleo\_h?publish=yes
- Instituto Mexicano del Seguro Social (IMSS). (2020). Informe al Ejecutivo Federal y al Congreso de la Unión sobre la situación financiera y los riesgos del Instituto Mexicano del Seguro Social 2019-2020. Available at: 21-InformeCompleto.pdf (imss.gob.mx)
- Instituto Mexicano del Seguro Social (IMSS). (2021). Informe al Ejecutivo Federal y al Congreso de la Unión sobre la situación financiera y los riesgos del Instituto Mexicano del Seguro Social. Available at: <a href="mailto:22-InformeCompleto.pdf">22-InformeCompleto.pdf</a> (imss. gob.mx)
- Instituto Mexicano del Seguro Social (IMSS). (2022). Informe al Ejecutivo Federal y al Congreso de la Unión sobre la situación financiera y los riesgos del Instituto Mexicano del Seguro Social . Available at: Informe Ejecutivo 21-22\_PORTAL.pdf (imss.gob.mx)
- Instituto Mexicano para la Competitividad A.C. (IMCO). (2022). Índice de Riesgos de Corrupción 2022. Available at: <a href="https://imco.org.mx/indice-de-riesgos-de-corrupcion-2022/">https://imco.org.mx/indice-de-riesgos-de-corrupcion-2022/</a>
- Instituto Mexicano para la Competitividad A.C. (IMCO). (2019). Diagnóstico IMCO. La política social en México, sin rumbo ni destino cierto. Available at: <a href="https://imco.org.mx/wp-content/uploads/2019/06/2019-06-03\_Diagnóstico-IM-CO-La-pol%C3%ADtica-Social-en-México-sin-rumbo-ni-destino-cierto-Documento-PDF.pdf">https://imco.org.mx/wp-content/uploads/2019/06/2019-06-03\_Diagnóstico-IM-CO-La-pol%C3%ADtica-Social-en-México-sin-rumbo-ni-destino-cierto-Documento-PDF.pdf</a>
- Instituto Nacional de Ecología y Cambio Climático (INECC) . (2018) . La economía del cambio climático. Resumen Informativo. Ciudad de México. Available at: <a href="https://cambioclimatico.gob.mx/sexta-comunicacion/material/economia.pdf">https://cambioclimatico.gob.mx/sexta-comunicacion/material/economia.pdf</a>
- Instituto Nacional de Ecología y Cambio Climático (INECC). (2021). Informe Nacional de la Calidad del Aire 2021. México. Ciudad de México: Coordinación General de Contaminación y Salud Ambiental, Dirección de Investigación de

- Calidad del Aire y Contaminantes Climáticos. Ciudad de México. Available at: Informe2020.pdf (inecc.gob.mx)
- Instituto Nacional de Ecología y Cambio Climático (INECC) y Secretaría de Medio Ambiente y Recursos Naturales. (2016). Estimación de impactos en la salud por contaminación atmosférica en la región centro del país y alternativas de gestión. Available at: <a href="https://www.gob.mx/cms/uploads/">https://www.gob.mx/cms/uploads/</a> attachment/file/208105/INECC\_CAME\_Final\_14022017.pdf
- Instituto Nacional de Estadística y Geografía (INEGI). (s.f). Censo de Población y Vivienda 2020. Available at: <a href="https://www.inegi.org.mx/programas/ccpv/2020/">https://www.inegi.org.mx/programas/ccpv/2020/</a>
- Instituto Nacional de Estadística y Geografía (INEGI).(s.f.a).

  Derechohabiencia. Información sobre derechohabientes
  afiliados a las instituciones del Sistema Nacional de Salud.
  Available at: https://www.inegi.org.mx/temas/derechohabiencia/
- Instituto Nacional de Estadística y Geografía (INEGI). (s.f.b). Encuesta Nacional de Empresas Constructoras (ENEC). Serie 2013. Available at: <a href="https://www.inegi.org.mx/programas/enec/2013/#Tabulados">https://www.inegi.org.mx/programas/enec/2013/#Tabulados</a>
- Instituto Nacional de Estadística y Geografía (INEGI). (s.f.c). Encuesta Nacional de Ocupación y Empleo (ENOE), población de 15 años y más de edad. Available at: <a href="https://www.inegi.org.mx/programas/enoe/15ymas/#Tabulados">https://www.inegi.org.mx/programas/enoe/15ymas/#Tabulados</a>
- Instituto Nacional de Estadística y Geografía (INEGI), (2013-2022). *Economía global*. Available at: <a href="https://www.inegi.org.mx/temas/productividadeco/">https://www.inegi.org.mx/temas/productividadeco/</a>
- Instituto Nacional de Estadística y Geografía (INEGI). (2013). Encuesta Nacional de Empresas Constructoras (ENEC). Serie 2013. Available at: <a href="https://www.inegi.org.mx/programas/enec/2013/#Tabulados">https://www.inegi.org.mx/programas/enec/2013/#Tabulados</a>
- Instituto Nacional de Estadística y Geografía (INEGI). (2020a). Censo de Población y Vivienda 2020. Available at: <a href="https://www.inegi.org.mx/programas/ccpv/2020/#Tabulados">https://www.inegi.org.mx/programas/ccpv/2020/#Tabulados</a>

- Instituto Nacional de Estadística y Geografía (INEGI). (2020b). Cuentas Económicas y Ecológicas de México, 2003–2020. Producto interno neto ajustado ambientalmente, por sector económico. En Sistema de Cuentas Nacionales de México. INEGI .Available at: <a href="https://www.inegi.org.mx/programas/ee/2003/default.html#Tabulados">https://www.inegi.org.mx/programas/ee/2003/default.html#Tabulados</a>
- Instituto Nacional de Estadística y Geografía (INEGI) (2020c). *Ecológicas*. Available at: <a href="https://www.inegi.org.mx/temas/ee/">https://www.inegi.org.mx/temas/ee/</a>
- Instituto Nacional de Estadística y Geografía (INEGI). (2020d). Encuesta para la Medición del Impacto COVID-19 en la Educación (ECOVID-ED) 2020. INEGI. Available at: <a href="https://www.inegi.org.mx/investigacion/ecovided/2020/">https://www.inegi.org.mx/investigacion/ecovided/2020/</a>
- Instituto Nacional de Estadística y Geografía (INEGI). (2021a). Cuantificando la Clase Media en México 2010-2020. Available at: https://www.inegi.org.mx/contenidos/investigacion/cmedia/doc/cm\_desarrollo.pdf
- Instituto Nacional de Estadística y Geografía (INEGI).(2021b).

  Mortalidad. Conjunto de datos: Defunciones por homicidios. INEGI. Available at: https://www.inegi.org.mx/sistemas/olap/proyectos/bd/continuas/mortalidad/defuncioneshom.asp?s=est
- Instituto Nacional de Estadística y Geografía (INEGI). (2022a). Censo Nacional de Sistema Penitenciario Federal y Estatales 2021. Available at: <a href="https://www.inegi.org.mx/conteni-dos/programas/cnspef/2021/doc/cnsipef\_2021\_resulta-dos.pdf">https://www.inegi.org.mx/conteni-dos/programas/cnspef/2021/doc/cnsipef\_2021\_resulta-dos.pdf</a>
- Instituto Nacional de Estadística y Geografía (INEGI). (2022b). Encuesta Nacional de Victimización y Percepción sobre Seguridad Pública (ENVIPE) 2022. INEGI. Available at: https://www.inegi.org.mx/programas/envipe/2022/
- Instituto Nacional de Estadística y Geografía (INEGI). (2022c). Estadísticas de defunciones registradas 2021. Comunicado de prensa Núm. 378/22. Available at: https://www.inegi.

- org.mx/contenidos/saladeprensa/boletines/2022/dr/dr2021\_07.pdf
- Instituto Nacional de Estadística y Geografía (INEGI). (2022d). Indicador Mensual de la Formación Bruta de Capital Fijo (IMFBCF). Base 2013. Available at: <a href="https://www.inegi.org.mx/programas/ifb/2013/">https://www.inegi.org.mx/programas/ifb/2013/</a>
- Instituto Nacional de Estadística y Geografía (INEGI).(2022e).

  Inversión Fija Bruta. Available at: <a href="https://www.inegi.org.mx/temas/ifb/#Informacion\_general">https://www.inegi.org.mx/temas/ifb/#Informacion\_general</a>
- Instituto Nacional Electoral (INE). (2022). El INE cuenta con 1,567.4 MDP para la organización de la Revocación de Mandato. Central Electoral. Available at: https://centralelectoral.ine.mx/2022/02/04/el-ine-cuenta-con-1567-4-mdp-para-la-organizacion-de-la-revocacion-de-mandato/
- Integralia Consultores. (2022). La militarización en México. Hacia la consolidación de una política de Estado 2006-2022. Available at: https://integralia.com.mx/web/reporte-especial-la-militarizacion-en-mexico-hacia-la-consolidacion-de-una-politica-de-estado-2006-2022/
- Internal Displacement Monitoring Centre (IDMC). (2022a). Global Report on Internal Displacement 2022. Available at: https://www.internal-displacement.org/global-report/grid2022/
- Internal Displacement Monitoring Centre (IDMC). (2022b). *Mexico*. Available at: <a href="https://www.internal-displacement.org/countries/mexico">https://www.internal-displacement.org/countries/mexico</a>
- International Monetary Fund (IMF). (2022a). Fiscal policy from pandemic to war. Available at: https://www.imf.org/en/Publications/FM/Issues/2022/04/12/fiscal-monitor-april-2022
- International Monetary Fund (IMF). (2022b). *Helping people bounce back*. Available at: <a href="https://www.imf.org/en/Publications/FM/Issues/2022/10/09/fiscal-monitor-october-22">https://www.imf.org/en/Publications/FM/Issues/2022/10/09/fiscal-monitor-october-22</a>

- International Monetary Fund (IMF). (2021c). *Pandemic, war, and global imbalances*. Available at: <a href="https://www.imf.org/en/Publications/ESR/Issues/2022/08/04/2022-external-sector-report">https://www.imf.org/en/Publications/ESR/Issues/2022/08/04/2022-external-sector-report</a>
- International Telecomunication Union (ITU). (2019). World Telecommunication/ICT Indicators. Database online. Available at: https://www.itu.int/pub/D-IND-WTID.OL-2019
- Intersecta. (2022). *La condena sin sentencia*. Available at: https://www.intersecta.org/pp-covid/
- IQAir. (2020). *Ciudades más contaminadas del mundo en 2020 (PM2.5)*. Available at: <a href="https://www.iqair.com/mx/world-most-polluted-cities">https://www.iqair.com/mx/world-most-polluted-cities</a>
- Jaime, E. (21 de octubre, 2022). La realidad fiscal no necesita peleoneros. México Evalúa. Available at: <a href="https://www.mexicoevalua.org/la-realidad-fiscal-no-necesita-peleoneros/">https://www.mexicoevalua.org/la-realidad-fiscal-no-necesita-peleoneros/</a>
- Jorge Ricardo (15 de octubre de 2022). Reclaman alumnos de Universidad del Bienestar y SEP amenaza. Reforma. Available at: https://www.reforma.com/aplicacioneslibre/preacceso/articulo/default.aspx?\_\_rval=1&urlredirect=/reclaman-alumnos-de-universidad-del-bienestar-y-sep-amenaza/ar2486999?referer=--7d616165662f3a3a-6262623b727a7a7279703b767a783a-
- Juárez , U. (agosto 5, 2022) TC Energy y CFE van por construir gasoducto marino Energía a debate. Available at: <a href="https://energiaadebate.com/tc-energy-y-cfe-van-por-construir-ga-soducto-marino/">https://energiaadebate.com/tc-energy-y-cfe-van-por-construir-ga-soducto-marino/</a>
- La Jornada. (16 de octubre de 2021). *Batallas por la ener-gía*. La Jornada. Available at: <a href="https://www.jornada.com.mx/2021/10/16/delcampo/delcampo169.pdf">https://www.jornada.com.mx/2021/10/16/delcampo/delcampo169.pdf</a>
- Llanos A. y Méndez J, S. (s.f.). *Presupuesto para salud mental: Relevancia ante la Covid19*. Centro de Investigación Económica y Presupuestaria (CIEP.). Available at: <a href="https://ciep.mx/presupuesto-para-salud-mental-relevancia-ante-la-covid19/">https://ciep.mx/presupuesto-para-salud-mental-relevancia-ante-la-covid19/</a>

- Maguey, H. (16 de mayo, 2019). 21 mil muertes al año asociadas a la contaminación. Gaceta UNAM. Available at: <a href="https://www.gaceta.unam.mx/21-mil-muertes-al-ano-asociadas-a-la-contaminacion/">https://www.gaceta.unam.mx/21-mil-muertes-al-ano-asociadas-a-la-contaminacion/</a>
- Martínez, E. (05 de junio, 2019). ¿Qué está haciendo México para combatir la mala calidad del aire?. Greenpeace. Available at: <a href="https://www.greenpeace.org/mexico/blog/2416/que-esta-haciendo-mexico-para-combatir-la-mala-calidad-del-aire/">https://www.greenpeace.org/mexico/blog/2416/que-esta-haciendo-mexico-para-combatir-la-mala-calidad-del-aire/</a>
- Martínez Peró, et al. (2021). COVID-19 e Infarto Agudo de Miocardio. Revista Cubana de Cardiología y Cirugía Cardiovascular, 1-3. Available at: <a href="https://dialnet.unirioja.es/descarga/articulo/8130701.pdf">https://dialnet.unirioja.es/descarga/articulo/8130701.pdf</a>
- Matías, P. (30 de septiembre de 2022). "Por portarse solidarios" con la 4T, AMLO basificará a 50 mil maestros de Oaxaca." Proceso. Available at: https://www.proceso.com.mx/nacional/2022/9/30/por-portarse-solidarios-con-la-4t-amlo-basificara-50-mil-maestros-de-oaxaca-294358.html
- México Cómo Vamos (MCV). (2022). Paquete Económico 2023, icastillos en el aire? Available at: https://mexicocomovamos.mx/paquete-economico-2023/
- México Evalúa. (2022). *Un presupuesto autoritario y no republicano: 1T 2022*. Available at: <a href="https://numerosdeerario.mexicoevalua.org/2022/05/16/numeros-de-erario-primer-trimestre-de-2022/">https://numeros-de-erario-primer-trimestre-de-2022/</a>
- México Unido Contra la Delincuencia (MUCD). (2022). *El negocio de la militarización en México*. Available at: <a href="https://www.mucd.org.mx/wp-content/uploads/2022/09/El-negocio-de-la-militarizacion-version-web.pdf">https://www.mucd.org.mx/wp-content/uploads/2022/09/El-negocio-de-la-militarizacion-version-web.pdf</a>
- Michael, T. (2022). Infografía La Militarización de Seguridad Pública en México. Wilson Center. Available at: <a href="https://www.wilsoncenter.org/article/infografia-la-militariza-cion-de-seguridad-publica-en-mexico">https://www.wilsoncenter.org/article/infografia-la-militariza-cion-de-seguridad-publica-en-mexico</a>

- Mimus. (2021). Por contaminación del aire, mueren 48 mil cada año en México. Mimus. Available at: https://mimus.mx/por-cortaminacion-del-aire-mueren-48-mil-cada-ano-en-mexico/
- Monroy, J. (10 de noviembre, 2021). Observan expertos claroscuros en la UIF de Nieto Castillo. El Economista.

  Available at: https://www.eleconomista.com.mx/politica/
  Observan-expertos-claroscuros-en-la-UIF-de-Nieto-Castillo-20211110-0004.html
- Moreno-Brid, J.C., J. Sánchez and I. Salat (2018). Las reformas estructurales de 2012-2018: avances y pendientes en la ruta de México hacia un crecimiento económico robusto e incluyente. En Arroyo, J.P. et al (Eds.) Balance de las reformas estructurales México, Senado de la República, Instituto Belisario Domínguez, Tomo I, pp. 29-68.
- Naciones Unidas.(s.f.1). *Agua*. Available at: <a href="https://www.un.org/es/global-issues/water">https://www.un.org/es/global-issues/water</a>
- Naciones Unidas.(s.f.2). El papel de los combustibles fósiles en un sistema energético sostenible. Available at: https://www.un.org/es/chronicle/article/el-papel-de-los-combustibles-fosiles-en-un-sistema-energetico-sostenible#:~:text=Todas%2olas%2otecnolog%C3%ADas%2otienen%2ouna%2ofunci%C3%B3n%2oque%2odesempe%C3%B1ar,tercios%2ode%2olas%2oemisiones%2oglobales%2ode%2oC0%2o2.
- Notimex. (o1 de abril, 2019). Senadores de oposición interpondrán amparo ante repetición de ternas para la CRE. El Financiero. Available at: https://www.elfinanciero.com.mx/ nacional/senadores-de-oposicion-interpondran-amparo-ante-repeticion-de-ternas-para-la-cre/
- Observatorio de la Guardia Nacional (OGN). (2022). Guardia Nacional 3 años de definición militarista. Causa en Común. Available at: <a href="http://causaencomun.org.mx/">http://causaencomun.org.mx/</a> observatorioguardiayfuerzasarmadas/wp-content/uploads/2022/07/2022.07.06 InformeOGN.pdf

- Oficina en Washington para Asuntos Latinoamericanos (WOLA). (2019). Oposición al nombramiento de Yasmin Esquivel a la Suprema Corte en México. Available at: <a href="https://www.wola.org/es/2019/03/nombramiento-yasmin-esquivel-mexico-ministros-scjn-derechos-humanos/">https://www.wola.org/es/2019/03/nombramiento-yasmin-esquivel-mexico-ministros-scjn-derechos-humanos/</a>
- Orellana, J., y Guerrero, R. (2021). *Impacto socioeconómico de la COVID-19 en el escenario Mexicano. Acta Odontológica Colombiana*, 127-135, Available at: <a href="https://revistas.unal.edu.co/index.php/actaodontocol/article/view/97196/81205">https://revistas.unal.edu.co/index.php/actaodontocol/article/view/97196/81205</a>
- Organización de las Naciones Unidas para la Alimentación y la Agricultura (FAO) y Programa de Naciones Unidas para el Medio Ambiente (PNUMA).(2020). El estado de los bosques del mundo 2020. Los bosques, la biodiversidad y las personas. Roma. Available at: https://www.fao.org/3/ca8642es/online/ca8642es.html
- Organización de las Naciones Unidas para la Alimentación y la Agricultura (FAO). (2020). *Aquastat database*. Available at: https://www.fao.org/aquastat/en/databases/
- Organización Mundial de la Salud (OMS). (s.f) "Estadísticas Sanitarias Mundiales 2005." Ginebra, Suiza, 2011.
- Organización Mundial de la Salud (OMS). (2021). COP26 special report on climate change and health: the health argument for climate action. Available at: <a href="https://www.who.int/publications/i/item/9789240036727">https://www.who.int/publications/i/item/9789240036727</a>
- Organización Mundial de la Salud (OMS). (2022). Enfermedad pulmonar obstructiva crónica (EPOC). Datos y cifras. Available at: <a href="https://www.who.int/es/news-room/fact-sheets/detail/chronic-obstructive-pulmonary-disease-(copd">https://www.who.int/es/news-room/fact-sheets/detail/chronic-obstructive-pulmonary-disease-(copd)</a>
- Organización Panamericana de la Salud (OPS). (2021). Nuevas directrices mundiales de la OMS sobre calidad del aire buscan evitar millones de muertes debidas a la contaminación. Organización Mundial de la Salud (OMS). Available at: https://www.paho.org/es/noticias/22-9-2021-nuevas-di

- rectrices-mundiales-oms-sobre-calidad-aire-buscan-evitar-millones
- Organización para la Cooperación y el Desarrollo Económico (OCDE). (2018). *México nota de país panorama de la educación 2018: Indicadores de la ocde*. Available at: <a href="https://gpseducation.oecd.org/Content/EAGCountryNotes/MEX\_Spanish.pdf">https://gpseducation.oecd.org/Content/EAGCountryNotes/MEX\_Spanish.pdf</a>
- Ortega, A. (21 de agosto, 2019). La contaminación ambiental en México deja 49,000 muertes. Expansión Política. Available at: https://politica.expansion.mx/mexico/2019/08/21/contaminacion-ambiental-mexico-deja-49-mil-muertes#:~:text=La%20contaminaci%C3%B3n%20ambiental%20en%20M%C3%A9xico%20deja%2049%2C000%20muertes,ambiental%2C%20un%20factor%20de%20riesgo%20en%20la%20salud.
- Our World in data. (s.f). Life expectancy. Projections of life expectancy. Life expectancy at birth, including the UN projections. Available at: <a href="https://ourworldindata.org/life-expectancy">https://ourworldindata.org/life-expectancy</a>
- Presidencia de la República (29 de marzo, 2019a) Anuncia presidente fortalecimiento de escuelas normales. Conferencia de prensa presidente AMLO. Available at: <a href="https://www.youtube.com/watch?v=bC-9rj6birU&t=115s">https://www.youtube.com/watch?v=bC-9rj6birU&t=115s</a>
- Presidencia de la República. (2019b). Mensaje del presidente Andrés Manuel López Obrador en la entrega de programas de bienestar en Aguascalientes. Gobierno de México. Available at: <a href="https://www.gob.mx/presidencia/articulos/mensaje-del-presidente-andres-manuel-lopez-obrador-en-la-entrega-de-programas-de-bienestar-en-aguascalientes">https://www.gob.mx/presidencia/articulos/mensaje-del-presidente-andres-manuel-lopez-obrador-en-la-entrega-de-programas-de-bienestar-en-aguascalientes</a>
- Presidencia de la República. (2022). Versión estenográfica. Conferencia de prensa del presidente Andrés Manuel López Obrador del 5 de septiembre de 2022. Gobierno de México. Available at: https://www.gob.mx/presidencia/articulos/version-estenografica-conferencia-de-prensa-del-presi

- dente-andres-manuel-lopez-obrador-del-5-de-septiembre-de-2022
- Presidencia Pro-tempore Guatemala 2021, Equipos técnicos nacionales del MIRPS, Secretaría Técnica ACNUR-OEA (Oficina Regional del ACNUR para las Américas y Departamento de Inclusión Social, Secretaría de Acceso a Derechos y Equidad, OEA). (2021). *Marco Integral Regional para la Protección y Soluciones (MIRPS)*. Available at: <a href="https://mirps-platform.org/wp-content/uploads/2021/11/13775.pdf">https://mirps-platform.org/wp-content/uploads/2021/11/13775.pdf</a>
- Programa de Naciones Unidas para el Medio Ambiente (PNU-MA). (2021). Regulating Air Quality: the First Global Assessment of Air Pollution Legislation. Available at: <a href="https://www.unep.org/resources/report/regulating-air-quality-first-global-assessment-air-pollution-legislation">https://www.unep.org/resources/report/regulating-air-quality-first-global-assessment-air-pollution-legislation</a>
- Programa de Naciones Unidas para el Medio Ambiente (PNU-MA).(2022). *Open Data*. Available at: <a href="https://open.unep.org/">https://open.unep.org/</a>
- Puga, C. y Valderrama, B. (2022). *Ciencia y resilencia*. [Manuscrito no publicado]. Resilencia Democrática.
- Quiroga, R. (2020). Esperanza de Vida en México creció a 76.6 años, informa la OMS. Available at: <a href="https://www.elecono-mista.com.mx/arteseideas/Esperanza-de-vida-en-Mexico-crecio-a-76.6-anos-informa-la-OMS-20200513-0144.html">https://www.elecono-mista.com.mx/arteseideas/Esperanza-de-vida-en-Mexico-crecio-a-76.6-anos-informa-la-OMS-20200513-0144.html</a>
- Ramírez, L. (25 de junio, 2020). El desmantelamiento institucional del sector ambiental en México. Nexos. Available at: https://nexos.com.mx/?p=48539
- Ramírez, E. (22 de abril, 2021). En México, más de 30 conflictos ambientales requieren atención "urgente". Contralínea. Available at: <a href="https://contralinea.com.mx/interno/semana/en-mexico-mas-de-30-conflictos-ambientales-requieren-atencion-urgente/">https://contralinea.com.mx/interno/semana/en-mexico-mas-de-30-conflictos-ambientales-requieren-atencion-urgente/</a>
- Raphael, R. (o6 de octubre, 2022). La ingrata experiencia de ser espiado por el Ejército mexicano. Washington Post. Available at: https://www.washingtonpost.

- com/es/post-opinion/2022/10/06/pegasus-espionaje-nso-amlo-ejercito-ricardo-raphael/
- Rivera, C. (19 de noviembre, 2019). *PAN impugna nombramiento de Rosario Piedra Ibarra en la CNDH*. Milenio. Available at: <a href="https://www.milenio.com/politica/cndh-pan-impug-na-tepj-designacion-rosario-piedra-ibarra">https://www.milenio.com/politica/cndh-pan-impug-na-tepj-designacion-rosario-piedra-ibarra</a>
- Rodríguez, I. (15 de agosto, 2021). Registra México déficit en plantas para tratar agua. El Economista. Available at: <a href="https://www.eleconomista.com.mx/politica/Registra-Mexico-deficit-en-plantas-para-tratar-agua-20210815-0093.html">https://www.eleconomista.com.mx/politica/Registra-Mexico-deficit-en-plantas-para-tratar-agua-20210815-0093.html</a>
- Rodríguez, I. (25 de marzo, 2022). Sobreexplotados, uno de cada cuatro mantos acuíferos en México. El Economista. Available at: https://www.eleconomista.com.mx/politica/Sobreexplotados-uno-de-cada-cuatro-mantos-acuiferos-20220325-0001.html
- Rodríguez, Q. y Foncerrada, L. (24 de junio de 2022). Situación laboral en México: los retos actuales y venideros (Parte 3 de 4). El Universal. Available at: https://www.eluniversal.com.mx/opinion/anel-rodriguez-quinto-y-luis-foncerrada-pascal/situacion-laboral-en-mexico-los-retos-actuales-y-venideros-parte-3-de-4
- Rojas, R. Univ. Libre de Berlín.
- San Martín, N. (05 de octubre, 2022). Sedena Leaks: El Ejército, autor de la reforma para controlar a la Guardia Nacional. Proceso. Available at: <a href="https://www.proceso.com.mx/nacional/2022/10/5/sedena-leaks-el-ejercito-autor-de-la-reforma-para-controlar-la-guardia-nacional-294665.html">https://www.proceso.com.mx/nacional/2022/10/5/sedena-leaks-el-ejercito-autor-de-la-reforma-para-controlar-la-guardia-nacional-294665.html</a>
- Schmelkes, S. (2020). *Desigualdad educativa, que ahondó la pandemia, requiere políticas públicas*. Universidad Iberoamericana. Available at: <a href="https://ibero.mx/prensa/desigualdad-educativa-que-ahondo-la-pandemia-re-quiere-politicas-publicas#:~:text=El%20abandon0%20escolar,-La%20p%C3%A9rdida%20de&text=La%20Secret-ar%C3%ADa%20de%20Educaci%C3%B3n%20P%C3%BAblica,(Animal%20Pol%C3%ADtico%2C%202020).

- Secretaría de Educación Pública (SEP). (s.f). Sistema Interactivo de Consulta de Estadística Educativa. Available at: <a href="https://www.planeacion.sep.gob.mx/principalescifras/">https://www.planeacion.sep.gob.mx/principalescifras/</a>
- Secretaría de Energía (Sener). (s.f.). Sistema de Información Energética (SIE Available at: <a href="https://sie.energia.gob.mx/">https://sie.energia.gob.mx/</a> bdiController.do?action=temas
- Secretaría de Gobernación (Segob). (s.f.). *Diario Oficial de la Federación*. Available at: <a href="https://sidof.segob.gob.mx/busquedaAvanzada/busqueda?tipo=T&tipotexto=Y&texto=Acuerdo&fechainicio=01-12-2018&fechahasta=21-09-2022&organismos=&sinonimos=false">https://sidof.segob.gob.mx/busquedaAvanzada/busqueda?tipo=T&tipotexto=Y&texto=Acuerdo&fechainicio=01-12-2018&fechahasta=21-09-2022&organismos=&sinonimos=false</a>
- Secretaría de Gobernación (Segob). (15 de mayo de 2019). Decreto por el que se reforman, adicionan y derogan diversas disposiciones de los artículos 30., 31 y 73 de la Constitución Política de los Estados Unidos Mexicanos, en materia educativa. Diario Oficial de la Federación (DOF). Available at: <a href="https://www.dof.gob.mx/nota\_detalle.php?codi-go=5560457&fecha=15/05/2019#gsc.tab=0">https://www.dof.gob.mx/nota\_detalle.php?codi-go=5560457&fecha=15/05/2019#gsc.tab=0</a>
- Secretaría de Gobernación (Segob). (2020). Resolución por la que se autoriza la constitución de una Empresa de Participación Estatal Mayoritaria denominada Aeropuerto Internacional Felipe Ángeles, S.A. de C.V., misma que estará agrupada en el sector coordinado por la Secretaría de la Defensa Nacional. Diario Oficial de la Federación (DOF). Available at: https://www.dof.gob.mx/nota\_detalle.php?codigo=5607471&fecha=14/12/2020#gsc.tab=0
- Secretaría de Gobernación (Segob). (2022). Acuerdo del Consejo General del Instituto Nacional Electoral por el que se aprueba la modificación a los Lineamientos del Instituto Nacional Electoral para la organización de la Revocación de Mandato en cumplimiento al Acuerdo INE/CG13/2022, y derivado de la negativa de la Secretaría de Hacienda y Crédito Público a la solicitud de otorgar de manera excepcional recursos adicionales para el Proceso de Revocación de Mandato. DOF. Available at: <a href="https://dof.gob.mx/nota\_deta-lle.php?codigo=5642791&fecha=15/02/2022#gsc.tab=0">https://dof.gob.mx/nota\_deta-lle.php?codigo=5642791&fecha=15/02/2022#gsc.tab=0</a>

- Secretaría de Hacienda y Crédito Público (SHCP). (2017). *Presupuesto de Egresos de la Federación Ejercicio Fiscal 2017*. Gobierno de México. Available at: <a href="https://www.pef.hacien-da.gob.mx/es/PEF2017/autonomos">https://www.pef.hacien-da.gob.mx/es/PEF2017/autonomos</a>
- Secretaría de Hacienda y Crédito Público (SHCP). (2018a). Presupuesto de Egresos de la Federación Ejercicio Fiscal 2018. Gobierno de México. Available at: <a href="https://www.pef.hacienda.gob.mx/es/PEF2018/home">https://www.pef.hacienda.gob.mx/es/PEF2018/home</a>
- Secretaría de Hacienda y Crédito Público (SHCP). (2018b).

  Ramo 16 Medio Ambiente y Recursos Naturales. Gobierno de México. Available at: r16\_ep.pdf (hacienda.gob.mx)
- Secretaría de Hacienda y Crédito Público (SHCP). (2019). *Presupuesto de Egresos de la Federación Ejercicio Fiscal 2019*. Gobierno de México. Available at: <a href="https://www.pef.hacienda.gob.mx/es/PEF2019/autonomos">https://www.pef.hacienda.gob.mx/es/PEF2019/autonomos</a>
- Secretaría de Hacienda y Crédito Público (SHCP). (2020). *Presupuesto de Egresos de la Federación Ejercicio Fiscal 2020*. Gobierno de México. Available at: <a href="https://www.pef.hacienda.gob.mx/es/PEF2020/autonomos">https://www.pef.hacienda.gob.mx/es/PEF2020/autonomos</a>
- Secretaría de Hacienda y Crédito Público (SHCP). (2021a).

  Informe Tributario y de Gestión. Primer semestre 2021. Available at: http://omawww.sat.gob.mx/gobmxtransparencia/Paginas/documentos/itg/ITG 2021 1S.pdf
- Secretaría de Hacienda y Crédito Público (SHCP). (2021b). Presupuesto de Egresos de la Federación Ejercicio Fiscal 2021. Gobierno de México. Available at: https://www.pef. hacienda.gob.mx/es/PEF2021
- Secretaría de Hacienda y Crédito Público (SHCP). (2022a). Criterios Generales de Política Económica para la Iniciativa de la Ley de Ingresos y el Proyecto de Presupuesto de Egresos de la Federación Correspondientes al Ejercicio Fiscal. Available at: <a href="https://www.ppef.hacienda.gob.mx/work/mo-dels/8ully2rB7/PPEF2023/mo2h2PK/paquete/politica\_ha-cendaria/CGPE\_2023.pdf">https://www.ppef.hacienda.gob.mx/work/mo-dels/8ully2rB7/PPEF2023/mo2h2PK/paquete/politica\_ha-cendaria/CGPE\_2023.pdf</a>

- Secretaría de Hacienda y Crédito Público (SHCP). (2022b). Estadísticas Oportunas Estadísticas Oportunas de Finanzas Públicas. Available at: <a href="http://presto.hacienda.gob.mx/EstoporLayout/estadisticas.jsp">http://presto.hacienda.gob.mx/EstoporLayout/estadisticas.jsp</a>
- Secretaría de Hacienda y Crédito Público (SHCP). (2022c). Informe Tributario y de Gestión. Segundo trimestre 2022. Available at: <a href="http://omawww.sat.gob.mx/gobmxtranspa-rencia/Paginas/documentos/itg/ITG\_2022\_2T.pdf">http://omawww.sat.gob.mx/gobmxtranspa-rencia/Paginas/documentos/itg/ITG\_2022\_2T.pdf</a>
- Secretaría de Hacienda y Crédito Público (SHCP). (s.f.). *Informes al Congreso de la Unión*. Available at: <a href="https://www.finanzaspublicas.hacienda.gob.mx/es/Finanzas\_Publicas/Informes\_al\_Congreso\_de\_la\_Union">https://www.finanzas\_publicas.hacienda.gob.mx/es/Finanzas\_Publicas/Informes\_al\_Congreso\_de\_la\_Union</a>
- Secretaría de Hacienda y Crédito Público (SHCP). (2022d). Presupuesto de Egresos de la Federación Ejercicio Fiscal 2022. Gobierno de México. Available at: https://www.pef. hacienda.gob.mx/es/PEF2022/home
- Secretaría de Hacienda y Crédito Público (SHCP) y Banco del Bienestar. (2022). Comentarios de la Administración sobre la Información Financiera relativa a los Estados Financieros al 30 de junio de 2022. Available at: <a href="https://www.gob.mx/cms/uploads/attachment/file/754905/Comentarios\_de\_la\_Administraci\_n.pdf">https://www.gob.mx/cms/uploads/attachment/file/754905/Comentarios\_de\_la\_Administraci\_n.pdf</a>
- Secretaría de la Defensa Nacional (SEDENA). (04 de octubre, 2022). *Comunicado de prensa 161*. Gobierno de México. Available at: <a href="https://www.gob.mx/sedena/prensa/comunicado-de-prensa-161?idiom=es">https://www.gob.mx/sedena/prensa/comunicado-de-prensa-161?idiom=es</a>
- Secretaría de Medio Ambiente y Recursos Naturales (SEMAR-NAT). (2019). *Agua residual que recibe tratamiento*. Gobierno de México. Available at: CN 3.1.5 (semarnat.gob.mx)
- Secretaría de Medio Ambiente y Recursos Naturales (Semarnat). (2021). Presupuesto asignado a la Semarnat por unidad administrativa. Available at: <a href="http://dgeiawf.semarnat.gob.mx:8080/ibi\_apps/WFServlet?IBIF\_ex=D4\_GASTOSo1\_03&IBIC\_user=dgeia\_mce&IBIC\_pass=dgeia\_mce&NOMBREANIO="http://dgeiawf.gob.mce&NOMBREANIO="http://dgeiawf.gob.mce&NOMBREANIO="http://dgeiawf.gob.mce&NOMBREANIO="http://dgeiawf.gob.mce&NOMBREANIO="http://dgeiawf.gob.mce&NOMBREANIO="http://dgeiawf.gob.mce&NOMBREANIO="https://dgeiawf.gob.mce@Nombreanio-"https://dgeiawf.gob.mce&NOMBREANIO="https://dgeiawf.gob.mce@Nombreanio-"https://dgeiawf.gob.mce@Nombreanio-"https://dgeiawf.gob.mce@Nombreanio-"https://dgeiawf.gob.mce@Nombreanio-"https://dgeiawf.gob.mce@Nombreanio-"https://dgeiawf.gob.mce@Nombreanio-"https://dgeiawf.gob.mce.gob.mce.gob.mce.gob.mce.gob.mce.gob.mce.gob.mce.gob.mce.gob.mce.gob.mce.gob.mce.gob.mce

- Secretaría de Seguridad y Protección Ciudadana (SSPC). (2022). Cuaderno mensual de información estadística penitenciaria nacional. Available at: https://www.gob.mx/cms/uploads/attachment/file/708057/CE 2022 01.pdf
- Secretaría de Seguridad y Protección Ciudadana y Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública. (2021). Informe Anual de Evaluación del Desempeño FORTASEG 2020. Available at: <a href="https://www.gob.mx/cms/uploads/attachment/file/665397/IAEDFORTASEG2020.pdf">https://www.gob.mx/cms/uploads/attachment/file/665397/IAEDFORTASEG2020.pdf</a>
- Shamah-Levy T, Romero-Martínez M, Barrientos-Gutiérrez T, Cuevas-Nasu L, Bautista-Arredondo S, Colchero MA, Gaona-Pineda EB, Lazcano-Ponce E, Martínez-Barnetche J, Alpuche-Arana C, Rivera-Dommarco J. (2021). *Encuesta Nacional de Salud y Nutrición 2021 sobre Covid-19*. Resultados nacionales. Cuernavaca, México: Instituto Nacional de Salud Pública, 2022. Available at: <a href="https://ensanut.insp.mx/encuestas/ensanutcontinua2021/informes.php">https://ensanut.insp.mx/encuestas/ensanutcontinua2021/informes.php</a>
- Signos Vitales. (2020a). Amputación de las capacidades de gobierno: funcionarios de calidad en riesgo. Available at: Capacidades-del-gobierno.pdf (signosvitalesmexico.org. mx)
- Signos Vitales. (2020b). *Destrucción institucional: un daño autoinfligido al Estado*. Available at: <a href="https://signosvitales-mexico.org.mx/rb/wp-content/uploads/2020/10/Destruccion-institucional.pdf">https://signosvitales-mexico.org.mx/rb/wp-content/uploads/2020/10/Destruccion-institucional.pdf</a>
- Signos Vitales. (2020c). *La Pandemia en México*. Available at: <a href="https://signosvitalesmexico.org.mx/reportes/reporte-1-completo/">https://signosvitalesmexico.org.mx/reportes/reporte-1-completo/</a>
- Signos Vitales. (2020d). *México enfermo con indicios de un régimen totalitario*. Available at: <a href="https://signosvitalesmexico.org.mx/reportes/reporte-2-completo/">https://signosvitalesmexico.org.mx/reportes/reporte-2-completo/</a>
- Signos Vitales: (2020e). Reporte o: Síntomas de México. Available at: SIGNOS-VITALES-MX-F-1.pdf (signosvitalesmexico. org.mx)

- Signos Vitales. (2021a). *Acumulación de rezagos para un futu-ro incierto*. Available at: <a href="https://signosvitalesmexico.org">https://signosvitalesmexico.org</a>. mx/rb/wp-content/uploads/2021/08/Reporte-3-2021.pdf
- Signos Vitales. (2021b). Balance Negativo. Los Derechos Humanos en México. Available at: https://signosvitales-mexico.org.mx/rb/wp-content/uploads/2021/12/Reporte-4-2021-2.pdf
- Signos Vitales (2021c). Educación: el futuro incierto DE UNA GENERACIÓN. Signos Vitales Society. Available at: <a href="https://signosvitalesmexico.org.mx/social/educacion-el-futuro-incierto-de-una-generacion/">https://signosvitalesmexico.org.mx/social/educacion-el-futuro-incierto-de-una-generacion/</a>
- Signos Vitales (2021d). *IMPACTO en la educación*. Signos Vitales Society. Available at: <a href="https://signosvitalesmexico.org">https://signosvitalesmexico.org</a>. mx/social/impacto-en-la-educacion/
- Signos Vitales. (2021e). México: Acumulación de rezagos para un futuro incierto. Available at: https://signosvitales-mexico.org.mx/rb/wp-content/uploads/2021/08/Reporte-3-2021.pdf
- Signos Vitales. (2021f). *Rumbo a un militarismo mexicano*. Available at: <a href="https://signosvitalesmexico.org.mx/gober-nanza/rumbo-a-un-militarismo-mexicano/">https://signosvitalesmexico.org.mx/gober-nanza/rumbo-a-un-militarismo-mexicano/</a>
- Signos Vitales. (2022a). *Cambio climático y acuerdos inter-nacionales*. Available at: <u>Acuerdos-internacionales.pdf</u> (signosvitalesmexico.org.mx)
- Signos Vitales. (2022b). *Deterioro ambiental y crecimiento económico en México*. Available at: <a href="https://signosvitales-mexico.org.mx/rb/wp-content/uploads/2022/06/Deterio-ro-ambiental-y-creci-economico.pdf">https://signosvitales-mexico.org.mx/rb/wp-content/uploads/2022/06/Deterio-ro-ambiental-y-creci-economico.pdf</a>
- Signos Vitales. (2022c). El sur de México: atraso, brechas y abandono. Available at: <a href="https://signosvitalesmexico.org.mx/rb/wp-content/uploads/2022/07/Reporte-2-2022.pdf">https://signosvitalesmexico.org.mx/rb/wp-content/uploads/2022/07/Reporte-2-2022.pdf</a>
- Signos Vitales. (2022d). *Estancamiento y regresión: México en el mundo*. Available at: <a href="https://signosvitalesmexico.org">https://signosvitalesmexico.org</a>. mx/rb/wp-content/uploads/2022/03/Reporte-1-2022.pdf

- Signos Vitales. (2022e). *Inseguridad Energética*. Available at: <a href="https://signosvitalesmexico.org.mx/rb/wp-content/uploads/2022/01/10-INSEGURIDAD-ENERGETICA.pdf">https://signosvitalesmexico.org.mx/rb/wp-content/uploads/2022/01/10-INSEGURIDAD-ENERGETICA.pdf</a>
- Solili. (03 de octubre de 2022). Reporte Industrial Solili 3T 2022: Récord en demanda con 2.1 millones de m , CDMX lideró. Available at: https://www.solili.mx/noticias/reporte-industrial-solili-3t-2022-record-en-demanda-con-2-millones-100-mil-m2-cdmx-lidero/5324/
- SPIN. (2022). *Conferencias Matutinas de AMLO*. Infografía Quincenal #74. Available at: <a href="http://www.spintcp.com/conferenciapresidente/infografia-74/">http://www.spintcp.com/conferenciapresidente/infografia-74/</a>
- Statista. (2020). Baseline water stress score worldwide in 2020. Available at: <a href="https://www.statista.com/statistics/1097524/water-stress-levels-by-country/">https://www.statista.com/statistics/1097524/water-stress-levels-by-country/</a>
- Tourliere, M. (21 de febrero,2021). Refinería de Dos Bocas: inviable, opaca y con impacto negativo al ambiente.

  Proceso. Available at: https://www.proceso.com.mx/
  nacional/2021/2/21/refineria-de-dos-bocas-inviable-opaca-con-impacto-negativo-al-ambiente-258730.html#:~:text=Refiner%C3%ADa%2ode%2oDos%2oBocas%3A%2o
  inviable%2C%2oopaca%2oy%2ocon,los%2oimpactos%2o
  negativos%2oal%2oambiente%2C%2odetermin%C3%B3%20la%2oASF.
- Tourliere, M. (02 de octubre, 2022). Gobierno de AMLO espió a periodistas y defensores de derechos humanos con spyware Pegasus. Proceso. Available at: <a href="https://www.proceso.com.mx/nacional/2022/10/2/gobierno-de-amlo-espio-periodistas-defensores-de-derechos-humanos-con-spyware-pegasus-294412.html">https://www.proceso.com.mx/nacional/2022/10/2/gobierno-de-amlo-espio-periodistas-defensores-de-derechos-humanos-con-spyware-pegasus-294412.html</a>
- Transparency International. (2021). *Corruption perceptions index*. Available at: <a href="https://www.transparency.org/en/cpi/2021/index/col">https://www.transparency.org/en/cpi/2021/index/col</a>
- U.S. Energy Information Administration (EIA). (2021). *U.S. Natural Gas Exports and Re–Exports by Country.* Available at: https://www.eia.gov/dnav/ng/ng move expc s1 a.htm

- Unidad de Inteligencia Financiera (UIF). (2022). Informe de Actividades. Unidad de Inteligencia Financiera. SHCP. Available at: <a href="https://www.gob.mx/cms/uploads/attachment/file/760669/Informe\_Agosto\_2022.pdf">https://www.gob.mx/cms/uploads/attachment/file/760669/Informe\_Agosto\_2022.pdf</a>
- Uresti, A. (2022). Los egresados de la Universidad del Bienestar, enfrentan una batalla legal al recibir de las autoridades educativas títulos que no tiene ninguna validez, pues no cuentan con los requisitos necesarios para obtener sus cédulas profesionales. Milenio. [Tweet]. Twitter. Available at: https://www.scribbr.es/normas-apa/ejemplos/twitter/
- Van Bedolla, L. (2021). ¿Qué ganamos al cancelar el proyecto del NAICM?. Nexos. Mexicanos contra la Corrupción. Available at: <a href="https://contralacorrupcion.mx/que-ganamos-al-can-celar-el-proyecto-del-naicm/">https://contralacorrupcion.mx/que-ganamos-al-can-celar-el-proyecto-del-naicm/</a>
- Vela, D. (16 de marzo, 2021). Juez que frenó reforma eléctrica de AMLO concede tres nuevas suspensiones. El Financiero. Available at: https://www.elfinanciero.com.mx/nacional/juez-que-freno-reforma-electrica-de-amlo-concedio-tres-nuevas-suspensiones/
- Velázquez, A,J. (2022). La desatención médica de enfermedades crónicas provocada por la presencia de la COVID-19 en México. Universidad de Guadalajara Ocotlán, Jalisco, México. Available at: https://www.unilim.fr/trahs/
- Vieyra, A., Belden, M., de la Calle, R. y Martínez, A. (2020). *The impact of the covid-19 pandemicon higher education in Mexico, Colombia and Peru*. EY-Parthenon. Available at: <a href="https://www.ey.com/en\_gl/strategy/how-covid-19-has-im-pacted-higher-education-in-mexico-colombia-and-peru">https://www.ey.com/en\_gl/strategy/how-covid-19-has-im-pacted-higher-education-in-mexico-colombia-and-peru</a>
- World Economic Forum (WEF). (2022). *Global Gender Gap Report 2022*. Available at: <a href="https://www.weforum.org/reports/global-gender-gap-report-2022">https://www.weforum.org/reports/global-gender-gap-report-2022</a>
- World Health Organization. (2022). World mental health report: transforming mental health for all: executive summary. World Health Organization. Available at: https://

- apps.who.int/iris/handle/10665/356115. Licencia: CC BY-NC-SA 3.0 IGO
- World Resources Institute (WRI).(2019). Aqueduct 3.0 Country Rankings. Available at: Aqueduct 3.0 Country Rankings | World Resources Institute (wri.org)
- World Resources Institute (WRI). (2020). *Global Forest Watch*. Available at: <a href="https://www.wri.org/initiatives/global-fo-rest-watch">https://www.wri.org/initiatives/global-fo-rest-watch</a>
- Yale Center for Environmental Law & Policy. (2022). *Environmental Performance Index*. Available at: <a href="https://epi.yale.edu/">https://epi.yale.edu/</a>





## November 2022



**DIAGNOSIS OF MEXICO: DARK PERSPECTIVES** 

© 2022 Signos Vitales Society
Website: www.signosvitalesmexico.org
Email: comunicacion@signosvitalesmexico.org

Electronic version. First Edition ISBN: 978-1-967204-19-9