

THE MEXICAN SOUTH: BACKWARDNESS, SCHISMS & ABANDONMENT



July 2022

SIGNOS VITALES
EL PULSO DE MÉXICO

Image: Gabriel Bouys/AFP/Getty Images at <https://www.esglobal.org/la-discriminacion-de-los-pueblos-indigenas-en-mexico/>



Is a non-profit, non governmental organization that 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 Communication 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

María Amparo Casar

Enrique Cárdenas*

Julio Frenk

María Elena Morera

Alejandra Palacios

Federico Reyes Heróles

Jorge Suárez Vélez

Duncan Wood

Carlos Lascurain

Executive Director & Prosecretary

*President 2020–2023



ADVISORY COMMITTEE SPECIALISTS

Eduardo Backoff

Rosanety Barrios

Juan Carlos Belausteguigoitia

José Ramón Cossío

Salomón Chertorivsky

Katia D'Artigues

Luis De la Calle

Carlos Elizondo Mayer-Serra

Luis Foncerrada Pascal

Ricardo Fuentes Nieva

Rogelio Gómez Hermosillo

Luis Raúl González Pérez

Eduardo González Pier

Eduardo Guerrero

Tonatiuh Guillén

Carlos Heredia

Gonzalo Hernández Licona

Alejandro Hope

Carlos Hurtado

María Eugenia Ibararán

Edna Jaime

Sergio López Ayllón

Carlos Mancera

Regina Martínez Casas

Lorenza Martínez Trigueros

Lourdes Melgar

Alfonso Mendoza

Manuel Molano

Lourdes Morales

Tony Payan

Jacqueline Peschard

José Antonio Polo Oteyza

Alejandro Poiré

Casiopea Ramírez

Francisco Rivas

José Roldán Xopa

Hernán Sabau

Pedro Salazar Ugarte

José Sarukhan Kermez

Sylvia Schmelkes

Jaime Sepúlveda

Carlos Serrano H.

Eduardo Sojo

Francisco Suárez Dávila

Miguel Székely

Luis Carlos Ugalde

Pablo Zárate



TABLE OF CONTENTS

EXECUTIVE SUMMARY 9

GOVERNANCE 20

- Subnational Democratic Development Index 21
- Crime and militarism with a regional magnifying glass 23
- Public safety 32
- Rule of law and corruption, an evaluation of the South of the country 37
- Fiscal Federalism 42

SOCIAL 46

- More poverty and less income 47
 - Geography and social mobility 51
- Education, pandemics and inequality 52
 - Right to education 53
- Vulnerable populations 57

Health in the region 62

Shortages and social neglect 67

SCIENCE AND TECHNOLOGY 69

- Science and Technology supports 69
- Attacks to universities 74

ECONOMY AND ENERGY 77

- Differences have no bounds 77
- Regional growth and prices 79
- Private consumption 81
 - Laboral income 81
 - Remittances 83
 - Mobility 85
- Investments 86
 - Public investments 87

Foreign investment	<u>89</u>
Public finance	<u>92</u>
Collection effort	<u>92</u>
Between eternal dependency and the weight of bureaucracy	<u>93</u>
Labor market	<u>95</u>
Labor informality	<u>95</u>
Social protection, only through teaching and the health sector	<u>96</u>
Women labor involvement	<u>98</u>
The South's stagnant potential	<u>100</u>

ENVIRONMENT 103

Southern Green	<u>105</u>
Southern Mexico natural resources general conditions	<u>107</u>
Environmental framework performance and compliance	<u>111</u>
An endangered present and future	<u>115</u>

FINAL REMARKS 117

REFERENCES 120





EXECUTIVE SUMMARY

Image: <https://www.elsoldeorizaba.com.mx/local/mas-pobreza-en-veracruz-5-millones-en-esa-situacion-indica-el-consejo-nacional-de-evaluacion-de-la-politica-de-desarrollo-social-Coneval-7620734.html>



THE BREACH OPENS

A constant remark among analysts, academics, and observers of the national reality is the growing divergence between those areas located to the Northern of the country and those located to the South. Although these differences are in part a historical legacy from pre-Columbian times, over the years and specifically in the most recent decades, these differences have been accentuated, largely due to the enforcement of the Northern American Free Trade Agreement and the globalization phenomenon.

As part of its work of permanently evaluating the country's pulse, the Vital Signals Executive Committee considered it appropriate to analyze in detail, in two reports, what is happening in these regions of the country. The first report, presented now, refers to the Southern part of Mexico, which includes some of the states in the country's center. In a future report, Vital Signals will make an equivalent analysis of the Northern part of Mexico, considering the central states that were not included in this report.

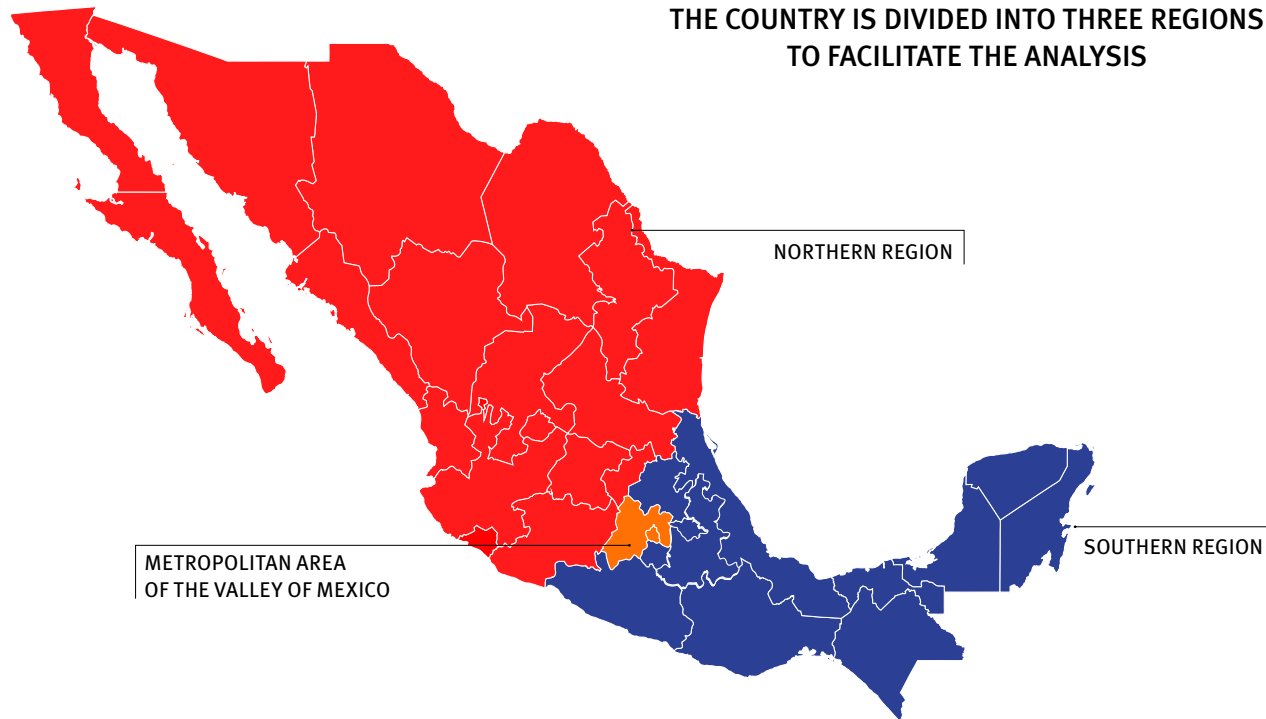
Images:

<https://sintesis.com.mx/2022/06/24/falso-que-aumento-18-mil-mdd-refineria-dos-bocas/>

<https://www.sie7edechiapas.com/post/se-hacen-esfuerzos-para-recuperar-empleos-en-chiapas>

<https://elpais.com/mexico/2021-10-23/grupos-de-autodefensa-la-delgada-linea-entre-defenderse-del-narco-o-convertirse-en-el.html>

THE COUNTRY IS DIVIDED INTO THREE REGIONS
TO FACILITATE THE ANALYSIS



The complexity involved in dividing the country into regions is exceptionally high. Each of the entities has its own reality, and, in turn, each municipality or locality has endemic characteristics that are difficult to find even in neighboring territories. In order to have a better overview of what is happening in the country's South, this report has considered twelve entities that geographically make up this region and that, although they share similar social characteristics, they also have many differences. The considered entities

are Campeche, Chiapas, Guerrero, Hidalgo, Morelos, Oaxaca, Puebla, Quintana Roo, Tabasco, Tlaxcala, Veracruz and Yucatan.

Due to the high specific weight of the Metropolitan Area of the Valley of Mexico in the national context, in order not to bias this analysis and for comparative references, we have considered Mexico City and the State of Mexico as a separate "region," hereafter referred to as the Metropolitan Area. We start from the

principle that this exercise responds to a somewhat discretionary regional division; however, the purpose of this and the following report on the country's Northern region is precisely to highlight the different characteristics and the growing gaps that have been developing between them for years.

The report is divided into three main axes: Governance, which includes issues such as democratic development, militarism, security, and the rule of law. The Social axis considers poverty, education, vulnerable populations, health, science, and technology. Finally, the third axis of Economy and Environment includes long-term economic growth, private consumption, income and remittances, public finances, labor market, energy, current environmental conditions, and environmental normativity performance and compliance.

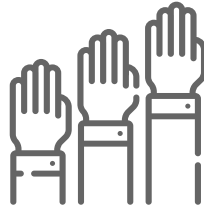
The objective of the report is to contribute to understanding how the Vital Signals of Southern Mexico are doing. This will allow us to visualize with clarity and evidence, based on hard data, the most pressing challenges and the actions needed to strengthen what has improved and start rebuilding what has lagged or deteriorated even further during the current administration.

The objective is to contribute to understanding how the Vital Signs of Southern Mexico are doing.

**IN DEMOCRACY:
THE LOWEST-RANKED STATES IN THE AREA.
OF THE 12 SOUTHERN MEXICAN STATES, FIVE ARE
CONSIDERED TO HAVE MINIMAL DEMOCRATIC
DEVELOPMENT.**

Thus, the Southern region comprised of the 12 states mentioned above has a total population of 41,769,700 million people (INEGI, National Institute of Statistics and Geography for its acronym in Spanish, 2020b), which represents a third of the country's total (33.2%, INEGI, 2020b), and comprises 25.1% of the national territory, equivalent to almost half a million square kilometers (493,751 Km², INEGI, s.f.a). In addition, the Metropolitan Area has a total population of 26,202,362 million people, representing 20.7% of the country's total (INEGI, 2020b), and comprises 1.2% of the national territory, equivalent to 23,846 Km² (INEGI, s.f.a).

Although each region has its peculiarities, its positive and negative points, it is generally known that the Southern region of the country has been punished in almost all relevant aspects. In terms of democracy, this region is home to the lowest-ranked states in the area. As has been the case in the last six editions of the Index of Democratic Development in Mexico, Guerrero is the state with the least democratic development in the country, followed by Puebla, Chiapas, and Tabasco. Of the 12 Southern Mexican states, five are considered to have minimal democratic development. The average evaluation in Southern Mexico in 2021 was 3.61 on a scale of ten, a figure below the 4.1 national average.



Regarding the rule of law, the country's Southern region is not well regarded either. The last installment of the Rule of Law performed by the World Justice Project shows a dismal 0.41 grade on a 0 to 1 rank, where 1 implies maximum compliance to the rule of law. The Southern states averaged below that figure having a .39 grade. Besides, the 2021 Estate Index of Prosecutors and Procuracies shows that in 2020, the crime reporting and solved probability in the South of Mexico was lower than 1%.

In Rule of Law, the Southern states were graded below national average.

IMPUNITY LEVELS:

- **22.6% OF THE REPORTED ALLEGED CRIMES IN THE COUNTRY**
- **PUEBLA & VERACRUZ: CRIME INCIDENCE ABOVE THE NATIONAL AVERAGE.**



These levels of impunity are present in a country strongly affected by crime incidence. Simply from January to April 2022, the Executive Secretariat of the National Public Security System (SESNSP, for its acronym in Spanish) recorded 687 thousand 882 alleged crimes, from which 22.6%, 155 thousand 679 crimes, were reported in the country's Southern region. It's worth mentioning that just Puebla and Veracruz are the Southern states presenting a crime incidence above the national average, situated in 21 thousand 496 crimes per entity.

According to the Espinosa Yglesias Study Center Regional Classification Criteria (CEEY, for its acronym in Spanish), the Southern region presents low social mobility for the poorest segment and strong regional disparities. A Mexican born in an impoverished household in the Northern has 3.5 times more possibilities of getting out of poverty than one born in the same situation in the South, where at least 45% of economic inequality is due to opportunity imbalance (Orozco *et al.*, 2019). Low labor income is one of the main determinants of poverty in Mexico. In the country's Southern region, seven out of ten people (70.4%) do not have enough income to buy even the basic food basket for a family of two; while in the rest



**IN THE SOUTHERN REGION,
45% OF ECONOMIC INEQUALITY IS DUE
TO OPPORTUNITY IMBALANCE.**

of the country, it is “only” three out of ten (27%) (Acción Ciudadana Frente a la Pobreza, n.d.)

The Southern estates report a monthly income below the national average (\$10,702) as the fruit of their labor. Even Chiapas, Guerrero, Oaxaca, and Veracruz are found below the average reported by the Southern region (8,398 pesos per month per household) (INEGI, s.f.). The indigenous population also earns lower incomes. According to INEGI (s.f.), a 3,407 pesos monthly income was reported for an indigenous-speaking household, and, on top of that, indigenous women earn practically half a month (2,463 pesos) compared to what indigenous language-speaking men earn (\$4,240). These disparities are more related to the ethnic origin of the population than the region of origin.

Considering that the population is found in poverty (quintile I and II of the population distribution) in the Metropolitan Area, almost 68 of each 100 people born under the poverty line remain poor for the rest of their lives. In the South, this portion increases to 81 out of 100 people (CEEY, 2017). One of the challenges facing the Southern part of the country stems from the average number of years of schooling people attain during their lifetime. In Mexico, by 2020, according to the Household and Population Census 2020, the Southern region presents a lower education level (9.2 average years) than the national average (9.7 average years), which limits their options for future work and income. Meanwhile, the schooling years for the Metropolitan Area are higher than the national average (10.8 average years) (INEGI, 2020).

The Social Rights Information System (SIDS, for its acronym in Spanish) shows that the population with income below the poverty line attending public education and also receiving a scholarship has been decreasing since 2016 nationally (2.5 percentage points decrease). Such decrease is greater in the Southern region, 6.9 percentage points less from 2018 to 2020 (Coneval, Council for the Evaluation of Social Development Policy for its acronym in Spanish, n.d.a). School dropout rates in all the states in the Southern



region are above the national average (11.3%), where the scholarship number has been insufficient to stop school attrition. Such is the case of Morelos (15.6% dropout rate), Oaxaca (13.7%), Campeche (12.5%) and Puebla (12.1%). Also, Mexico City and the State of Mexico have high percentages of impoverished people who attend public school and received scholarships for 2020. (60.2% and 11.7% respectively), showed high school attrition rates (13.5% and 12.1%, respectively) for the 2021–2022 cycle (SEP, The Secretariat of Public Education for its acronym in Spanish, s.f.).

Nationally, it is highlighted that the country's South shows the highest proportion of households with moderate and severe food insecurity. (27.6%), in comparison with the national average (20.6%). The Metropolitan Area and the rest of the country present lower ratios (19.5% and 17.2%, respectively) (Shama *et al.*, 2021). higher Food expenditure is observed

in the Metropolitan Area with \$1,733 per capita on household average, and the rest of the country with 1,698 pesos above the national average when comparing the geoGraphal region expenditure—contrasting those figures with the expenditure in households located on the Southern region of the country with \$1,331 per capita. On top of that, the health service access scarcity has increased since 2016. According to the figures published by Coneval (s.f. b), said scarcity has increased in strength (even above the national average of 28.2%) in states like (37.1%), Oaxaca (36.9%), Guerrero (33.5), Puebla (32%), Morelos (31.8) and Veracruz (31%) (Coneval, s.f.b), not to mention those are the entities with higher levels of extreme poverty and poverty in the country.

In terms of science and technology, the results of the IMCO's Innovation Sub-Index reveal that 92% of the states belonging to the Southern region of the country have a low or medium-low innovation sub-index, and Puebla contributes the remaining 8% with a "medium-high" rating. The worst positions are for Oaxaca (position 29), Tabasco (position 30), Chiapas (position 31), and Guerrero (position 32), which have the lowest levels of innovation (IMCO, Public Policy Research Center for its acronym in Spanish,2022)



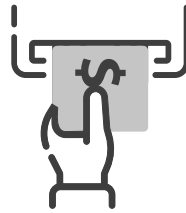
THE SOUTHERN REGION SHOWS THE HIGHEST PROPORTION OF HOUSEHOLDS WITH MODERATE AND SEVERE FOOD INSECURITY.

In Science & Technology, the South is in the lowest ranking.

92% OF THE STATES BELONGING TO THE SOUTHERN REGION OF THE COUNTRY HAVE A LOW OR MEDIUM-LOW INNOVATION SUB-INDEX, AND PUEBLA CONTRIBUTES THE REMAINING 8% WITH A "MEDIUM-HIGH" RATING.

On the other hand, the Metropolitan Area presents high and medium–low positions, respectively. At the state level, all entities worsened in the sub–index indicators. However, the worst–rated entities in terms of productivity, research centers, or the number of patents belong to the country’s Southern region (Guerrero, Chiapas, and Quintana Roo), while the best rated are Mexico City, Jalisco, and Nuevo Leon (IMCO, 2022). The affront to science in Mexico ranges from adherence to budgetary austerity to the disappearance of funds and trusts (Vital Signals, 2021c) and career disincentives for researchers and students, to the point of trying to discredit science with open attacks on academics and institutions. All this jeopardizes the country’s knowledge, competitiveness, and innovation.

The Southern economy has shown some dynamism on the demand side (private consumption), although it’s still left behind –1.4% compared to pre–pandemic levels (CNBV, National Banking, and Securities Commission for its acronym in Spanish, sf.) This dynamism is mainly due to transfers received by households, such as remittances, which accelerated their growth in the midst of the health crisis (annual growth of 11.4% in 2020). In 2021 the South captured 29% of the total remittances the country re-



IN 2021 THE SOUTH CAPTURED 29% OF THE TOTAL REMITTANCES THE COUNTRY RECEIVED.

ceived (51.6 mddd, billions of dollars for its acronym in Spanish). This rapid increase of remittances benefits even more, a subset of the Southern economies: Guerrero, Hidalgo, Morelos, and Oaxaca, which present higher transfers per habitant than the rest of the country (404.2 dollars per capita) (Banxico, Mexican Bank for its acronym in Spanish, 2022a). The accelerated growth rate of remittances compensated for the work income fragility, which barely grew 0.8% compared to pre–pandemic levels (Coneval, 2022). These remittances are about to match the wage bill of the South (302.8 billion pesos vs. 309.2 billion pesos). (Coneval, 2022).

But this dynamism is insufficient to close the gap between Northern and South. The growth trajectories of both regions diverge instead of converging; while the Northern grows at an average quarterly rate of 0.56%, the South grows at a rate of only 0.14% (INEGI, 2022d; Banxico, n.d.). If long–term growth rates are maintained, within seven years, the Northern

will double the production of the South and will be almost equivalent to the sum of the South and Metropolitan Area (INEGI, 2022d) (Banxico, n.d.), given the collapse of the economy of the latter region since the end of 2018 (−6.3% below the third quarter of 2018) (INEGI, 2022d) (Banxico, n.d.) (Banxico, n.d.).

The slow economic reactivation has been accompanied by a weak improvement in employment (1.4% in the South vs. 2.3% at the national level compared to the pre-pandemic level). In addition, now, 33 out of every 100 employees in the South have incomes of up to one minimum wage, when this figure was almost 28 out of every 100 employed prior to the confinement (INEGI, 2022b). Wage insecurity is higher among women, with 11 out of 100 receiving no income for their work. The number of workers who cannot enjoy health rights is 76 out of every 100 and remains at the same level as before the health crisis. Thus, 13.5 million workers are in this condition (INEGI, 2022b)

The governments' weight is still considerable in the job market since 35 out of 100 formal employees are generated by the health, education, and government sector, and the three country's poorest entities, also located in the South (Chiapas, Guerrero, and Oaxaca) the ratio is of at least 50 out of each 100 (INEGI, 2022b).

The slow economic reactivation has been accompanied by a weak improvement in employment: 1.4% in the South vs. 2.3% at the national level.

**WHILE THE NORTHERN GROWS AT AN AVERAGE QUARTERLY RATE OF 0.56%, THE SOUTH GROWS AT A RATE OF ONLY 0.14%.
33 OUT OF EVERY 100 EMPLOYEES IN THE SOUTH HAVE INCOMES OF UP TO ONE MINIMUM WAGE.**

In turn, the payrolls of these sectors (plus public security) put pressure on the budgets of the Southern states (54.6% of total budgets), which reduces the room for maneuver to carry out infrastructure projects (1.9% of spending vs. 3% at the national level) (INEGI, 2022c). Public and private investment scarcity undermines the region's economic development. Under the administration of Andrés Manuel López Obrador, in 2021, the value of the public investment in construction was 50.8% lower than the historic high of 2012 (−49.1 billion pesos) (INEGI, 2022a). Public investment is heavily concentrated in hydrocarbons at the national level: for every peso invested

in education, health, and communication infrastructure, 4.5 pesos are invested in hydrocarbons (SHCP, 2022). It also discourages capital formation in areas where the South has competitive advantages over the rest of the territory, such as wind energy, which is a lost opportunity for the region. The private sector, national and foreign, is investing less and less in construction, -47.2% in the last two years, a drop of almost double that of the national level (-26.7%) (IN-EGI, 2022a). The South depends more and more on external factors than its resources.

Finally, the environmental deterioration in the South, as in most of the country, it's a mining factor in development. In general terms, the great cities like Mexico City, Toluca, Puebla, Cuernavaca, Xalapa, and Veracruz, amongst others, have at least 40% of their water basins polluted. Likewise, Tabasco, Tlaxcala, Veracruz, Yucatan, Chiapas, Guerrero, Hidalgo, Oaxaca, Puebla and Quintana Roo have above 40% soil degradation.

The same scenario is presented in air pollution, where the Metropolitan Area is the most affected, with more than 270 days of the year registering up to three different pollutants. Entities such as Morelos,

Hidalgo, Puebla, and Veracruz registered cities for up to 160 days with at least two types of pollutants.

The Southern region has a precarious quality in terms of care and protection of the environment, in addition to the few and precarious institutional capacities it must face present and future challenges.

The report's look at Southern Mexico allows us to understand not only the immediate challenges and needs of a country that lacks direction but also provides information to build recovery alternatives that the country will need in the near future.

The report's look at Southern Mexico allows us to understand not only the immediate challenges and needs of a country that lacks direction but also provides information to build recovery alternatives that the country will need in the near future.





GOVERNANCE



DEMOCRACY & RIGHTS

« **M**exico has not been able to overcome the challenges of building a stable democracy in which there is a genuine rule of law; the government is clearly separated from the military, justice is accessible to all, and the State controls the entire national territory and guarantees security, the main public good. On the contrary, the modest advances in democratic matters that had been achieved in decades have ex-

perienced setbacks, impunity and inaccessibility to justice remain at almost total levels, military bodies have increased their political influence, and insecurity remains the main problem in Mexico. Likewise, organized crime, fragmented, has taken over entire areas of the national territory without encountering great resistance. In addition, federalism in the country is not advancing.

Image: “Where is Irma Galindo? The activist who defends the forest disappears in the South of Mexico”. Photo/Facebook of Irma Galindo Barrios at https://www.elconfidencial.com/mundo/2021-11-12/desaparece-defensora-bosques-ambientalista-irma-galindo-mexico_3322900/

Subnational Democratic Development Index



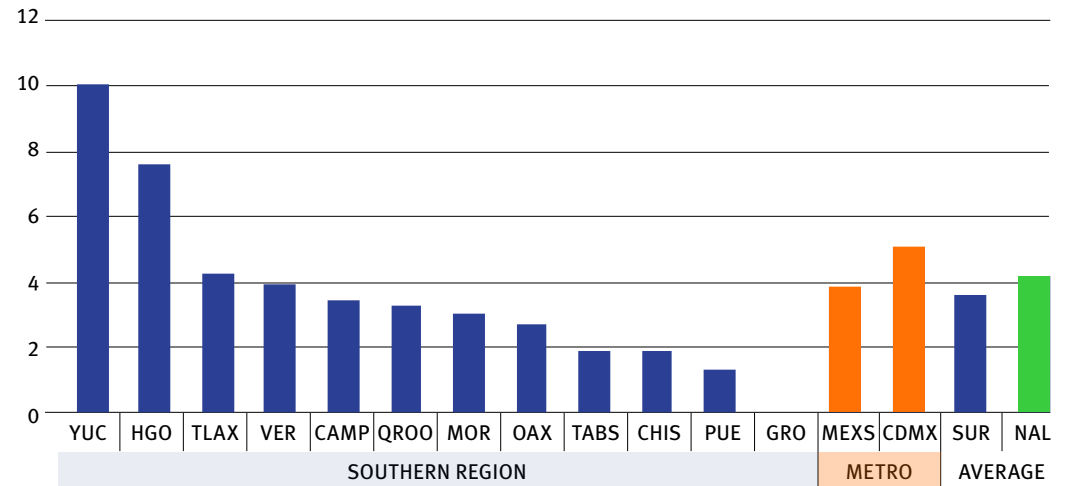
Building democracy requires a long institutional construction process, liberties increment, human rights protection, and the development of an advanced political culture. Mexico took more than half a century to traverse from a single-party system to a plural-party system, in other words, an electoral democracy. But even if at the federal level institutions were built that allowed Mexico to be considered a democracy (it bears mentioning that starting 2022, *The Economist* stopped considering Mexico a democracy), on the subnational level, there is an ample variation in democratic development. The 2021 Mexican Democratic Development Index shows that subnational democracy in Mexico is going backward. While in 2020, the study considered that eight states kept high democratic development, by 2021, the index only considered two in the same category. Besides, in 2021 eight entities were qualified as minimum democratic development territories, an increase of two compared to 2020 (Fundación Konrad Adenauer *et al.*, 2022).

The Southern region is home to the lowest-rated states in this area. As has been the case in the last six editions of the study, Guerrero is the state with the minor democratic development in the country, followed by Puebla, Chiapas, and Tabasco. Of the 12 states in Southern Mexico, five maintain minimal democratic development, five are rated as democracies with low development, and two are rated as highly developed. Yucatan continues to be the best-rated state in terms of democracy, and despite its overall rating, Hidalgo improved its relative position by moving from fifth to second place (Konrad Adenauer Foundation *et al.*, 2022). The South's average evaluation in 2021 was 3.61, representing a marginal improvement from the 3.59 reported in 2020. In no year has the Southern average reached the national average, which for 2020 was 5.4 and for 2021 dropped to 4.1. Furthermore, in 2021, only three of the South entities of the country were positioned above the national average reported in 2021 (Yucatan, Hidalgo, and Tlaxcala). It is worth highlighting the case of Puebla, which went from 25th place in 2020 (with a

score of 3.6 on a scale of 10¹) to 31st place in 2021, with a score of 1.3 (Konrad Adenauer Foundation *et al.*, 2020; 2022).

It is also worth noting that although the average score of the Index decreased (this year, it was the lowest average since this exercise was carried out), in the dimension related to citizens' democracy (existing climate in each state concerning the exercise of rights and freedoms and commitment to these values), most of the states in the Southern part of the country are positioned above the national average in this dimension. Only Guerrero did not reach this average and was placed as the second worst-rated state in this area, behind Colima (Konrad Adenauer Foundation *et al.*, 2022). The reason is that the violence incidence mainly settled in the country's Northern and in some focalized points in the center of the country, which face the highest levels of violence.

GRAPH 1. 2021 DEMOCRATIC DEVELOPMENT INDEX RANK (IDD, FOR ITS ACRONYM IN SPANISH) PER FEDERAL ENTITY



Source: In-house elaboration with data from Fundación Konrad Adenauer *et al.* (2022).

YUCATAN CONTINUES TO BE THE BEST-RATED STATE IN TERMS OF DEMOCRACY, AND DESPITE ITS OVERALL RATING, HIDALGO IMPROVED ITS RELATIVE POSITION BY MOVING FROM FIFTH TO SECOND PLACE.

¹ As discussed in the methodological section of the Mexican Democratic Development Index, a score of 10,000 points in democratic development is assigned to the best-performing state, but it is not equivalent to optimal performance in all variables.

CRIME AND MILITARISM WITH A REGIONAL MAGNIFYINGGLASS



As mentioned on several occasions, militarization growth is, perhaps, the most worrying topic about formal democracy. The fact that the armed forces (FFAA, for its acronym in Spanish) have acquired so much power and responsibilities interdict the civil supremacy over the militia. It is known that most of the national guard members are transferred military men from Sedena (Secretariat of National Defense for its acronym in Spanish) and Semar (Marine Secretariat, for its acronym in Spanish) to the Security Secretariat and Citizen Protection (SSPC, for its acronym in Spanish). In fact, all of them keep their positions on the FFAA. Hence, with the policy framework already approved by legislation, you can attest that the GN performance is a military cut performance with a nationwide deployment.

It is known that, as of January 2022, the GN had 113,833 elements, of which 104,496 have been mobilized throughout the country. That day, last reported by the NG Observatory, 30,853 guards were deployed in the country's South, 29.5%. Most of these were

concentrated in Oaxaca (5,628), Chiapas (3,947), Guerrero (3,601), and Puebla (3,547). It is worth noting that eleven of the 12 Southern states (Campeche, Chiapas, Guerrero, Hidalgo, Morelos, Oaxaca, Puebla, Quintana Roo, Tabasco, Veracruz, and Yucatan) have received more national guards than the national average of 3,265 guards per state.

Contemplating the total deployed guards from August 2019 until January 2022. It is noticeable that Oaxaca, Veracruz, Guerrero, Chiapas, and Puebla are the entities with the most deployed guards (National Guard Observatory and the Mexican Militarization, 2022). As mentioned by the Causa en Comun organization, the federal government has not explained its reasoning related to population, crime incidence, or geography to justify the distribution of said elements (Causa en Comun, 2022b) (Table 1).

TABLE 1. NATIONAL GUARD ELEMENTS DEPLOYED IN THE COUNTRY'S SOUTH BY STATE

REGION	STATE	JAN 2022
SOUTHERN REGION	Campeche	917
	Chiapas	3,947
	Guerrero	3,601
	Hidalgo	1,877
	Morelos	1,226
	Oaxaca	5,628
	Puebla	3,547
	Quintana Roo	1,770
	Tabasco	2,121
	Tlaxcala	547
	Veracruz	4,907
Yucatan	855	
METROPOLITAN AREA	CDMX	13,102
	MEXS	9,927
TOTAL SOUTH		30,943
TOTAL NATIONAL		104,496

Source: In-house elaboration with data from Causa en Comun (2022).

Another indicator used to measure the level of militarization in the country has been the number of military personnel occupying civilian positions. As of 2021, the National Guard observatory counted that ten state police corporations are headed by military personnel and a significant number of municipal police forces. In addition, 18 of the 55 military personnel occupying civilian positions in the federal public administration are deployed in entities in the South of the country, that is, 41.8%. Most of these are in Veracruz (9) (National Guard Observatory and the Mexican Militarization, 2022) (Table 2).

Concerning organized crime, it must be clearly stated that the entire country has been subject to its activities. Although violence, a consequence of organized crime, and the most notorious organizations are concentrated in the Bajío and the Northern of Mexico, the South of the country and Metropolitan Area have also been progressively colonized by cartels and criminal organizations.

TABLE 2. MILITARY ELEMENTS ON THE CIVIL SPHERE 1/4






STATE	DEPENDENCE/ INSTITUTION	NAME		PREVIOUS CHARGE	CURRENT POSITION	STARTING DATE
CAMPECHE	National Migration Institute	Roberto Gonzalez Lopez		Vice Admiral	Head of Office	21/08/2019
<i>Image:</i> https://expreso.press/2017/01/17/cambian-mando-naval-soto-la-matina/						
CHIAPAS	National Migration Institute	Aurelio Antonio Argüelles		Naval Aggregate in Sweden and Germany	General Manager	18/08/2020
<i>Image:</i> https://mexicobusiness.news/infrastructure/news/mayan-trains-fifth-segment-tender-receives-one-bid?tag=aurelio-antonio-arguelles-rodriquez						
GUERRERO	State Public Safety Commission	Victor Manuel Martinez Maya		Rear Admiral	Head of Office	17/03/2020
<i>Image:</i> https://twitter.com/ricardo1pineda/status/1461819683770970119						
HIDALGO	National Migration Institute	Francisco Javier Hernandez San- chez		Cavalry First Captain	Head of Office	17/03/2020
MORELOS	State Public Safety Commission	Jose Antonio Ortiz Guarneros		Vice Admiral	Executive Secre- tary of the Public State Security System	01/10/2018
<i>Image:</i> https://www.elsoldecuernavaca.com.mx/local/ortiz-guarneros-mi-unica-intencion-fue-explicar-que-en-algunos-espacios-las-mujeres-son-mas-vulnerables-3075802.html						

TABLE 2. MILITARY ELEMENTS ON THE CIVIL SPHERE 2/4






STATE	DEPENDENCE/ INSTITUTION	NAME		PREVIOUS CHARGE	CURRENT POSITION	STARTING DATE
MORELOS	Executive Secretariat of the Public State Security System	Jose Manuel Rodriguez Mo- rales		Rear Admiral	Executive Secre- tary of the Public State Security System	01/10/2018
<i>Image:</i> https://sesesp.morelos.gob.mx/						
PUEBLA	Atlixco's Public Safe- ty Secretariat	Enrique Jaime Tapia Espinoza		Retired Lieutenant Colonel	Head	27/06/2019
<i>Image:</i> https://elpopular.mx/secciones/municipios/2019/06/28/nombra-a-titular-de-seguridad-en-atlixco						
PUEBLA	National Migration Institute	Jose Luis Chavez Aldana		DEM Brigadier General	Head of Office	17/03/2020
<i>Image:</i> https://twitter.com/Segob_Puebla/status/1308839649280962561/photo/3						
TABASCO	Integral Port Authority	Gregorio Martinez Nuñez		Vice Admiral	General Manager	02/09/2020
<i>Image:</i> https://twitter.com/refineriazbocas/status/1301732461152358400						
VERACRUZ	Integral Port Authority	Romel Eduardo Ledezma		Admiral	General Manager	02/09/2020
<i>Image:</i> https://www.masnoticias.mx/almirante-romel-eduardo-ledezma-nuevo-comandante-de-la-primera-region-naval/						

TABLE 2. MILITARY ELEMENTS ON THE CIVIL SPHERE 3/4











STATE	DEPENDENCE/ INSTITUTION	NAME		PREVIOUS CHARGE	CURRENT POSITION	STARTING DATE
VERACRUZ	Integral Port Authority	Cuauhtemoc Zuñiga Bonilla		Ship Captain	Undersecretary of Operations	17/07/2019
<i>Image: https://www.diariodexalapa.com.mx/policiaca/mas-de-3-mil-efectivos-de-ssp-marina-Sedena-participan-en-operativo-de-buen-fin-en-el-estado-7455523.html</i>						
VERACRUZ	Public Safety Secretariat	Nicodemus Villagomez Broca		Vice Admiral	General Manager	10/08/2020
<i>Image: https://www.tuxpaninformativo.com/2020/08/11/vicealmirante-nicodemus-villagomez-broca-nuevo-titular-de-la-apitux/</i>						
VERACRUZ	Public Safety Secretariat	Juan Sanchez Alvarado		Rear Admiral	Manager of inter-municipal Operations	S.F.
VERACRUZ	Public Safety Secretariat	Laureano Suarez Allen		Vice Admiral	General Manager of Prevention and Social Rehabili- tation	08/05/2019
<i>Image: https://e-veracruz.mx/nota/2014-09-23/municipios/anuncian-operativo-contra-carros-maceta-en-el-puerto</i>						
VERACRUZ	Public Safety Secretariat	Luis Enrique Torres Campos		Chief Master	General Mana- ger of the Civil Forces l	S.F.

TABLE 2. MILITARY ELEMENTS ON THE CIVIL SPHERE 4/4

STATE	DEPENDENCE/ INSTITUTION	NAME	PREVIOUS CHARGE	CURRENT POSITION	STARTING DATE	
VERACRUZ	Public Safety Secretariat	Jose Antonio Campos Valencia		Corvette Captain	General Manager of Road Safety of the State and Transit	25/03/2019
<i>Image:</i> https://www.masnoticias.mx/reforzar-cultura-vial-a-los-veracruzanos-compromiso-de-nuevo-delegado-de-transito/						
VERACRUZ	Public Safety Secretariat	Evaristo Cruz Cabañas		Rear Admiral	General Manager of the Formative Institute “Studies and Research Center on Security”	S.F.
<i>Image:</i> https://www.proceso.com.mx/nacional/estados/2019/5/7/encargado-de-entrenar-policias-en-veracruz-estuvo-acusado-de-tortura-224509.html						
VERACRUZ	National Migration Institute	Raul Alberto Paredes Hernandez		CG DEM Rear Admiral	Head of Office	21/08/2019
<i>Image:</i> https://www.avcnoticias.com.mx/resumen.php?idnota=288295						
YUCATAN	National Migration Institute	Juan Saucedo Almazán		DEM Brigadier General	Head of Office	21/08/2019
<i>Image:</i> http://www.larevista.com.mx/yucatan/indemaya-e-inm-firman-convenio-a-favor-migrantes-de-yucatan-57408						
YUCATAN	Integral Port Authority	Jorge Carlos Tobilla		Chief of Staff Logistics Administrator (Semar)	General Manager	18/08/2020
<i>Image:</i> https://lectormx.com/2020/08/17/jorge-carlos-tobilla-rodriguez-asume-en-api-de-puerto-progreso/						

Source: In-house elaboration with data from Causa en Comun (2021).

As has been frequently commented, the fight between cartels and the government's fight against certain criminal groups since 2007 has changed the criminal functioning of drug trafficking organizations. The fragmentation of these criminal groups increased violence in the country, diversified illicit markets, and established new criminal geography. As reported by Lantia Intelligence (2020), six major criminal organizations have been identified that are still in force in Mexico: The Sinaloa Cartel (CDS, for its acronym in Spanish), the Jalisco New Generation Cartel (CJNG, for its acronym in Spanish); the Zetas, the Gulf Cartel (CDG, for its acronym in Spanish), the Beltrán Leyva Criminal Organization (OCBL, for its acronym in Spanish), and the Templar Knights–La Familia Michoacana (CT–FM, for its acronym in Spanish), furthermore the relevant local or regional criminal groups (GLR, for its acronym in Spanish). According to Lantia Intelligence (2020), only two of these groups can be considered to have a national presence: the Sinaloa Cartel and the Jalisco Nueva Generación Cartel.

CDS is present in 28 states through its 37 cells. The Southern states where its activity stands out are Guerrero through the Gente Nueva cell and Oaxaca with the Cárteles Unidos (La Unión) group. The CDS has a presence in the Metropolitan Area through the

Comando de la Muerte. For its part, the CJNG, as of 2019, had 36 cells and one splinter, through which it maintains a presence in all the country's states. In the country's South, the El Negro cell in Puebla stands out for its operational capacity, mainly dedicated to the theft of hydrocarbons, and the Taliban cell in Tabasco. In the Metropolitan Area, La Fuerza Anti-Unión Tepito stands out.

As far as the OCBL is concerned, it is known that the arrest and assassination of its main leaders in the last decade has weakened the strength of this criminal organization. Some groups created because of the weakening of this cartel were Los Rojos, with a presence in Mexico City, the State of Mexico, Puebla, Guerrero, and Morelos; or Guerreros Unidos, with a presence in Mexico City, the State of Mexico, and Guerrero. According to Lantia Intelligence (2020) information, it's known that at least in 16 of the states, 29 local and regional organizations which are geographically relevant are found. From these two are found in the country's South (The Oaxaca or Istmo Cartel, in Oaxaca and Yucatan, and the band of El Loco Téllez in Tlaxcala and Puebla, besides the trafficking mob and slave trade in Tlaxcala) and one in the Metropolitan Area (La Unión Tepito in Mexico City).

CRIMINAL PRESENCE OF THE CARTELS IN THE SOUTHEN REGION AND THE METROPOLITAN AREA



TABLE 3. CRIMINAL PRESENCE & ACTIVITIES

REGION	CRIMINAL PRESENCE AND ACTIVITIES	CARTELS		SPLINTER CELLS FROM CRIMINAL ORGANIZATIONS				GLR	ACTIVITIES			
		CDS	CJNG	ZETAS	CDG	OCBL	CT-FM		DRUG TRAFFICKING-DRUG DEALING	EXTORTION-USE RIGHTS COLLECTION	HIGH IMPACT CRIME (TRANSPORT THEFT, RAILWAY THEFT, SLAVE TRADE)	HYDROCARBON BLACK MARKET (MIH)
SOUTHERN REGION	Campeche											
	Chiapas											
	Guerrero											
	Hidalgo											
	Morelos											
	Oaxaca											
	Puebla											
	Quintana Roo											
	Tabasco											
	Tlaxcala											
	Veracruz											
Yucatan												
METROPOLITAN AREA	CDMX											
	MEXS											

CDS: Cartel of Sinaloa; CJN: Cartel of Jalisco nueva Generación; CDG: Cartel of Golfo; OCBL: Criminal Organization Beltran Leyva; CT-FM: Caballeros Templarios-La Familia Michoacana; GLR: Local o regional criminal groups.

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

« PUBLIC SAFETY

Insecurity, without a doubt, is the issue that worried Mexicans the most during the last 15 years. As reported on different occasions, crime incidence has significantly increased since 2007, during Felipe Calderón's sexennium. Since then, intentional homicides have accelerated, even if there were reductions in some years. Currently, these figures are more than alarming. Since 2019, intentional homicides each year have surpassed the 30 thousand cases barrier, and the national average homicide rate since then up until 2021 is 28 per one hundred thousand inhabitants (SESNSP, Executive Secretariat of the National Public Security System for its acronym in Spanish, 2022c).

Crime incidence is lower in the South than in the rest of the country. Between January and April 2022, the Executive Secretariat of the National Public Security System (SESNSP) recorded 687 thousand 882 alleged crimes, from which 22.6%, around 155 thousand 679 crimes, were reported in the country's South. Only two out of the 12 selected entities in the Southern region showed a crime incidence higher than the national average in 21 thousand 496 crimes per entity (Puebla and Veracruz). As expected, due to

TABLE 4. CRIME INCIDENCE PER STATE
JANUARY-MARCH 2022

REGION	FEDERAL ENTITY	INCIDENCE (THOUSANDS)
SOUTHERN REGION	Campeche	6,2
	Chiapas	4,3
	Guerrero	6,5
	Hidalgo	12,2
	Morelos	10,8
	Oaxaca	10,7
	Puebla	19,0
	Quintana Roo	11,8
	Tabasco	10,6
	Tlaxcala	1,2
	Veracruz	20,8
	Yucatan	1,0
METROPOLITAN AREA	CDMX	54,5
	MEXS	98,5
TOTAL SOUTH		115,1
TOTAL NATIONAL		367,9

Source: In-house elaboration with data from SESNSP (2022).

its size, the Metropolitan Area (Mexico City and Mexico State) is the region with the most recorded crimes in the first quarter of 2022, accruing 30% of the total, around 206 thousand 448. This region skews quite significantly the national crime distribution. While the average number of crimes in the Metropolitan Area is 103 thousand 224 per entity, the national average is 21 thousand 496 crimes per entity (Table 4).

Among the ten municipalities with the most murders registered during the first four months of 2022, only one, Acapulco, is in the country's Southern region, in fourth place. Although when comparing the first four-month period of 2021 with that of 2022, three of the 12 states that are contemplated as being in the Southern region in this report experienced percentage increases in intentional homicides: Tlaxcala (25%), Puebla (24%) and Hidalgo (23%) and only Tabasco and Campeche reported decreases (37% and 35% respectively) (Causa en Comun, 2022a) (Table 5).

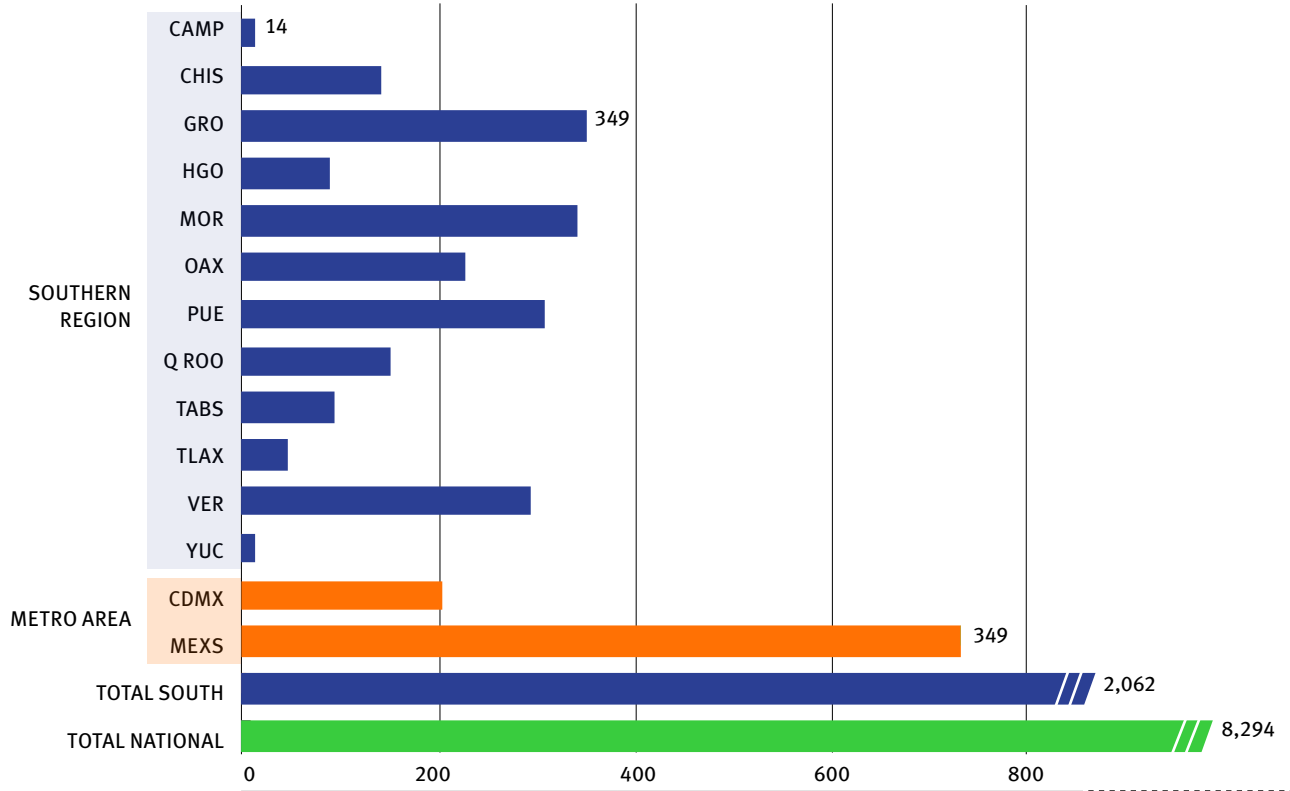
TABLE 5. SOUTHERN STATES MUNICIPALITIES WITH THE HIGHEST RECORDED NUMBER OF INTENTIONAL HOMICIDES

APRIL 2022

STATE	MUNICIPALITY	TOTAL
Campeche	Candelaria	5
Chiapas	Tapachula	15
Guerrero	Acapulco	143
Hidalgo	Pachuca	12
Morelos	Cuernavaca	48
Oaxaca	Oaxaca	15
Puebla	Puebla	69
Quintana Roo	Benito Juarez	94
Tabasco	Centro	21
Tlaxcala	Apizaco	6
Veracruz	Coatzacoalcos	17
Yucatan	Progreso	4

Source: In-house elaboration with data from SESNSP (2022).

GRAPH 2. NUMBER OF RECORDED HOMICIDE VICTIMS
 APRIL 2022



STATES OF THE SOUTHERN REGION THAT INCREASED PERCENTAGES OF INTENTIONAL HOMICIDES:

TLAXCALA 25%

PUEBLA 24%

HIDALGO 23%

STATES THAT REPORTED DECREASE OF INTENTIONAL HOMICIDES:

TABASCO -37%

CAMPECHE -35%

Source: In-house elaboration with data from SENSP (2022).

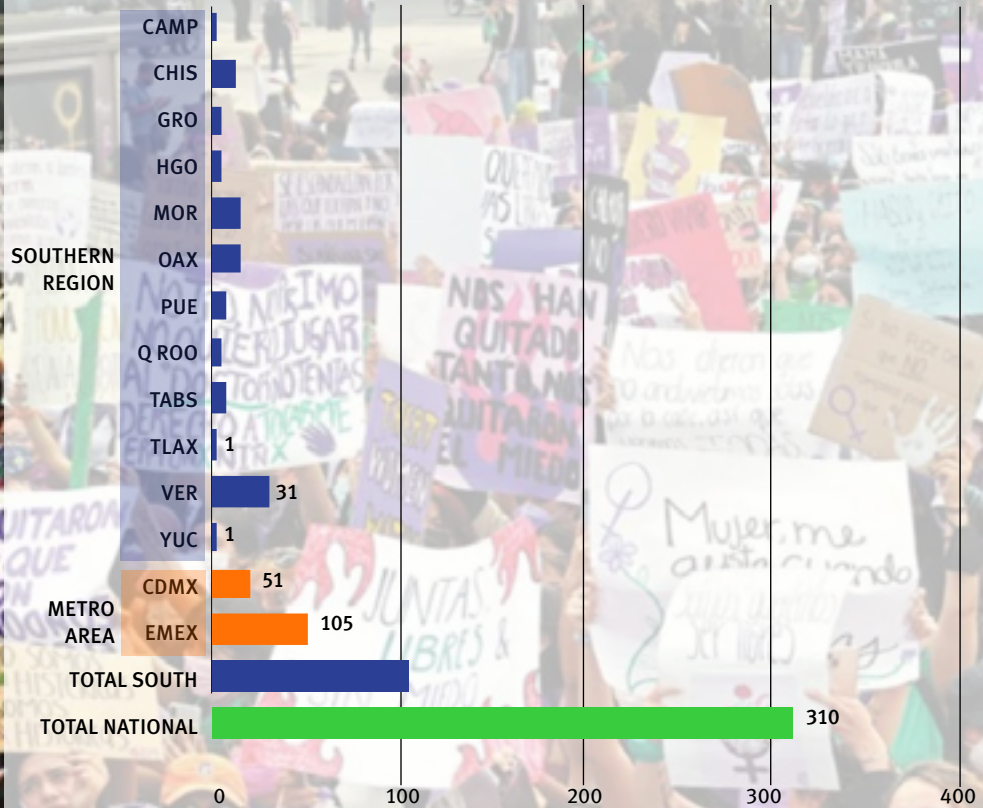
In terms of femicides, the numbers are also alarming. According to the SESNSP, in 2021, 1,004 femicides were reported throughout the country. Most of these are not concentrated in the South. Among the ten municipalities with the most femicides in the first four months of 2022, only one, Centro in Tabasco, belongs to the Southern region.

TABLE 6. SOUTHERN STATES MUNICIPALITIES WITH THE HIGHEST NUMBER OF FEMICIDES
APRIL 2022

STATE	MUNICIPALITY	TOTAL	TOTAL BY STATE
CAMPECHE	Candelaria	2	2
CHIAPAS	Comitan de Dominguez	3	3
GUERRERO	Acapulco, San Luis Acatlan, San Marcos and Jose Joaquin de Herrera	1 by/municipality	4
HIDALGO	Pachuca, Atotonilco de Tula, Tizayuca	1 by/municipality	3
MORELOS	Cuernavaca	3	3
OAXACA	Santa Maria Petapa	2	3
PUEBLA	Zoquitlan, Venustiano Carranza, San Pedro Cholula, Nopalucan, Francisco Z. Mena, Esperanza and Acajete	1 by/municipality	7
Q ROO	Benito Juárez	3	3
TABASCO	Centro	3	3
TLAXCALA	San Pablo del Monte	1	1
VERACRUZ	Altotonga, Coatzacoalcos, Cosamaloapan de Carpio, Xalapa, Veracruz	2 by/municipality	10
YUCATAN	Progreso	1	1

Source: In-house elaboration with data from SESNSP (2022).

GRAPH 3. RECORDED FEMICIDE VICTIMS
APRIL 2022



Source: In-house elaboration with data from SENS (2022).



Image: "Femicides have grown 121%" at <https://www.eleconomista.com.mx/politica/Mujeres-exigen-un-alto-a-la-violencia-que-padecen--20220309-0001.html>

RULE OF LAW AND CORRUPTION, AN EVALUATION OF THE SOUTH OF THE COUNTRY



The rule of law, understood as unrestricted compliance with the law, is one of the significant debts of the Mexican political system. The Mexico Rule of Law Index 2022 shows that the country ranks very poorly in this area. The national average is 0.41 on a range from 0 to 1, where 1 indicates the highest adherence to the rule of law. If only the Southern region states are considered, the average rule of law is 0.39, slightly below the national average. In addition, seven of the ten worst evaluated states correspond precisely to the Southern region, and the only three states in this area of the country that exceed the national average are Yucatan, Campeche, and Hidalgo (World Justice Project, 2022). However, it is worth noting that no state even manages to reach 0.50, the intermediate score of the index.

As reported on different occasions, impunity and corruption levels in Mexico are enormous. It is known that the dark figure of the country's crimes during 2020 was 93.3%, the highest since 2017 (INEGI, 2021d). Of

TABLE 7. MEXICAN RULE OF LAW INDEX
2020–2021–2021–2022 CHANGE BY FEDERATIVE ENTITY

REGION	POSITION	STATE	SCORE*	2020–2021– 2021–2022** CHANGE
SOUTHERN REGION	2	Yucatan	0.47	0.00
	11	Campeche	0.43	-0.02
	14	Hidalgo	0.42	-0.02
	19	Tlaxcala	0.40	0.00
	20	Oaxaca	0.39	-0.01
	23	Veracruz	0.38	0.00
	25	Chiapas	0.38	-0.01
	26	Tabasco	0.37	-0.02
	27	Puebla	0.37	0.00
	30	Quintana Roo	0.36	0.00
	31	Morelos	0.35	-0.02
METROPOLITAN AREA	32	Guerrero	0.34	-0.01
	28	MEXS	0.36	0.00
	29	CDMX	0.36	-0.01
SOUTH		South Average	0.39	-0.01
NATIONAL		National Average	0.41	-0.01

Source: In-house elaboration with data from World Justice Project (2022).

Note: *Scores are rounded up to two decimals. **Consult the section on methodology for more details on scores calculations.

SIX OF THE TEN WORST EVALUATED STATE ATTORNEYS ARE LOCATED IN THE SOUTHERN REGION: PUEBLA, MORELOS, VERACRUZ, OAXACA, TLAXCALA AND CAMPECHE.



Image: “Puebla’s General Attorney defends assailants” at <https://es-us.noticias.yahoo.com/fiscal%C3%ADa-puebla-defiende-agresores-lamentaron-175957998.html>

the total reported crimes and the ones with an investigation started during 2020, almost half the cases (47%) nothing happened, 27% of the investigation status was “in process,” 6.6% of the cases were concluded with an anticipated due process way, in 5.9% the victim recovered its goods, and only in 4.6% the report reached a judge (INEGI, 2021d).

Furthermore, as detailed by the organization Impunidad Cero in its State Performance Index of Attorneys and Prosecutors’ Offices 2021, in the year 2020, the probability of a crime being reported and solved in Mexico is only 1%. This percentage represented a decrease in relation to 2019, going from 1.32% to 1.04% (Impunidad Cero, 2021). This average in the South is 1.07. The same study shows that the average rating

of the prosecutors' offices in the country's South is 45.45 on a scale of 100, a score below the national average of 49.63. In addition, six of the ten worst evaluated prosecutors' offices are in this region (Puebla, Morelos, Veracruz, Oaxaca, Tlaxcala, and Campeche). It also shows that at the state level, the prosecutors' offices in Southern Mexico with the highest probability of clearing up the crime, although with a very low percentage, are those of Chiapas (2.42%), Yucatan (1.58%), and Hidalgo (1.57%). On the other hand, the prosecutors' offices of Guerrero (0.1%) and Quintana Roo (0.25%) are the least likely to solve crimes in the same region.

Pertaining to intentional homicide, Impunidad Cero (2021) reported that up until 2019, 9 out of the 10 prosecutors' offices with the highest impunity percentage were in the Mexican South and are: Morelos (99.6%), Oaxaca (99.4%), Guerrero (98.8%), Chiapas (98.4%), Tabasco (97.2%), Quintana Roo (96.8%), Puebla (96.6%), Veracruz (95.7%), and Tlaxcala (94.3%). Since one of the states in the region is the best qualified nationally (Yucatan with a 24.2% impunity percentage on intentional homicide), the 12-state Southern state average in 2019 is not so bad: 86.90%, barely under the national mean with 89.6%.

TABLE 8. INTENTIONAL HOMICIDE IMPUNITY
PERCENTAGE
BY FEDERAL ENTITY 2019

STATE	PERCENTAGE
SOUTHERN REGION	
CAMPECHE	60.6%
CHIAPAS	98.4%
GUERRERO	98.8%
HIDALGO	81.3%
MORELOS	99.6%
OAXACA	99.4%
PUEBLA	96.6%
QUINTANA ROO	96.8%
TABASCO	97.2%
TLAXCALA	94.3%
VERACRUZ	95.7%
YUCATAN	24.2%
METROPOLITAN AREA	
CDMX	65.8%
MEXS	92.8%
NATIONAL	89.6%

Source: In-house elaboration with data from Impunidad Cero (2021).

Likewise, Impunidad Cero (2021) reported that in 2021 only 10.9% of people in the country say they trust the prosecution authorities. When considering only the 12 Mexican South states, the percentage decreases slightly to 10.8%. Puebla (6.2%), Tlaxcala (7.4%), Veracruz (9.0%), Morelos (9.1%), and Guerrero (9.1%) are the Southern states with the least trust in the prosecution authorities.

Naturally, impunity also has an important impact on human rights. The 2021 National State Human Rights Census, performed by INEGI, shows the most recent data on the number of complaint requests filed both in the National Human Rights Commission (CNDH, for its acronym in Spanish) or in the Local Human Rights Public Bodies (OPDH, for its acronym in Spanish). In 2020 only, 164 thousand 888 complaints requests were reported, 35.6% (58 thousand 722) in the CNDH and 64.4% (106 thousand 166) in the OPDH. Compared with the 2019 reports, the number of complaint requests received by the CNDH in 2020 increased by 5.2%, while in the OPDH, a 33.8 percent decrease was recorded (INEGI, 2021b).

The bodies with the most complaints received in 2020 were the CNDH and the OPDH in Mexico City (30 thousand 207), Oaxaca (9 thousand 590), and Jalisco (9 thousand 590).

TABLE 9. HIGH TRUST PERCENTAGE ON PROSECUTION AUTHORITIES BY FEDERAL ENTITY 2021

STATE	PERCENTAGE
SOUTHERN REGION	
CAMPECHE	14.3%
CHIAPAS	10.1%
GUERRERO	9.1%
HIDALGO	11.2%
MORELOS	9.1%
OAXACA	11.7%
PUEBLA	6.2%
QUINTANA ROO	10.2%
TABASCO	13.1%
TLAXCALA	7.4%
VERACRUZ	9.0%
YUCATAN	18.4%
METROPOLITAN AREA	
CDMX	4.2%
MEXS	7.3%
NATIONAL	10.9%

Source: In-house elaboration with data from Impunidad Cero (2021).

co (9 thousand 304) (INEGI, 2021b). As you can see, only the OPDH in Mexico City, Oaxaca, and Jalisco focus 30.3% of the total complaint requests (INEGI, 2021b). Of the country's Southern area, the average complaint per entity is 2 thousand 783, way below the national mean of 5 thousand 152 complaints per state. The Southern region focuses 20.3% of the total complaints, and Campeche is the entity with the least complaints of this type (238).

Regarding classified files in CNDH and OPDH, 85,903 were classified as allegedly violating human rights, which, compared to what was reported in 2019, represents a decrease of 17.5% in 2020. It is worth mentioning that in terms of the workload of the heads of the investigative units in 2020, Mexico City was the entity with the highest workload, with 3,162 cases handled per head of the investigative units (INEGI, 2021b).

TABLE 10. RECEIVED COMPLAINT REQUESTS
BY THE CNDH AND THE OPDH
BY FEDERAL ENTITY, 2020

STATE	NUMBER
SOUTHERN REGION	
CAMPECHE	238
CHIAPAS	853
GUERRERO	1,053
HIDALGO	4,971
MORELOS	471
OAXACA	959
PUEBLA	5,997
QUINTANA ROO	1,587
TABASCO	372
TLAXCALA	520
VERACRUZ	7,423
YUCATAN	320
METROPOLITAN AREA	
CDMX	30,207
MEXS	7,449
TOTAL	
SOUTH	33,395
NATIONAL	164,888

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

« FISCAL FEDERALISM

As previously reported by Vital Signals (2020a), Mexican federalism has been diagnosed as a dysfunctional federal system that collects little and distributes disproportionately as many competencies as the budgetary resources on the government level. The federation keeps a large number of control devices over subnational governments and creates incentives to maintain the fiscal laziness and competence of the states. On a list reported by OECD of 106 countries until 2020 (last year available), Mexico ranks 79 among the countries that collect the most, where number one is the one with the most tributary collection, and 106 is the one with the least. Mexico barely collects 17.9 points pertaining to its GDP, way below OCDE's average (33.5), and barely above countries of the region like Peru (15.2), Venezuela (14.4), Paraguay (13.4), and Guatemala (12.4) (OCDE, s.f.).

Federalism implies decentralizing power. Tax policy is one of the essential competencies because the formulation of public policies is subject to the budget available to the entities and the federation. Contrary to federalist intuition, the fiscal coordination system centralized fiscal policy in Mexico, leaving the feder-

ation with the task of collecting most of the total revenues.² On average, between 1998 and 2020, federal revenues accounted for 92% of all tax revenues, while states and municipalities together contributed only 8%. In contrast, spending is increasingly federalized. Of this, 54% is exercised by the central government, 38% by the states, and 8% by the municipalities (INGI, 2021a). In addition, the actual increase in total revenues has increased federalized spending significantly each year (Vital Signs, 2020a).

Besides, budgetary resource distribution between the federative entities is highly disproportionate. While some states perceive four times their contribution to the federal budget through participation and contributions, others do not receive half of what, on principle, is transferred to the federation. Even if this has a compensatory logic to equalize the living conditions and opportunities of the country's population, it hasn't had better results and generated a permanent

² The federal government is responsible for collecting taxes related to highly mobile taxable factors, while local treasuries are responsible for those with low mobility. In this sense, the main taxes collected by the federal treasury are: ISR, VAT, IEPS, ISAN, Foreign Trade Tax.



MEXICO BARELY COLLECTS 17.9 POINTS PERTAINING TO ITS GDP, WAY BELOW OCDE'S AVERAGE (33.5), AND BARELY ABOVE COUNTRIES OF THE REGION LIKE PERU (15.2), VENEZUELA (14.4), PARAGUAY (13.4), AND GUATEMALA (12.4)

political conflict between subnational demarcations and the federation. Altogether, the 12 Southern area states contribute barely 9.8% of the total tributary taxes but perceive 31% of the total participation and 40% of federal provisions. The only Southern entities of the country that contribute more than one percent of tributary taxes are Puebla (1.09%) and Veracruz (4.60%).

Image: Photo:/Cuartoscuro at <https://www.animalpolitico.com/2018/02/listas-empresas-fantasma-sat-corte/>

TABLE 11. TRIBUTARY TAX REDISTRIBUTION THROUGH FEDERAL PARTICIPATIONS AND CONTRIBUTIONS

FEDERAL ENTITY	TRIBUTARY TAX	PARTICIPATIONS	CONTRIBUTIONS
SOUTHERN REGION			
VERACRUZ	4.60%	5.81%	6.64%
PUEBLA	1.09%	4.22%	5.17%
TABASCO	0.60%	3.54%	2.62%
YUCATAN	0.47%	1.65%	1.98%
MORELOS	0.41%	1.41%	1.67%
CAMPECHE	0.40%	1.21%	1.21%
OAXACA	0.38%	2.58%	5.10%
CHIAPAS	0.37%	4.04%	5.64%
HIDALGO	0.36%	1.95%	2.89%
GUERRERO	0.24%	2.24%	4.35%
TLAXCALA	0.12%	1.04%	1.28%
METROPOLITAN AREA			
CDMX	49.27%	11.88%	3.34%
MEXS	4.70%	12.55%	10.33%

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

Given this enormous disparity between federal and state revenues and expenditures, it is worth considering rethinking the fiscal coordination system to correct these flaws without necessarily losing a well-used compensatory quota for the states with the greatest lag. It is clear that this issue is one of the most politically thorny because it implies reorganizing power geographically.

IT IS WORTH CONSIDERING RETHINKING THE FISCAL COORDINATION SYSTEM. THIS ISSUE IS ONE OF THE MOST POLITICALLY THORNY BECAUSE IT IMPLIES REORGANIZING POWER GEOGRAPHALLY.



SOCIAL



THE POOREST REGION



In Mexico, we face a social panorama that reflects socioeconomic, cultural, political, etc., inequalities that affect the country's regions differently. Unfortunately, the Southern part continues to show the starkest panorama in terms of poverty and extreme poverty levels, the lowest income levels in the country, the widest differences in equality of opportunities, the highest levels of food insecurity, the lowest levels of education and the most drastic increases in

lack of access to health services, where even being a woman further determines social wellbeing in the region.

In addition, social assistance and programs are not distributed according to poverty dynamics. The data reveals that most support goes to the Metropolitan Area, and the least favored are not prioritized.

Image: "¿What is like to be poor in Mexico?" at https://www.taringa.net/+economia_negocios/que-es-ser-pobre-en-mexico_xg089

« MORE POVERTY AND LESS INCOME

In Mexico, the individual's ability to improve their economic, social, educational, and health conditions is largely determined by their birthplace and not by the conditions they manage to develop. There is evidence that being born in certain regions of the country generates greater possibilities for social mobility than in others. Being born in the Northern region implies more significant opportunities than being born in the Southern region, where individuals even regress rather than advance compared to their parents' situation (Castañeda, 2021).

The Southern region has the highest levels of poverty and food insecurity and the lowest levels of income. (Mazzoco & Meléndez, s.f.). According to the Regional Rank Criteria from Espinosa Yglesias Study Center CEEY), the Southern region presents low social mobility for a segment with the most notable poverty and region disparity. A Mexican born into an impoverished household in the Northern is 3.5 times more likely to escape poverty than one born into the same situation in the South. In this region, at least 45% of economic inequality results from unequal opportunities (Orozco *et al.*, 2019).

THE SOUTHERN REGION HAS THE HIGHEST LEVELS OF POVERTY AND FOOD INSECURITY AND THE LOWEST LEVELS OF INCOME.

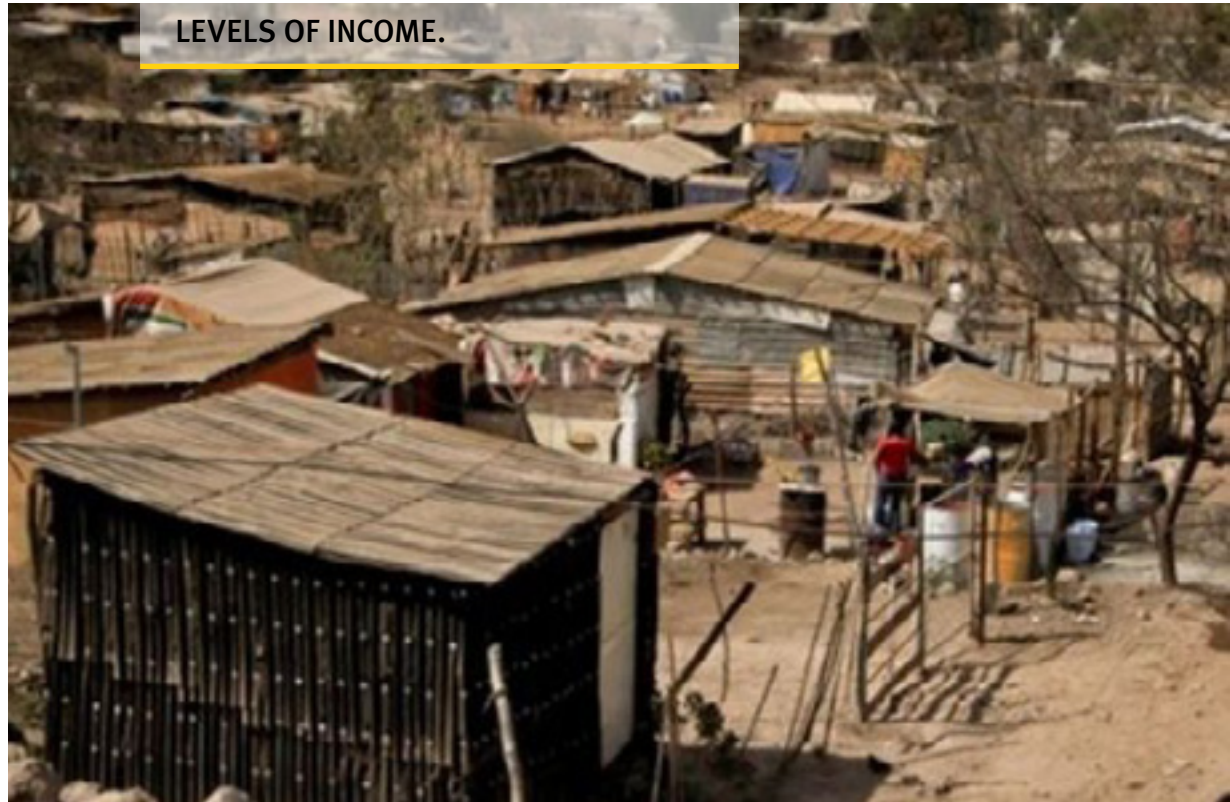


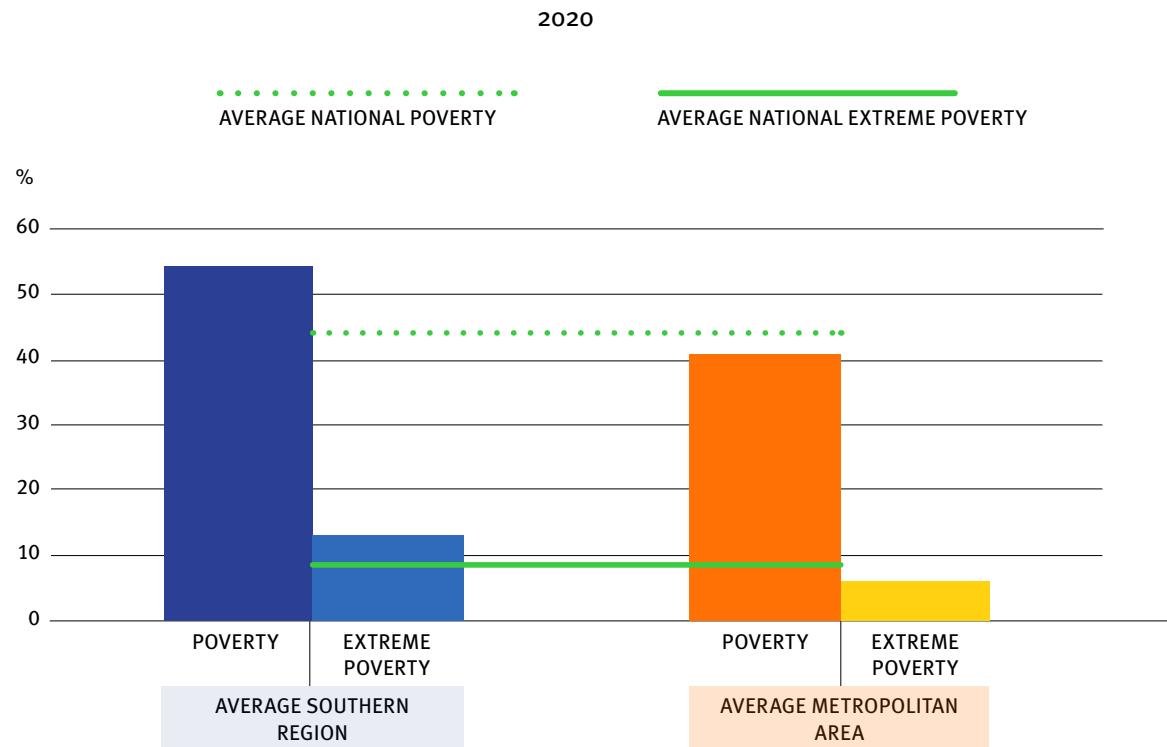
Image: "Mexico between poverty and inequality" at <https://www.telesurtv.net/telesuragenda/Pobreza-en-Mexico-20160801-0040.html>

Unlike the Metropolitan Area, the Southern region of the country reports the highest poverty (54.4%) and extreme poverty (13.1%), with figures above the national average (43.9% in poverty and 8.5% in extreme poverty) (Coneval, s.f.a) (Graph 4).

Low labor income is one of the main determinants of poverty in Mexico, and a high percentage of the population in the Southern part of the country does not have sufficient labor income even though it is one of the fundamental labor rights. In the South region of the country, seven out of ten people (70.4%) do not have sufficient income to buy even the basic food basket for a family of two, while in the rest of the country, only three out of ten (27%) do not have enough to buy a basic food basket for a family of two (Acción Ciudadana Frente a la Pobreza, s.f.).

The National Household Income and Expenditure Survey (ENIGH) shows that the primary income source is work income. All states comprising the Southern region are below the national mean. Even some like Chiapas, Guerrero, Oaxaca, and Veracruz are below the region's average (\$8,398) (INEGI, s.f.c) (Graph 5). On their behalf, the entities belonging to the Metropolitan Area (Mexico City 13,145 pesos/month and Mexico State \$10,727) surpass the national mean per household (10,702 pesos/month).

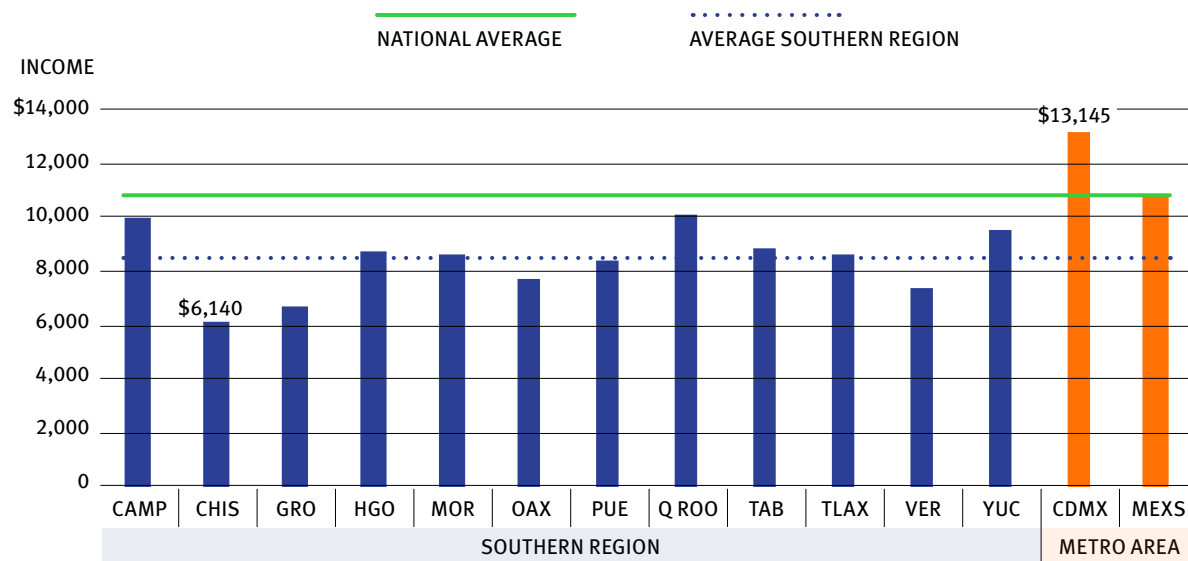
GRAPH 4. PERCENTAGE OF POPULATION UNDER POVERTY OR EXTREME POVERTY IN THE COUNTRY'S SOUTH AND METROPOLITAN AREAS



Source: In-house elaboration with data from Coneval (s.f.a).

GRAPH 5. LABOR INCOME PER HOUSEHOLD IN THE COUNTRY'S SOUTHERN REGION AND THE METROPOLITAN AREA

2020



Source: In-house elaboration with data from INEGI (s.f.c).

The short-term effects of the pandemic in Mexico resulted in millions of working people having to deal with low wages or layoffs (Feix, 2020), which has impacted labor income. Nationally, people working in poverty were registered, from 36.6% of the population in the 2020 first quarter (when the pandemic began) to 40.7% in the 2021 third quarter. The population in extreme working poverty increased from 8.7 mil-

lion people in 2018 to 10.8 million in 2020. Regionally during the first three months of 2022, decreases in working poverty were reported in 21 of the 32 federative entities. The Metropolitan Zone decreased by 7.9 percentage points the poor working population from the first quarter of 2021 to the same period of 2022. At the national level, it fell by 3.2 pp; in the Southern region, it only decreased by 2.5 pp (Table 12).

TABLE 12. LABOR POVERTY PERCENTAGE NATIONALLY AND REGIONALLY

REGION	1Q 2021	1Q2022	REDUCTION
Southern REGION	51,3	48,9	2,4
METROPOLITAN AREA	43,7	35,8	7,9
NATIONAL	42	38,8	3,2

Source: In-house elaboration with estimates from Coneval (s.f)

Well-being is closely linked to economic performance, income, health access, or education (México Cómo Vamos, 2021); nevertheless, things are not getting better fast enough. In 2020, the ratio between Gross Domestic Product (GDP) and the Social Development Index (IPS for its acronym in Spanish) revealed that 21 states rolled back on the score. Although the most affected entities were Mexico City, Oaxaca, and San Luis Potosí, are still on the last places Guerrero (last place), Chiapas (place 31), Oaxaca (place 30), Veracruz (place 29), Tabasco (place 28), and Puebla (place 27) (México Cómo Vamos, 2021), of entities found with the highest levels of poverty and extreme poverty in the country (Coneval, s.f.).

With the panorama mentioned above, the data on the social programs granted by the federal government indicate that in the Southern region, which is where

the entities with the highest poverty and lowest income levels are located, up to 2.6 social interventions are granted for each beneficiary of social programs, a figure lower than the national average (3.4). While in the Metropolitan Area are up to 5.9 interventions per beneficiary and 3.1 in the rest of the country (Gobierno de México, s.f.b).

DISTRIBUTION OF SOCIAL INTERVENTIONS BY BENEFICIARY OF THE FEDERAL GOVERNMENT

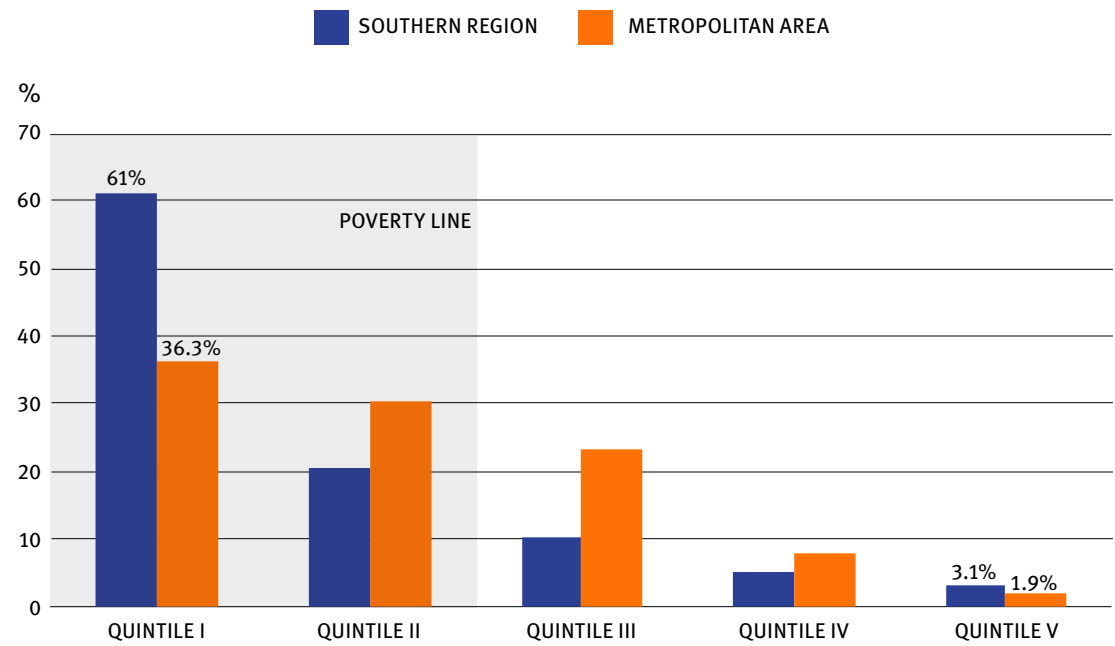


« GEOGRAPHY AND SOCIAL MOBILITY

Being born and living in poverty or extreme poverty influence people's social mobility, i.e., the changes experienced in socioeconomic status. According to the Social Mobility Report from CEEY (2019), Mexican social mobility is very low for the poorest population segment, and regional inequalities are drastic. Lack of mobility is much higher in the country's Southern part, while it is more fluid in the Northern region (Orozco *et al.*, 2019).

In this sense, if we consider the population living in poverty (quintiles I and II) in the Metropolitan Zone, almost 68 out of every 100 people (67.8%) born below the poverty line remain poor for the rest of their lives. In the South, this proportion rises to 81 out of every 100 people (Graph 6). This means it is much more difficult to escape poverty in the South than in the Northern.

GRAPH 6. SOCIOECONOMIC MOBILITY BETWEEN TWO GENERATIONS: POPULATION WITH POOREST VS. MOST AFFLUENT ORIGINS IN THE SOUTHERN REGION AND THE METROPOLITAN AREA
% OF PEOPLE



Source: In-house elaboration with data from CEEY (2017).

EDUCATION, PANDEMIC, AND INEQUALITY

Education is one of the main drivers of social mobility, as it gives people the skills to enter the labor market and obtain better wages for a life with greater well-being. This will depend, to a large extent, on educational attainment and the quality of education (Orozco *et al.*, 2019).

According to CEEY, the Mexican population of the lowest stratum has generally shown more significant progress in educational mobility; however, this mobility is short-lived. This means that children of parents with little or no education have achieved a higher level of education; however, it is not enough for the education they receive to have a tangible impact on their future. Nine out of ten people achieve a higher education level than their parents, but 52% did not complete junior high (Orozco *et al.*, 2019).

Regionally, the country's South is where inequality in educational attainment is most persistent from one generation to the next. Although the Southern region reports the largest increase in the education index (32 percentage points), it contributes only 24.7%

to national mobility. In contrast, the Metropolitan Area increased its education index by 28 percentage points but contributes as much as 39% to national upward mobility (De la Torre, 2020). Despite advances in years of schooling in recent decades, the persistence of educational disadvantages from one generation to the next is high. In this sense, mobility is still low, especially in the country's South.



Image: "Education system in Mexico encourages inequality" at <https://desinformememos.org/sistema-educativo-mexico-fomenta-la-desigualdad/>

« RIGHT TO EDUCATION

The right to education considers the dimension of quality with equity. It is about the competencies improvement for the full development of individuals and not only about access to schools but also about the right to education (Acción Ciudadana Frente a la pobreza, 2017). Learning, permanence, and schooling conditions are essential as a policy to combat poverty. Unfortunately, access to the right to education in Mexico suffers from a notorious structural inequality reflected differently in different regions of the country.

Regarding schooling, one of the challenges faced by the country's South comes back with the average number of years people reach along with their lives, implying that social mobility is found in the middle and hence future income level and wellbeing. In Mexico, by 2020, according to the Household and Population Census 2020, the Southern region has less schooling (on average 9.2 years) than the national average (an average of 9.7 years), which limits its future labor and income options (Table 13). Meanwhile, the schooling years for the Metropolitan Area are higher than the national mean (on average 10.8) (INEGI, 2020b).

TABLE 13. SCHOOLING PERCENTAGE IN 15-YEAR-OLD AND OLDER POPULATION
PER REGION 2020

REGION	SCHOOLING 15 YEAR-OLD AND MORE
SOUTH	9.2
METROPOLITAN AREA	10.8
NATIONAL	9.7

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

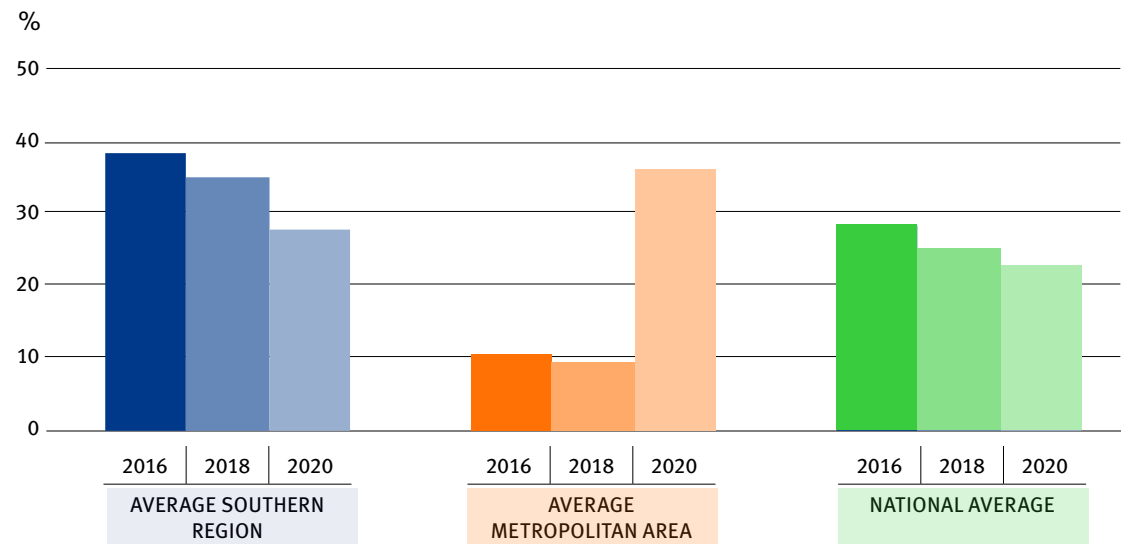
One of the flagships of the current Federal Government in promoting education has been its commitment to educational scholarships. Its purpose is to help young people attending high school in a public school to continue and complete their studies, giving preference to those who study in schools in priority localities. Nevertheless, the Social Rights Information System (SIDS, for its acronym in Spanish) shows that the lowest income population on the poverty line that goes to public education and receives the scholarship has decreased since 2016 nationally (a 2.5 percentual points decrease). These reductions are greater in the Southern region, which was 6.9

percentage points between 2018 and 2020 (Coneval, n.d.b). What is unfortunate is that the most significant decreases in the proportion of people below the poverty line attending public school and receiving scholarships in 2020 are Chiapas, Guerrero, Oaxaca, and Veracruz. Nationally, those entities have the most poverty and extreme poverty and belong to the Southern region. Their adequate access to education is severely limited (Coneval, n.d.b). In contrast, Mexico City is the entity with the highest increase of people attending public education and receiving scholarships. That percentage went from 7.8% in 2018 to 60.2% in 2020 (Graph 7).

An additional hint of the educational crisis reflects in the increase of school dropouts in all the Southern region federative entities, which is above the national mean (11.3%), where the number of scholarships has been insufficient to stop school attrition. Such is Morelos case (15.6% drop out rate³), Oaxaca (13.7%), Campeche (12.5%), and Puebla (12.1%). Even Mexico City and Mexico State, which have a high percentage of people attending public schools and received the

scholarship by 2020 (60.2% and 11.7%, respectively), presented high school dropout rates (13.5% and 12.1%, respectively) for the 2021–2022 cycle (Graph 8) (SEP, s.f.).

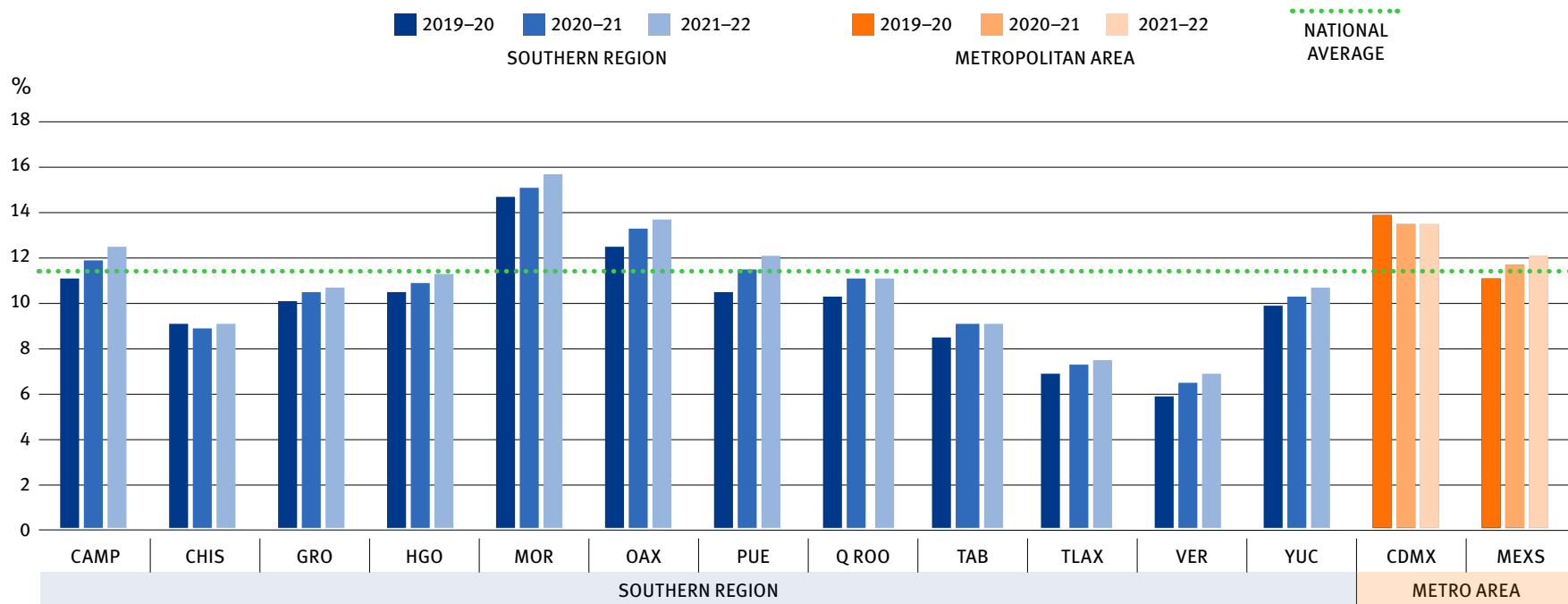
GRAPH 7. PERCENTAGE OF PEOPLE BETWEEN 3 AND 29 YEARS OLD WITH INCOME BELOW THE POVERTY LINE WHO ATTEND COMPULSORY PUBLIC EDUCATION AND RECEIVE SCHOLARSHIPS IN THE COUNTRY'S SOUTHERN REGION AND METROPOLITAN AREA



Source: In-house elaboration with data from Coneval (s.f.b).

³ The dropout rate is defined as the number of students who leave school from one school year to the next, for every one-hundred students who were enrolled at the beginning of courses at the same educational level (SEP 2019).

GRAPH 8. SCHOOL ATTRITION RATE IN THE COUNTRY'S SOUTHERN REGION AND METROPOLITAN AREA PER SCHOOL CYCLE



Source: In-house elaboration with data from SEP (s.f).

Dropping out of school represents a barrier to better future opportunities, higher income, and well-being. The probability that students who have dropped out of school will return to school is very low. In addition, one of the educational inequalities students face in recent Mexico is the access to digital media to continue their studies. According to the Use and Avail-

ability of Information Technologies in the Household National Survey (ENDUTIH, for its acronym in Spanish), regionally, the states reported differences in internet and mobile telephony availability, computer, or television. Under this scheme, the country's Northern states reported fewer connection or availability problems, while the Southern region continues to be

the most restricted in terms of access to digital media (INEGI, 2020c).

Regarding household Internet availability, nationally, 60.6% of households reported having Internet access. The highest figures were in Mexico City (80.5%), Sonora (79.5%), Nuevo León (78.8%), and Baja California (75.8%). While the states recording the lowest figures were Chiapas (27.3%), Oaxaca (40.0%), and Tabasco (45.2%), the latter belong to the country’s South, hampering the learning continuation or online courses on behalf of the students (INEGI, 2020c). Regionally, the Metropolitan Area reported 75.6%, and in the Southern region, only 49% of the households have Internet available, 11.6 percentage points under the national average.

Likewise, the ENDUTIH (INEGI, 2020c) reports that 44.2% of households nationwide have a computer. In the Metropolitan Area, this percentage is above the national average (56.1%), while in the Southern region, only 37.1% of households reported having a computer (INEGI, 2020c).

Unfortunately, the regional landscape highlights the inequalities faced by students, being more profound in the South of the country with higher levels of poverty, lower incomes, more significant educational re-

INTERNET AVAILABILITY IN HOUSEHOLDS

LOWEST:

CHIAPAS	27.3%
OAXACA	40.0%
TABASCO	45.2%
AVERAGE SOUTH	49%

HIGHEST:

CDMX	80.5%
SONORA	79.5%
NUEVO LEON	78.8%
NATIONAL	60.6%

strictions, and digital exclusion. These elements call into question both the official discourse of “First the poor” and the efficiency of the Benito Juárez scholarships. More significant efforts and better strategies are required to ensure the future of millions of students in the present, which will lead us to conditions for a tomorrow with greater well-being.

VULNERABLE POPULATIONS



The inequalities faced by women, girls, indigenous people, migrants, and people with disabilities are due to structural and cultural factors at all stages and aspects of their lives, from economic factors to access to education, health, and decent employment (Signos Vitales, 2021d). These inequalities are exacerbated under different living conditions that imply social diversity (UNHCR, 2016).

In Mexico, the reality faced by most women is critical. Even though they represent 51.2% of the national population (64.5 million in 2020) (INEGI, 2020b), the quality of life to which they usually have access is limited by structural factors in the economic, political, cultural, and social spheres, as well as by attitudes based on openly discriminatory prejudices that end up hindering their life projects.

The exclusion of women from access to health services is worrisome. Of the almost 65 million women, 48 million (75%) are affiliated with health services. This means that 16 million women (25%) are totally excluded from the right to health. In the Metropolitan Area, 4 million women are not affiliated with health services, while in the Southern region, there are 5.8



Image: “Complaints of scarce and low quality services for indigenous women” at <https://desinformemonos.org/denuncian-servicios-salud-escasos-sin-calidad-mujeres-indigenas-mexico/>



Image: “Mexican women believe that relatives will cover old age expenses” at <https://vanguardia.com.mx/noticias/nacional/70-de-mujeres-mexicanas-creo-que-familiares-cubriran-sus-gastos-en-la-vejez-cnbnv-ftvg3475101>



Image: “Medical shame in Mexico” at <https://www.redaccionmedica.com/secciones/sanidad-hoy/verguenza-medica-en-mexico-agua-en-vez-de-quimioterapia-a-ninos-con-cancer-3240>

GRAPH 9. NUMBER OF ENROLLED WOMEN
PER REGION 2020

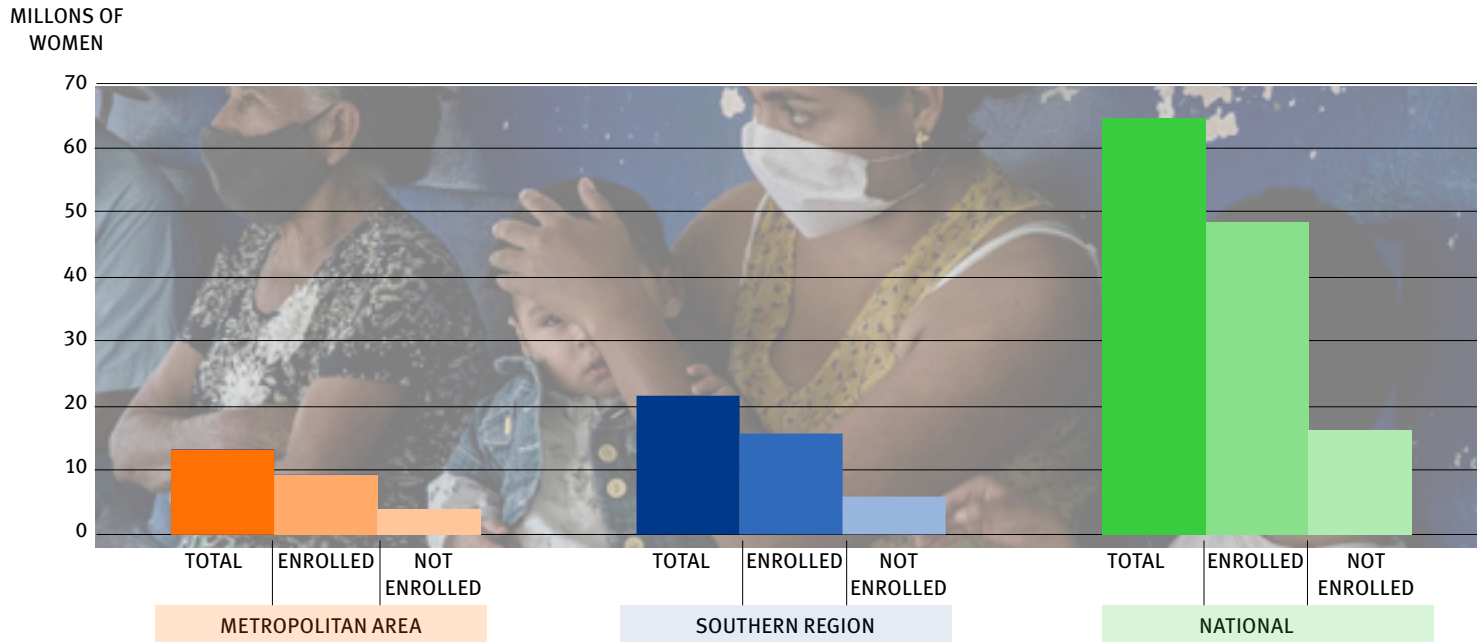


Image: “Lack of medicines, femicides, unemployment; deterioration of life in Mexico” at <https://elpais.com/mexico/2021-08-23/falta-de-medicamentos-femicidios-desempleo-el-deterioro-de-la-vida-en-mexico.html>

Source: In-house elaboration with data from INEGI (2020b). Interactive tabulations.

The case of women’s access to health systems also explains the multiple exclusions of historically discriminated sectors. In the labor field, Orozco *et al.* (2019) point out that almost all the people excluded from the labor market are women. More than half of them are excluded because they have no one to take care of their children or other members of their

households who require care (i.e., the sick or disabled, adults or the elderly, among others).

According to INEGI (s.f.d), state-wise changes in participation rates by sex reveal that Mexico City and Michoacán presented the most significant differences in percentage points between the first quarter of

2020 and the first quarter of 2021 for women (−7.0 and −6.3, respectively). Likewise, the most critical labor conditions are found in Chiapas with the highest percentage (44.4%), followed by Tlaxcala with 33%, and Puebla with 28.9%. On average, the Southern region reports a rate of critical labor conditions of 27.3%, a figure above the national average (22.7%) and above that reported for the Metropolitan Area (26%).

In addition, labor unprotection in the first years of employment is high, especially for women. This initial condition marks the life course: 13% of those with social security in their first job lose this protection. Moreover, 60% of those who did not have social security remain unprotected. This phenomenon explains the effect of the characteristics of the first job on current employment conditions (Rangel and Llamosas, 2019).

The low female involvement in the labor market and the characteristics of women's employment are related to multiple factors that are related to the role that society assigns them, associated with gender discrimination. These factors, in turn, concern the social origin and condition of women's social mobility in the labor market and education (Borker, 2018).

Unfortunately, the current administration has failed to design and implement a strategy to include women and girls better to reduce the gaps between men and women and move from rhetoric to the reality that affects millions of women throughout the country (Signos Vitales, 2021d).

In addition to the fact that being a woman in Mexico is already a condition that in itself represents inequality, facing certain conditions such as migration, having a disability, or being an indigenous woman, exacerbates the living conditions of women, regardless of their region of origin.

Image: “Just because are women, 20% of women employees earn lower income” at <https://www.forbes.com.mx/solo-por-ser-mujer-20-de-trabajadoras-ha-recibido-menos-salario/>





THE ENTITIES WITH THE HIGHEST PERCENTAGE OF INDIGENOUS SPEAKERS AGED THREE YEARS AND OLDER ARE OAXACA (31.2%), CHIAPAS (28.2%), YUCATAN (23.7%), GUERRERO (15.5%), AND QUINTANA ROO (11.7%). IN THE SOUTHERN REGION CONCENTRATES 92% OF MEXICO'S INDIGENOUS POPULATION

Image: "7 indigenous languages are spoken in Puebla" at <https://www.elsiglodetorreon.com.mx/noticia/2018/se-hablan-siete-lenguas-indigenas-en-puebla-una-podria-extinguirse.html>

Mexico's indigenous population is part of the poorest and most disadvantaged strata of our society, and their living standards are often below national and regional averages, as well as the internationally stipulated minimum standards of well-being. The entities with the highest percentage of indigenous speakers aged three years and older are Oaxaca (31.2%), Chiapas (28.2%), Yucatan (23.7%), Guerrero (15.5%), and Quintana Roo (11.7%) entities that belong to the

country's Southern region which concentrates 92% of Mexico's indigenous population. In contrast, 0.7% inhabit the Metropolitan Area, and a further 6.5% are distributed in the rest of the country (INEGI, 2020). The fact that they share the same general deficiencies does not mean heterogeneity among indigenous peoples, nor that all indigenous people are the same; therefore, it is essential to recognize their differences (INMujeres, 2006).

Unfortunately, the situation of indigenous people continues to represent a significant lag. In 2012 the proportion of indigenous speakers in poverty was 74.9%. In 2018, it increased to 75.8% and 76.8% in 2020, compared to 41.5% of the non-indigenous-speaking population in poverty for the same year (Coneval, s.f).

According to the ENADIS (National Discrimination Survey for its acronym in Spanish) (2017), almost 7 out of 10 indigenous people think that their rights are little or not at all respected in the country (65%), and 75.6% of the indigenous population agrees that indigenous people are little valued by most people (INEGI, 2017).

The Indigenous population also earns less. According to INEGI (s.f.b), a 3,407 pesos monthly income was reported for an indigenous-speaking household, and, as this wasn't enough, indigenous women earn half (2,463 pesos) of what indigenous-speaking men do (4,240 pesos). These disparities are more related to the ethnic origin of the population than to the region of origin.

In terms of migrants, Mexico is the leading country of emigration in the region, with some 11.8 million Mexicans abroad (Feix, 2016). In recent years, these

flows have increased, both in number and in these populations' diversity of origin passing through Mexico. According to INEGI (s.f.e), regionally, 34.1% of the people who leave belong to the Southern region. In the case of the Metropolitan Area, it is 29.1%, and the rest of the country reports 34.7%. Unfortunately, these people face severe deficits in decent work and are often affected by high unemployment, labor informality, precarious working conditions, lower incomes, and insecurity. They also face barriers in accessing health services and social security due to their migratory status, language and cultural barriers, costs, lack of access to information, discrimination, and xenophobia.

MEXICO HAS RECENTLY INCREASED EMIGRATION AS FLOWS OF PEOPLE TRAVEL TO THE NORTH. REGIONALLY, 34.1% OF THEM BELONG TO THE SOUTHERN REGION, AND 29.1% FROM THE METROPOLITAN AREA.

« HEALTH IN THE REGION

According to CEEY, health can be affected throughout life by different factors like breakthroughs in life expectancy and accidents or diseases. Given that health conditions are generationally transferred, children can inherit conditions that hinder their position compared to their parents' health. Besides, the environment, nutritional habits and patterns, and physical activity play a significant role (Orozco *et al.*, 2019).

According to the UN, access to food is the right of all individuals to enjoy physical and economic access to adequate food and the means to obtain it (OHCHR, 2004). Not suffering hunger is the minimum level that must be guaranteed as a right to food security. To have a measure that reflects as accurately as possible the existence of significant limitations in the exercise of the right to food, we consider the situation of food deprivation in households in the country with some degree of food insecurity (moderate or severe), which reflects the reduction in the calory consumption.

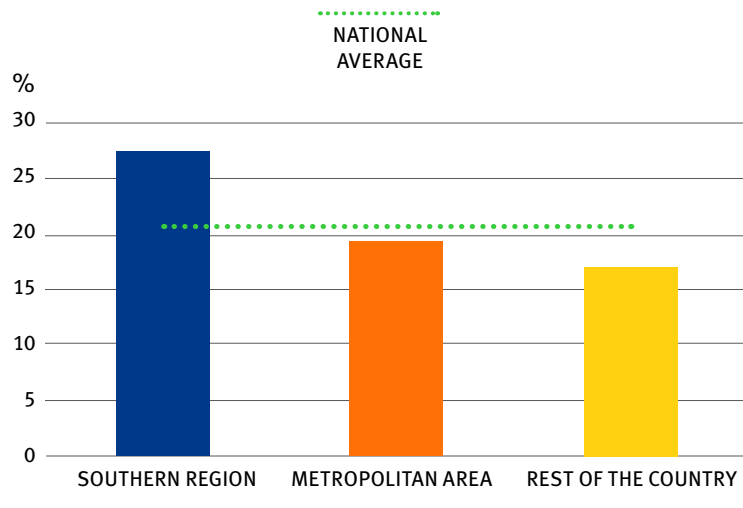
According to ENSANUT (National Health and Nutrition Survey, for its acronym in Spanish) (2020), the country's Southern region shows a moderate and severe

predisposition to food insecurity. Nationally, it was identified that 6 of every ten households (59.1%) are in food insecurity to some degree (minor, moderate, and severe), reporting that 2 of every 10 (20.6%) of households have moderate and severe food insecurity. In the months before the survey, households reduced their usual intake (Shama *et al.*, 2021), including situations in which some members omitted lunch hours or stopped eating for an entire day due to a lack of money or resources to acquire food.

Regionally, the country's South shows the highest proportion of households with moderate and severe food insecurity (27.6%) compared to the national average (20.6%), with the Metropolitan Zone and the rest of the country showing lower proportions (19.5% and 17.2% respectively) (Shama *et al.*, 2021) (Graph 10).

The survey reflects that Mexican households spent a monthly average of 1,501 pesos per person on food regarding households' capabilities to cover their families' nutritional and food needs. In rural communities, the average expenditure was 329 pesos less

GRAPH 10. PERCENTAGE OF POPULATION WITH MODERATE AND SEVERE FOOD INSECURITY IN THE SOUTHERN REGION, AND THE METROPOLITAN AREA
2020



Source: In-house elaboration with data from Shama, *et al.* (2021).

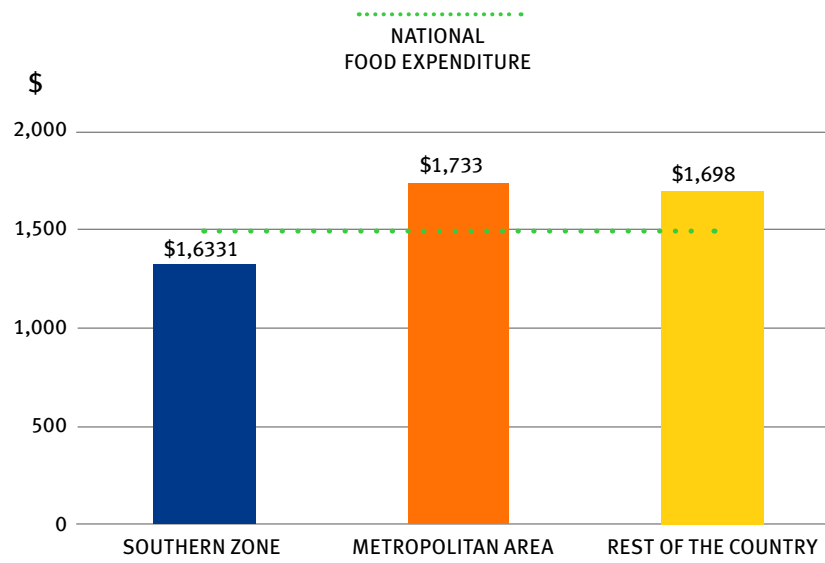


Image: “Indigenous women rescue traditional food” at <https://www.eluniversal.com.mx/articulo/estados/2017/01/2/cocineras-mujeres-indigenas-rescatan-la-comida-tradicional-mexicana>

than in urban communities. Higher food spending is noted in the Metropolitan Area with 1,733 per capita on average per household and the rest of the country with 1,698 pesos above the national average, comparing this expenditure geographically. These figures contrast the household expenditure in the country’s Southern region with 1,331 pesos per person (Graph 11) (Shama *et al.*, 2021).

This shows that households in the Southern entities are precisely those that face greater poverty and lower-income levels and are also those that are less able to cover a quality nutritional diet. While the South of the country has presented higher proportions of poverty, extreme poverty, and social deprivation, Mexico City and the State of Mexico have had the most significant setback in nutrition and health

GRAPH 11. MONTHLY PER CAPITA FOOD EXPENDITURE
2020



Source: In-house elaboration with data from Shama, *et al.* (2021).

care of the IPS (The Social Development Index for its acronym in Spanish) in 2020, with losses of -35.7 points and -10.7 points respectively. This means that people lost access to both sufficient food and medical care (Mexico Como Vamos, 2021) due to job losses and insufficient labor income aggravated by the COVID-19 pandemic.

On the other hand, the behavior of household spending allocated to health indicates an increase com-

pared to that reported in 2018 (INEGI, n.d.c). The data suggest that spending on consultations and medicines significantly rose for all households. At the same time, more affluent families spent much more on hospitalization, and poorer households allocated more resources to medicines and seeking medical attention.

The substantial decline in family income experienced by Mexican households due to the pandemic

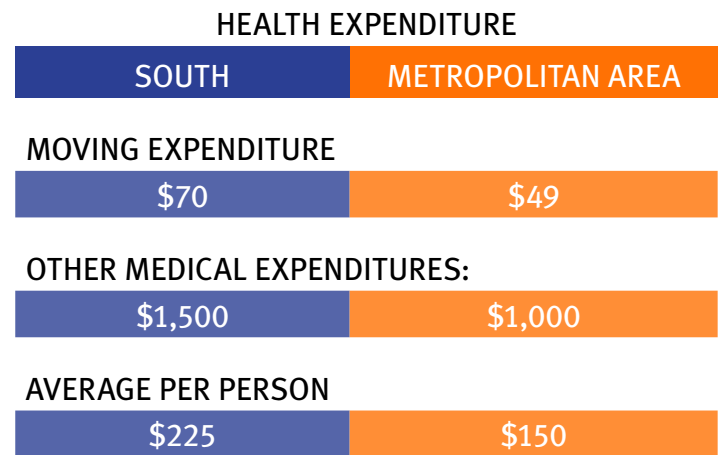
implied a necessary spending adjustment on products and services not concerning food or health during 2020. This loss was significant on rubrics like clothing and footwear, maintenance, the purchase of household goods, and culture or entertainment services (Shama *et al.*, 2021).

Regionally, health spending in the South is higher than in the rest of the country. For example, 59.4% of the Southern population that spent on a hospital transfer paid an average of 70 pesos, while in the Metropolitan Area, both the proportion of people and the average expenditure on transfers were lower (49% and 49 pesos). Likewise, the item of other medical expenses such as studies and clinical analyses reports the same pattern. In the Southern region, the proportion of people who spent on these expenditures is higher than the average amount. The 28.8% of the population that spent on “other medical expenses” in the South spent an average of 1,500 pesos, while the national average reports that only 23.6% of the people who spent on “other medical expenses” paid an average of 1,000 pesos. (Shama *et al.*, 2021).

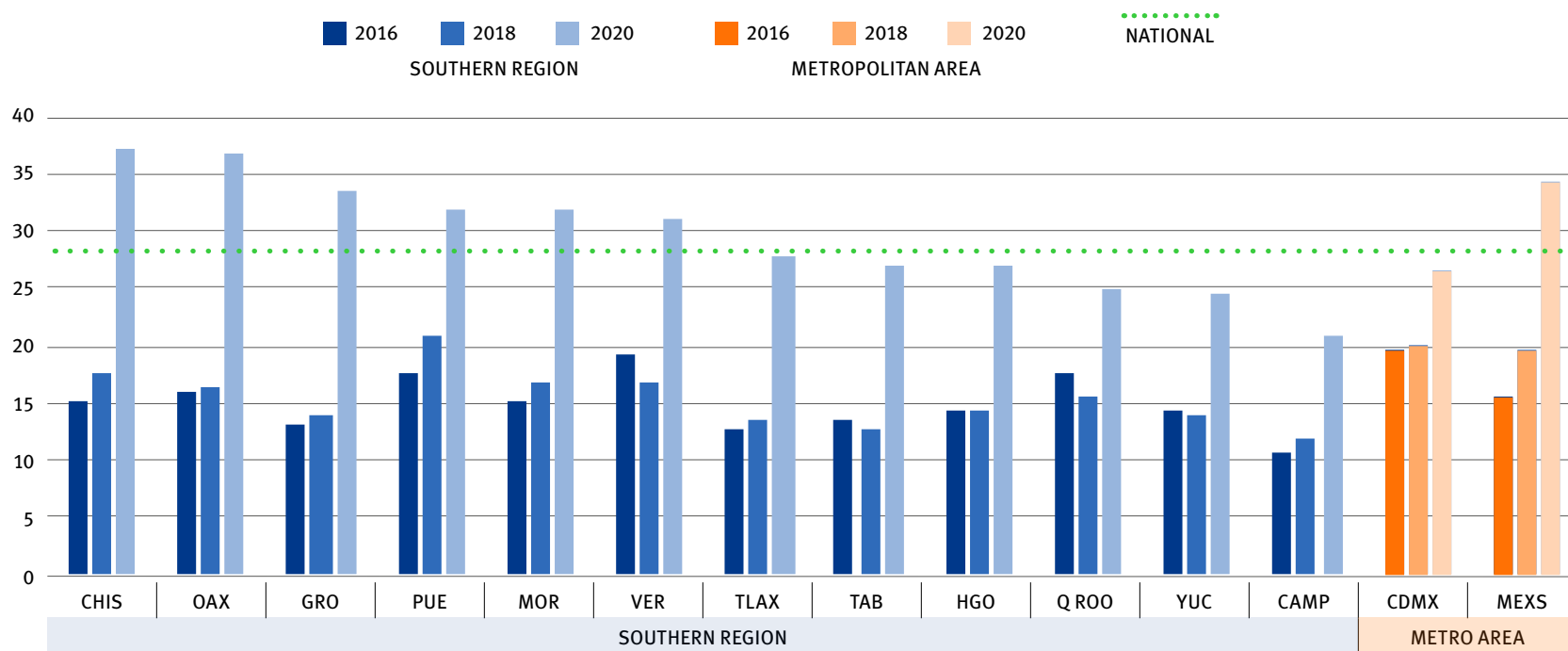
However, even though the Metropolitan Area reports a higher proportion of people spending on health services (55.7%) than the South (50.9%), it is in the

latter region where there was a higher expenditure destined to that rubric (on average, 225 pesos, 150 in the Metropolitan Area, and 200 nationally).

On top of that, the lack of access to health services has increased since 2016. According to published figures by Coneval (s.f. c), the scarcity mentioned above has increased its strength (even above the 28.2% national average) in states like Chiapas (37.1%), Oaxaca (36.9%), Guerrero (33.5%), Puebla (32%), Morelos (31.8), and Veracruz (31%) (Graph 12) (Coneval, s.f.c). People spend more on health in the country’s poorest region.



GRAPH 12. HEALTH SERVICES ACCESS SCARCITY INDEX IN THE COUNTRY'S SOUTHERN REGION AND METROPOLITAN AREA
2020



Source: In-house elaboration with data from Coneval (s.f.c).

THE LACK OF ACCESS TO HEALTH SERVICES HAS INCREASED IN STATES SUCH AS CHIAPAS (37.1%), OAXACA (36.9%), GUERRERO (33.5%), PUEBLA (32%), MORELOS (31.8), AND VERACRUZ (31%).

SHORTAGES AND SOCIAL NEGLECT



The Federal Government's neglect of healthcare is also reflected in reports of hospital medicine shortages. In 2021, 1,227 reports were registered, and when counting by medical units, it was found that the reports of medicine shortages are concentrated in entities such as Mexico City, the State of Mexico, Guerrero, and Jalisco. Four of the ten hospitals with the highest number of reports belong to IMSS, three to ISSSTE, and the rest correspond to Insabi (2) and Pemex (1) (Cero Desabasto, 2022).

The lack of social benefits and the null access to social security are more severe in the South. Despite these states being the second most populated region of the country, they are the region with the least social benefits and security. According to Acción Ciudadana Contra la Pobreza (s.f.), 76% of the population in the region does not have social security, and 48.7% do not have benefits that guarantee the right to health. Hence the out-of-pocket expense rises, and the access barriers heighten, especially for those living in poverty and areas with higher social lag. It is clear that even in 2020, the country's Southern area still represents a social challenge. The great schisms

faced by the Southern population in poverty, income inequality, opportunities, access to education, health services, and quality food (just to mention some) are imminent.

Nevertheless, the implementation of social supports such as scholarships for the poorest students, programs such as La Escuela Es Nuestra, and health services such as Seguro Popular have been decreasing or disappearing even in the poorest states of the country, elements that condition the education, nutrition, health, and life of these generations. The challenges to be overcome in the region include social deprivation, higher levels of inequality, educational backwardness, access to quality health and education, tensions derived from crime, and socioeconomic tensions derived from migratory flows. These elements together deepen disparities for the most disadvantaged.



SCIENCE & TECHNOLOGY

Image: <https://nacionmx.com/2020/10/14/el-inaoe-abre-convocatoria-para-el-ingreso-a-los-programas-de-doctorado-en-la-primavera-2021-2/>



LOW DEVELOPMENT

« SCIENCE AND TECHNOLOGY SUPPORT

As we have pointed out in Vital Signals (2022), Investment in Science and Technology (S&T) is key to the country's development, as it directly impacts GDP growth, increases productivity, and improving the population's quality of life. Historically, Mexico has been one of the countries that allocates the least resources to the S&T sector. This implies a limitation and an obstacle for Mexico to advance towards a

knowledge economy that links the public sector with public and private universities, research centers, and mainly with the private sector (Vital Signals, 2021c).

Under this framework, encouraging investment in science and technology is a priority for Mexico to be able to respond to the challenges that industries face at a global level. Unfortunately, the federal government actions have focused on the disappearance of funds

Image: "Janet Gutierrez. Biology, biotechnology, sustainable development and ecology researcher" at <https://conecta.tec.mx/es/noticias/nacional/investigacion/25-mujeres-mexicanas-que-dedican-su-vida-la-ciencia-y-la-tecnologia>

and trusts, leaving the development of the Science, Technology, and Innovation sector adrift. (Signos Vitales, 2022). According to IMCO (Mexican Institute for Competitiveness for its acronym in Spanish) (2022), the Mexican future and well-being are determined by its capability to develop and adopt technologies that increase productivity in added value sectors. Regionally, significant differences are observed in the sophistication and innovation capabilities of economic sectors that allow competitiveness among states, particularly in added value sectors, heavily knowledge-based and state-of-the-art technology.

The results of IMCO’s Innovation sub-index reveal that 11 of the 12 entities in the country’s Southern region have a low or medium-low innovation sub-index. Only Puebla has a “medium-high” level. The worst positions in innovation in the country are Oaxaca (position 29), Tabasco (position 30), Chiapas (position 31), and Guerrero (position 32) (Table 14) (IMCO, 2022). On the other hand, the Metropolitan Area presents high and medium-low positions, respectively.

TABLE 14. INNOVATION SUB-INDEX RANKING

● HIGH ● ADEQUATE ● MEDIUM HIGH ● MEDIUM LOW ● LOW





REGION	FEDERAL ENTITY	ICE POSITION 2021	POSITION CHANGE
METROPOLITAN AREA	● HIGH CDMX	1	0
	● MEDIUM LOW MEXS	17	0
SOUTHERN REGION	● MEDIUM HIGH Puebla	13	3
	● MEDIUM LOW Morelos	16	-8
	● MEDIUM LOW Yucatan	18	0
	● MEDIUM LOW Quintana Roo	19	2
	● MEDIUM LOW Hidalgo	21	-2
	● MEDIUM LOW Tlaxcala	24	1
	● MEDIUM LOW Campeche	25	7
	● MEDIUM LOW Veracruz	27	-3
	● LOW Oaxaca	29	0
	● LOW Tabasco	30	1
	● LOW Chiapas	31	-3
● LOW Guerrero	32	-2	

Source: In-house elaboration with data from IMCO (2021).

State-wise, all entities worsen on the sub-index indicator. However, the worst graded entities on productivity, research facilities, or patent numbers belong to the country's Southern region (Guerrero, Chiapas and Quintana Roo), while the highest graded are Mexico City, Jalisco, and Nuevo Leon (IMCO, 2022).

Given that a state with more innovative economic sectors attracts and retains more investment and talent, it is necessary to promote and build research and innovation ecosystems in Mexico, taking into account the most lagging regions. It is important to mention that the structure of the Mexican scientific system is based on three pillars: the postgraduate scholarship program, the national system of researchers, and the

TABLE 15. INNOVATION SUB-INDEX GENERAL RESULTS PER INDICATOR 2022

INDICATOR (UNITS)	2021 STATE COMPETITIVENESS INDEX	2022 STATE COMPETITIVENESS INDEX	BEST ENTITY*	WORST ENTITY**
ECONOMIC COMPLEXITY IN INNOVATION SECTORS (Index)	54	52 	Nuevo Leon (100)	Guerrero (0)
TOTAL FACTOR PRODUCTIVITY (Annual Growth Rate)	-1,30%	-4,30% 	Campeche (-0.2)	Quintana Roo (-7.0)
RESEARCH CENTERS (Centers per 100 thousand of the economically active population)	1,3	1,2 	CDMX (2.4)	Colima (0.3)
PATENTS (Patents applied per 100 thousand of the economically active population)	1,8	1,6 	Jalisco (5.7)	Chiapas (0.1)

Source: IMCO (2022).

Note: *Data corresponds to the value obtained by the best entity of the analyzed indicator. **Data corresponds to the value obtained by the worst entity of the analyzed indicator.

system of research funds, which also present a differentiated distribution in the regions of the country. These differences reflect and exacerbate regional inequalities and discourage high-level human capital formation.

Regarding national bachelor's degree student scholarships, social services, professional internships, and postgraduate Degrees active in 2018, 35% are found in the Metropolitan Area, especially in Mexico City, focusing 29% of the total national scholarships. Again, the Southern region is the least benefited from national scholarships, with only 23% of the total scholarships destined for national students for 2018 (Mexican Government, s.f.a) (Table 16).

Mexico City is the state with the highest percentage of scholarships (29%), followed by Mexico State (6%), and Puebla (4.9%), while states such as Guerrero and Oaxaca are close to 1%. (Conacyt, s.f.).

TABLE 16. POSTGRADUATE SCHOLARSHIPS AND QUALITY SUPPORT
2018 AND 2021 PER REGION

REGION	TOTAL 2018	% 2018	TOTAL 2021	% 2021
SOUTHERN REGION	4,761	22.9	5357	22.7
METROPOLITAN AREA	7,182	34.5	8275	35.1
REST OF THE COUNTRY	8,868	42.6	9959	42.2
NATIONAL	20,811	100.0	23591	100.0

Source: In-house elaboration with data from the Mexican Government (s.f.s.).



Image: “Benito Juárez’ scholarships are paid at CETIS 22” at <https://www.elsoldetampico.com.mx/local/pagan-becas-benito-juarez-en-el-cetis-22-3874365.html>

GRAPH 13. SCHOLARSHIP PROPORTION BY FEDERAL ENTITY IN THE SOUTHERN REGION AND METROPOLITAN AREA ON THE NATIONAL
2021



Source: In-house elaboration with data from Conacyt (s.f.).

Image: <https://itpe.mx/la-importancia-de-estudiar-una-maestria-como-parte-del-desarrollo/>

Regarding the National System of Investigators (SIN, for its acronym in Spanish), the researchers' roll in 2021 shows significant differences between regions. The Metropolitan Area is above the national average, while the lowest averages in researcher numbers for the SNI in 2021 belong to the Southern area (Graph 14) (Conacyt, s.f.).

Notably, the regions with the least promotion of science include Southern Mexico, comprised of Hidalgo, Morelos, Puebla, Guerrero, Oaxaca, Chiapas, Veracruz, Tabasco, Tlaxcala, Campeche, Yucatan, and Quintana Roo. Researchers and national support are concentrated in Mexico City, the State of Mexico, and Puebla. However, this does not imply that they have

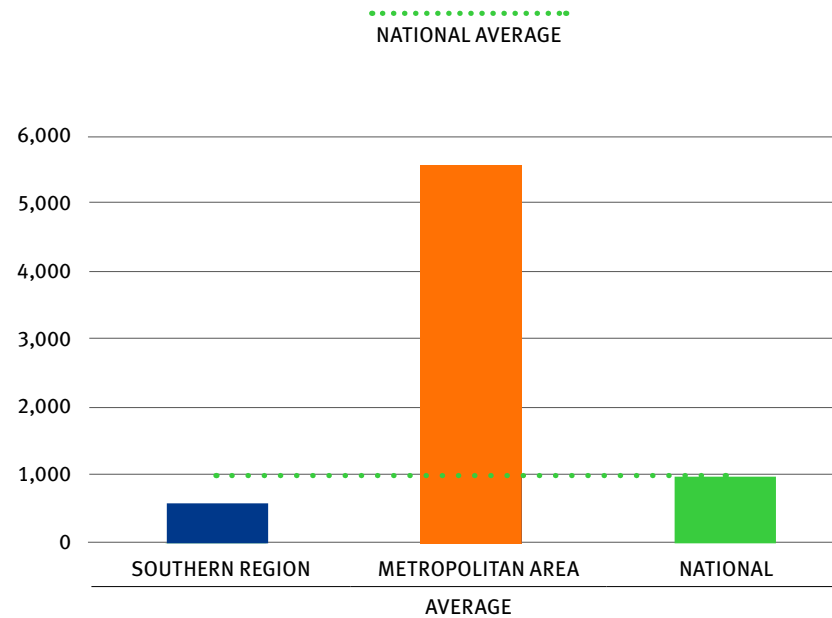
a high level of innovation and development, making regional and national competitiveness impossible.

ATTACK TO UNIVERSITIES

Finally, an issue already alerted by (Vital Signals, 2022) is the contempt for science and the freedom of thought. It has been reflected in the federal government attacks on public and private universities, which have been accused of being neoliberal, which has little to do with the scientific know-how (Jimenez, 2022).

The institutions that the head of state has most attacked are the Tecnológico de Monterrey, the UNAM (the Autonomous University of Mexico for its acronym in Spanish), the CIDE (Centre of Research and Higher Education Specializing in Social Sciences for its acronym in Spanish) and recently the Institute of Ecology (INECOL, for its acronym in Spanish). In at least five research centers, they have managed to impose directors related to the head of Conacyt (National Council for Science and Technology for its acronym in Spanish) through sometimes dubious and sometimes openly illegal mechanisms that do not comply with the terms of the calls for proposals.

GRAPH 14. NATIONAL SYSTEMS OF RESEARCHERS (SNI FOR ITS ACRONYM IN SPANISH) BENEFICIARIES BY REGIONS
2021



Source: In-house elaboration with data from the National System of Investigators (SNI) (2021).

IN AT LEAST FIVE RESEARCH CENTERS, CONACYT HAS MANAGED TO IMPOSE DIRECTORS RELATED TO THE HEAD OF THE INSTITUTION THROUGH DUBIOUS AND OPENLY ILLEGAL MECHANISMS.

In the case of Inecol, researchers of the institution have anonymously declared that the new director (Armando Contreras) does not have the community's support (Torres, 2022). In the case of CIDE, the directors not only do not meet the quality requirements demanded by the statutes, but Conacyt even reformed them illegally to hold their positions.

Definitely, the attacks on science in Mexico go from the budgetary austerity compliance with the disappearance of trusts and funds (Vital Signals, 2021c), career disincentives for students and researchers, and the open attacks on academics and institutions, risking the knowledge, competitiveness, and innovations of the Mexican regions.



Image: Armando Contreras Hernandez, new director of Inecol at <https://www.inecol.mx/personal/index.php/ambiente-y-sustentabilidad/20-armando-contreras-hernandez>



Image: "Director of CIDE, Jose Romero Tellaeche, committed plagiarism in a scientific publication: El Universal" at <https://aristeguinoticias.com/0206/mexico/director-del-cide-jose-antonio-romero-tellaeche-cometio-plagio-en-un-articulo-cientifico-el-universal/>

CONACYT ATTACKS TO SCIENCE IN MEXICO:

- DISAPPEARANCE OF TRUSTS AND FUNDS,
- CAREER DISINCENTIVES FOR STUDENTS AND RESEARCHERS,
- OPEN ATTACKS ON ACADEMICS AND INSTITUTIONS.

CONACYT IS RISKING KNOWLEDGE, COMPETITIVENESS,
AND INNOVATION IN MEXICO.



ECONOMY & ENERGY



HOLD BACK & OPPORTUNITIES

« THE DIFFERENCES HAVE NO BOUNDS

Although the Southern region's economy has performed similarly to the rest of the areas in the last year, the gap between the economies is latent. The Northern will eventually double the Southern region's contribution to the economy in the next seven years (INEGI, 2022d) (Banxico, s.f.). The divergence between the Northern and South is increasingly evident, and the gaps are less likely to diminish. For its part, the Metropolitan Area has not been able to

recover from the collapse that started at the end of 2018 (-6.3%) (INEGI, 2022d) (Banxico, s.f.).

Low levels of physical investment largely explain the weak trajectory of these economies, as, despite the massive communication strategy of López Obrador's administration, infrastructure investment in the South is barely half of what it was in 2012 (historical high Southern infrastructure investment) (-49.1

Image: "Remittances to Mexico achieve new record: increase 23,51 % between January and July" at <https://www.ny1noticias.com/nyc/noticias/noticias/2021/09/01/remesas-a-mexico-anotan-nuevo-record--suben-23-51---entre-enero-y-julio>

billion pesos). On the other hand, 4.5 times more is invested in infrastructure oriented to hydrocarbon production (267.7 billion pesos) than in schools, hospitals, or roads (only 59.9 billion pesos) (SHCP, 2022), so Tabasco's growth is merely an oil veil. On the other hand, private investment has suffered a -47.2% plunge compared to 2019 (INEGI, 2022a), which has been discouraged since the beginning of the current federal administration and is seen as a tremendous lost opportunity.

Families' international transfers sustain private consumption in the South. Remittances have grown 41.5% (4.4 billion dollars) in the last three years (Banxico, 2022a) and are remarkably close to matching the wage bill in the region (302.8 billion pesos vs. 309.2 billion pesos) (Coneval, 2022). Thus, remittances act as a compensatory mechanism for the fragile recovery of labor income (0.8% concerning the last quarter of 2019), where employment has become precarious. The minimum wage worker's share has increased considerably, with 33 out of every 100 workers in the South barely earning up to minimum wage for their work and 11 out of every 100 women in the South earning no income from their occupation (INEGI, 2022b).

The labor market in the South offers very few opportunities, and the dependence of the working-age population on the government sector is still notable. The public sector generates 35 out of every 100 formal jobs, and this dependence is exacerbated in the three poorest states in the country, also located in the South (Chiapas, Guerrero, and Oaxaca). In these states, the public sector generates at least 50 out of every 100 formal jobs, unlike in the Northern, where the ratio is 21 out of every 100 formal jobs (INEGI, 2022b). In addition, the Southern labor participation in the manufacturing sector is only 11% of those employed nationally, which shows that the link between the South and the outside world is minimal. (INEGI, 2022b). Consequently, the revenue drivers of the Southern economy are highly fragile and are contingent on the poor fiscal space of the state governments (between 6.8% and 7.8% at most⁴) to encourage formal employment and household transfers.

4 Defined as unrestricted revenues after deducting salaries and wages, state administration operating expenses, pensions, and payment of debt and other liabilities not considered as debt.

REGIONAL GROWTH AND PRICES



From 2003 up until the 2022 first quarter, regional economies have grown at a 0.42% mean quarterly rate, but the South keeps a lower mean rate compared with the other regions, barely 0.14%. The Metropolitan Area in the same amount of time has grown at three times greater rate (0.44%), almost at the same rate as the national average. In the Northern, the difference is nearly four times higher (0.56%) (INEGI, 2022d; Banxico, s.f.). If keeping the same growth rate, the Northern and Southern regions will stave off more instead of converging.

While the severe backlog in the Metropolitan Area since the last quarter of 2018 should not be overlooked, the difference between the third quarter of 2018 and the first quarter of 2022 is -6.3%. Mexico City's economic collapse has been enormous in recent years, so the share of the Southern and metropolitan regions in total regional activity is very close to that of Mexico City (INEGI, 2022d; Banxico, s.f.). At these growth rates, by the last quarter of 2024, the Northern will have a share 84.2% higher than that of the South, when the difference was 73.4% before the health crisis (last quarter of 2019), and by the end of

2029, the Northern will double the share of the South and will be very close to the weight of the metropolitan and Southern regions combined.

According to The Quarterly State Economic Activity Indicator (ITAE, for its acronym in Spanish), the economic activity of the country's entities grew 4.7% in 2021, and of this growth, only 26.4% is accounted for by the Southern states. The rest of the country (except for the Metropolitan Area) contributed more than twice this growth (58.8%), a phenomenon that has been repeated for a long time (the South contributes less). Even three entities in the region did not contribute or subtract from the growth of the entities in 2021: Campeche (-0.1%), Morelos (0.04%), and Tlaxcala (0.03%). The Metropolitan Area remains well below the levels observed concerning the pre-pandemic level, mainly due to stagnation in Mexico City (-10.6% below the last quarter of 2019). Meanwhile, the South is the region that grows the least after the Metropolitan Area (INEGI, 2022d).

Economic activity in the country's South is generally below the levels observed before the health crisis. (-2.1%). On the supply side, progress in the tertiary

THE ECONOMIC ACTIVITY OF THE COUNTRY'S ENTITIES GREW 4.7% IN 2021. ONLY 26.4% OF THIS GROWTH IS ACCOUNTED FOR BY THE SOUTHERN STATES.

THE REST OF THE COUNTRY (EXCEPT FOR THE METROPOLITAN AREA) CONTRIBUTED MORE THAN TWICE THIS GROWTH (58.8%) (ITAE).

sector (services) benefited this region for much of last year, even though growth is not sustained in some of the region's states. The concentration of resources in construction in Tabasco has boosted the region's secondary sector but does not represent the rest of the federative entities (INEGI, 2022d). The Quarterly Indicator of Regional Economic Activity (ITAER, for its acronym in Spanish) from Banco de Mexico (Banxico) anticipated that progress will still be slow at the beginning of 2022. It is estimated that the Southern region is -1.2% below the pre-pandemic level, while at the national level, given the weight of the Metropolitan Area in the economy, economic activity remains -2.1% below the pre-pandemic level.

Meanwhile, the Northern continues to drive the region's growth upward to this point (Banxico, s.f.). However, the demand analysis indicates that while consumption is recovering, mainly due to remittances and other transfers, investment (mainly private) remains at historically low levels in the South due to the high degree of uncertainty in activities in which the South has advantages over the rest of the country: energy, mining, and tourism (Banxico, 2022d).

Another risk to the economy is price increases. According to companies surveyed by Banxico, inflation

is the main obstacle to growth in both the South (31.8% of total respondents) and the center (28.5% of total respondents). (Banxico, 2022d). Inflation is hitting eight Southern states the hardest⁵ (8.3% annual rate as of May 2022 vs. 7.7% at the national level), the highest rate in the country, and worsens in food (annual variation of 12.4% as of May 2022) (Banxico, 2022d). This price increase, combined with the wage impoverishment and the regional agricultural production drop, puts the family economy in a delicate situation. Unless appropriate measures are taken, poverty levels in the region will continue to rise.

WHILE CONSUMPTION IS RECOVERING, MAINLY DUE TO REMITTANCES AND OTHER TRANSFERS, INVESTMENT (MAINLY PRIVATE) REMAINS AT HISTORICALLY LOW LEVELS IN THE SOUTH DUE TO THE HIGH DEGREE OF UNCERTAINTY IN ACTIVITIES IN WHICH THE SOUTH HAS ADVANTAGES OVER THE REST OF THE COUNTRY: ENERGY, MINING, AND TOURISM (BANXICO, 2022).

⁵ Campeche, Chiapas, Guerrero, Oaxaca, Quintana Roo, Tabasco, Veracruz, and Yucatan.

« PRIVATE CONSUMPTION LABOR INCOME

The wage bill (sum of wages of employed personnel) has increased 4.1% between the last quarter of 2019 (301.3 billion pesos) and the last quarter of 2021 (313.6 billion pesos) (Coneval, 2022) due to the economic reopening and the boost in the Northern (6% variation) and metropolitan (7.9%) regions. The South has only grown 0.8% in the same period.

Employment has been recovering, as have working hours. Unfortunately, the productivity level per hour declined by -5.2% in the same period (INEGI, n.d.b). Mexicans are working longer hours to produce fewer goods and services than before the health crisis. The most severe consequence is the impact on workers' wages, especially in the country's South.

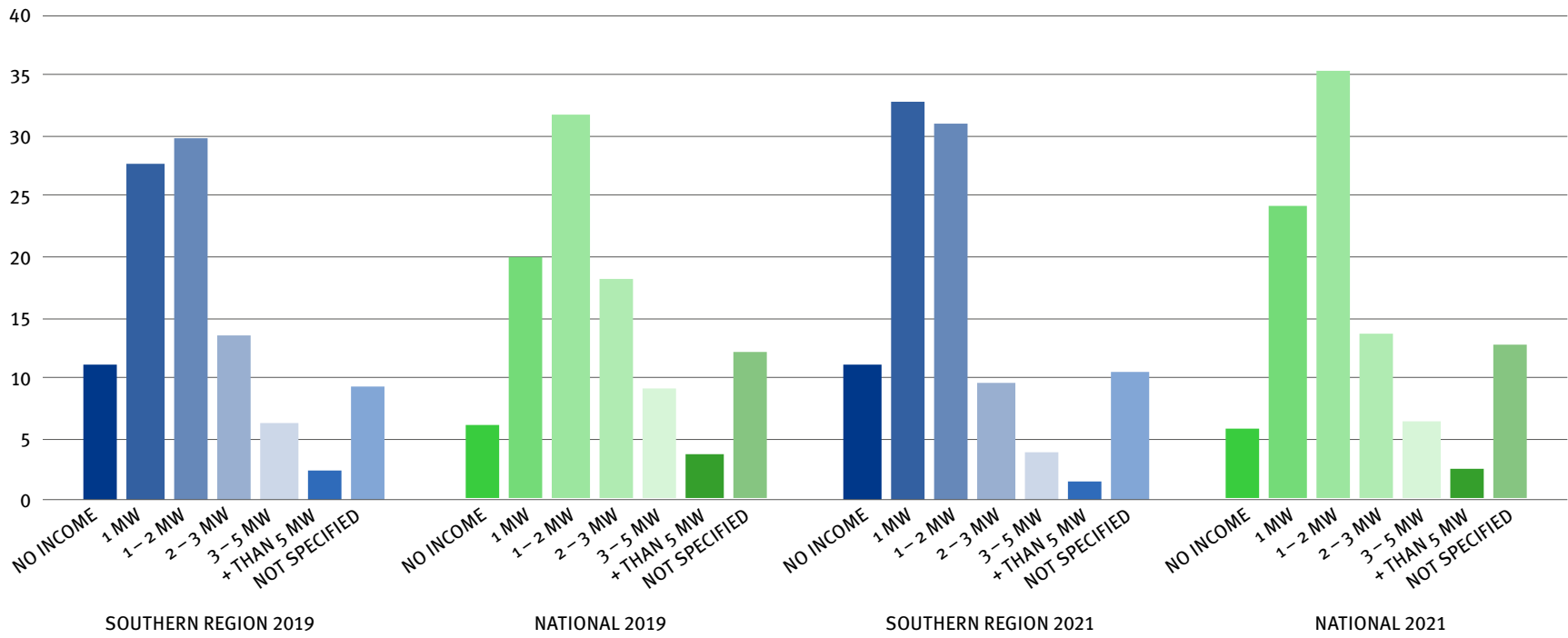
Average wages per employed person in the country's South have been the hardest hit and, as of the last quarter of 2021, do not exceed the level seen at the close of 2020. They are stagnant and still slightly below (-0.6%) the level seen in the last quarter of 2019 (before the health crisis). In contrast, the wage level in the Northern region is in better condition than

before the health crisis (2.5%) and regaining lost ground in wage purchasing power, a trend that has been visible since 2019's first quarter. As a result, the gap between the salaries of employed personnel in the South and the national average is 30.5% in the last quarter of 2021, when it was 27.4% at the end of 2019 (Coneval, 2022; INEGI, 2022b) (Graph 16).

Between 2019's last quarter and 2021's last quarter, in the South, employed people with incomes of up to one minimum wage have swelled the labor force, which represented 27.6% and is now 32.7% of the region's employed population (INEGI, 2022b). The country shows a greater employment recovery with incomes of more than one and up to two minimum wages. In the fourth quarter of 2019, they were 31.5%, and by 2021's last quarter, they are 35.2% of the employed population (INEGI, 2022b). The employment recovery has been accompanied by wage precariousness, mainly in the country's Southern and Metropolitan Areas, while the Northern cushions the fall in wage level nationally increasing, to a great-

GRAPH 15. EMPLOYED POPULATION PER INCOME LEVEL AND COUNTRY REGION*
4TH QUARTER 2019 AND 4TH QUARTER 2021

WORKING
POPULATION %



Source: In-house elaboration with data from INEGI, (2022b). *MW: Minimum Wage

er extent (25.3% compared to December 2019), jobs with incomes of more than one and up to two minimum wages (INEGI, 2022b). The above shows that labor productivity may be falling faster in the South.

REMITTANCES



Remittances received by Mexican families grew unusually in the middle of the health crisis (11.4% between 2019 and 2020). They reached 51.6 billion dollars (mmdd, for its acronym in Spanish), a historic record equivalent to the public sector petroleum income (1.16 billions of pesos) (SHCP, 2022) in the same year. Different criteria explain this phenomenon, mainly governmental support to families and companies due to the pandemic that allowed the fast economic recovery in the USA between 2020 and 2021 and the Mexican families' impoverishment with relatives working in the USA. 94.9% of 2021's remittances came from that country. (Banxico, 2022c).

In three years (2019–2021), total remittances increased 41.6% (15.1 billion dollars) (Banxico, 2022a). Southern and Northern regions' contribution presents serious differences. The South receives 29%, the center and the Metropolitan Area 22.1%, and the Northern the remaining 48.9% (Banxico, 2022a). Nevertheless, within regions, heterogeneous results can be observed. This phenomenon is reproduced by observing the average person receiving transferences (remittance per capita) per federative entity. In 2021, out of 15 entities that exceed the national average of

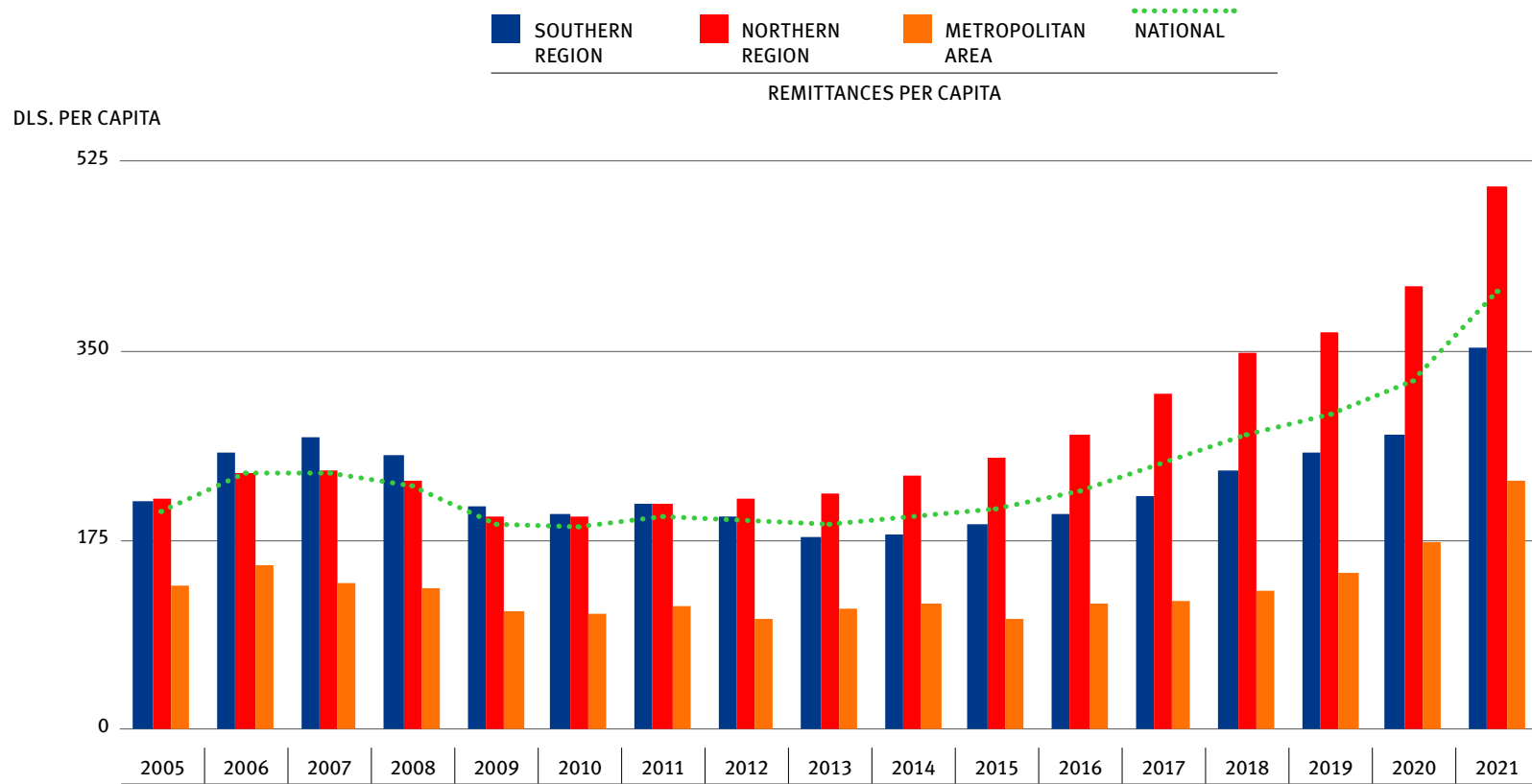
404.2 dollars per capita (DPC), only four are located in the country's Southern region: Guerrero (733.7 DPC), Hidalgo (416.1 DPC), Morelos (506.8 DPC), and Oaxaca (573.2 DPC) (Banxico, 2022a; INEGI, 2022b).

On average, the country's Southern region received 353.4 dollars per inhabitant in 2021, the Northern part 501.9 dollars, and the Metropolitan Area 230.6 dollars. The national mean was 404.2 dollars per inhabitant (INEGI, 2022b; Banxico, 2022b). It would have been needed for the South to receive 6.3 mmdd more during 2021 to close the 148.5-dollar gap per inhabitant (42% difference) between the Southern and the Northern regions, meaning 21.2mmdd instead of 14.9 (INEGI, 2022b; Banxico, 2022b). The Metropolitan Area is lagging because it focuses 20.7% of the national population but only gets 11.8% of remittances.

REMITTANCES IN DOLLARS PER INHABITANT IN 2021



GRAPH 16. REMITTANCES PER INHABITANT PER COUNTRY REGION, AND NATIONAL DOLLARS PER CAPITA



Source: In-house elaboration with data from Signos Vitales and information from Banco de Mexico (2022b) and INEGI, (2022b).

MOBILITY

The restoration of people's mobility in the different entities of the country has allowed for household re-activation and business consumption, the most dynamic component of aggregate demand. As of February 2022, private consumption nationally, measured by transactions through multiple bank ATMs, is still below (-3.9%), respecting the level observed in February 2020. The Metropolitan Area shows the most considerable deterioration (-6.1%), and the South is the region that is closest to its pre-financing level (-1.4%) (CNBV, s.f.).⁶ None of the country's regions have been able to recover fully, and progress has been slower and slower. Rising prices and a more restrictive monetary policy (increase in interest rates) will end up discouraging the weak growth in private consumption.

PRIVATE CONSUMPTION, AT A NATIONAL LEVEL, IS 3.9% BELOW IN RELATION TO FEBRUARY 2020.



Image: "Price of tortilla in Mexico will be pressured by the war in Ukraine" at <https://www.bloomberglinea.com/2022/03/04/precio-de-la-tortilla-en-mexico-se-vera-presionado-por-guerra-en-ucrania/>

⁶ Seasonally adjusted figures

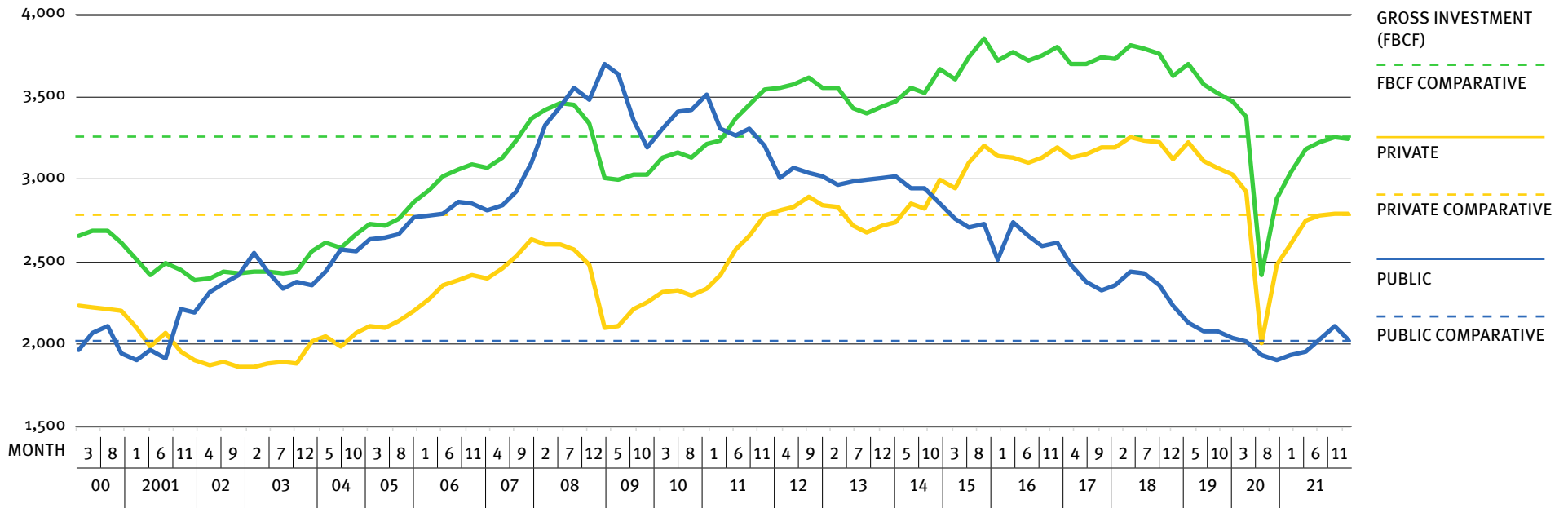
INVESTMENTS

Gross investment is in sharp decline. Families and companies have stopped investing, thus limiting the country's growth capacity. 85.9% of investment in the country comes from the private sector, 2.79 trillion pesos (BDP, for its acronym in Spanish), equivalent to 15.7% of GDP. (INEGI, 2022e). The public sector is barely about to reach pre-health-crisis lev-

els (-0.4% below the last 2019's quarter). As of the fourth quarter of 2021, it is at levels close to those of the second quarter of 2000 (459.2 billion pesos). As of the same quarter, total physical investment (public plus private) is similar to that of 2011's first quarter (3.24 billion pesos) (INEGI, 2022e).

GRAPH 17. FIXED INVESTMENT, PUBLIC AND PRIVATE, HISTORICAL DECLINE
SEASONALLY ADJUSTED SERIES 2013 = 100

TOTAL AND PRIVATE INVESTMENT
BILLION PESOS



Source: In-house elaboration with data from INEGI (2022b).

« PUBLIC INVESTMENT

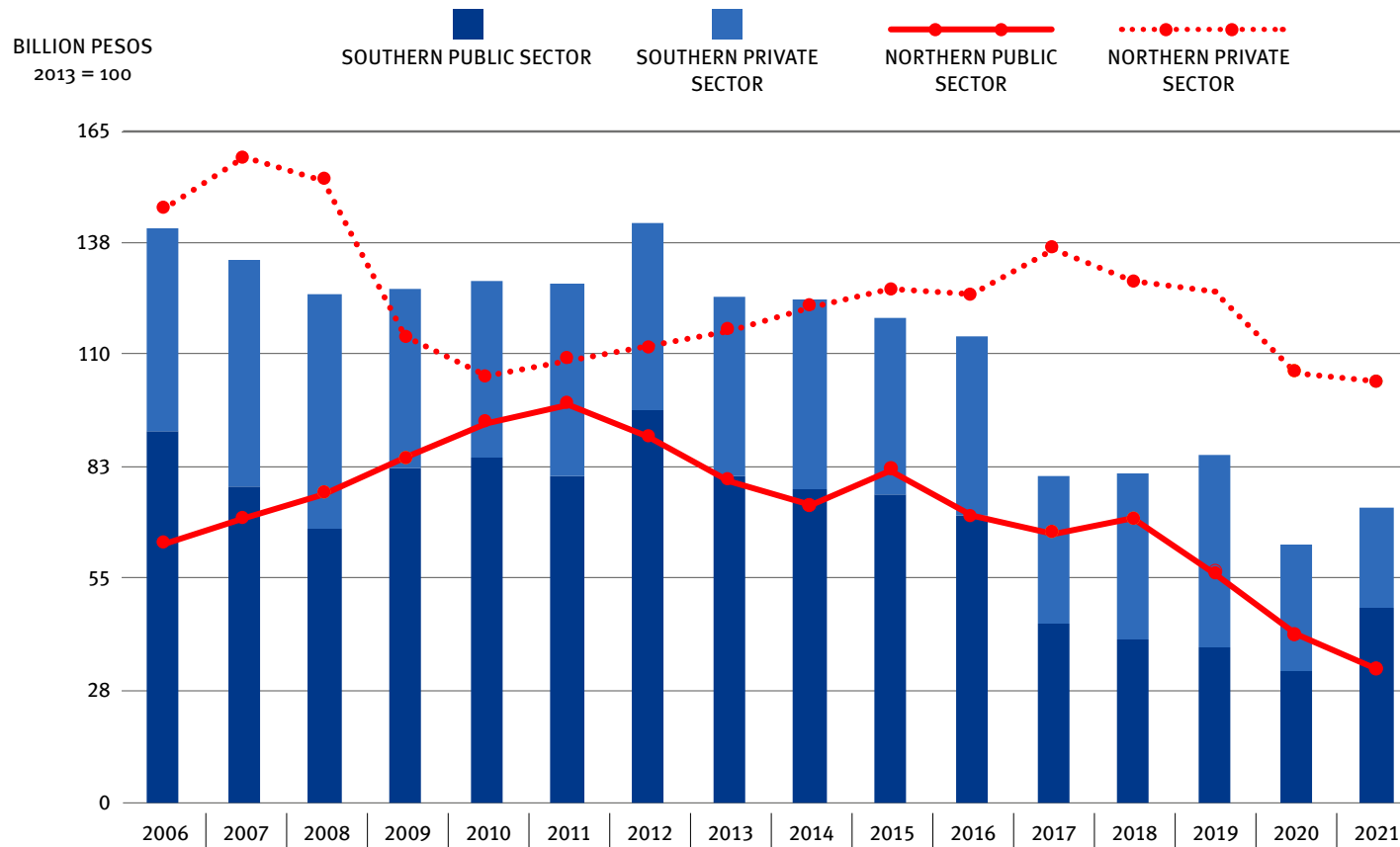
The South has been a priority for federal government investment since the beginning of the current administration. López Obrador's government has focused investment on Mexican Petroleum (Pemex, for its acronym in Spanish). In 2021 alone, the federal government transferred 11.2 billion dollars to this company (Ocampo, 2021). The South may be an energy power, but it is far from being the oil power of another era. Instead, it can become wind energy power and significantly contribute to electricity generation through solar energy. In 2021, 267.7 billion pesos (bp) were spent on hydrocarbons (SHCP, Department of Finance and Public Credit for its acronym in Spanish, 2022), especially on the Dos Bocas (DB, for its acronym in Spanish) refinery. According to Bloomberg estimates, the DB cost overrun may at least double and end up between 16 and 18 billion dollars (Stillman, 2022), and not at 9.8 billion dollars, as stated by the Secretary of Energy (Reuters, 2022). In contrast, in 2021, the physical budget investment in education, health, communications, and transportation was 59.9 billion pesos (SHCP, 2022), which means that 4.5 times more was spent on hydrocarbons than on hospital infrastructure, schools, roads, and bridges in the country. As we have been stating, public infrastructure is collapsing.

Among other projects, the Maya Train (TM, for its acronym in Spanish) stands out for the multiple human rights violations and the opacity with which the project has been implemented. Both the TM and DB do not have environmental impact studies. Even the Secretariat of National Defense (Sedena, for its acronym in Spanish) recognized the absence of said study. Even so, they started working on it (Aristegui Noticias, 2022), while the Superior Audit Office of the Federation made it public then. (Ramírez and Torres, 2022; ASF, s.f.). In the case of DB, the project manager, Leonardo Cornejo (former employee of Emilio Lozoya, Olmos, 2020), classified the project as a financial investment and was, therefore, able to start the work even though the pertinent studies had not been conducted to prove its technical and economic feasibility.

Given the current policy, there is no way investment can be recovered while the private sector remains depressed in all regions of the country, but especially in the South, where the collapse in private construction value is -47.2% over 2019, far higher than the drop nationally (-26.7%) and in the rest of the regions. Public sector intervention has only had a moderate impact in the South (variation of 7.8 bp between 2018

GIVEN THE CURRENT POLICY, THERE IS NO WAY INVESTMENT CAN BE RECOVERED WHILE THE PRIVATE SECTOR REMAINS DEPRESSED IN ALL REGIONS OF THE COUNTRY.

GRAPH 18. CONSTRUCTION IN THE COUNTRY'S NORTH AND SOUTH, BY PARTICIPATION (PUBLIC AND PRIVATE)
BILLION PESOS 2013=100



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

and 2021), while in the rest of the territory, its presence continues to fade since the beginning of the current federal administration. The amounts of public investment in both the South and the Metropolitan Area are far from the levels they presented in 2012

and 2018 (historical highs), -50.8% and -30.3% , respectively (-49.1 bp and -13.4 bp) (INEGI, 2022a). And in the Northern, public investment is minimal, with a downward trend and no compensation from the private sector.

FOREIGN INVESTMENT



By the end of 2021, only 14.1% (90 bd) of Direct Foreign Investment (IED, for its acronym in Spanish) is focused on the Mexican South. Just Mexico City surpasses the whole Southern IED, 21.2% of the country's IED (135.5 bd). The Metropolitan Area accrues almost a third (30.2%), and nearly half of IED (48.9%) is captured by the Northern region (Secretariat of Economy, 2022).

Of the 90 billion dollars invested in the South, 40.2% is concentrated in the manufacturing industry. Only two regional entities (Puebla and Veracruz) account for 54.3% of this due to their vocation for manufacturing transportation equipment and the chemical, plastic, rubber, and basic metal industries. Without considering IED in the transportation equipment manufacture in Puebla State (characteristic of economies linked to the export sector), such investment in manufacturing in the South is considerably reduced (35.6% of the total). However, manufacturing continues to be the main attraction in the country's South. Although 26.9% of this IED in manufacturing is concentrated in the beverage and tobacco industry, less complex goods when nationally it only reaches 15% of total investment in manufacturing (45.8 billion dollars) (Secretariat of Economy, 2022).



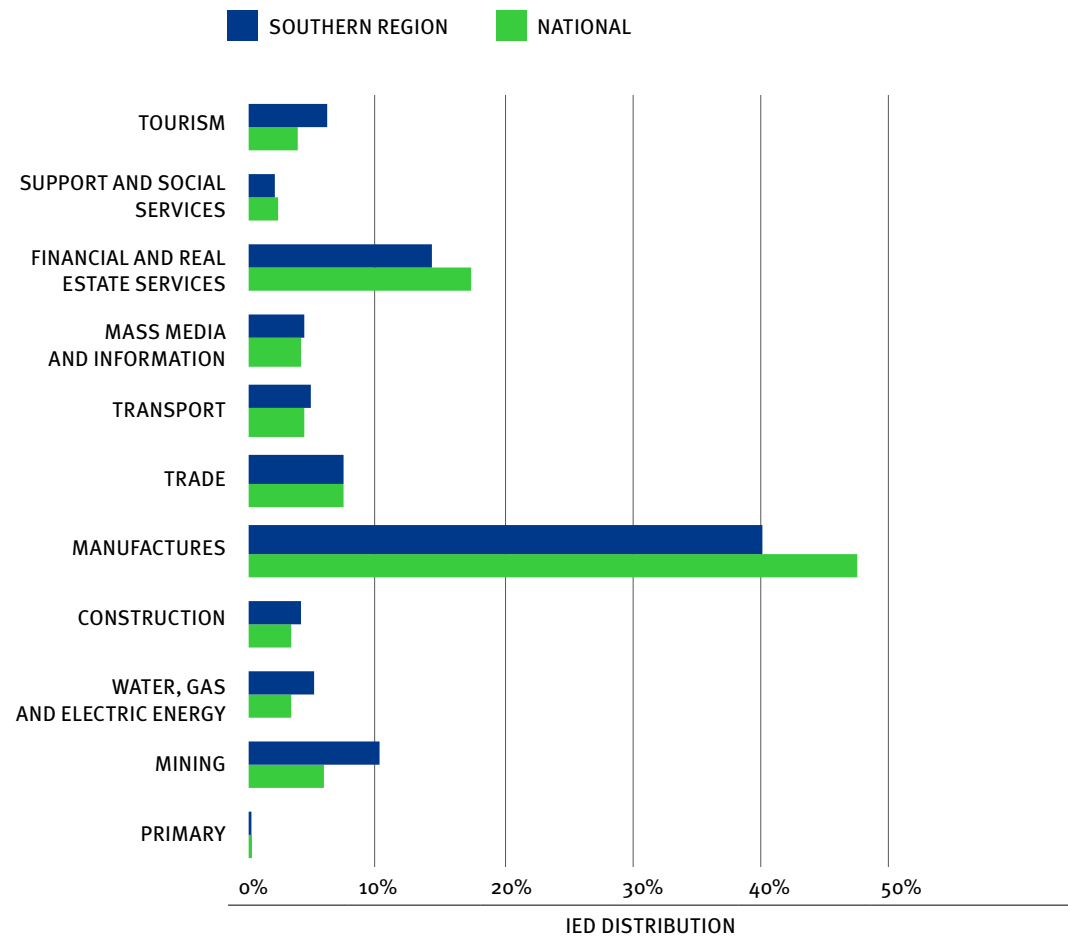
So far in the López Obrador administration (2018–2021), IED flows have fallen –7.2% (–2.5 bd) nationwide. However, the South has lost attractiveness to a greater extent than the rest of the country, as the loss of foreign investment in the South is at least three times greater (–23.5%) (–1.1 billion dollars) in the same period (Secretariat of Economy, 2022).

Image: Automobile industry in Puebla at <https://noticiaspueblabla.com/audi-abre-convocatoria-para-formacion-de-aprendices-en-puebla/>

Unlike the rest of the country, the South has a higher proportion of IED in mining, energy, and tourism. Although its competitive advantages are obvious, they are underutilized and even undermined. In addition, the South continues to lag in financial services, one of the region's major ailments related to access to financial services and financial penetration. In turn, these limitations in the so-called precursors of the economy, such as ATMs, point-of-sale terminals, and the use of mobile banking, continue to affect the low competitiveness of the South, especially in the poorest states of the country: Chiapas, Guerrero, and Oaxaca. The availability of these precursors is also extremely limited in other regional entities, such as Hidalgo and Puebla. On average, the South-

THE SOUTH HAS A HIGHER PROPORTION OF IED IN MINING, ENERGY, AND TOURISM. ALTHOUGH IT CONTINUES TO LAG IN FINANCIAL SERVICES FROM ATMS, POINT-OF-SALE TERMINALS, AND THE USE OF MOBILE BANKING, ESPECIALLY IN THE POOREST STATES OF THE COUNTRY: CHIAPAS, GUERRERO, AND OAXACA.

GRAPH 19. IED DISTRIBUTION PER ECONOMIC SECTOR IN 2021
SOUTH AND NATIONAL (%)*



Source: In-house elaboration with data from the Secretariat of Economy, (2022).

* Tourism includes cultural and sports entertainment and other recreational services, temporary accommodation, and food and beverage preparation services; support and social services include business support services, waste and waste management, remediation services, and educational, health, and social services.

ern states have 3.3 ATMs per 10,000 people, while Chiapas has only 1.9. Nationally, there are 4.5 ATMs per 10,000 inhabitants (Banxico, 2021; INEGI, 2022b). In Oaxaca, access channels through mobile banking are minimal, with 3,576 contracts per 10,000 adults, while the average for all states is 5,724 contracts per 10,000 adults (IMCO, 2022). The concentration of employment and investment in the manufacturing, financial services, and commerce sectors anticipates higher growth in the Northern entities since the Public Policy Research Center considers high growth sectors (IMCO, 2022). On the other hand, the South is expected to grow slower in the future, which will continue to widen the gap between the North and the South.



Image: Beach in Cancun at <http://royalholidaynews.info/blog/las-5-mejores-playas-para-vacacionar-en-cancun/>

Image: Acapulco beaches at <https://www.playasmexico.mx/El-bello-puerto-de-Acapulco.html>

« PUBLIC FINANCE

COLLECTION EFFORT

Since the beginning of records, the states have shown a high dependence on public revenues from the federation. However, dependence is greater in the country's South than in other regions. All this is despite the progress observed in tax matters since the entry into force of the Fiscal Coordination Law (LCF, for its acronym in Spanish, which rewards the collection efforts of the federal entities through federal participation (branch 28). Both revenues (state plus federal participations) constitute unrestricted revenues, which do not have a previously established purpose of the expenditure, and it is based on these revenues that the financial planning of the entities is carried out. In this concept, the Northern has gained ground, 36% of its revenues are federal participation, and in the South, they represent 32.1% of total revenues (INEGI, 2022c); the Metropolitan Area has a better financial position in this sense, as participations constitute 38% of the total revenues of the region (INEGI, 2022c), as a result of the greater collection effort, where 47.7% of the state taxes of the whole country are collected. This small advantage gives the states

in the Northern and Metropolitan regions more room for maneuver.

On the other hand, the LCF allows the allocation of greater federal contributions (branch 33) to the entities with the largest population living in poverty, which explains why the South depends on these revenues for 53.1%. In comparison, in the Northern, they represent 45.1% of its revenues, and in the metropolitan region, they barely contribute 26.2% of its revenues (INEGI, 2022c). However, these resources are subject to operating rules or legal regulations restricting their use.

Therefore, as long as the South makes less of a collection effort, i.e., collects less of its own revenues, the distribution of its revenues (state and federal) allows it less room for maneuver than the Northern entities and the Metropolitan Area. In 2020, state taxes barely accounted for 3.1% of total revenues in the South, and considering the rest of the concepts (duties, products, and benefits), these barely reach 5.5% of the total. Considering branches 33 and 28 and oth-

AS LONG AS THE SOUTH COLLECTS LITTLE FROM ITS OWN SOURCES, THE AMOUNT OF ITS OTHER REVENUES (STATE AND FEDERAL) ALLOW LESS ROOM FOR MANEUVER.

er federal revenues, these account for 85.8% of total Southern revenues, and nationally they account for 80.1% of total state revenues (INEGI, 2022c). For their part, several Southern states are heavily dependent on the state payroll tax, a state levy heavily favored by the payrolls of teachers, the health sector, and the government sector.

Although on average, the states have increased their dependence on federal transfers in the last year, with a 1% reduction in their own revenues, it is essential to emphasize that budget transparency has made considerable progress in the same year as a result of better practices in the reporting of accounting information and compliance with laws and standards (IMCO, 2022).

BETWEEN ETERNAL DEPENDENCY AND THE WEIGHT OF BUREAUCRACY

Regarding the distribution of spending, there are no significant differences in the total of the states and the country's South. The weight of state payrolls and those related to health, education, and public safety account for a large part of the states' budgets: 51.6% nationally and 54.6% in the country's South (INEGI, 2022c). It should be clarified that many of these expenses are covered by the 33 branches: teachers, doctors, health personnel, and state police.

In addition to these obligations, the states must cover indispensable others. Either because they are provided for in some legal ordinance or because they are essential for the daily operation of the state governments, such as transfers to municipalities and municipalities, payment of the financial cost of the debt, pensions, and retirements, transfers to other powers (legislative and judicial), autonomous and electoral bodies, and operating expenses (water, electricity, and voice and data services). Nationally, these concepts account for 32.6% of the state government budget; in the South, they account for 33.6%. The above result is that state government operations alone account for 84.2% of all entities and 88.2% in

the South. The Southern entities start with a more costly operation, reducing their room for maneuver since they only have 11.8% of their total budget. We must deduct social assistance–related spending from this percentage, already labeled (it has a specific function) in branch 33 of approximately 2% (INEGI, 2022c).⁷ Finally, other liabilities (obligations) not recognized as debt (financial factoring or public–private partnerships) should be considered, which we estimate to be between 2% and 3% of the budget. In other words, the South only has between 7.8% and 6.8% of its budget at its disposal as a maximum.⁸, 11.8% and 10.8% difference in the whole country.

The current operation puts pressure on spending in other areas, such as public investment (infrastructure), social security, the environment, and the acquisition of furniture and equipment. Investment spending in the South is 1.9% of their budgets, and for all entities, 3% (INEGI, 2022c). While the South allocates only 0.3% to social security, in all of the

country’s entities, it allocates around 1.8%. An increase in debt’s financial cost is expected, as well as federally, due to the rise in interest rates. However, this increase may be offset at the state level by the rise in participation caused by the surge in oil prices. In other words, the increase in participatory revenues will be used to amortize state government debt and will not necessarily imply an improvement in the living conditions of citizens, especially in the South of the country, where it represents 9.2% of the state budget (INEGI, 2022c).

INVESTMENT SPENDING IN THE SOUTH IS 1.9% OF THEIR BUDGETS, AND FOR ALL ENTITIES, 3% (INEGI, 2022C). WHILE THE SOUTH ALLOCATES ONLY 0.3% TO SOCIAL SECURITY, IN ALL OF THE COUNTRY’S ENTITIES, IT ALLOCATES AROUND 1.8%.

⁷ This expense is associated with the actions of the state DIFs. (National System for Integral Family Development, for its acronym Spanish).

⁸ It should be considered that some sources of financing are subject to operating rules since most of these resources come from the federation through collaboration agreements.

« LABOR MARKET

LABOR INFORMALITY

By the fourth quarter of 2021, the Metropolitan Area and the country's South contribute a similar number of workers with access to health institutions, 19.7% and 23.1%, respectively (INEGI, 2022b), while the Northern is the largest generator of employment with access to health institutions (50.1%) (10.9 million employed), which total 21.7 million employed (mdo, for its acronym in Spanish). This is even though the South contributes 31.6% of the employed population in the country (17.9 million dollars) (INEGI, 2022b) (13.6% more than the central and Metropolitan Areas combined), i.e., the contribution to labor formality is not proportional to the size of the employed population. Within the Southern region, 75.6% of the employed population is in the informal sector (INEGI, 2022b), a prevailing situation since before the health crisis (75.9% as of the fourth quarter of 2019). And between the last quarter of 2019 and the fourth quarter of 2021, the employed population with access to health institutions barely grew by 1.9% in the South (78 thousand employed), while at the national level, the growth rate was 3.6% (754.6 thousand emplo-

yed) (INEGI, 2022b), in other words, the South contributed only 10% of the growth in formal employment in the country in the last two years.

This is a long-standing problem, and as long as labor status (formal or informal) conditions the right to access health care, the problem will persist, and the social cost will fall mainly on Mexico's South. By the end of 2021, 14 of the country's 32 states were above the national rate of informal employment (61%), and of these, 11 are in the South of the country: Campeche (66.1%), Chiapas (83.8%), Guerrero (82.4%), Hidalgo (76.4%), Morelos (73.3%), Oaxaca (84.5%), Puebla (75.9%), Tabasco (68.8%), Tlaxcala (75.7%), Veracruz (75.3%), and Yucatan (65.9%) (INEGI, 2022b). Only the state of Quintana Roo is the exception in the region (52.3%). As such, there are few opportunities to access formal employment in the South, unlike the rest of the regions where the exception is in the opposite direction (INEGI, 2022b).

BY THE END OF 2021, 14 OF THE COUNTRY'S 32 STATES WERE ABOVE THE NATIONAL RATE OF INFORMAL EMPLOYMENT (61%), AND OF THESE, 11 ARE IN THE SOUTH OF THE COUNTRY.

SOCIAL PROTECTION, ONLY THROUGH TEACHING AND THE HEALTH SECTOR



The share of employment in health, education, and government activities represent 35 out of every 100 formal jobs in the country's South (INEGI, 2022b). This scenario is the opposite of the Northern (INEGI, 2022b), where the vocation towards manufacturing production has positively affected the creation of formal employment, generating almost 30 out of every 100 formal jobs. In the South, this is not the case with tourism. It does not cause significant differences between the national average or the Northern and the Metropolitan Area, as might be expected.

The formal labor participation for the total is almost the same for the South, Northern, and Metropolitan Area in tourism, 10.1%, 7.9%, and 7.4%, respectively (INEGI, 2022b), even though the South has a greater share of its investment in this area.

For its part, the country's South has shown a –not only now– strong dependence on the public sector in the generation of formal jobs. This inhibits people's labor participation in other economic sectors due to the strong incentive to participate in the government labor force, mainly at the state and federal levels.

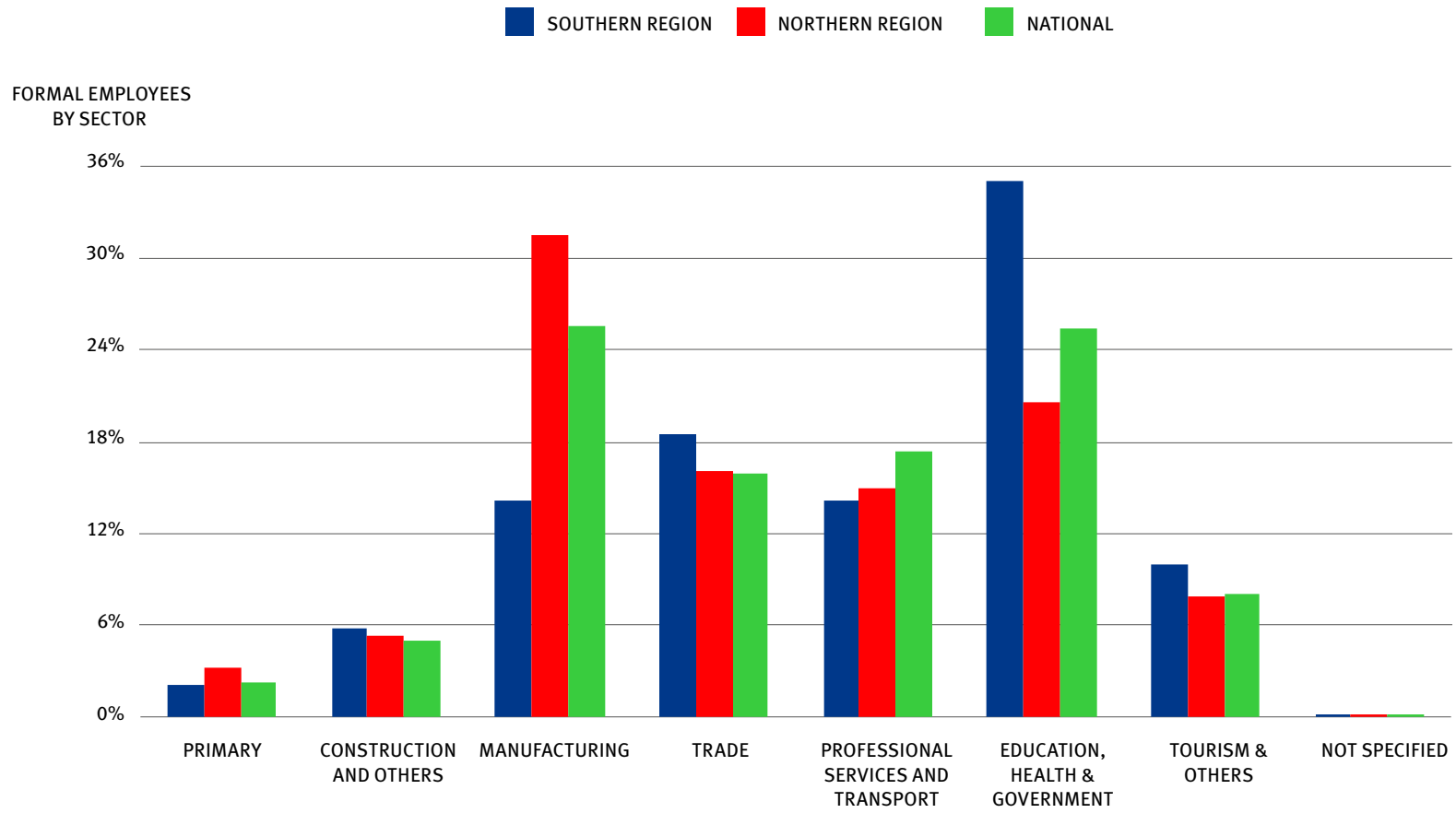
These jobs enjoy access to health services, pensions, and childcare, among other benefits. But even the regional average hides the greater dependence of some state economies on the creation of formal employment by governments. The most emblematic cases are Chiapas (53.8%), Guerrero (50%), and Oaxaca (55.2%) (INEGI, 2022b). Thus, the three poorest entities in the country, located in the South, are the most dependent on public sector hiring; governments create at least 5 out of every ten formal jobs.⁹ In the Northern region, Michoacan is the exception (41.8%) (INEGI, 2022b).

The labor market expresses the Mexico of contrasts. While the South accumulates only 10.9% of the country's formally employed personnel in manufacturing, the Northern contributes 61.9% of the officially employed personnel in this sector (INEGI, 2022b). While dependence on the government sector is more significant in the South (35.1%) and the Metropolitan Area (29.8%), in the Northern, it is barely close to one-fifth of the country's formal employed person

⁹ Where the jobs that depend on the program Youngsters Building the Future must be taken into account.

CHIAPAS, GUERRERO, AND OAXACA ARE THE THREE POOREST ENTITIES IN THE COUNTRY. ARE THE MOST DEPENDENT ON PUBLIC SECTOR HIRING; GOVERNMENTS CREATE AT LEAST 5 OUT OF EVERY TEN FORMAL JOBS (INEGI, 2022B)

**GRAPH 20. ECONOMIC SECTOR WEIGHT ON LABOR FORMALITY
PER REGION AND NATIONALLY (%) 4TH QUARTER 2021***



Source: In-house elaboration with data from INEGI (2022b).

*Tourism and miscellaneous, including temporary lodging services, food and beverage preparation services, and miscellaneous services.

WOMEN LABOR INVOLVEMENT

« By fourth quarter of 2021, women's participation in the employed population is almost identical to other country regions, although the South records a higher backwardness level (38% of total employed) (INEGI, 2022b). That participation is, on average, pretty much the same in the South and the Northern (39.3%), and both are below the national participation in 2019's last quarter (before the sanitary crisis) (39.6%). But women's higher labor participation in Mexico City (44.4%) tinges the lowest participation in Mexico State in the country's Metropolitan Area (39.4%), which has similar features to the rest of the territory. While the South is full of contrasts, it harbors the entities with the least women labor participation like: Campeche (37.5%), Chiapas (32.9%), Tabasco (35.6%), and Veracruz (35.1%), but also four out of the seven of the country's entities with the higher women labor participation; Oaxaca (41.6%), Hidalgo (41.4%), Puebla (41.3%), and Tlaxcala (41.2%) (INEGI, 2022b).

On the other hand, although participation is similar in the different regions, the precarious employment conditions of women in the South are less favorable:

- » **LABOR INFORMALITY.** 74.5% of employed women in the South do not have access to health institutions, 57.1% in the Valley of Mexico Metropolitan Area, and 50.9% in the Northern. At a national level, 60% of employed women do not have access to health care (INEGI, 2022b).
- » **WORKING POVERTY.** 1.45 million employed women in the country do not receive income for their work, 6.5% of all employed women; in the South, 11.4% of women do not receive payment. In the Northern and Metropolitan Area, this proportion is much less than half (4.2% and 4.5%, respectively). More than half of these women (53.9%) are in the South (782.8 thousand women). Working poverty extends to most women in the South of the country. This is where 40.2% of employed women with incomes below the minimum wage (2.8 million women) live. In the Northern, this figure is lower (24.4%) (INEGI, 2022b). Therefore, 37 out of every 100 employed women in Mexico do not receive a salary for their work or barely get up to one MW, while in the South, it is 52% (INEGI, 2022b). (INEGI, 2022b).

» FROM SHORTAGE TO EXCESS. The Southern region includes those states where women's participation in working hours is exceptionally low but also states where the working day may be excessive. Oaxaca and Chiapas' examples highlight this problem. In Oaxaca, women's participation in the labor market is higher than the national average (41.6%). However, 48.7% of these women work less than 34 hours per week, and a considerable percentage can barely work 15 hours per week (17.9%). In other words, the high participation rate is explained by the short duration of the workday. Chiapas is a particular case since 24.2% of employed women work more than 48 hours per week, but 40.5% also work up to 34 hours per week. (INEGI, 2022b).

Women's labor participation may be similar, but labor conditions are dissimilar between the Northern, the Metropolitan Area, and the South. The labor conditions described here limit the growth of the Southern entities by attracting and retaining less talent and investment, which leads to a lower level of competitiveness in the region. Women's working conditions and access to health services by the employed population, the wage gap between women and men restrict the level of competitiveness in Southern

Mexico. Less complex economies, with a state that permeates the labor market to a large extent, impede integration with other markets at the national and international levels.



Image: Entrepreneur in Chiapas at <https://heifer-mexico.org/autosuficiencia/emprededora-de-hatching-hope-se-supera-dia-con-dia/#>

WOMEN'S WORKING CONDITIONS IN THE SOUTH RESTRICT THEIR COMPETITIVENESS.

« THE SOUTH'S STAGNANT POTENTIAL

Several studies have shown the wind potential of the country's South, but the facts speak for themselves. The growth in installed capacity since the early 90s to date has been exponential. What began as an experimental project has bared fruit. The generation costs of wind projects in Mexico are the cheapest in the market and highly competitive internationally. The country's wind power potential is around 50 thousand (in the most conservative scenario) (AMDEE, Mexican Wind Energy Association for its acronym in Spanish, s.f.) and 71 thousand megawatts (MW) (Wilson Center, 2012), which exceeds national demand by nearly 40%; of these, the state of Oaxaca could generate at least 33 thousand MW, making use of just over 7% of the state's territory (Elliot *et al.*, 2003). Only half of this capacity would be enough to generate 35% of the country's clean electric energy. (AMDEE, s.f.).

It is no coincidence that the structure of foreign capital in the state of Oaxaca has changed in the same way, very rapidly, in the last two decades. Before 2000, Oaxaca did not receive a dollar of IED in the energy sector and currently accumulates as much IED in power generation (2.3 billion dollars) as in beve-

rage manufacturing (2.2 billion dollars). (Secretariat of Economy, 2022). The Isthmus of Tehuantepec has the potential to become an energy corridor, not just a product corridor. While electrification is increasingly a necessity, Mexico is betting on oil refining, where we do not have competitive advantages. The answer lies in the South, but the federal executive's compass reading is clearly inadequate. Currently, there are four constraints to adequate development in the country's South:

1. RESTRICTIONS FROM ENERGY REGULATORY COMMISSION (CRE, for its acronym in Spanish) to assign electricity generation permissions. As previously documented, it is stymied (Vital Signals, 2022).
2. LIMITED TRANSMISSION CAPACITY FROM FEDERAL ELECTRICITY COMMISSION (CFE, for its acronym in Spanish). Suppose CFE does not expand its transmission, where its natural monopoly is conducting electricity to where it's needed, it won't be possible.
3. CFE'S LIMITED FINANCIAL CAPACITY AND LIMITED STRATEGIC VISION. It is clear from the company's business plan that it will not invest in clean energy.

The capacity expansion consists of the construction of combined-cycle plants. (Signos Vitales, 2022).

4. SOCIAL DISSATISFACTION. In Mexico, only 1% of company profits are allocated to communities, while in developed countries, it is 5% (Wilson Center, 2012). The regulatory framework must be tailored to the social and economic development required, based on socially concerted projects.

The Acciona company managed to build a wind park in Oaxaca with a 306MW generation capacity—one of the biggest in Latin America’s class—in just 204 days. This capacity can supply electricity to 700 thousand homes in Mexico (Acciona, s.f.), the equivalent of 67.8% of households in Nuevo Leon (INEGI, 2020a). The administration of López Obrador has about 900 days left. There is still time to increase clean energy generation capacity at the lowest cost.

THERE IS STILL TIME TO INCREASE
CLEAN ENERGY GENERATION CAPACITY
AT THE LOWEST COST.



Image: Wind energy park of Acciona Enterprise in Oaxaca at <https://elpais.com/economia/2021-06-24/acciona-saca-a-bolsa-la-joya-de-la-corona.html>



ENVIRONMENT



LOST RESOURCES

« It is practically impossible to speak of a single Southern Mexican region in environmental terms. Each entity has its own characteristics and variables, and although this makes it challenging to have a complete regional vision, it allows us to overview the natural resources and environment state. In order to achieve this regional vision, this section includes indicators such as a) water availability, access, and pollution; b) soil degradation and pollution; c) air quality and pollution; and d) the institutional capac-

ities of each entity, which are evidently different in each one of them.

For decades, federal government support for environmental issues has been precarious. As a result, the policies implemented have been a placebo to improve and reverse the ecological damage detected in Mexico. Today, to understand the priority that the government has given to issues related to sustainable development, environmental protection, climate

Image: “Sinkholes stop Mayan Train’s plan” at <https://www.reforma.com/atora-ce-note-avance-en-trazado-del-tren-maya/ar2388948>

change, and natural resources, it is crucial to know how the government has prioritized the following issues: environmental protection, climate change, and natural resources, just refer to the National Development Plan 2019 – 2024 (PND, for its acronym in Spanish, 2029 – 2024) (SEGOB, Government Secretariat for its acronym in Spanish, 2019). In this official document, these issues are framed within a social policy that, in a confusing and unprofessional manner, attempts in a single paragraph to cover all the actions to be taken by the administration to ensure, monitor, and safeguard a healthy environment for Mexicans.

Although Mexico has wide and vast biodiversity, to date, these resources are at a vulnerability level never before reached in the country. (Vital Signals, 2022, p. 170–199). Without a clear direction and with an Environment and Natural Resources Sector Program (SEGOB, 2020), created with a delay of more than two years after the start of the administration, Mexico presents severe consequences with the policies and actions implemented by the Secretariat of Environment and Natural Resources (Semarnat, for its acronym in Spanish). Among the more important are constant environmental degradation and pollution and the lack of updating on the data of the Envi-

ronmental Information National System (SNIA, for its acronym in Spanish) (Vital Signals, 2020b).

Contrary to the official narrative, environmental deterioration has contributed significantly to the loss of social welfare in the country. After more than three and a half years of government, it has become evident that Semarnat has prioritized political issues over those that should be addressed (Grupo Reforma, 2022). The results of national policy in this area are of no real significance, so the country's geopolitical vision is evidently negative regarding the environment, sustainability, and climate change. Given that the policies implemented over the last 30 years have not shown effective results, high economic, political, social, and environmental costs are foreseen, which will end up disproportionately affecting the most vulnerable population (Vital Signals, 2022).

ENVIRONMENTAL DETERIORATION HAS CONTRIBUTED SIGNIFICANTLY TO THE LOSS OF SOCIAL WELFARE IN THE COUNTRY.

HIGH ECONOMIC, POLITICAL, SOCIAL, AND ENVIRONMENTAL COSTS ARE FORESEEN, WHICH WILL END UP DISPROPORTIONATELY AFFECTING THE MOST VULNERABLE POPULATION (SIGNOS VITALES, 2022).

◀◀ SOUTHERN GREEN

As defined in this report, the Southern Mexican region has vast biodiversity, which is the source of plentiful natural resources. Considering the 12 entities we nominated the South part for this study, plus the Metropolitan Area (Mexico City and Mexico State), it is essential to highlight that the natural resources are especially rich and comprise at least 52 Protected Natural Areas (ANP, for its acronym in Spanish), which surpass the 20 million hectares (CONANP, 2021). Nevertheless, all these resources and biodiversity are in a permanent state of danger due to the pressure imposed by high population, regional development, and economic growth.

Due to its geographic conformation, it is evident how this region concentrates critical development points and growth that affect, in a significant way, the care of the environment. In what we have defined as the Southern region, the entities that comprise it are in the center of the country,¹⁰ grouping nearly 13 million people and the other entities¹¹ a little more than 29

¹⁰ Comprise by entities like Puebla, Tlaxcala, Hidalgo, and Morelos.

¹¹ Comprised by Veracruz, Tabasco, Campeche, Yucatan, Quintana Roo, Chiapas, Oaxaca, and Guerrero.

million. The Metropolitan Area has served as a reference throughout the report and has more than 26 million people (INEGI, 2020d). In total, the demand for natural resources in this part of the country is given by more than 68 million people, about 55% of the country's population. This clear division also defines the demand for natural resources and the stress level on water basins, soil, and air, mainly in the central zone, due to the focus on secondary and tertiary economic activities.

The region has a coastline of more than 4,200 kilometers and, due to its natural wealth, is one of the regions with the most diverse flora and fauna, in many cases endemic and endangered. The entire Southern region is also a clear example of natural wealth, even compared to the country's Northern part. Despite having a very valuable rainforest ecosystem, official data indicates that this area has deteriorated by more than 67% (Conabio, National Commission for Knowledge and Use of Biodiversity for its acronym in Spanish, s.f.), an effect that would be even more devastating with the projects implemented on the Yucatan peninsula, like the Maya Train construction.

From the original potential of rainforests that the area showed towards the middle of the last century (192,552.81 Km²), it is evident the severe deterioration that has occurred over the years (Conabio, n.d.), leaving only 98,380. 87 km² as of 2014, where the most drastic changes have occurred in Veracruz, Tabasco, the Southern highlands of Chiapas, and the Northern part of the Yucatan state, where almost all the rainforest vegetation was eliminated for cattle raising (Conabio, n.d.). Compared to the Metropolitan Area, the latter has only 260 km² of NPA, which shows the devastating growth and the lack of care and protection to recover natural spaces.

DESPITE HAVING A VERY VALUABLE RAINFOREST ECOSYSTEM, OFFICIAL DATA INDICATES THAT THIS AREA HAS DETERIORATED BY MORE THAN 67%, AN EFFECT THAT WOULD BE EVEN MORE DEVASTATING WITH THE PROJECTS IMPLEMENTED ON THE YUCATAN PENINSULA, LIKE THE MAYA TRAIN CONSTRUCTION.



Image: Montebello lagoons in Chiapas at <https://topadventure.com/ecoturismo/Actividades-para-disfrutar-las-Lagunas-de-Montebello-Chiapas-20210510-0002.html>

SOUTHERN MEXICO NATURAL RESOURCES

« GENERAL CONDITIONS

Environmental deterioration in this region is reaching its limit, and it is estimated that shortly it will not be able to support further growth from large cities or maintain the demand for energy flows required by its population. In terms of renewable water per capita, for example, the entities with the best performance are Quintana Roo (993 m³/inhabit/yr) and Morelos (920 m³/inhabit/yr), which have the capacity to renew their water at over 600 m³ per inhabitant per year. Entities such as Mexico City, Campeche, Guerrero, Hidalgo, Puebla, Tlaxcala, Veracruz, and Yucatan had a precarious performance until 2019. Strangely, Mexico State, located in the center of the country, has an average performance concerning comparing these entities with 268 m³/inhabit/yr (INEGI, s.f.). Despite Mexico State's performance, the dramatic stress to which the Metropolitan Area is subjected, compared with the entities that make up the Southern area.

TABLE 17. RENEWABLE WATER PER INHABITANT, PER FEDERAL ENTITY
2019

● BETTER PERFORMANCE ● MEDIUM PERFORMANCE ● POOR PERFORMANCE

REGION	FEDERAL ENTITY	MEDIUM RENEWABLE WATER (HM ³ /YR)	PER CAPITA RENEWABLE WATER 2019 (M ³ /INHAB/YR)
SOUTHERN REGION	● Campeche	5,815	6,046
	● Chiapas	113,557	20,619
	● Guerrero	20,972	5,759
	● Hidalgo	7,475	2,481
	● Morelos	1,848	920
	● Oaxaca	55,901	13,612
	● Puebla	11,382	1,771
	● Quintana Roo	1,741	993
	● Tabasco	31,941	12,897
	● Tlaxcala	868	644
	● Veracruz	51,64	6,24
	● Yucatan	21,813	9,799
METROPOLITAN AREA	● CDMX	644	73
	● MEXS	4,786	268
NATIONAL		451,585	3,586

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

Even though practically all the entities analyzed have more than 90% of the water services, such as drainage, sanitation, and piped water, the quality and efficiency of these services raise an enormous question mark. The Metropolitan Area and its periphery (Hidalgo, Puebla, and Tlaxcala) have the highest contamination percentage, with more than 60% of their

watersheds at risk. Meanwhile, Veracruz, Chiapas, Morelos, and Tabasco have yellow alerts regarding contamination of their watersheds, with more than 40%. Campeche, Guerrero, Quintana Roo, and Yucatan are the states with minor contamination of their watersheds (INEGI, 2021c).

TABLE 18. TOTAL INHABITED HOUSEHOLDS WITH HYDROLOGICAL SERVICES

REGION	FEDERAL ENTITY	INHABITED PRIVATE DWELLING	DRAINAGE AVAILABILITY	TOILET AVAILABILITY	PIPED WATER AVAILABILITY
SOUTHERN REGION	Campeche	260,221	94.4	96.4	95.5
	Chiapas	1,348,105	91.00	96.8	89.6
	Guerrero	939,989	87.7	90.5	88.5
	Hidalgo	855,83	94.9	97.3	96.0
	Morelos	559,102	98.1	98.8	95.9
	Oaxaca	1,121,846	80.3	97.2	89.9
	Puebla	1,710,331	95.1	98.3	95.4
	Quintana Roo	574,124	96.9	97.6	97.2
	Tabasco	668,486	97.5	97.7	93.8
	Tlaxcala	340,954	96.6	97.00	97.5
	Veracruz	2,385,265	91.00	98.1	91.5
	Yucatan	656,907	92.2	93.5	98.6
METROPOLITAN AREA	CDMX	2,752,169	99.7	99.7	98.8
	MEXS	4,561,381	97.3	98.5	97.3
TOTAL SOUTH		11,421,160	91.93	96.85	93.11
TOTAL NATIONAL		35,156,897	95.46	98.07	96.30

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

TABLE 19. THREATENED BASINS TRAFFIC LIGHT BY 2021

REGION	STATES	NUMBER OF BASINS	PERCENTAGE	REGION	STATES	NUMBER OF BASINS	PERCENTAGE	
SOUTHERN REGION	Campeche	33	62.30	SOUTHERN REGION	Morelos	3	4.70	
		4	7.50			35	53.80	
		16	30.20			26	39.40	
	Guerrero	75	38.30		Oaxaca	102	55.70	
		72	36.70			39	21.30	
		51	26.00			41	22.40	
	Hidalgo	9	18.00		Chiapas	26	41.90	
		12	24.00			24	38.70	
		29	58.00			11	17.70	
	Puebla	9	9.90		Veracruz	81	23.70	
		22	24.20			152	44.40	
		60	65.90			110	32.20	
	Quintana Roo	108	93.10		Yucatan	21	87.50	
		3	2.60			0	0.00	
		6	5.20			3	12.50	
	Tabasco	51	41.80		METROPOLITAN AREA	MEXS AND CDMX	8	9.50
		59	48.40				23	27.40
		13	10.70				52	63.10
	Tlaxcala	2	5.60		AVERAGE			
		3	8.30		SOUTHERN REGION		GREEN	38.80
		30	83.30				YELLOW	31.70
						RED	29.50	

Source: In-house elaboration with information from Conagua (The National Water Commission for its acronym in Spanish) (2021).

Pertaining to soil degradation per federative entity, the most affected entities are Estado de México, Tabasco, Tlaxcala, Veracruz, and Yucatan, with more than 60% of soil affectation. On their part Chiapas, Guerrero, Hidalgo, Morelos, Oaxaca, and Puebla fluctuate between 40% and 59% soil affectation, while Campeche and Quintana Roo record the least soil degradation with less than 40% (Semarnat, 2002). About polluted sites recorded as environmental passives per federative entity, the most current information date back to 2016, the most impacted entities are Mexico City (15), Chiapas (40), Mexico State (37), Quintana Roo (20), and Veracruz (73) (Semarnat, 2002).

According to official data from the National Institute for Ecology and Climate Change (INECC) (2020), in terms of the number of days per year in which any current air quality standard is exceeded per state and its Metropolitan Area; the Metropolitan Area has reached more than 270 days per year, quantifying up to three different types of pollutants. In the same situation as Mexico State and Mexico City are Pachuca, Hidalgo (>60 days) or Puebla, Puebla (>160 days) with at least three pollutants detected. In an equally worrying situation, there are entities that have come

TABLE 20. TOTAL STATE SURFACE AREA WITH EROSION AND DEGRADATION*

REGION	ENTITY	PROPORTION
SOUTHERN REGION	Campeche	39.2
	Chiapas	52.1
	Guerrero	49.0
	Hidalgo	43.0
	Morelos	53.4
	Oaxaca	42.4
	Puebla	44.7
	Quintana Roo	30.4
	Tabasco	72.4
	Tlaxcala	73.3
	Veracruz	62.9
Yucatan	74.2	
METROPOLITAN AREA	CDMX	46.1
	MEXS	60.6

Source: In-house elaboration with information from Semarnat (2002). *Degradation by water, wind, chemical, and physical erosion.

THE METROPOLITAN AREA HAS REACHED MORE THAN 270 DAYS PER YEAR, QUANTIFYING UP TO THREE DIFFERENT TYPES OF POLLUTANTS.

to concentrate up to two types of pollutants in their cities and that, at the same time, have exceeded the number of days with concentrations above the currently allowed limits. For Hidalgo, there are Tizayuca, Atitalaquia, Atotonilco, and Tepeji del Rio; For Morelos, there are Cuernavaca, Zacatepec, Ocuituco, and Cuautla; Puebla with Coronango, and Veracruz with Xalapa, Minatitlan, and Poza Rica.

ENVIRONMENTAL FRAMEWORK PERFORMANCE AND COMPLIANCE



Mexico entered the era of ecological modernization under extreme vulnerability, determined primarily by the lack of interest in making environmental issues a priority. Belatedly, Mexico is starting a long and difficult process of adapting to the new national and international environment. Environmental policy in transition has been characterized by disjointed management of its different components and the adoption of ambivalent responses to extremely delicate challenges.

Historically, the federal government has not been able to see the state governments as a group of allies. On the contrary, these governments have had

to make many environmental decisions without federal support. As a result, the implementation of their policies has had different shortcomings and deficiencies, which have directly impacted the region's environmental quality. This policy of leaving the federal entities in the background has been exacerbated in this last administration, which has not shown a vocation to address environmental and climate issues.

Of all the entities analyzed in this report, all have an agency specialized in the care and protection of the environment. As a result, the institutional capacities of the state agencies have been progressively strengthened, unlike Semarnat, which has been rapidly dismantled. This has led to the non-fulfillment of many of its main attributions and international commitments, as well as a significant reduction in the budget allocated to it.

There is a significant discrepancy in the budget allocated to each agency in the different entities. Three have had significant budget reductions, Mexico City, Mexico State, and Hidalgo, which report the greatest environmental damage to water, soil, and air. Chiapas, Guerrero, and Puebla have had to maneuver through budget increases and decreases, which affects the project's continuity and the implementation

of those already programmed. Finally, in a sort of administrative consolation, the entities that have been able to increase their green budget are Campeche, Morelos, Oaxaca, Quintana Roo, Tabasco, Tlaxcala, Veracruz, and Yucatan. In most cases, there are significant increases, which guarantees both continuity and policy innovation.

Since tourism is one of the main growth drivers in the analyzed region, its natural resources and biodiversity are at constant risk. In Mexico, according to the 2019 Economic Census, 786,540 establishments depend economically on tourism (16.4% of the total number of establishments in the country), and 9.9% of the country's fixed assets are oriented to tourism production (Vital Signals, 2021a). For the country's Southern states, it is estimated that, after the great confinement during the COVID-19 pandemic, the attempt to recover the sector will be much more aggressive and firmer, being able to put aside the importance that the care and protection of the natural environment deserve.

SIGNIFICANT DISCREPANCIES IN THE BUDGETS ALLOCATED

**MEXICO CITY, MEXICO STATE & HIDALGO:
SIGNIFICANT BUDGET REDUCTIONS, WHICH
REPORT THE GREATEST ENVIRONMENTAL
DAMAGE TO WATER, SOIL, AND AIR.**

**CHIAPAS, GUERRERO & PUEBLA:
HAVE HAD TO MANEUVER THROUGH BUDGET
INCREASES AND DECREASES WHICH
AFFECTS THE PROJECT'S CONTINUITY AND
IMPLEMENTATION.**

**CAMPECHE, MORELOS, OAXACA, QUINTANA ROO,
TABASCO, TLAXCALA, VERACRUZ & YUCATAN:
HAVE BEEN ABLE TO INCREASE THEIR BUDGET,
WHICH GUARANTEES CONTINUITY AND POLICY
INNOVATION.**

TABLE 21. ENVIRONMENTALLY RELATED BUDGET
PER FEDERAL ENTITY (FIGURES IN MP)

REGION	FEDERAL ENTITY	ENVIRONMENTAL SECRETARIAT	2019 BUDGET	2020 BUDGET	2021 BUDGET	2022 BUDGET
SOUTHERN REGION	● Campeche	✓	40.8	52.9	53.7	70
	● Chiapas	✓	107.8	111.3	148	108.8
	● Guerrero	✓	51.7	70	55.2	61.9
	● Hidalgo	✓	184	141.6	125.5	117
	● Morelos	✓	85.1	Not available	131.3	90
	● Oaxaca	✓	33.7	35.3	69.8	89.3
	● Puebla	✓	800	222.3	120.3	140.3
	● Quintana Roo	✓	76.5	82.7	83.8	126.8
	● Tabasco	✓	101.3	342.5	343	381.5
	● Tlaxcala	✓	70.2	73.7	76	99.3
	● Veracruz	✓	47.5	47.8	89.8	189.8
● Yucatan	✓	571.7	426.3	531.3	653	
METROPOLITAN AREA	● MEXS	✓	1,412	1,435	1,201	765
	● CDMX	✓	1,416	1,243	1,175	1,243
TOTAL SOUTH						1,976
TOTAL NATIONAL						13,934

Source: In-house elaboration with information from the governments of Campeche, CDMX, Chiapas, MEXS, Guerrero, Hidalgo, Morelos, Oaxaca, Puebla, Quintana Roo, Tabasco, Tlaxcala, Veracruz and Yucatan, (2019–2022).

In many entities, the work of strengthening institutional capacities implies the existence of laws and regulations that give shape and meaning to the construction, design, and implementation of environmental policies. Many of these have a genuine environmental vocation that is reflected in the regulatory and legal support. Those with the strongest support are Mexico City, Chiapas, Oaxaca, Quintana Roo, and Veracruz, all of which have more than 22 binding laws. Those with the lowest number of regulations (less than 15) are Mexico State and Tlaxcala (ITESM, Monterrey Technology Institute, for its acronym in Spanish, s.f).

In budgetary terms, the Metropolitan Area has the largest annual allocation of environmental resources at the national level. Campeche, Oaxaca, Quintana Roo, Tabasco, Tlaxcala, Veracruz, and Yucatan are the states that have shown a sensitive interest in green issues, allocating a larger budget in recent years. Strangely, states such as Chiapas, Guerrero, Morelos, and Puebla in the country's Southern region still seem to stagnate.



Image: "Gulfweed, old enemy of tourism in Mexico" | Photo: xataka.com.mx at https://www.tourinews.es/competidores/sargazo-obliga-a-bahia-principe-a-tomar-medidas_4456183_102.html

◀◀ AN ENDANGERED PRESENT AND FUTURE

As detailed in previous Vital Signals reports and alerts, one of the next crises the planet will experience is undoubtedly environmental. Mexico has been reluctant to realize both the value of its natural resources and the deterioration they are suffering at the expense of uncontrolled and poorly programmed growth (mainly in economic and population aspects). The Mexican South is suffering a significant decline in terms of water, soil, and air pollution and quality, which is increasing at an accelerated rate due to the lack of the minimum policy tools to face these challenges. Many localities in these entities, plus the Metropolitan Area, are already experiencing a catastrophic scenario in environmental matters.

In some cases, it has been possible to contain it since the effects of such degradation have been transferred to neighboring areas or regions. However, the fact that the region is beginning to have environmental disaster zones reflects the inefficiency of environmental authorities at all levels of government. The reality and environmental precariousness of this part of the country make it vulnerable in the years to come. Many of the projects that are now being promoted, especially the most emblematic of the federal

government, reflect governmental inattention and inadequacy in decision-making and prioritizing public problems.

Evidence indicates that a larger budget does not necessarily reflect better performance and attention to environmental issues. The effort required to reverse the damage will likely take years of focus and attention to watersheds, land, and air. Political will is the criterion that has served as a bastion of leadership for those entities whose future depends partly on the quality and richness of their biodiversity. The country's future in environmental matters must begin to add new actors in the decision-making process that promote and attend regionally to the wear, degradation, or polluting effects, but also to the care, attention, and promotion of a green culture.

MEXICO HAS BEEN RELUCTANT TO REALIZE BOTH THE VALUE OF ITS NATURAL RESOURCES AND THE DETERIORATION THEY ARE SUFFERING AT THE EXPENSE OF UNCONTROLLED AND POORLY PROGRAMMED GROWTH.

A photograph showing a group of people in a meeting. They are gathered around a round wooden table, looking at and pointing to documents. One person is holding a pen. The scene is dimly lit, with a warm, focused light on the table. A green horizontal bar is overlaid across the middle of the image, containing the text 'FINAL REMARKS'.

FINAL REMARKS

« FINAL REMARKS

This report allows us to visualize Mexico as a heterogeneous, diverse, complex country. Although the regionalization towards the South justifies this report and a future one towards the Northern is somewhat discretionary, it allows us to learn more about what is happening and evaluate the dimensions and characteristics of the gaps that exist and are widening between the Northern and South. It shows clear evidence of the most important and urgent problems experienced in these entities and which actors are affected and responsible.

The added value of this report is centered on the thorough documentation of the major public issues that directly contribute to the construction of development in the Southern region of Mexico. This exercise of evidencing the region's reality confronts us with an aberrant regional disparity in governance, where the country has taken a significant turn towards militarization, the growing influence of organized crime, and democratic vulnerability at the state level. In the social sphere, it shows that the vulnerability of the poorest has increased, affecting them in terms of food and income, compromising learning at all lev-

els of education, access to quality public health, and leaving groups such as indigenous women, children, and adolescents unprotected. Finally, the report presents a reality in terms of economy and sustainability, tragic enough represented by a lost decade, which is partly the result of the pandemic and the international situation but mostly originated from bad decisions in terms of investment, public finances, as well as in the labor market. Added to this is an unstable and neglected natural environment that complicates planning for a green future throughout the region.

The unfortunate combination of low government effectiveness nationally and the dubious state capacity to address all these issues have turned the regional panorama into a high-risk zone. There is not a single issue that has not been analyzed that has not been breached, a fact that highlights the need to initiate a process of damage assessment, detection of lags, and, at the same time, a careful and thorough formulation of proposals to prevent further deterioration in the region. It is hoped that the recorded information in this report has a diagnostic effect and provides certainty of the nuances the area faces, and with that,

presents the fundamental analysis and information to plan possible solution routes that ensure, in the medium term, the convergence towards the Northern and Southern prosperity.

The reality we face as a country, specifically in the Southern region, is threatening the future of millions of people and the social coexistence between Mexicans who are increasingly distant from each other. Vital Signals presents this study on the country's South to reverse the future that is now envisioned for Mexico and will make a subsequent report on the Northern. We want to contribute to having the best statistical information and interpretation to support the best decisions to put the country back on a path of growth, development, and prosperity.

THE REALITY WE FACE AS A COUNTRY, SPECIFICALLY IN THE SOUTHERN REGION, IS THREATENING THE FUTURE OF MILLIONS OF PEOPLE AND THE SOCIAL COEXISTENCE BETWEEN MEXICANS WHO ARE INCREASINGLY DISTANT FROM EACH OTHER.



REFERENCES

REFERENCES

- Acción Ciudadana Frente a la Pobreza. (2017). *Derechos Humanos y Pobreza Políticas públicas frente a la pobreza con la perspectiva de derechos del artículo 1º constitucional [Human Rights and Poverty Public policies to address poverty from the rights perspective of Article 1 of the Constitution]*. Available at: https://www.cndh.org.mx/sites/all/doc/Informes/Especiales/Pobreza_DH_SE_o82o18.pdf
- Acción Ciudadana Frente a la Pobreza. (s.f.). *Observatorio de Trabajo Digno [Decent Work Observatory]. Región Sur-sureste*. Available at: <https://frentealapobreza.mx/observatorio-de-trabajo-digno/perfil-region.php?=sureste>
- Acciona. (s.f.). *Oaxaca II-III-IV Wind Complex*. Available at: [Oaxaca II-III-IV Wind Complex \(acciona.no\)](http://Oaxaca-II-III-IV-Wind-Complex(acciona.no))
- Alto Comisionado de las Naciones Unidas para los Refugiados (ACNUR). (2016). *Recursos para entender la diversidad social. Conciencia social y económica [Resources for understanding social diversity. Social and economic awareness]*. Available at: <https://eacnur.org/blog/recursos-entender-la-diversidad-social/#:~:text=Ning%C3%BAn%20pueblo%2C%20civilizaci%C3%B3n%20o%20comunidad,lo%20tanto%2C%20su%20propia%20cultura>.
- Aristegui Noticias. (02 de mayo, 2022). *Tren Maya: faltan estudios de impacto ambiental, reconocen Sedena y Semarnat [Maya Train: environmental impact studies are lacking, acknowledge Sedena and Semarnat]*. Aristegui Noticias. Available at: [Tren Maya: faltan estudios de impacto ambiental, reconocen Sedena y Semarnat | Aristegui Noticias](http://Tren-Maya-faltan-estudios-de-impacto-ambiental-reconocen-Sedena-y-Semarnat|Aristegui-Noticias)
- Asociación Mexicana de Energía Eólica (AMDEE). (s.f.). *El potencial eólico mexicano. Oportunidades y retos en el nuevo sector eléctrico [Mexican wind energy potential. Opportunities and challenges in the new electricity sector]*. Available at: AMDEE-PwC-El-potencial-eolico-mexicano.pdf
- Auditoría Superior de la Federación (ASF). (s.f.). *Grupo Funcional Desarrollo Económico [Economic Development Functional Group]*. Available at: [Tomos SICSA 1999 \(asf.gob.mx\)](http://Tomos-SICSA-1999(asf.gob.mx))
- Banco de México (Banxico). (s.f.). *Indicador Trimestral de la Actividad Económica Regional - (CR190) [Quarterly Indicator of Regional Economic Activity - (CR190)]*. Available at: <https://www.banxico.org.mx/SieInternet/consultarDirectorioInternetAction.do?sector=2&accion=consultarCuadro&idCuadro=CR190&locale=es>
- Banco de México (Banxico). (2021). *Número de cajeros automáticos por entidad federativa-(CF266) [Number of ATMs by federal state-(CF266)]*. Sistema de Información Económica (SIE). Available at: [Estructura de información \(SIE, Banco de México\) \(banxico.org.mx\)](http://Estructura-de-información-(SIE,-Banco-de-México)(banxico.org.mx))
- Banco de México (Banxico). (2022a). *Ingresos por remesas - (CE80) [Remittances Income - (CE80)]*. Sistema de Información Económica (SIE). Available at: [Estructura de información \(SIE, Banco de México\) \(banxico.org.mx\)](http://Estructura-de-información-(SIE,-Banco-de-México)(banxico.org.mx))
- Banco de México (Banxico). (2022b). *Ingresos por remesas, distribución por entidad federativa-(CE100) [Remittance income, distribution by state-(CE100)]*. Sistema de Información Económica (SIE). Available at: [Estructura de información \(SIE, Banco de México\) \(banxico.org.mx\)](http://Estructura-de-información-(SIE,-Banco-de-México)(banxico.org.mx))
- Banco de México (Banxico). (2022c). *País de origen de los ingresos por remesas-(CE167) [Country of origin of remittance income - (CE167)]*. Sistema de Información Económica (SIE). Available at: <https://www.banxico.org.mx/SieInternet/consultarDirectorioInternetAction.do?sector=1&accion=consultarCuadro&idCuadro=CE167&locale=es>
- Banco de México (Banxico). (2022d). *Reporte sobre las Economías Regionales [Report on Regional Economies]*. Available

- at: <https://www.banxico.org.mx/publicaciones-y-prensa/reportes-sobre-las-economias-regionales/%7B249D0126-CCoA-E289-0559-5FF8CA63A88A%7D.pdf>
- Borker, G. (2018). *Safety First: Perceived Risk of Street Harassment and Educational Choices of Women*. Work Document.
- Castañeda, R.. (2 de diciembre, 2021). *Geografía de la movilidad social: desigualdad de acceso a la educación en México [Geography of social mobility: unequal access to education in Mexico.]*. Nexos. Available at: <https://economia.nexos.com.mx/geografia-de-la-movilidad-social-desigualdad-de-acceso-a-la-educacion-en-mexico/>
- Causa en Común. (2021). *Elementos militares en la esfera civil. En Observatorio de la Guardia Nacional y la Militarización en México [Military Elements on the Civilian Sphere. National Guard Observatory and Mexican Militarization]*. Available at: 200917_Elementos-militares-en-la-esfera-civil_V1-1-2.xlsx (live.com)
- Causa en Común. (2022a). *Análisis de Incidencia Delictiva Enero y Febrero 2022 [Crime Incidence Analysis January and February 2022]*. Available at: [Presentación de PowerPoint \(causaencomun.org.mx\)](Presentación de PowerPoint (causaencomun.org.mx))
- Causa en Común. (2022b). *Despliegue de Fuerzas Armadas*. En Observatorio de la Guardia Nacional y la Militarización en México [Deployment of Armed Forces. National Guard Observatory and Mexican Militarization]. Available at: <http://causaencomun.org.mx/observatorioguardiayfuerzasarmadas/#1605037000491-4fc55d73-20f9>
- Centro de Estudios Espinosa Yglesias (CEEY). (2017). *Encuesta ESRU de movilidad social (ESRU-EMOVI, 2017) [ESRU Social Mobility Survey (ESRU-EMOVI, 2017)]*. CEEY. Available at: [ESRU – EMOVI \(ceey.org.mx\)](ESRU – EMOVI (ceey.org.mx))
- Cero Desabasto. (2022). *Radiografía del desabasto. Informe de Transparencia en Salud 2017–202 [Scarcity Radiography. Health Transparency Report 2017-202]*. Available at: <https://cdn-yeeko.s3.amazonaws.com/assets/Radiografia+desabasto+2017-2021.pdf>
- Comisión Nacional Bancaria y de Valores (CNBV). (s.f.). *Portafolio de operación [Operational portfolio]*. Available at: [PORTAFOLIO DE INFORMACIÓN \(cnbv.gob.mx\)](PORTAFOLIO DE INFORMACIÓN (cnbv.gob.mx))
- Comisión Nacional de Áreas Naturales Protegidas (CONANP). (2021). *Áreas Naturales Protegidas [Natural Protected Areas]*. Gobierno de México. Available at: [Comisión Nacional de Áreas Naturales Protegidas | Gobierno | gob.mx \(www.gob.mx\)](Comisión Nacional de Áreas Naturales Protegidas | Gobierno | gob.mx (www.gob.mx))
- Comisión Nacional del Agua (Conagua). (2021). *Calidad del agua en México [Water quality in Mexico]*. Gobierno de México. Available at: [Calidad del agua en México | Comisión Nacional del Agua | Gobierno | gob.mx \(www.gob.mx\)](Calidad del agua en México | Comisión Nacional del Agua | Gobierno | gob.mx (www.gob.mx))
- Comisión Nacional para el Conocimiento y Uso de la Biodiversidad (Conabio). (s.f.). *Selvas húmedas [Rainforests]*. Available at: <https://www.biodiversidad.gob.mx/ecosistemas/selvaHumeda>
- Consejería Jurídica del Poder Ejecutivo del Gobierno del Estado de Guerrero. (2020). *Decreto Número 160 del Presupuesto de Egresos del Estado de Guerrero para el Ejercicio Fiscal 2020 [Decree Number 160 of the Budget of Expenditure of the State of Guerrero for Fiscal Year 2020]*. Available at: <https://congresogro.gob.mx/62/sesiones/decretos/2020-12-11-644-1-PER-ORD.pdf>
- Consejería Jurídica del Poder Ejecutivo del Gobierno del Estado de Guerrero. (2022). *Decree Number 160 of the Expenditure Budget of the State of Guerrero for fiscal Year 2022*. Available at: <https://www.guerrero.gob.mx/wp-content/uploads/2022/03/D160PEGEF2022.pdf>
- Consejo Nacional de Ciencia y Tecnología (Conacyt). (s.f.). *Padrón de Beneficiarios [Beneficiary Roll]*. Available at: <https://conacyt.mx/sistema-nacional-de-investigadores/padron-de-beneficiarios/>

- Consejo Nacional de Evaluación de la Política de Desarrollo Social (Coneval). (s.f.a). *Medición de la Pobreza*. Coneval [Poverty Measurement. Coneval]. Available at: https://www.coneval.org.mx/Medicion/MP/Paginas/Pobreza_2020.aspx
- Consejo Nacional de Evaluación de la Política de Desarrollo Social (Coneval). (s.f.b). *Sistema de Información de Derechos Sociales [Social Rights Information System]*. Coneval. Available at: <https://www.coneval.org.mx/Medicion/Paginas/Sistema-de-informacion-de-derechos-sociales.aspx>
- Consejo Nacional de Evaluación de la Política de Desarrollo Social (Coneval). (s.f.c). *Pobreza Multidimensional: Indicadores de Carencia Social [Multidimensional Poverty: Social Deprivation Indicators]*. Coneval. File Format: PDF/Adobe Acrobat
- Consejo Nacional de Evaluación de La Política de Desarrollo Social (Coneval). (2022). *El Coneval presenta información referente a la pobreza laboral al cuarto trimestre de 2021 [Coneval presents information on in-work poverty as of the fourth quarter of 2021]*. Coneval. Available at: [ITLP-IS pobreza laboral \(coneval.org.mx\)](https://www.coneval.org.mx/ITLP-IS/pobreza-laboral)
- De la Torre, R. (2020). *Reporte de movilidad social educativa 2020 [Educational Social Mobility Report 2020]*. Centro de Estudios Espinosa Yglesias (CEEY). Available at: [chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://cefey.org.mx/wp-content/uploads/2020/10/Reporte-de-movilidad-social-educativa-2020.pdf](https://cefey.org.mx/wp-content/uploads/2020/10/Reporte-de-movilidad-social-educativa-2020.pdf)
- Elliot, D., Schwartz, M., Scott, G., Haymes, S., Heimiller, D. & George, D. (2003). *Wind Energy Resource Atlas of Oaxaca*. Available at: [Wind Energy Resource Atlas of Oaxaca \(nrel.gov\)](https://www.nrel.gov/wind/atlas/oaxaca/)
- Feix, N. (2020). *México y la crisis de la COVID-19 en el mundo del trabajo: respuestas y desafíos. Panorama laboral en tiempos de la COVID-19 [Mexico and the COVID-19 crisis in the work world: responses and challenges. Labor outlook in COVID-19 times]*. [Nota Técnica País]. Organización Internacional del Trabajo (OIT). Available at: [wcms_757364.pdf \(ilo.org\)](https://www.ilo.org/wcmsp5/groups/public/-/dms/representationsandpublications/-/wcms_757364.pdf)
- Fundación Konrad Adenauer, Instituto Nacional Electoral (INE), Polilat, Confederación USEM and Centro de Estudios Políticos y Sociales (CEPOS). (2020). *Índice de Desarrollo Democrático (IDD-MEX) [Democratic Development Index (IDD-MEX)]*. Available at: <https://www.ieepco.org.mx/archivos/documentos/2021/IDDMEX2020.pdf>
- Fundación Konrad Adenauer, Instituto Nacional Electoral (INE), Polilat, Confederación USEM and Centro de Estudios Políticos y Sociales (CEPOS). (2022). *Índice de Desarrollo Democrático (IDD-MEX) [Democratic Development Index (IDD-MEX)]*. Available at: <https://idd-mex.org/>
- Gobierno de México. (s.f.a). *Padrón de Becas [Scholarship Roll]*. Available at: <https://datos.gob.mx/busca/dataset?tags=-becas>
- Gobierno de México (s.f.b). *Padrón Único de Beneficiarios (PUB). Consolidado de los programas sociales [Consolidated social programs]*. Available at: <https://pub.bienestar.gob.mx/pub/agregado>
- Gobierno de la Ciudad de México. (s.f.). *Proyecto Paquete Económico [Draft Economic Package]*. Available at: <https://www.finanzas.cdmx.gob.mx/servicios/servicio/proyecto-paquete-economico>
- Gobierno del Estado de Campeche. (s.f.). *Fracción XXI.A. - Presupuesto Asignado Anual [Section XXI.A. - Annual Allocated Budget]*. Available at: <http://www.transparencia.finanzas.campeche.gob.mx/70-XXI/70-XXI-A>
- Gobierno del Estado de México. (s.f.). *Presupuesto de Egresos del Estado de México. [Expenditure Budget of Mexico State.]* Available at: https://transparenciainformacion.gob.mx/presupuesto_egresos2
- Gobierno del Estado de Oaxaca. (2019). *Decreto de Presupuesto de Egresos del Estado de Oaxaca para el ejercicio fiscal 2019 [Decree of the Budget of Expenditures of Oaxaca State for 2019 fiscal year]*. Available at: <https://www.finanzasooax.gob.mx/Presupuesto-de-Egresos-del-Estado-de-Oaxaca-2019>

[aca.gob.mx/pdf/asistencia/leyes_fiscales/2019/pdf/DECRETO_PRESUPUESTO_EGRESOS_2019\(2\).pdf](http://aca.gob.mx/pdf/asistencia/leyes_fiscales/2019/pdf/DECRETO_PRESUPUESTO_EGRESOS_2019(2).pdf)

Gobierno del Estado de Oaxaca. (2020). *Decreto de Presupuestos de Egresos del Estado de Oaxaca para el ejercicio fiscal 2020* [Decree of the Budget of Expenditures of Oaxaca State fiscal 2020 year]. Available at: <https://www.finanzasooaxaca.gob.mx>

Gobierno del Estado de Oaxaca. (2021). *Decreto de Presupuestos de Egresos del Estado de Oaxaca para el ejercicio fiscal 2021* [Decree of the Budget of Expenditures of Oaxaca State fiscal 2021 year]. Available at: https://www.finanzasooaxaca.gob.mx/pdf/presentacion/PE2021/Iniciativa_de_Ley_de_Ingresos_del_Estado_de_Oaxaca_y_Ley_General_de_Ingresos_Municipales_del_Estado_de_Oaxaca_para_el_Ejercicio_Fiscal_2021.pdf

Gobierno del Estado de Oaxaca. (2022). *Decreto de Presupuestos de Egresos del Estado de Oaxaca para el ejercicio fiscal 2022* [Decree of the Budget of Expenditures of Oaxaca State fiscal 2022 year]. Available at: https://www.finanzasooaxaca.gob.mx/pdf/presentacion/PE2022/Iniciativa_de_la_Ley_de_Ingresos_del_Estado_de_Oaxaca_para_el_Ejercicio_Fiscal_2022_y_Ley_General_de_Ingresos_Municipales_del_Estado_de_Oaxaca_para_el_Ejercicio_Fiscal_2022.pdf

Gobierno del Estado de Puebla. (s.f.) *Presupuesto de Egresos* [Expenditure Budget]. Available at: <http://lgcg.puebla.gob.mx/marco-programatico-interno/category/egresos-copy>

Gobierno del Estado de Quintana Roo. (2019). *Presupuesto de Egresos del Gobierno del Estado de Quintana Roo, para el Ejercicio Fiscal 2019* [Quintana Roo State Expenditure Budget for Fiscal Year 2019]. Available at: http://documentos.congresoqroo.gob.mx/documentos/presupuestos/2019/PTO_EGRESOS_EJERCICIO_2019.pdf

Gobierno del Estado de Quintana Roo. (2020). *Presupuesto de Egresos del Gobierno del Estado de Quintana Roo, para el Ejercicio Fiscal 2020* [Quintana Roo State Expenditure Bud-

get for Fiscal Year 2020]. Disponible en: <http://documentos.congresoqroo.gob.mx/decretos/EXVI-2019-12-13-16.pdf>

Gobierno del Estado de Quintana Roo. (2021). *Presupuesto de Egresos del Gobierno del Estado de Quintana Roo, para el Ejercicio Fiscal 2021* [Quintana Roo State Expenditure Budget for Fiscal Year 2021]. Available at: <http://documentos.congresoqroo.gob.mx/leyes/L229-XVI-20201219-l1620201219078-presupueesto.pdf>

Gobierno del Estado de Tabasco. (2022). *Presupuesto de Egresos 2022* [2022 Expenditure Budget.]. Available at: <https://tabasco.gob.mx/PeriodicoOficial/descargar/2657>

Gobierno del Estado de Tabasco. (s.f.). *Presupuesto de Egresos* [Expenditure Budget]. Available at: <https://tabasco.gob.mx/presupuesto-de-egresos-del-estado-de-tabasco>

Gobierno del Estado de Tlaxcala. (2019). *Presupuesto de Egresos del Estado de Tlaxcala para el Ejercicio Fiscal 2019* [Tlaxcala State Expenditure Budget for the Fiscal Year 2019]. Available at: <https://sfp.tlaxcala.gob.mx/pdf/normateca/Presupuesto%20de%20Egresos%20del%20Estado%20de%20Tlaxcala,%20para%20el%20Ejercicio%20Fiscal%202019.pdf>

Gobierno del Estado de Tlaxcala. (2020). *Presupuesto de Egresos del Estado de Tlaxcala para el Ejercicio Fiscal 2020* [Tlaxcala State Expenditure Budget for the Fiscal Year 2020]. Available at: https://congresodetlaxcala.gob.mx/wp-content/uploads/2020/01/D.-190.-PRESUPUESTO-DE-EGRESOS-DEL-ESTADO-DE-TLAXCALA-PARA-EL-EJERCICIO-FISCAL-2020.-161219_compressed.pdf

Gobierno del Estado de Tlaxcala. (2021). *Presupuesto de Egresos del Estado de Tlaxcala para el Ejercicio Fiscal 2021* [Tlaxcala State Expenditure Budget for the Fiscal Year 2021]. Available at: <https://congresodetlaxcala.gob.mx/wp-content/uploads/2021/05/D.%20297.-%20PRESUOUESTO%202021.pdf>

- Gobierno del Estado de Tlaxcala. (2022). *Presupuesto de Egresos del Estado de Tlaxcala para el Ejercicio Fiscal 2022* [Tlaxcala State Expenditure Budget for the Fiscal Year 2022]. Available at: <https://www.finanzastlax.gob.mx>
- Gobierno del Estado de Veracruz. (2019). *Presupuesto de Egresos 2019* [2019 Expenditure Budget]. Available at: <http://www.veracruz.gob.mx/finanzas/transparencia/transparencia-proactiva/programacion-y-presupuesto/proyecto-de-presupuesto-de-egresos-2019/>
- Gobierno del Estado de Veracruz. (2020). *Presupuesto de Egresos 2020* [2020 Expenditure Budget]. Available at: <http://www.veracruz.gob.mx/finanzas/wp-content/uploads/sites/2/2020/01/Gac2019-520-Lunes-30-TOMO-II-Ext.pdf>
- Gobierno del Estado de Veracruz. (2021). *Presupuesto de Egresos 2021* [2021 Expenditure Budget]. Available at: <http://www.veracruz.gob.mx/finanzas/wp-content/uploads/sites/2/2021/07/PRESUPUESTO-DE-EGRESOS-DEL-GOBIERNO-DEL-ESTADO-DE-VERACRUZ-DE-IGNACIO-DE-LALLAVE-PARA-EL-EJERCICIO-FISCAL-2021.pdf>
- Gobierno del Estado de Veracruz. (2022). *Presupuesto de Egresos 2022* [2022 Expenditure Budget]. Available at: <https://www.legisver.gob.mx/leyes/LeyesPDF/DPRESUPUESTOEGRESOS2022.pdf>
- Gobierno del Estado de Yucatán. (2019). *Presupuesto de Egresos del Estado de Yucatán para el Ejercicio Fiscal 2019* [Yucatan State Expenditure Budget for the Fiscal Year 2019]. Available at: https://www.yucatan.gob.mx/docs/transparencia/paquete_fiscal/2019/TOMO_I.pdf
- Gobierno del Estado de Yucatán. (2020). *Presupuesto de Egresos del Estado de Yucatán para el Ejercicio Fiscal 2020* [Yucatan State Expenditure Budget for the Fiscal Year 2020]. Available at: https://www.yucatan.gob.mx/docs/diario_oficial/diarios/2019/2019-12-31_2.pdf
- Gobierno del Estado de Yucatán. (2021). *Presupuesto de Egresos del Estado de Yucatán para el Ejercicio Fiscal 2021* [Yucatan State Expenditure Budget for the Fiscal Year 2021]. Available at: https://www.yucatan.gob.mx/docs/diario_oficial/diarios/2020/2020-12-30_2.pdf
- Grupo Reforma. (2022). *Renuncian en Semarnat entre presiones por Tren Maya* [Semarnat people resigns amid pressure for the Mayan Train]. Grupo Reforma. Available at: https://www.reforma.com/aplicacioneslibre/preacceso/articulo/default.aspx?_rval=1&urlredirect=https://www.reforma.com/renuncian-en-semarnat-entre-presiones-por-tren-maya/ar2402534?referer=-7d616165662f3a3a6262623b727a7a7279703b767a783a-
- Impunidad Cero. (2021). *Indicadores del Índice Estatal de Desempeño de Procuradurías y Fiscalías 2021 (IEDF)* [Indicators of the State Performance Index for Public Prosecutor's Offices and Public Defender's Offices 2021 (IEDF)]. Available at: <http://www.impunidadcero.org.mx>
- Instituto Mexicano para la Competitividad (IMCO). (2021). *X. Innovación y Sofisticación en los Sectores Económicos* [Innovation and Sophistication in Economic Sectors]. IMCO. Available at: https://imco.org.mx/pub_indices/2021/04/page/2/
- Instituto Mexicano para la Competitividad (IMCO). (2022). *Índice de competitividad estatal 2022* [State Competitiveness Index 2022]. IMCO. Available at: <https://www.imco.org.mx/ice2022>
- Instituto Nacional de Ecología y Cambio Climático (INECC). (2020). *Informe Nacional de la Calidad del Aire 2019*. Coordinación General de Contaminación y Salud Ambiental, Dirección de Investigación de Calidad del Aire y Contaminantes Climáticos [National Air Quality Report 2019. General Coordination of Pollution and Environmental Health, Directorate of Air Quality and Climate Pollutants Research.]. Ciudad de México. Available at: <https://sinaica.inecc.gob.mx/archivo/informes/Informe2019.pdf>

- Instituto Nacional de Estadística y Geografía (INEGI). (s.f.). *Agua potable y drenaje [Drinking water and drainage]*. INEGI. Available at: <https://cuentame.inegi.org.mx/territorio/agua/dispon.aspx>
- Instituto Nacional de Estadística y Geografía (INEGI). (s.f.a). *Cuéntame de México [Tell me About Mexico]*. INEGI. Available at: <https://cuentame.inegi.org.mx/default.aspx>
- Instituto Nacional de Estadística y Geografía (INEGI). (s.f.b). *Economía global [Global Economy]*. INEGI. Available at: [Economía global \(inegi.org.mx\)](https://inegi.org.mx)
- Instituto Nacional de Estadística y Geografía (INEGI). (s.f.c). *Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH) [National Household Income and Expenditure Survey (ENIGH)]*. 2020. Available at: <https://www.inegi.org.mx/programas/enigh/nc/2020/>
- Instituto Nacional de Estadística y Geografía (INEGI). (s.f.d). *Migración [Migration]*. Tabulados. Available at: <https://www.inegi.org.mx/temas/migracion/#Tabulados>
- Instituto Nacional de Estadística y Geografía (INEGI). (s.f.e). *La Covid 19 y su impacto en las mujeres en México [Covid 19 and its impact on women in Mexico]*. INEGI. Available at: [La COVID-19 y su impacto en las mujeres en México \(inegi.org.mx\)](https://inegi.org.mx)
- Instituto Nacional de Estadística y Geografía (INEGI). (2017). *Encuesta Nacional sobre Discriminación (ENADIS) 2017 [National Discrimination Survey (ENADIS) 2017]*. INEGI. Available at: <https://www.inegi.org.mx/programas/enadis/2017/>
- Instituto Nacional de Estadística y Geografía (INEGI). (2020a). *Características de los hogares [Household characteristics]*. INEGI. Available at: [Características de los hogares \(inegi.org.mx\)](https://inegi.org.mx)
- Instituto Nacional de Estadística y Geografía (INEGI). (2020b). *Censo de Población y Vivienda. Presentación de Resultados [Population and Housing Census. Results]*. INEGI. Available at: [Presentación de resultados. Estados Unidos Mexicanos \(inegi.org.mx\)](https://inegi.org.mx)
- Instituto Nacional de Estadística y Geografía (INEGI). (2020c). *Encuesta Nacional sobre Disponibilidad y Uso de Tecnologías de la Información en los Hogares México (ENDUTIH) [Use and Availability of Information Technologies in the Household National Survey (ENDUTIH)]*. INEGI. Available at: <https://www.inegi.org.mx/programas/dutih/2020/>
- Instituto Nacional de Estadística y Geografía (INEGI). (2020d). *Población total por entidad federativa y grupo quinquenal de edad según sexo, serie de años censales de 1990 a 2020 [Total population by state and five-year age group by sex, series of census years from 1990 to 2020]*. INEGI. Available at: https://www.inegi.org.mx/app/tabulados/interactivos/?px-q=Poblacion_Poblacion_01_e60cd8cf-927f-4b94-823e-972457a12d4b
- Instituto Nacional de Estadística y Geografía (INEGI). (2021a). *Anuario estadístico y geográfico por entidad federativa 2020. Versión actualizada [Statistical and geographic yearbook by state 2020. Updated version]*. INEGI. Available at: [Publicación \(inegi.org.mx\)](https://inegi.org.mx)
- Instituto Nacional de Estadística y Geografía (INEGI). (2021b). *Censo Nacional de Derechos Humanos Federal y Estatal 2021 [National Human Rights Census Federal and State 2021]*. INEGI. Available at: [Censo Nacional de Derechos Humanos Estatal 2021. Resultados \(inegi.org.mx\)](https://inegi.org.mx)
- Instituto Nacional de Estadística y Geografía (INEGI). (2021c). *Censo de Población y Vivienda 2020 [Population and Housing Census 2020]*. INEGI. Available at: <https://www.inegi.org.mx/sistemas/Olap/Proyectos/bd/censos/cpv2020/Viviendas.asp>
- Instituto Nacional de Estadística y Geografía (INEGI). (2021d). *Encuesta Nacional de Victimización y Percepción sobre Seguridad Pública (ENVIPE) 2021 [National Survey of Victimization and Perception of Public Safety (ENVIPE) 2021]*. Available at: https://www.inegi.org.mx/contenidos/programas/envipe/2021/doc/envipe2021_presentacion_nacional.pdf

- Instituto Nacional de Estadística y Geografía (INEGI). (2022a). *Encuesta Nacional de Empresas Constructoras (ENEC) [Construction Companies National Survey(ENEC)]. Serie 2013*. INEGI. Available at: [Encuesta Nacional de Empresas Constructoras \(ENEC\). Serie 2013 \(inegi.org.mx\)](https://inegi.org.mx)
- Instituto Nacional de Estadística y Geografía (INEGI). (2022b). *Encuesta Nacional de Ocupación y Empleo (ENOE), población de 15 años y más de edad [National Survey on Occupation and Employment (ENOE), 15 year-old and older population]*. INEGI. Available at: [Encuesta Nacional de Ocupación y Empleo \(ENOE\), población de 15 años y más de edad \(inegi.org.mx\)](https://inegi.org.mx)
- Instituto Nacional de Estadística y Geografía (INEGI). (2022c). *Finanzas públicas estatales y municipales [State and Municipal Public Finances]*. INEGI. Available at: [Finanzas públicas estatales y municipales \(inegi.org.mx\)](https://inegi.org.mx)
- Instituto Nacional de Estadística y Geografía (INEGI) (2022d). *Indicador Trimestral de la Actividad Económica Estatal [State Economic Activity Quarterly Indicator]*. INEGI. Available at: <https://www.inegi.org.mx/temas/itaee/#Tabulados>
- Instituto Nacional de Estadística y Geografía (INEGI). (2022e). *Oferta y Demanda Global Trimestral [Quarterly Global Supply and Demand]*. INEGI. Available at: [Oferta y Demanda Global Trimestral \(inegi.org.mx\)](https://inegi.org.mx)
- Instituto Nacional de las Mujeres (INMujeres). (2006). *Las mujeres indígenas de México, su contexto socioeconómico, demográfico y de salud [Mexico's Indigenous Women, their Socioeconomic, Demographic and Health Context]*. INMujeres. Available at: http://cedoc.inmujeres.gob.mx/documentos_download/100833.pdf
- Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM). (s.f.). *Leyes Ambientales por Estados [Environmental Laws by State]*. Available at: [Http://Legismex.Mty.Itesm.Mx/Estados/Estados.Htm](http://Legismex.Mty.Itesm.Mx/Estados/Estados.Htm)
- Jiménez, G. (13 de enero de 2022). *Álvarez-Buylla y el control de los centros de investigación [Álvarez-Buylla and the control of research centers]*. Gato pardo. Available at: <https://gato-pardo.com/noticias-actuales/elena-alvarez-buylla-conacyt-ciencia-cpi-censura-cide/>
- Lantia Intelligence. (2020). *Mapa Criminal Mexico 2019-2020 [Mexican Criminal Map 2019-2020]*. Available at: [Microsoft Word - Mapa criminal de México, 2019-2020, versión ejecutiva, Lantia Intelligence.docx](https://lantiaintelligence.com)
- Mazzocco, c. & Melendez, Kristobal M. (s.f). *Niveles de pobreza 2016. Centro de Investigación Económica y Presupuestaria, A. C [Poverty levels 2016. Center for Economic and Budgetary Research, A. C.]*. Available at: <https://ciep.mx/niveles-de-pobreza-2016/>
- México ¿cómo vamos? (2021). *¿Como vamos en progreso social? Avances y retroceso por región [How are we doing in terms of social progress and setbacks by region]*. Índice de Progreso Social, México 2015-2020. Available at: <https://mexicocomovamos.mx/indice-de-progreso-social-2015-2020/>
- México ¿cómo vamos? (s.f). *ÍNDICE DE PROGRESO SOCIAL 2015-2020 [SOCIAL PROGRESS INDEX 2015-2020]. ¿Qué es?*. Available at: <https://mexicocomovamos.mx/indice-de-progreso-social-2015-2020/>
- Observatorio de la Guardia Nacional y la Militarización en México. (2022). *Informe 2021 del Observatorio de la Guardia Nacional y la Militarización en México [2021 Report of the National Guard Observatory and Militarization in Mexico]*. Causa en Comun. Available at: http://causaencomun.org.mx/observatorioguardiafyfuerzasarmadas/wp-content/uploads/2022/02/2022.01.25_InformeOGN_2021.pdf
- Ocampo, O. (17 de diciembre, 2021). *Pemex ante el 2022: Nuevo Plan de Negocios y Recuperación Económica*. IMCO. Disponible en: [Pemex ante el 2022: nuevo Plan de Negocios y recuperación económica \(imco.org.mx\)](https://imco.org.mx)

- Oficina del Alto Comisionado para los Derechos Humanos (OACDH). (2004). *El Derecho a la alimentación adecuada [The Right to Adequate Food]*. Folleto informativo No. 34. Available at: <https://www.ohchr.org/sites/default/files/Documents/Publications/FactSheet34sp.pdf>
- Olmos, R. (09 de septiembre, 2020). *Leonardo Cornejo, de instrumentar para Odebrecht contratos de corrupción a dirigir para AMLO la Refinería del Sexenio. La Refinería del Sexenio [Leonardo Cornejo, from instrumenting Corruption-tainted contracts for Odebrecht to managing the Refinery of the Six-year term for AMLO]*. México contra la Corrupción. Available at: [Leonardo Cornejo, de instrumentar para Odebrecht contratos manchados de corrupción a dirigir para AMLO la refinería del sexenio](#) Página 1 de 0 (contralacorrupcion.mx)
- Organización para la Cooperación y el Desarrollo Económicos (OCDE). (s.f.). *Base de datos global de estadísticas tributarias [Global tax statistics database]*. Available at: <https://www.oecd.org/tax/tax-policy/base-de-datos-global-de-estadisticas-tributarias.htm>
- Orozco, M., Espinosa, R., Fonseca, C. & Vélez, R. (2019). *Informe de Movilidad Social en México 2019 [Mexico Social Mobility Report 2019]*. Centro de Estudios Espinosa Yglesias (CEEY). Available at: <https://ceey.org.mx/informe-de-movilidad-social-mexico-2019/>
- Periódico Oficial del Gobierno del Estado de Hidalgo. (s.f.). *Presupuesto de Egresos [Expenditure Budget]*. Available at: https://periodico.hidalgo.gob.mx/?page_id=65688
- Periódico Oficial del Gobierno del Gobierno del Estado libre y soberano de Morelos. (2019). *Decreto Número setenta y seis – Por el que se aprueba el presupuesto de egresos del Gobierno del Estado de Morelos para el ejercicio fiscal del primero de enero al 31 de diciembre de 2019 [Decree Number Seventy six – Approving the expenditure budget of the Government of Morelos State the fiscal year from January 1 to December 31, 2019.]*. Available at: https://www.periodicooficial.morelos.gob.mx/periodicos/2019/5687_2A.pdf
- Periódico Oficial del Gobierno del Gobierno del Estado libre y soberano de Morelos. (2021). *Presupuesto de egresos del Gobierno del Estado de Morelos para el ejercicio fiscal del primero de enero al 31 de diciembre de 2021 [Expenditure budget of the Government of Morelos State for the fiscal year from January 1 to December 31, 2021.]*. Available at: https://www.hacienda.morelos.gob.mx/images/docu_planeacion/info_presupuestal/presupuesto_ciudadano/Presupuesto-Ciudadano_2021.pdf
- Programa de las Naciones Unidas para el Desarrollo (PNUD). (2020). *La próxima frontera. El desarrollo humano y el Antropoceno. Informe sobre Desarrollo Humano 2020 [The next frontier. Human development and the Anthropocene. Human Development Report 2020]*. PNUD. Available at: [hdr_2020_overview_spanish.pdf](http://hdr.2020.un.org/overview_spanish.pdf) (undp.org)
- Ramírez, L. & Torres, B. (31 de marzo, 2022). *Falso que Tren Maya tenga todos los permisos de impacto ambiental, faltan del Tramo 5 [False that the Maya Train has all the environmental impact permits, only Section 5 is missing.]*. Animal Político. Available at: [Falso que Tren Maya tenga todos los permisos de impacto ambiental \(animalpolitico.com\)](http://animalpolitico.com)
- Rangel, E. & I. Llamosas. (2019). *Efectos del primer empleo sobre las perspectivas laborales de los trabajadores en las regiones de México: un enfoque de movilidad social [Effects of first employment on the job prospects of workers in Mexico's regions: a social mobility approach.]*. Documento de trabajo CEEY, Centro de Estudios Espinosa Yglesias. Available at: <https://ceey.org.mx/efectos-del-primero-empleo-sobre-las-perspectivas-laborales-de-los-trabajadores-en-las-regiones-de-mexico-un-enfoque-de-movilidad-social/>
- Secretaría de Educación Pública (SEP). (2019). *Lienamientos para la Formulación de Indicadores Educativos [Guidelines for the Formulation of Educational Indicators]*. Available at: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.planeacion.sep.gob.mx/Doc/estadistica_e_indicadores/lineamientos_formulacion_de_indicadores.pdf

- Secretaría de Educación Pública (SEP). (s.f). *Dirección General de Planeación, Programación y Estadística Educativa. Estadísticas e indicadores educativos por Entidad Federativa [General Directorate of Educational Planning, Programming and Statistics. Educational Statistics and Indicators by Federal Entity]*. Available at: <https://www.planeacion.sep.gob.mx/>
- Secretaría de Gobernación (Segob). (2019). *PLAN Nacional de Desarrollo 2019-2024 [National Development Plan 2019-2024]*. Diario Oficial de la Federación (DOF). Available at: https://www.dof.gob.mx/nota_detalle.php?codigo=5565599&fecha=12/07/2019#gsc.tab=0
- Secretaría de Gobernación (Segob). (2020). *Programa Sectorial de Medio Ambiente y Recursos Naturales 2020-2024 [Environment and Natural Resources Sector Program 2020-2024]*. Diario Oficial de la Federación (DOF). Available at: https://www.dof.gob.mx/nota_detalle.php?codigo=5596232&fecha=07/07/2020#gsc.tab=0
- Secretaría de Hacienda del Gobierno del Estado de Chiapas. (2019). *Presupuesto de Egresos para el Estado de Chiapas para el Ejercicio Fiscal 2019 [Chiapas State Expenditure Budget Fiscal Year 2019]*. Available at: <https://www.hacienda-chiapas.gob.mx/marco-juridico/Estatal/informacion/Decretos/decreto19.pdf>
- Secretaría de Hacienda del Gobierno del Estado de Chiapas. (2020). *Presupuesto de Egresos para el Estado de Chiapas para el Ejercicio Fiscal 2020 [Chiapas State Expenditure Budget Fiscal Year 2020]*. Available at: <https://www.hacienda-chiapas.gob.mx/marco-juridico/Estatal/informacion/Decretos/decreto20.pdf>
- Secretaría de Hacienda del Gobierno del Estado de Chiapas. (2021). *Presupuesto de Egresos para el Estado de Chiapas para el Ejercicio Fiscal 2021 [Chiapas State Expenditure Budget Fiscal Year 2021]*. Available at: <https://www.hacienda-chiapas.gob.mx/marco-juridico/Estatal/informacion/Decretos/decreto21.pdf>
- Secretaría de Hacienda del Gobierno del Estado de Chiapas. (2022). *Presupuesto de Egresos para el Estado de Chiapas para el Ejercicio Fiscal 2022 [Chiapas State Expenditure Budget Fiscal Year 2022]*. Available at: <http://www.hacienda-chiapas.gob.mx/marco-juridico/Estatal/informacion/Decretos/decreto22.PDF>
- Secretaría de Hacienda y Crédito Público (SHCP). (2022). *Estadísticas Oportunas de Finanzas Públicas [Pertinent Public Finance Statistics]*. Available at: <http://presto.hacienda.gob.mx/EstoporLayout/estadisticas.jsp>
- Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT). (2002). *Suelos [Soils]*. Gobierno de México. Available at: https://apps1.semarnat.gob.mx:8443/dgeia/indicadores19/conjuntob/indicador/03_suelos/3_3.html
- Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública (SESNSP). (2022a). *Incidencia delictiva Nacional [National Crime Incidence]*. Gobierno de México. Available at: [Incidencia delictiva | Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública | Gobierno | gob.mx \(www.gob.mx\)](http://www.gob.mx)
- Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública (SESNSP). (2022b). *Mapa Acumulado Enero-Marzo 2022*. En *Incidencia delictiva Nacional [Cumulative Map January-March 2022 in National Crime Incidence]*. Gobierno de México. Available at: [Mapa acumulado enero-marzo 2022.pdf - Google Drive](http://www.gob.mx)
- Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública (SESNSP). (2022c). *Víctimas y unidades robadas, nueva metodología [Victims and stolen units, new methodology]*. Gobierno de México. Available at: [Víctimas y unidades robadas, nueva metodología. | Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública | Gobierno | gob.mx \(www.gob.mx\)](http://www.gob.mx)
- Shamah, L. T., Romero-M. M., Barrientos, G.T., Cuevas, N. L., Bautista, A. S., Colchero M., Gaona, P. E., Lazcano, P.E., Martínez,

- B. J., Alpuche, A.C., Rivera, D. J. *Encuesta Nacional de Salud y Nutrición 2020 sobre Covid-19* [National Health and Nutrition Survey 2020 on Covid-19]. *Resultados nacionales* (ENSANUT) [National Results]. 2020. Cuernavaca, México: Instituto Nacional de Salud Pública, 2021. Available at: <https://ensanut.insp.mx/encuestas/ensanutcontinua2020/doctos/informes/ensanutCovid19ResultadosNacionales.pdf>
- Signos Vitales. (2020a). *Federalismo fiscal. La lucha por el poder presupuestal* [Fiscal Federalism. The Fight for Budgetary Power]. Available at: [Federalismo-fiscal.pdf](https://signosvitalesmexico.org.mx/reportes/federalismo-fiscal.pdf) (signosvitalesmexico.org.mx)
- Signos Vitales. (2020b). *Reporte o: Síntomas de México* [Symptoms of Mexico]. Available at: <https://signosvitalesmexico.org.mx/reportes/reporte-o/>
- Signos Vitales. (2021a). *Anatomía del Turismo en México* [Anatomy of Tourism in Mexico]. Available at: <https://signosvitalesmexico.org.mx/rb/wp-content/uploads/2021/07/A6-1-TURISMO.pdf>
- Signos Vitales. (2021b). *BALANCE NEGATIVO: LOS DERECHOS HUMANOS EN MÉXICO* [NEGATIVE BALANCE: HUMAN RIGHTS IN MEXICO]. Signos Vitales Society. Available at: <https://signosvitalesmexico.org.mx/rb/wp-content/uploads/2021/12/Reporte-4-2021-2.pdf>
- Signos Vitales. (2021c). *Ciencia y Tecnología: Un sector limitado* [Science and Technology: A Limited Sector]. Available at: <https://signosvitalesmexico.org.mx/rb/wp-content/uploads/2021/10/2-Ciencia-y-tecnologia.pdf>
- Signos Vitales. (2021d). *Ser mujer en México Abuso. Violencia. Desigualdad. Femicidio. Discriminación.* [Being a Woman in Mexico Abuse. Violence. Inequality. Femicide. Discrimination]. Signos Vitales Society. Available at: <https://signosvitalesmexico.org.mx/rb/wp-content/uploads/2021/05/Reporte-R2-2021-FINAL.pdf>
- Signos Vitales. (2022). *Estancamiento y regresión: México en el mundo* [Stagnation And Regression: Mexico in the World]. Signos Vitales Society. Available at: <https://signosvitalesmexico.org.mx/reportes/estancamiento-y-regresion-mexico-en-el-mundo/>
- Stillman, A. (22 de junio, 2022). *Refinería Dos Bocas podría costar hasta US\$18.000 millones* [Dos Bocas refinery could cost up to US\$18 billion]. Bloomberg. Available at: [Refinería Dos Bocas podría costar hasta US\\$18.000 millones](https://www.bloomberglinea.com) (bloomberglinea.com)
- The Economist. (2022). *A new low for global democracy*. Available at: [A new low for global democracy](https://www.economist.com) | The Economist
- Torres, I. (16 de mayo de 2022). *Director electo del Instituto de Ecología no cumple con el perfil* [Director-elect of the Institute of Ecology does not meet the profile]. Crónica. Available at: <https://www.cronica.com.mx/academia/director-electo-inecol-cumple-perfil.html>
- Wilson Center. (2012). *Wind Energy Potential in Mexico's Northern Border States*. Woodrow Wilson International Center for Scholars. Mexico Institute. Available at: [Border_Wind_Energy_Wood.pdf](https://www.wilsoncenter.org/publication/wind-energy-potential-in-mexico-s-northern-border-states) (wilsoncenter.org)
- World Justice Project. (2022). *Índice de Estado de derecho en México 2021-2022* [Mexican Rule of Law Index 2021-2022]. Available at: [part-1-cover-to-profiles-9mayo.indd](https://www.worldjusticeproject.org) (worldjusticeproject.mx)

SIGNOSVITALES
EL PULSO DE MÉXICO

July 2022



WWW.SIGNOSVITALESMEXICO.ORG.MX

