# Sustainable Development and Fight Against Poverty and Marginalization of Mexican Indigenous Peoples



Gabriela Narcizo de Lima, Roberto Ariel Abeldaño Zuñiga, and Nelson Eduardo Bernal Dávalos

**Abstract** In Mexico, there are 68 indigenous peoples spread throughout the national territory. According to data from the 2020 census, the total population of selfdeclared indigenous people amounts to 23,229,088 inhabitants, representing 19.5% of the national population, most of whom are located in the south and southeast of the country. This chapter aims to assess the effectiveness of Mexican policies for ensuring sustainable development among indigenous peoples, thus enabling them to promote their own development agendas, based on their worldviews and priorities. In this chapter, the authors present an analysis of data from the Population and Housing Censuses and the reports offered by national and international organizations. Mexico has made important progress regarding its laws and policies concerning indigenous peoples. The data from the Population and Housing Censuses analyzed in this chapter reflect, in parts, the results of these advances in the legal field; since there is a reduction in the percentage of illiterate indigenous people, there are also advances regarding insurance in health and employment indicators. However, there is a persistent gap between the indigenous and non-indigenous populations in the country, more significant in indigenous women.

**Keywords** Indigenous population • Sustainable development • Gender inequalities • Social vulnerability • Development gaps

G. N. de Lima (🖂)

R. A. Abeldaño Zuñiga

N. E. Bernal Dávalos Center for Sustainable Development, University of Brasilia, Campus Universitário Darcy Ribeiro, Brasília P.C. 70910-900, Brazil

Department of Urban and Environmental Studies, The College of the Northern Border, Jalisco 1505, Colonia Nísperos, P.C. 26020 Piedras Negras, Coahuila, Mexico e-mail: glima@colef.mx

University of Sierra Sur, Guillermo Rojas Mijangos SN. Ciudad Universitaria. Miahuatlán de Porfirio Díaz, P.C. 70805 Oaxaca, Mexico

<sup>©</sup> The Author(s), under exclusive license to Springer Nature Switzerland AG 2022 M. F. Mbah et al. (eds.), *Indigenous Methodologies, Research and Practices for Sustainable Development*, World Sustainability Series, https://doi.org/10.1007/978-3-031-12326-9\_10

# 1 Introduction

Mexican indigenous peoples are recognized for their unique culture and ways of relating to nature, which is directly reflected in how they live. Nevertheless, despite the importance of these groups in the conservation of the country's flora and fauna and the great richness of their cultures and forms of social organization, indigenous peoples live in conditions of great poverty, marginalization, and discrimination in all areas of everyday life. Data presented by the National Council for the Evaluation of Social Development Policy shows that in 2020 more than 70% of the Mexican population living in poverty and 28% in extreme poverty were indigenous people (Consejo Nacional de Evaluación de la Política de Desarrollo Social (CONEVAL), 2021).

According to the 2030 Agenda of the United Nations, one of the first steps to achieve sustainable development is to fight poverty, which is, in turn, one of the main causes of environmental problems around the world. Mexico actively participated in the definition of the 2030 Agenda. It advocated the adoption of a multidimensional approach to poverty and sustainable development that, in addition to considering people's income, would take into account their effective access to other basic rights such as food, education, health, Social Security, and basic services.

At the national level, the commitment of the Mexican State was even more specific, permeating sustainable development at the local and community levels. According to article 2 of the Mexican Constitution (Cámara de Diputados del Honorable Congreso de la Unión, 2021), to reduce the deficiencies and lags that affect indigenous peoples and communities, the federation, states, and municipalities have an obligation to support productive activities and the sustainable development of indigenous communities, which contrasts sharply with the high rates of poverty and marginalization that these groups have historically faced.

This chapter aims to assess the effectiveness of Mexican policies for ensuring sustainable development among indigenous peoples, thus enabling them to promote their development agendas, based on their worldviews and priorities. This evaluation was done by analyzing selected dimensions of sustainable development with data from the Population and Housing Censuses and the reports offered by national and international organizations.

# 2 Panorama of the Indigenous Population in Latin America and Mexico

This section offers a literature review of the history and the situation of indigenous people in Latin America and Mexico.

At the global level, Latin America is one of the richest continents in terms of natural resources and cultural representation, being the second with the largest concentration of forest resources and home to diverse indigenous peoples. In this continent, and

specifically in 21 countries, there are more than 800 indigenous peoples with a population of close to 50 million people, characterized by their broad demographic, sociocultural, territorial, and political diversity (Banco Interamericano de Desarrollo (BID), 2018). In addition to being present in large urban settlements, they are found in rural communities with a long history and, in some cases, settled in inhospitable regions of voluntary isolation, places where they practice their different ways of life.

Resident populations in rural areas are mainly engaged in agriculture, animal herding, hunting, fishing, fruit gathering, and textile making, activities that have given them a cultural connotation throughout history due to their ancestral knowledge and approach to their areas of coexistence. The relationship of the indigenous people with the land is not reduced to strictly economic-productive factors because they preserve a holistic vision of the land and the environment that is combined with social, cultural, religious, and economic aspects. Due to these facts, the people made notable contributions to science, medicine, architecture, culture, education, and biodiversity conservation. However, despite this knowledge, their economic and social situation is unfavorable.<sup>1</sup>

Various indigenous peoples, from the Mapuche in Chile to the Zoque (O' de püt) in Mexico, are part of the most disadvantaged social groups on the continent, a situation that is due to historical and colonial leftovers and complex social processes initiated more than 500 years ago. According to data published by the Inter-American Development Bank (Banco Interamericano de Desarrollo (BID), 2018), the continent's indigenous peoples make up 14% of the poor and 17% of the extremely poor. Bello and Rangel (2002), show that the cause of this situation is the result of a process of colonial domination and exclusion over a population subcategorized by ethnic factors, skin color, or culture, compromising their access to an educational system and adequate labor sources. In addition, the systematic dispossession of their ancestral territories, the disparities in education and employment, and the lack of natural resources, livelihoods, and areas of production of the indigenous people. All of this collectively caused a gradual impoverishment, seriously compromising their economy, welfare, and culture (Dávalos et al., 2021).

In several cases, the social imbalances resulting from the exclusion and marginalization of the continent's indigenous peoples are related to the deterioration of their natural resources and the reduction or loss of their ancestral territories, as a result of the denial or disregard of their rights over their territories promoted by governmental models of modern States (Bello & Rangel, 2002). This loss of subsistence resources led to forced rural–urban migration, placing indigenous people in precarious, poorly paid, low-quality jobs.

<sup>&</sup>lt;sup>1</sup> Some indigenous peoples that still inhabit natural areas become agents of environmental conservation due to their worldview and respect for nature. In many cases, they are not interested in the accumulation of goods and wealth, basing their production on small-scale commercialization and self-consumption, accessing markets for the exchange of products through reciprocity (Sabourin, 2011). Many of the productive activities of these peoples are not very invasive to the environment, as a result of their respect for mother earth, which is why they prioritize the production of native species and the use of fertilizers and agrochemicals (Brighenti, 2005).

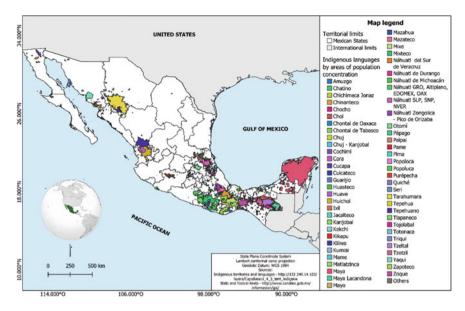
Traditional territories have been one of the main points of reference in terms of historical continuity, preservation of protected areas and natural resources, identity, and self-determination of indigenous people. Yet the World Bank (2015) data shows that 49% of indigenous people in Latin America currently live in urban areas. This transition is mainly due to the dispossession of their lands, environmental deterioration, displacement caused by conflicts and violence.

Poverty, marginalization, and exclusion have become structural characteristics for the indigenous peoples of this continent. Comparative studies disaggregated by ethno-racial origin show that poverty is concentrated in certain indigenous social groups, differentiated by several points concerning the rest of the population, mainly white. According to Psacharopoulos and Patrinos (1994), in the most extreme cases, such as Guatemala, Mexico, and Peru, this difference reaches 20–30% points, a figure that has increased in some countries in recent years.

These social and economic disparities in Latin America result from discrimination and racism, which have become a constituent part of the region's problems, amplifying the biases in terms of poverty, exclusion, and inequality of millions of people. According to Anderson et al. (2016), access to basic services for indigenous peoples is at a disadvantage compared to non-indigenous communities, causing impacts on the education, health, and life expectancy of the population. Infant malnutrition and maternal mortality are the most recurrent problems of these populations. In Colombia, for example, it is stated that 240 out of every 100,000 indigenous women die from complications associated with childbirth, compared to 66 cases occurring out of every 100,000 non-indigenous women (Anderson et al., 2016).

In Mexico, there are 68 indigenous peoples scattered throughout the national territory. According to data from the 2020 census, the total population of self-declared indigenous people amounts to 23,229,088 inhabitants, representing 19.5% of the national population, most of whom are located in the south and southeast of the country. This population inhabits more than 172 localities within the national territory, identified as concentrated areas of indigenous population (Fig. 1) (Instituto Nacional de Estadística Geografia e Informática INEGI, 2016) and areas rich in vegetation and natural resources. It is estimated that approximately 50% of the most important headwaters of the country's watersheds are in indigenous territory, areas from which 23.3% of the country's water is captured (Instituto Nacional de los Pueblos Indígenas, 2018; Villagómez Velázquez and Gómez Martínez, 2020).

Many of Mexico's indigenous peoples have a strong special relationship with their immediate environment, as their lands, territories, and natural resources are the means that have provided them with cultures, languages, arts, cosmologies, and forms of political, economic, and social organization (Dávalos et al., 2021; Stavenhagen, 2001). A large part of the indigenous population residing in their areas of origin have self-consumption agriculture as their main economic activity, carried out under a traditional agricultural and productive system made up of a polyculture called "milpa" (Carrera García et al., 2012). On the other hand, this population also engages in activities such as fishing and cattle raising, all of which are mediated by a spiritual relationship and respect for nature.



**Fig. 1** Indigenous languages by areas of population concentration in México. *Sources* Elaborated by the authors based on data from GeoComunes (2015), Comisión Nacional para el Conocimiento y Uso de la Biodiversidad (CONABIO) (2021)

Like many people of Latin America, a large part of the Mexican indigenous peoples, despite the great cultural wealth and potential of their lands, territories, and natural resources, live in conditions of poverty, marginalization, and discrimination in all areas of daily life. This is the result of a historical colonial process of subjugation and abandonment perpetuated to this day. The exclusion of ethnic groups in Mexico dates back to the beginning of the republic and the process of military and spiritual conquest (Florescano, 1997), when, under a model of domination, Spaniards, Creoles, and their descendants dictated the characteristics of a nation, including language, religion and Roman law (Bastos & Camus, 2004; Rosas Vargas, 2007).

According to Bastos and Camus (2004), in Mexico, the indigenous people were seen as "inferior or backward," excluding them from the nation and from progress, resulting in alarming social imbalances in various aspects. For example, according to the National Council for the Evaluation of Social Development Policy of Mexico (CONEVAL) (2021), by 2016, of the 100% of the population characterized as poor, 71.9% were indigenous, and 28% were in extreme poverty. This situation leads many of the members of these populations to live in a situation of alarming social, environmental, and health vulnerability, as they are limited to having adequate infrastructure and access to basic services.

This situation of marginalization has caused a large part of the population to have access to poorly paid jobs, working mainly in the primary sector and earning between one and two minimum wages (Guerra Manzo, 2005; UNDP, 2010). The same is true

for education and illiteracy; this group of Mexican society has significant lags in terms of access, school attendance, and illiteracy.

In addition to the marginalization, these populations experience denial, exclusion, abandonment, racism, and the remnants of internal colonialism generate this hurtful situation. Progress has been made with Mexico's political design, which, in line with cultural, social, and economic diversity, has modified important articles of its Political Constitution; however, much remains to be done to comply with its first article, which establishes the right to non-discrimination based on ethnic or national origin. This country is defined in its composition as pluricultural, originally sustained by its indigenous peoples, but actions must be taken to reduce these existing differences between the non-indigenous and indigenous population in order to establish greater equity and equality to guarantee the future of its peoples. This represents structural challenges in terms of democracy and the State and the formulation of consistent public policies in the search for equality and inclusion of the rights of their peoples. To this end, the analysis of data from the national population and housing censuses is fundamental since they reflect progress or setbacks in social and economic aspects.

# 3 Methods

For the purposes of this chapter, some indicators on the sustainable development of indigenous peoples were selected from the national population and housing censuses corresponding to the years 2010 and 2020, which, although not entirely compatible with the criteria proposed by the CDI, can provide clarity in relation to the progress achieved by the Special Program for Indigenous Peoples 2014–2018 (Comisión Nacional para el Desarrollo de Pueblos Indígenas (CDI), 2014) and indicate possible points to be strengthened or reevaluated in the strategies proposed by the National Program for Indigenous Peoples 2018–2024 (Instituto Nacional de los Pueblos Indígenas, 2018). The indicators selected are health security, illiteracy, employment status of the population and indigenous languages, which are related to the goals of (a) increasing access to food, health, and education for indigenous peoples; (b) improving the monetary and non-monetary income of the indigenous population through the promotion of productive projects; and (c) preserving and strengthening the culture of indigenous peoples, recognizing their national heritage.

To explore the selected indicators related to sustainable development in the indigenous population of Mexico, data from the national population and housing censuses of this country for the years 2010 and 2020 were used.

According to the United Nations Department of Economic and Social Affairs of Indigenous Peoples, the condition of belonging to an indigenous people can take into consideration two criteria (Departamento de Asuntos Económicos y Sociales-Secretaría de las Naciones Unidas, 2006). The first criterion refers to the condition of speaking an indigenous language, while the second is self-ascription.

Regarding the first criterion, the National Institute of Statistics and Geography (INEGI—by its acronym in Spanish) defines the status of speakers of an indigenous language as "the population three years of age and older who declare that they speak an indigenous language" (Instituto Nacional de Estadística Geografia e Informática, 2021). This is the criterion traditionally used; however, it excludes people of indigenous traditions whose language has been lost through generations. It is very relevant because only 44.5% of the entire population in Mexico that declares itself as indigenous can currently speak their mother tongue (Instituto Nacional de Estadística Geografia e Informática, 2021). So, here comes into play the second criterion, that of self-ascription. In this sense, Article 2 of the Political Constitution of the United Mexican States establishes that "Awareness of their indigenous identity shall be a fundamental criterion for determining to whom the provisions on indigenous peoples apply" (Cámara de Diputados del Honorable Congreso de la Unión 2021).). In this case, INEGI recognizes indigenous self-ascription based on "Self-recognition as an indigenous person based on their own culture, traditions, and history" (Instituto Nacional de Estadística Geografia e Informática, 2011, 2021).

In order to analyze the reality of the Mexican indigenous population in light of the SDGs, SDG 3 "*Health and well-being*", SDG 4 "*Quality education*" and SDG 8 "*Decent work and economic growth*" were taken into account, and these three were analyzed in a cross-cutting manner incorporating a gender approach, consistent with SDG 5 "*Gender Equality*". It is necessary to mention that the indicators analyzed were selected as proxies for their practicality for comparing indigenous and non-indigenous populations, between 2010 and 2020, and between sexes; but that, ultimately, they do not reflect the complexity of the dimensions involved in each of the SDGs referred to in this chapter.

Thus, SDG 3, "*Health and well-being*", analyzed data on access to health security, SDG 4 "*Quality education*" shows data on illiteracy, and SDG 8 "*Decent work and economic growth*" shows data related to the employment status of the population.

In both censuses considered, illiteracy percentages were analyzed as the condition of reading and writing a message in the population aged 18 years or older.

## 4 Results

# 4.1 Strategies and Policies that Seek to Guarantee the Development and Well-Being of Mexico's Indigenous People

In Mexico, the indigenous population makes up an important social group identified as native peoples. Among the different recognized groups, there are two main aspects, one with characteristics more closely linked to millenary traditions, which are reflected in their languages and customs, and the other whose practices derive from the relations of coexistence and domination of the colonial period (Comisión Nacional para el Desarrollo de Pueblos Indígenas (CDI), 2014; Galván Martínez et al., 2016; Instituto Nacional de los Pueblos Indígenas, 2018). Despite these differences, all Mexican indigenous peoples share similar histories and relations of domination and exclusion, which shape their vision of the world and lead them to propose different development projects, which are often not completely aligned with government proposals.

An evaluation of the Mexican legal and political framework concerning these groups reveals diverse positions in the analysis and the construction of proposals to overcome the social and economic backwardness they have historically suffered. At the extremes, some approaches vindicate only the traditional approach as the way to overcome the economic and social backwardness, thus preserving their identity. At the same time, other positions advocate change and/or the assimilation of new development processes and visions, seeking to preserve their identity without rejecting integration and change (Organización Internacional del Trabajo, 2020).

Mexico currently has a vast body of federal legislation on indigenous peoples, as well as specific provisions in general regulations, which are derived from the Political Constitution of the United Mexican States (Table 1). At the state level, 26 states also have specific laws on the rights of traditional and indigenous peoples and communities: Aguascalientes; Baja California; Campeche; Chiapas; Chihuahua; Colima; Durango; Guanajuato; Guerrero; Hidalgo; Jalisco; Mexico; Morelos; Nayarit; Nuevo León; Oaxaca; Puebla; Querétaro; Quintana Roo; San Luis Potosí; Sinaloa; Sonora; Tabasco; Tlaxcala; Veracruz, and Yucatán (Organización Internacional del Trabajo, 2020).

Currently, the National Institute of Indigenous Peoples (INPI—by its acronym in Spanish), which replaced the National Commission for the Development of Indigenous Peoples (CDI—by its acronym in Spanish), is the state agency in charge of designing and promoting public policy for the indigenous and Afro-Mexican population in Mexico. With the aim of presenting proposals to address the issues that most directly affect these groups and as a synthesis of the existing legal framework, in December 2018, the entity approved the National Program for Indigenous Peoples 2018–2024. This program seeks to "promote and guarantee the development and integral well-being of Indigenous and Afro-Mexican Peoples as subjects of public law, within the framework of a new relationship with the Mexican State, for the effective exercise of their rights, the sustainable use of their lands, territories and natural resources, as well as the strengthening of their autonomies, institutions, cultures, and identities, through the implementation of permanent processes of dialogue, participation, consultation, and agreement" (Instituto Nacional de los Pueblos Indígenas, 2018).

This program's principles are self-determination of peoples; integrality; social, economic, and cultural relevance; sustainability and territoriality; transversality; gender equality and participation and consultation, based on which various strategies and lines of action are determined to be implemented by 2024 (Instituto Nacional de los Pueblos Indígenas, 2018). However, despite appearing to be a fairly complete document, the lack of concrete proposals regarding implementing these strategies and

Table 1 Mexical regulatory framework regarding indigenou	is peoples	1	
Law, program, or agreement	Year of enactment	Latest update	
Constitución Política de los Estados Unidos Mexicanos	1917	2019	
Código Penal Federal	1931	2019	
Código de Procedimientos Civiles	1932	2018	
Código Federal de Procedimientos Penales	1934	2014	
Ley General del Equilibrio Ecológico y la Protección al Ambiente	1987	2015	
Ley Agraria	1992	2018	
Ley Minera	1992	2014	
Ley Federal de Derechos de Autor	1996	2018	
Ley del Instituto Mexicano de la Juventud	1999	2013	
Ley de Desarrollo Rural Sustentable	2001	2019	
Acuerdo A/067/03 del Procurador General de la República por el que se crea la Unidad Especializada para la Atención de Asuntos Indígenas	2003	-	
Ley Federal para Prevenir y Eliminar la Discriminación	2003	2018	
Ley General de Desarrollo Social	2004	2018	
Ley de Bioseguridad de Organismos Genéticamente Modificados	2005	-	
Ley de Planeación	2012	-	
Ley General de Derechos Lingüísticos de los Pueblos Indígenas	2012	-	
Ley de la Industria Eléctrica	2014	-	
Ley de Energía Geotérmica	2014	-	
Ley de Hidrocarburos	2016	-	
Ley Federal de Zonas Económicas Especiales	2016	-	
Ley General de Desarrollo Forestal Sustentable	2018	-	
Ley Orgánica de la Procuraduría General de la República	2018	-	
Ley del Instituto Nacional de los Pueblos Indígenas y que abroga la Ley de la Comisión Nacional para el Desarrollo de los Pueblos Indígenas	2018	-	
Programa Nacional de los Pueblos Indígenas 2018-2024	2018	-	
Ley General de Educación	2019	-	
Ley de Derechos de los Pueblos y Barrios Originarios y Comunidades Indígenas Residentes en la Ciudad de México	2019	-	

 Table 1
 Mexican regulatory framework regarding indigenous peoples

Source Elaborated by the authors based on data from Organización Internacional del Trabajo (2020)

instruments to measure their effectiveness, especially in terms of reducing poverty and the social backwardness of indigenous peoples, is striking.

On the other hand, upon analyzing the preceding document, called the Special Program for Indigenous Peoples 2014–2018 (Comisión Nacional para el Desarrollo de Pueblos Indígenas (CDI), 2014), which sets forth similar objectives and principles, greater clarity is observed in the strategies and cross-cutting lines of action, since they include, in addition to a detailed description of each point, also a proposal for their execution and eight indicators, which correspond to the objectives of the program, allowing their evaluation in periods of one or two years and an assessment of the progress achieved. Each of the indicators proposed in the program has its own calculation method, which is generally based on the data generated by the National Council for the Evaluation of Social Development Policy (CONEVAL—by its acronym in Spanish) and on the criteria determined by CDI.

# 4.2 The Indigenous Population in Mexico: Progress and Persistent Gaps in Sustainable Development

In Mexico, 364 languages or linguistic variants are spoken (including many regional variants), which are grouped into 18 linguistic groupings and 11 linguistic families of indigenous languages. Table 2 shows the 15 languages most widely spoken by the indigenous population of Mexico. These 15 indigenous languages are spoken by 85% of the total indigenous population of this country. It can be observed that the most representative languages are Nahuatl, Maya, Tzeltal, Mixteco, and Tzotzil (Table 2). Regarding the volume of the population speaking an indigenous language, in 2010, this was 6,986,404 inhabitants, which represented 6.2% of the total population. In 2020, the volume increased to 7,522,495 people, but this figure represents 6.0% of the total population. This implies that the absolute number of people speaking an indigenous language may have increased, but not in proportional terms relative to the total population. This is consistent with the current concerns of official agencies, which periodically measure through census sources, over time, the disuse of some languages, and the loss of cultural richness.

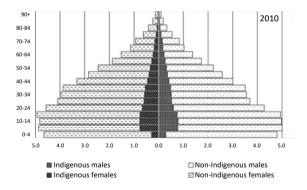
Now, taking into account the second criterion, that of self-ascription to an indigenous people, in 2010, 15,703,465 inhabitants of Mexico declared themselves to be indigenous, which corresponded to 14% of the total population censused in that year. In 2020, the self-declared indigenous population reached 23,229,088 inhabitants, which corresponded to 19.5% of the total population.

Figures 2 and 3 show the structure of the indigenous and non-indigenous population for the years 2010 and 2020. Both censuses show the structure of a young population. In the 0–4 age bracket, the effect of considering the indigenous population as of 3 years of age (still by self-ascription) is observed. But in the following age brackets, between 5 and 14 years of age, there is a decrease in fertility at the base of both pyramids.

1	Náhuatl	23.0 11.5			
2	Maya				
3	Tzeltal (Tseltal)	7.0			
4	Mixteco	6.9			
5	Tzotzil (Tsotsil)	6.5			
6	Zapoteco	6.4			
7	Otomí	4.2			
8	Mazateco	3.5			
9	Totonaca (Totonaco)	3.3			
10	Chol (Ch'ol)	3.1			
11	Huasteco	2.5			
12	Chinanteco	2.1			
13	Tlapaneco	1.9			
14	Mazahua	1.9			
15	Mixe	1.8			
	Others	14.3			

 Table 2
 The 15 indigenous languages most spoken by the population in Mexico

*Source* Elaborated by the authors based on data from the National Population and Housing Census. INEGI, 2010



**Fig. 2** Percentage distribution of the indigenous and non-indigenous population of Mexico, by sex and age groups. Year 2010. *Source* Elaborated by the authors based on data from the National Population and Housing Census. INEGI, 2010

In the younger age brackets, between 20 and 34 years of age, the effect of the migration of the indigenous population in search of better life opportunities can be observed. This is observed in both sexes but is stronger in males. In the year 2020, the volume of the "missing" population in these age groups seems to have increased.

At the top of the pyramid in 2020, an aging process begins to be observed in the indigenous population, which is slower than in the non-indigenous population.

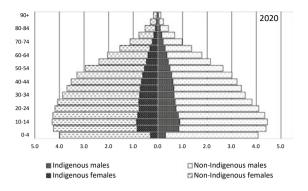


Fig. 3 Percentage distribution of the indigenous and non-indigenous population of Mexico, by sex and age groups. Year 2020. *Source* Elaborated by the authors based on data from the National Population and Housing Census. INEGI, 2020

Regarding the geographic distribution of the indigenous population in Mexico, the states with the highest percentage of indigenous inhabitants are Oaxaca (65.7%), Yucatan (62.4%), Campeche (44.9%), Chiapas (34.5%), Quintana Roo (31.7%) in the southern and Gulf of Mexico regions, and the states of Hidalgo (35.0%), Puebla (31.5%) and Guerrero (31.3%) in the central region of the country (Fig. 1).

The illiteracy percentages in the indigenous population are higher than in the nonindigenous population. Still, they are even higher in the female population (compared to the male population), so there is a double gap in access to education: because they are indigenous and are women. Although there was an improvement in the illiteracy situation in 2020 compared to 2010, this improvement did not follow the same pace for the indigenous population, and even less so for indigenous women compared to men (Table 1).

Regarding access to health, this dimension was analyzed with the ascription to health services from health insurance obtained through work, or from public Social Security, or by contracting private insurance, and the lack of health insurance. Here the effect of Social Security by the state is protective since it is observed that between 2010 and 2020, the gap of indigenous people without health insurance has been reduced significantly, and the gap that existed in 2010 between indigenous and non-indigenous populations has also been reduced. In these indicators of access to health services, a gender gap is observed, but it negatively affects the male population (Table 3). The effect of private security in all population groups is very low, but even so, it is lower in the indigenous population compared to the non-indigenous population. Although it should be taken into account that having health insurance does not imply effective access to health services in a timely manner.

Regarding employment indicators, it should be taken into account that population and housing censuses are not the most appropriate instruments for measuring the labor market, but rather the National Employment Surveys, which offer permanent estimates and are not as widely spaced as the censuses. However, censuses allow us

Indicators	2010			2020	2020			
	Indigenous population (%)		Non-indigenous population (%)		Indigenous population (%)		Non-indigenous population (%)	
	Females	Males	Females	Males	Females	Males	Females	Males
Illiteracy	21.4	13.1	6.4	4.6	13.5	8.4	4.1	3.2
Health insurance from job or public insurance	60.2	57.2	64.1	61.2	77.9	74.6	74.4	71.9
Private health insurance	1.0	1.0	2.6	2.8	0.8	0.8	2.7	2.7
No health insurance	37.4	40.3	30.8	33.4	20.8	24.0	21.7	24.1
Employed	30.8	74.7	36.7	72.3	36.8	73.6	41.1	71.7
Unemployed	0.5	3.6	1.1	4.4	0.6	3.0	1.0	3.1
Unpaid work	56.0	1.2	46.3	1.0	48.0	2.0	39.3	1.6

 Table 3
 Indicators of development in indigenous and non-indigenous population in Mexico, by sex, in 2010 and 2020

*Source* Elaborated by the authors based on data from the National Population and Housing Census. INEGI, 2010 and 2020

to have some approximations of the labor market with an acceptable precision for the purposes of this chapter.

The employment figures for the indigenous population show different patterns by sex.

Indigenous men have a higher employment rate than non-indigenous men, and a drop of one percentage point is observed in both censuses for these two population groups.

On the other hand, indigenous women have a substantially lower inclusion in the labor market than men and lower than non-indigenous women. However, an improvement in this indicator was observed in 2020, compared to 2010. The other side of the coin of these indicators for the population of indigenous women is unpaid work, which has a higher incidence in indigenous women than in non-indigenous women. According to these data, one out of every two indigenous women performs unpaid work (Table 3).

# 5 Discussion

In terms of health, the legal advances in the Mexican legislation refer mainly to ensuring the right of indigenous peoples to make use of their traditional medicine, but there are no clear strategies to guarantee access of these groups to health services in public and/or private medical centers. The indicators analyzed show a relevant increase in the percentage of indigenous people who have Social Security from the state between 2010 and 2020. However, as mentioned above, this does not ensure the effective access of these people to health services in a timely manner.

Although indigenous women in Mexico are covered by the Law of the National Institute of Indigenous People, which recognizes the need to incorporate a gender equality approach in policies on indigenous peoples, this has not been reflected in their daily lives. If we consider, for example, the indicators of illiteracy and unpaid work, indigenous women show a double gap because they are women and because they are indigenous. In this sense, gender gaps became narrower in 2020 compared to 2010. However, progress in the conditions of illiteracy and unpaid work did not occur at the same rate among indigenous women if we compare with the population of non-indigenous women or with any of the male populations (whether indigenous or not).

These gender differences can be analyzed in light of the contributions of Kimberle Crenshaw (1991), a U.S. law scholar who in the 1990s published one of her most important articles, entitled "Mapping the Margins: Intersectionality, identity politics, and violence against women of color." In her contribution, Crenshaw defined a theoretical framework for exploring gender differences based on the assumption that not all women, solely being women, occupied the same position in power structures. Indeed, Crenshaw demonstrated that not all women occupy the same position in society by describing how class, race, disability, and many other factors intersect. To generate a structure of historical oppression of women, Crenshaw's approach revolves around understanding that race, gender, social position intersect to violate women, as her study was based on the experiences of African American women who were violated [by men] and sought help in shelters. Many of the women seeking protection were unemployed or underemployed, and many of them were also poor, overburdened with childcare tasks, and with little job training. All this, as a consequence of gender and class oppression and differences that intersect with race oppressions.

Despite the enactment of laws and specific proposals, such as the Special Program for Indigenous Peoples 2014–2018 whose principles date back to the Federal Constitution of 1917 and seek to address the main problems affecting these populations, no substantial progress has been made in reducing the inequalities and social backwardness they have historically suffered.

Another important factor is that the right of indigenous peoples to their traditional lands is recognized and guaranteed by the Mexican Federal Constitution; however, the country does not have a specific regulation to put into effect demarcation and titling processes for these lands, which undermines the possibility of integral development of these groups, based on their own worldviews and priorities.

These facts force a large part of their members to make decisions that compromise and generate diverse impacts on the population and their culture, which are evidenced mainly due to the migration of the population, predominantly male, compromising the continuity of their languages and their cultural richness by the abandonment of their lands and the distancing of their cultural practices. On this point, policies of cultural and language valuation, empowerment of indigenous women, and reduction of migration are promoted. However, an indigenous cultural decline is observed as a result of a search for the social development of these populations and their members in the face of existing disparities.

Certain advances in national policy regarding representation, promotion of equality and equity, are the result of the struggle of Mexican indigenous peoples and the establishment of some institutions. These include the National Indigenous Congress or the National Institute of Indigenous Peoples, which were established mainly to represent these populations before the state; regulating, designing, and evaluating policies and programs that guarantee the rights of indigenous peoples. The establishment of institutions of this size made possible the inclusion of indigenous people in certain areas. However, there is still a long way to go, as socioeconomic disparities are still significant.

Many of these disparities arise from the fundamental insecurity that many populations experience, in some cases due to existing deficiencies in the recognition and titling of their areas of origin. However, conflicts over the implementation of extractivist activities and land titling impact the development of populations, causing poverty, forcing their members to join an illegal labor market or to seek opportunities outside their areas of origin, and, in many cases, becoming victims of indirect labor exploitation due to the work they do (Bernal Dávalos, 2021).

This study presents some limitations. First, the indicators analyzed were selected as proxy variables given their practicality for comparing indigenous and nonindigenous populations, as well as their availability among the data sources; but they do not entirely reflect the complexity of the dimensions involved in each of the SDGs referred to in this chapter. Second, as mentioned in this chapter, in Mexico there are more than one criteria for considering a person as indigenous; so these different criteria can reflect differences in the SDGs indicators. Third, the analyzed databases probably could be including indigenous population who have immigrated from other countries (i.e. from Central and South America) to Mexico.

### 6 Conclusions

Based on the objective of this chapter, which sought to assess the effectiveness of Mexican policies to ensure the sustainable development of indigenous peoples and thus enable the promotion of their own development agendas, it is observed that, from the legal point of view, Mexico has made some progress regarding its laws and policies concerning indigenous peoples. For example, in the field of education, the country has constitutional provisions that promote multiculturalism and bilingualism at all levels of basic education, ensuring respect for the cultural identity of the different peoples. As a result, progress has also been made in preserving and recognizing indigenous languages, especially in the areas mainly inhabited by indigenous peoples in the south and southeast of Mexico.

The data from the Population and Housing Censuses, analyzed in this chapter, reflect, in part, the results of these advances in the legal sphere since a reduction in the percentage of illiterate indigenous people between 2010 and 2020 is noted. However, the data also reveals the persistence of a significant gap between the indigenous and non-indigenous population, which is even more accentuated in the population of indigenous women.

## 7 Future Prospects

Decision-makers must pay more attention to the situation of indigenous peoples in Mexico if the health, education, gender and labor goals envisioned under a macro SDG approach to reduce inequalities are to be achieved. This statement comes from the principle that the well-being of these populations must be guaranteed, on the one hand, because it is their right and a historical debt is owed, and on the other, because they are concentrators of history, culture, and knowledge. On this last point, their linguistic and knowledge systems are key to understanding biological, nutritional, medicinal, and cultural diversity, contributing to health issues, preservation of natural and water resources, and the fight against poverty and malnutrition, which leads us to achieve various objectives. In this sense, these groups should be better recognized and included, guaranteeing their participation in the different spheres of decision making, whether in planning or the elaboration of public policies and national action plans.

#### References

- Anderson, I., Robson, B., Connolly, M., et al. (2016). Indigenous and tribal peoples' health (The Lancet-Lowitja Institute Global Collaboration): A population study. *Lancet*, 388, 131–157. https:// doi.org/10.1016/S0140-6736(16)00345-7
- Banco Interamericano de Desarrollo (BID). (2018). Desarrollo sostenible de los pueblos indígenas: con ellos, para ellos.
- Bastos, S., & Camus, M. (2004). Multiculturalismo y Pueblos Indígenas: reflexiones a partir del caso de Guatemala. *Rev Centroam Ciencias Soc* 1.
- Bello, Á., & Rangel, M. (2002). La equidad y la exclusión de los pueblos indígenas y afrodescendientes en América Latina y el Caribe. *Rev la CEPAL 2002*, 39–54. https://doi.org/10.18356/61f c0d54-es
- Bernal Dávalos, N. E. (2021). Consecuencias de la explotación amazónica. In L. Sablich (Ed.) Amazonía y expansión mercantil capitalista. Nueva frontera de recursos en el siglo XXI. CLACSO: Centro de Estudios para el Desarrollo Laboral y Agrario-CEDLA.
- Brighenti, C. A. (2005). Necessidade De Novos Paradigmas Ambientais Implicações E Contribuição Guarani. Cad PROLAM/USP, 4, 33. https://doi.org/10.11606/issn.1676-6288.prolam.2005.81790
- Carrera García, S., Navarro Garza, H., Pérez Olvera, M., & Mata García, B. (2012). Calendario agrícola Mazateco, milpa y estrategia alimentaria campesina en territorio de Huautepec, Oaxaca. *Agric Soc y Desarro*, *9*, 455–475.

- Comisión Nacional para el Desarrollo de Pueblos Indígenas (CDI). (2014). Programa Especial de los Pueblos Indígenas 2014–2018. Gob México, 1–97
- Cámara de Diputados del Honorable Congreso de la Unión. (2021). Constitución Política de los Estados Unidos Mexicanos. Texto vigente. Mexico.
- Consejo Nacional de Evaluación de la Política de Desarrollo Social (CONEVAL). (2021). Medición de pobreza 2016–2020. In Cons. Nac. Evaluación la Política Desarro. Soc. https://www.coneval. org.mx/Medicion/MP/Paginas/Pobreza\_2020.aspx. Accessed November 19, 2021.
- Comisión Nacional para el Conocimiento y Uso de la Biodiversidad (CONABIO). (2021). Geoportal del Sistema Nacional de Información sobre Biodiversidad . In *CONABIO*. http://www.conabio.gob.mx/informacion/gis/. Accessed November 23, 2021.
- Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Rev, 43*, 1241. https://doi.org/10.2307/1229039
- Dávalos, N. B., Rodrigues-Filho, S., & Litre, G. (2021) The impacts of the construction of hydroelectrics on indigenous communities. Displacement, division and pilgrimage among The Tuxá peoples of Bahia state, Brazil. Sustentabilidade em Debate, 12, 220–235. https://doi.org/10.18472/ SustDeb.v12n1.2021.36587
- Departamento de Asuntos Económicos y Sociales- Secretaría de las Naciones Unidas. (2006). Quinto Período de Sesiones del Foro Permanente de Pueblos Indígenas.
- Florescano, E. (1997). Etnia, estado y nación: ensayo sobre las identidades colectivas en México. Nuevo Siglo, Mexico City.
- Galván Martínez, D., Fermán Almada. J. L., & Espejel. I. (2016). Sustentabilidad comunitaria indígena? Un modelo integral. *Soc y Ambient*, 4–22. https://doi.org/10.31840/sya.v0i11.1674
- GeoComunes, (2015). Territorios de pueblos indígenas. In *GeoNode*. http://132.248.14.102/layers/ CapaBase:ii\_4\_3\_terri\_indigena. Accessed November 23, 2021.
- Guerra Manzo, E. (2005). Los pueblos indígenas: entre la comunidad corporativa y el pluralismo, 1968–2001. In I. Bizberg, & L. Meyer, (Eds.) Una historia contemporánea de México (pp. 305– 366). Editorial Océano.
- Instituto Nacional de Estadística Geografia e Informática. (2011). Censo de Población y Vivienda 2010.
- Instituto Nacional de Estadística Geografia e Informática. (2021). Censo Población y Vivienda 2020.
- Instituto Nacional de Estadística Geografia e Informática INEGI. (2016). Encuesta Intercensal 2015.
- Instituto Nacional de los Pueblos Indígenas. (2018). Programa Nacional de los Pueblos Indígenas 2018–2024. México.
- Organización Internacional del Trabajo. (2020). Leyes y políticas públicas al respecto de pueblos indígenas y tribales: Perfiles de países de América Latina que han ratificado el Convenio sobre pueblos indígenas y tribales, 1989.
- Psacharopoulos, G., & Patrinos. H. (1994). Pueblos indígenas y pobreza en América Latina: Un análisis empírico. In *Estudios Sociodemográficos de Pueblos Indigenas*. Centro Latinoamericano de Demografía (CELADE).
- Rosas Vargas, R. (2007). Exclusión, marginación y desarrollo de los pueblos indígenas. *Ra Ximhai*, *3*, 693–705.
- Sabourin, E. (2011). Teoria da reciprocidade e sócio-antropologia do desenvolvimento. Sociologias 24–51. https://doi.org/10.1590/S1517-45222011000200003
- Stavenhagen, R. (2001). La cuestión étnica. El Colegio de Mexico, Mexico City.
- UNDP. (2010). *Informe sobre Desarrollo Humano de los Pueblos Indígenas en México* (1st edn). Programa de las Naciones Unidas para el Desarrollo (PNUD)
- Villagómez Velázquez, Y., & Gómez Martínez, E. (2020). Los recursos hídricos en las regiones indígenas de México. *Región y Soc, 32*, e1288. https://doi.org/10.22198/rys2020/32/1288