digital divide, inequality, and disinformation: Conditions in Oaxaca and Chiapas
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Introduction

Since 1980 the world has experienced an increase in the generation of digital tools and processes, whose development has led to know—colloquially—our era as the Information and Knowledge Society (IKS). The IKS is portrayed by a global deployment and access to the so-called Information and Communication Technologies (ICTs), that might result in better possibilities for the economic and social development of populations. However, reality has shown that this has only been possible for the most developed countries of the Global North, while in other countries with less economic development—such as Mexico—these possibilities are a reality only for certain segments of the population.

Inequality in access to digital and communication technologies has generated a “digital divide” which, in its simplest understanding, is defined as: the social distance that separates those who have access to ICTs from those who do not have them. In Mexico, the digital divide affects the most the states located in the southeastern region of the country, particularly the states of Oaxaca and Chiapas. In addition to representing a problem, the digital divide has a significant impact on the exercise of economic, social, and cultural rights of populations, especially as far as the lack of equitable access to ICTs creates and accentuates social exclusion and marginalization.

In this context, the main objective of the research that gave rise to this report was to make visible the impact of the digital divide on human rights exercised through and with the use of ICTs, focusing its attention on the states of Chiapas and Oaxaca. More specifically, it was interested in: a) identifying the infrastructure status for connectivity; b) analyzing the relationship between access and use of Internet and the differentiated exercise of the rights of populations, with particular attention to freedom of speech and information in the context of a pandemic; c) developing a portrayal of the phenomenon of digital disinformation; and d) identifying alternative mechanisms and strategies for access, use and generation of ICTs implemented at the local level by groups and communities.

Methodology

In methodological terms, research was based on a qualitative approach that sought to deepen the life experience comprehension of those who deal with the problem daily. In order not to separate this experience from the social and political processes in which it is immersed, we combined the search for quantitative data (indicators, statistics, percentages), the documentation of specialized reports, press releases, academic articles, together with interviews mainly addressed to two types of factors: on one hand, people from an organization who are involved in the discussion of the digital divide or related issues, and on the other hand, people who—from their particular spheres of life—face the challenges of connectivity. This included housewives, teachers from different educational levels and members of local social organizations.

For the inquiry process, five thematic categories were developed in line with the research objectives, based on a conceptual review of the term digital divide and taking into consideration the indicators for the analysis of Internet universality suggested by UNESCO. A first approach to the case of Chiapas made by ARTICLE 19 in mid-2020: The results of this approach appear in this report. The second stage occurred between the months of February and June 2021, broadening the focus to the state of Oaxaca.

The condition of social distancing due to the pandemic forced a large part of this communication to take place via telephone calls or video calls. However, given the subject matter, this
modality was effective in opening the lines of communication in the limited availability of the network. On the other hand, it is important to point out that for several people consulted, the conversation resulted in a form of catharsis, which suggests the latent need to talk about the experience as an effect of the pandemic. In relation to documentation, the constant challenge was the location of accurate information for the construction of data. Public information is not always available, updated or disaggregated at the state level. However, we sought to present the most recent public data from official sources to show trends within which people’s concrete experience takes place.

**Structure and Findings**

Chapter 1 provides a brief overview of the policies and legal frameworks that seek to guarantee and regulate access to connectivity at the national level and in the states of Oaxaca and Chiapas. The analysis suggests that although there is a legal framework aimed at guaranteeing the right to connectivity established in the Constitution, the actions that show its implementation are not yet clear from the government. Chapter 2 reviews the connectivity infrastructure status in both states. The condition of inequality and social exclusion reflected in the economic and social figures of both states define—the circumstances of access to connectivity. The low quality of signal and the excessive costs for the acquisition of services and equipment are added to the dominant conceptions about technology that tend to privilege urban, young, and “productive” populations, to the detriment of others, such as adults, rural people, and women. Chapter 3 examines how this situation has effects on the exercise of human rights of populations in the context of the pandemic, specifically in education, health, and employment areas. The findings suggest that the “connectivity urgency” only increased stress and frustration levels, in women now forced to assume the dual roles of housewives, teachers, students, or professionals, who unsuccessfully find alternatives to resolve the situation and the workloads.

Chapter 5 addresses the issue of the right to freedom of speech and access to information in the states of Oaxaca and Chiapas. In general terms, the information reveals that in both states, what prevails is a lack of interest from the state authorities, which allows the federal government’s policy of limiting and attacking critical voices of its performance to predominate. Likewise, the circumstances of the pandemic generated an environment of disinformation characterized, on the one hand, by the lack of effective information channels adequate to the realities of the communities and, on the other hand, by the excess of inaccurate information circulating in social networks. Faced with this broad panorama that shapes the digital divide in Oaxaca and Chiapas, Chapter 6 presents the main ways in which local efforts are made as alternatives to the lack of or low connectivity. These alternatives range from efforts of signal reproduction and access to those that seek self-management of their own communication networks. In this context, “the importance of ownership” was highlighted as a way of pointing out the aspiration of many communities within the framework of their autonomous processes.

In the big picture, reducing the digital divide does not only imply the provision of connectivity, but also the creation of conditions for groups and communities to strengthen their leading role in the design and management of their forms and means of communication.

The document ends by taking up the findings to outline some conclusions that, in general terms, show the persistence of social and structural conditions of inequality in the states of Oaxaca and Chiapas that limit the reduction of the digital divide. In view of this, recommendations are aimed at identifying key challenges for follow-up and political advocacy, through which the authorities are required to fully comply with constitutionally guaranteed rights.
Mexico has a regulatory framework that, copied verbatim, guarantees access to connectivity and ICTs for all the country’s populations. However, an invisibility of needs and autonomy of the most digitally backward communities has perpetuated, such as Oaxaca and Chiapas. This translates into a lack of concrete actions of the Government to ensure compliance with the constitutional guarantee of Internet access.

At international level, Mexico was one of the countries that in 2015 adopted the new Agenda for Sustainable Development at global level, within which technological and infrastructure innovation is considered as one of its objectives, with the following goal: “significantly increase access to information and communications technology as well as strive to provide universal and affordable Internet access in developing countries by 2020.”

At national level, the main point of reference of the regulatory framework for this purpose is the Political Constitution, which guarantees rights in matters of communication (Art. 2, B, vi), technological innovation (Art. 3, V), information and freedom of speech (Arts. 6 and 7), connectivity (Art. 6, B, I) and the right to petition (Art. 8). Two fundamental aspects for the reduction of the digital divide stand out from this legal framework. First, the obligation that guarantees the exercise of autonomy of indigenous peoples and communities through acquisition, operation, and administration of their own means of communication (Art. 2, B, vi). Secondly, the importance of the right to connectivity as an enabler of other rights, to the extent that it facilitates the conditions for access in a context of technological innovation, as recognized by various social actors and by the Mexican State itself.

At the national policy-making level, the Federal Telecommunications and Broadcasting Law (LFTR, in Spanish) grants: the administration of the radio electric spectrum in benefit of users (Art. 54), the granting of concessions (Art. 78), and the neutrality of network—under the principles of free will, non-discrimination, privacy, transparency and information, quality and sustainable development of infrastructure—(Art. 145).

On April 23, 2021, a modification to several articles for the granting of concessions was published in the Official Gazette of the Federation (DOF, in Spanish), which, in expert opinion, could benefit community and indigenous use. These are: 1) clarification and simplification of requirements; (2) elimination of requirements for community and indigenous concessions that represent economic and administrative barriers; (3) expansion of the scope of technical assistance by the Federal Telecommunications Institute (IFT, in Spanish); and (4) legal certainty for concessionaires for public use. The benefits that these changes could generate for indigenous and community communication projects have yet to be realized.

Months earlier, in October 2019, the federal government announced the creation of the Social Coverage Program, whose main purpose would be to provide connectivity in the most marginalized areas of the country. According to the document, this program was inspired by the constitutional precepts, the regulations contained in the LFTR and the National Development Plan 2019–2024 (PND 2019–2024) of the current government; and it is incorporated into its Universal Digital In-

6 Political Constitution of the United Mexican States, 1917 (last amendment made on May 28th, 2021.)
7 Government of Mexico, “In Mexico, access to Internet is a constitutional right.” https://www.gob.mx (Search made on March 15th, 2021)
8 Federal Telecommunications and Broadcasting Law, 2014 (last amendment made on April 16th, 2021)
9 Communication with Mayra López, Right to Information Program, ARTICULO19.
clusion Policy to be built “through the participation of all stakeholders—the three levels of government, industry, academia and civil society.”

The program involves the participation of different government agencies: the Ministry of Communications and Transportation (SCT, in Spanish) in the formulation of policy; the IFT as regulator; the Federal Electricity Commission (CFE, in Spanish) as operator, and Telecommunications of Mexico (TELECOM, in Spanish) as responsible for the management of the Government’s satellite reserve. The program also assigns other tasks to define the so-called “Priority Social Coverage Attention Areas”, as shown in the following Table No. 1:

**State agencies with responsibilities for development of the Social Coverage Program**

<table>
<thead>
<tr>
<th>Agency</th>
<th>Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undersecretary of Communications of the SCT</td>
<td>Creation of the program, Responsible for implementation and follow-up, Identification of priority areas</td>
</tr>
<tr>
<td>IFT</td>
<td>Establish obligations of geographic, population or social coverage and connectivity in public places for service licensees, Identification of infrastructure indicators.</td>
</tr>
<tr>
<td>National Institute of Statistics, Geography, and Informatics (INEGI, in Spanish)</td>
<td>Compiles and provides data for locating and identifying priority areas, ICT usage statistics</td>
</tr>
<tr>
<td>National Population Council (CONAPO)</td>
<td>Compiles and provides data for locating and identifying priority areas.</td>
</tr>
<tr>
<td>CFE e Internet para Todos Company</td>
<td>Brings services closer to priority areas through provision of CFE infrastructure.</td>
</tr>
</tbody>
</table>

**Source:** Prepared by the authors based on the document Programa de Cobertura Social, 2019 of the Ministry of Communications and Transportation.

At state level, in recent years, Oaxaca and Chiapas have incorporated modifications to their regulatory agencies and development plans with the purpose of guaranteeing the right to connectivity and access to ICTs. In Oaxaca, for example, in 2015 a paragraph was added to Article 3 of the Political Constitution of this state that reads as follows: “The State shall guarantee and promote the right of access to information technologies.” In Chiapas, the constitutional mandate incorporated since 2014 to this regulation is more explicit by establishing as a right “free and universal access to internet and information and communication technologies” (Art. 5, II), and the purpose of creating a digital government “where public policies will be established to incorporate the use of information and communication technologies to governmental procedures.”

The governments of both states have also incorporated in their state development plans some indication (objective, strategy, or line of action) aimed at reducing the digital divide. The Oaxaca Development Plan (2016-2022), for example, proposes to “increase infrastructure and bandwidth to achieve statewide coverage in radio and television” and “expand the coverage of telephone and internet services in dispersed and hard-to-reach localities.” While the Chiapas Development Plan (2019-2024) contemplates “strengthening the technological and communications infrastructure in public agencies.”

The abovementioned allows to identify if a legal framework that establishes the basic regulatory conditions to guarantee the constitutional right to Internet accessibility exists in Mexico. However, in terms of implementation, there is little or no information available on the articulation between the three levels of government. A regulatory framework that guarantees the constitutional right of access to connectivity and ICTs exists, but there is still no certainty of progress in its implementation neither broad multisectoral participation.

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11 Political Constitution of the Free and Sovereign State of Oaxaca, 1922 (last amendment made on December 31st, 2016).

12 Political Constitution of the Free and Sovereign State of Chiapas, 1921 (last amendment made on June 24th, 2020)


15 A minimal exception is represented by the agreement signed by the Government of Oaxaca, the Institute for the Administration and Appraisal of National Assets (INDAABIN) and the Telecommunications Investment Promotion Agency (PROMTEL) for the public real estate for deployment of communications and broadcasting infrastructure sharing.

16 Interview with Erick Huerta, director of the organization Networks for Diversity, Equity and Sustainability. A.C., on April 6th, 2021.
Connectivity situation in Oaxaca and Chiapas: a persistent gap

In Oaxaca and Chiapas, despite government policies, the required infrastructure for connectivity continues to be weak and little progress has been made. There is little availability of excellent quality internet access; where it is available, the cost of this service and the necessary devices are unaffordable for most of the population in both states. In addition, there are other barriers: ICTs are developed in languages that do not correspond to the linguistic realities of the communities; adverse social conditions hinder access to them, for women; and, technology is associated only with certain stages of life, causing the marginalization of populations that are not considered "productive" or "up-to-date". This causes the digital divide to persist in terms of language, gender, and age.

Scenarios of inequality and social exclusion

Located in southeastern Mexico, the states of Oaxaca and Chiapas represent one of the poorest and most unequal regions in the country. Their weak economic structure, intertwined with the social circumstances of their populations, create a panorama defined by a social gap and exclusion—both within the state and in relation to the rest of the country—.

According to official data\textsuperscript{17}, in 2020 Oaxaca had a total of 4,132,148 inhabitants, of which 1,974,843 were men and 2,157,305 were women. In Chiapas, the total population was 5,543,828, of which 2,705,947 were men and 2,837,881 were women. The average age in both states (28 in Oaxaca, and 24 in Chiapas) indicates the existence of young populations. They are also the states with the highest concentration of indigenous population\textsuperscript{18} in the country: in Oaxaca there are 1,221,555, and in Chiapas there are 1,459,648 indigenous people. Regarding the distribution of this population in the territory, official figures consider that in Oaxaca most of the population is in urban areas (77%), while a significant percentage (23%) is in rural areas.\textsuperscript{19} In Chiapas, on the other hand, more than half of the population lives in rural areas (51%) and only 49%, in urban areas.\textsuperscript{20}

Among the socio-demographic data—which reflect the conditions of inequality—the most important are those of economic nature.\textsuperscript{21} In Oaxaca, it is estimated that most of the economically active population (EAP) is employed in tertiary activities (commerce, transportation, services) and that there is parity between women and men. In Chiapas, 71.8% of

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\textsuperscript{18} The Mexican state uses the criterion of self-ascription to determine indigenous identity; however, the official indicators are based on the criterion of "indigenous language speaker". This leads to the conclusion that the number of indigenous people in both states who do not speak a language but who consider themselves indigenous is much higher than the figures presented in the table below.

\textsuperscript{19} For descriptive purposes, INEGI’s official definitions of "urban" and "rural" are assumed, based on the number of inhabitants. An urban area is one where more than 2,500 people live and a rural area is one where less than 2,500 people live.


\textsuperscript{21} The data presented in this part have been obtained from the official CONEVAL website at [https://www.coneval.org.mx/](https://www.coneval.org.mx/) and INEGI website at [http://cuenterame.inegi.org.mx/](http://cuenterame.inegi.org.mx/).
As a recommendation, here are some key challenges that those involved in the development of public policies can consider beginning (or continue) the reduction of the digital divide in the states of Oaxaca and Chiapas:

**For state and federal authorities:**

1. To make the digital policy implementation process transparent, making widely and participatively known the specific actions and the agencies responsible for their follow-up and implementation. Specifically in relation to the CFE Telecommunications and Internet para Todos program and the Red Compartida ALTAN commitments.

2. Promote spaces for discussion with other stakeholders (civil society organizations, local suppliers, communities, and citizens in general) to learn about their real needs and their capacity for protagonism and social agency.

3. Integrate into their plans a human rights approach that prioritizes social benefit over private profit. This also implies paying attention to the cultural, linguistic and gender circumstances that make the policies to be developed relevant.

4. Improve and expand the performance of the virtual portals and virtual services of the different State units, paying particular attention to the linguistic and age diversity of ICT users in the different regions of both states.

**For social organizations and communities:**

5. Strengthen mechanisms for continuous advocacy at the federal, state and municipal levels, in order to follow up on government actions in the areas of connectivity, access to ICTs, freedom of expression and access to information.

6. To follow up on legislative changes in communication and frequency concessions for social and community use.

7. Expand knowledge and discussion of current connectivity programs (CFE Internet and ALTAN), to detect possible opportunities and challenges for the incorporation of new community networks and the strengthening of existing ones.

8. To create communicative alliances to broaden the debate on the conceptions of technology, its nature and its purposes based on local knowledge and know-how.

9. Creatively support the generation of local and culturally relevant content, taking advantage of existing technological capabilities (community radios, intranets, cellular telephones, etc.)

10. Once the impact of the digital divide on human rights is known, collectively imagine possible contributions of technology to reduce the negative effects on the lives of individuals and communities: **Is it possible to think of technology as a factor that contributes to the improvement of life rather than its deterioration?**