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# The Digital Divide as an Expression of Territorial Inequality: towards Constitutionalizing the Prohibition of Territorial Exclusion

La brecha digital como expresión de la desigualdad territorial: hacia la constitucionalización de la prohibición de la exclusión territorial

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# **Abstract**

Inequality, by territory, is a factor that generates exclusion in the satisfaction of rights of the inhabitants of vulnerable or marginalized areas, as is the case of access to digital technologies, which is found in various parts of the world, Latin America, and, of course, Colombia. The study seeks to demonstrate how territorial inequality is a factor of discrimination that deserves to be legally and expressly prohibited as others that already are: race, religion, political affiliation, ideology, sex, economic status, and others. The phenomenon of digital divides is used to confirm this situation, since the differences in access to technologies, especially the most recent ones, such as the Internet and its different modalities, are generated, among other causes, by the differences between vulnerable territories and the most advantaged ones. The achieve this objective, category equality, discrimination in general, then territorial discrimination, and, finally, the digital divide itself, will be handled, making references to several countries, including Colombia. The correlation between territory and technological inequalities contributes to reinforce the thesis of constitutional and normative prohibition, in general, of territory as a factor of discrimination is demonstrated.

#### KEYWORDS

Equality, discrimination, territorial inequality, digital divide.

# Resumen

La desigualdad en virtud del territorio es un factor que genera exclusión en la satisfacción de derechos de los habitantes de las zonas vulnerables o marginadas, como es el caso del acceso a las tecnologías digitales, lo que se constata en varias partes del mundo, Latinoamérica y por supuesto, Colombia. El estudio persigue demostrar cómo la desigualdad territorial es definitivamente un factor de discriminación que merece prohibirse jurídica y expresamente como otros que ya lo están: raza, religión, afiliación política, ideológica, sexo, condición económica, entre otros. Se utiliza el fenómeno de brecha digital para constatar tal situación, por cuanto las diferencias en el acceso a las tecnologías, especialmente las más recientes como el Internet y sus distintas modalidades, son generadas, entre otras causas, por las diferencias entre territorios vulnerables y los más aventajados. Para el logro del objetivo se manejará la categoría igualdad, discriminación en general, luego la discriminación territorial y, por último, la brecha

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#### INTRODUCTION

The territory is relevant. The area in which one lives, whether countries, departments, municipalities, or even neighborhoods, is a space where group and individual aspirations and social, economic, cultural, and legal needs are related, and the satisfaction or not of these needs.

As is well known, there are more developed territories and less relegated to public policies, and, on the other hand, some marginalized territories have been excluded from the means of satisfying needs and rights, even basic ones. This makes it evident that it is a factor of exclusion, but, despite this, from a constitutional point of view, it is not an aspect expressly prohibited as are others that threaten equality and non-discrimination such as sex, race, religion, economic status, political affiliation, ideology, philosophy, age, and others, as provided by the democratic Constitutions of the Western world such as that of Colombia, and relevant international treaties such as the Universal Convention on Human Rights and the Inter-American Convention on Human Rights, among others.

It is pertinent to highlight the territorial exclusion of groups and inhabitants of a territory to contribute to the aforementioned normative prohibition. To this end, this paper aims to demonstrate it, through the category of territorial discrimination, a social and individual fact that affects access to the satisfaction of interests, needs, services, and, consequently, rights, where territory is a determining factor, as well as others such as economic condition, age, educational level, etc.

According to experts, the digital divide has several dimensions in technological differences: access, competence, motivation, and use. For this analysis, one of the relevant indicators, namely access to technologies, specifically the Internet and its applications, will be considered a simplification.

The methodology moves between exploratory and descriptive, for this purpose, bibliographic research is performed, consisting of documentary research of doctrine on equality, discrimination, territorial exclusion, and digital divide. Concerning the latter, several works are referred to with information from several countries such as Spain, Argentina, and, obviously, Colombia, where legal relations are also included, referring to norms, and even jurisprudence.

Finally, to achieve the desired goal, the work has four fundamental parts: equality and discrimination, territorial inequality, the digital divide in general, and, finally, references to this phenomenon in the mentioned countries, where Colombia stands out in particular.



# **EQUALITY**

Equality, as a demand for justice, is a concept of great importance, not only in the legal field, but also in political science, sociology, economics, and other sciences, because it signifies a humanizing position of social phenomena. History has been no exception, and equality has been the impetus or justification for social, economic, and cultural changes, such as the extension of rights to all human beings, regardless of their social or economic status, race, sex, ideology, or religion, among other aspects.

Equality is closely interrelated with justice, the latter being considered the most sublime value of law, it constitutes its north, and it is in turn integrated by other values such as freedom, legal security, the common good, solidarity, human dignity, and equality. The idea of justice is assumed as the correct distribution of burdens and benefits in society, and this distribution must be equal for all, that is, equality is a requirement of justice, regardless of the elements to be distributed: salaries, goods, services, rights, duties, individual, or social benefits (Ross, 1963; Rawls, 1995).

Scandinavian master Ross warns of absolute equality. If everyone must be treated in the same way regardless of the circumstance or situation in which they find themselves, their marital status, whether they are a child or an adult, and whether they are guilty or not of murder, then, this would not consist of equality or justice, equality to be true, fair, must consider each of these distinctions, otherwise, equal treatment would not be relevant to be considered a value or legal principle. Equality, and, therefore, justice, following Ross (1963), means that no one arbitrarily, i.e., without reasonable justification for it, should be treated differently from any other person.

#### ON DISCRIMINATION AS THE ESSENCE OF EQUALITY

It is for this reason that, within the very concept of equality, non-discrimination is inherent, that is to say, that no one should be treated differently in an unjustified manner, meaning that criteria that are not relevant but rather excluding or relegating such as race, sex, religion, social and economic condition, political or philosophical ideas, among others, prohibited in international treaties and the constitutions of the majority of States with democratic forms of government such as Colombia, should be used.

Discrimination consists of treating a person or group of people in an inferior and differentiated manner for reasons such as race, sex, religion, political preference, and age; it is differentiating, excluding in the sense of limiting rights and freedoms (Rodríguez Zepeda, 2007). "In this sense, discrimination is interpreted as an unfair limitation to people in terms of their fundamental free-



doms and protections, to social and political participation, and to a welfare system adequate to their needs" (Rodriguez Zepeda, pp.65-66).

The absence of discrimination is a guarantee of equality, in fact, Article 7 of the Universal Declaration of Human Rights of 1948 states that:

All [human beings] are equal before the law and are entitled without distinction to equal protection of the law. All are entitled to equal protection against any discrimination in violation of this Declaration and against any incitement to such discrimination.

Therefore, the statement in the article "...without any distinction whatsoever..." is very relevant, that is, without discriminating or treating any human being in an inferior manner.

Rodríguez Zepeda (2007) insists that the substantial element of discrimination is the culturally formed, systematic, and widespread contempt or stigma or negative prejudice with an undeserved disadvantage that has the consequence, deliberately or not, of damaging fundamental rights and freedoms.

The right to non-discrimination is individual, but, in many cases, the collective element of discrimination stands out because there are groups or persons of certain groups especially vulnerable or susceptible to acts of discrimination such as racial, sexual, religious, health, age, disability, that tend to be despised and have their fundamental freedoms limited.

The distinction or inferior treatment must be unjustified (Ross, 1963), for example, in the case of a group of convicted criminals, according to the law, they may have limitations to their freedom and political rights, or the person who is rejected for a job not because of any prejudice but because he or she does not meet the required profile or does not have the competence for the position. In these cases, the distinction is not discrimination, because it is justified.

The types of equality are based on formal equality and material equality; formal equality refers to equality before the law, as a requirement of the generality of law, every person must be treated equally, in the same circumstances, due to the requirement that they are governed by the same legal system. The guarantee is that all citizens are subject to the same rules and administrative and jurisdictional bodies. It is the recognition of the quality of the citizen or person to whom the law must be applied without any exemption from such treatment. It is the equality of legal treatment for people in substantially equal circumstances (Pérez Luño, 2006).

Following the same author, material equality implies the idea of equalization of individuals in different circumstances through the balance of goods and economic and social situations, it is



the equality of the greatest number of individuals in the greatest number of goods. Equality also implies equalization by convention, declaring equality before distinctive elements that are not relevant to the application of the law; it is the way to exclude discrimination.

In safeguarding equality, it is important to avoid arbitrarily equating different situations or, on the contrary, arbitrarily establishing distinctions that are not relevant. In this sense, Pérez Luño (2006) states that absolute equality generates uniformity, treating different cases in the same way, which produces injustice. Equality, then, cannot be absolute, treating different cases as if they were the same, producing unjust consequences by not considering significant substantial differences that justify different treatments, as long as it is more favorable.

For equality to be an element of justice, it must discard arbitrary or unjustifiable differentiations, which are typical prohibitions of constitutional clauses that establish the principle of equality and non-discrimination to guarantee the value of equality and expand the conception and effectiveness of human rights, such as race, sex, social condition, religion, and others, which generate less favorable differentiating treatment than the rest of the population. Equality has as an element in its definition the absence of discrimination, but not of justified differentiation<sup>1</sup>. Equality, in terms of constitutional clauses, the central theme of this research, is called by Díaz de Valdez (2015: 154): "Constitutional equality" that must be established in the fundamental letters and the laws that develop these elements:

- o General equality, which is identified with formal equality before the law as a consequence of the generality of law, of being all equally subject to a legal system.
- o Equality as Protection of Important Public Goods (Fundamental Rights), which implies not protecting equality as such, but linking it to the use and enjoyment of fundamental rights, such as equal access to political participation, and enjoyment of free transit, among others.
- o Equality is non-discrimination based on factors associated with belonging to certain groups, related to aspects such as religion, age, sex, and race, among others.
- Equality as a positive obligation to promote equality of opportunities (and de facto), refers to the duty of the State to remove the obstacles that hinder equal access to certain goods, advantages, or rights, such as the appointment in a competition to a position by credentials open to citizens who meet certain qualifications, where access to education is vital, being in

<sup>1</sup> There will be justified differences by merit, experience, and aptitudes, among others, as explained by Ross: "On Law and Justice" (1963, pp. 261-280).



many cases free education, subsidies or benefits based on economic handicap a legitimate measure to achieve quality education.

Concerning the Political Constitution of 1991, Article 5 establishes equality in the protection of fundamental rights, while Article 13 establishes equality before the law or general equality and the prohibition of discrimination for reasons of sex, race, family or national origin, language, religion, political or philosophical opinion, as well as positive equality at the end of the same article by establishing the duty of the State to provide the conditions for equality to be effective and to especially protect people due to their economic, physical, and mental conditions. Likewise, the Universal Declaration of Human Rights of 1948 establishes the principle of equality and non-discrimination in its articles 1 and 2, as does the American Convention on Human Rights or Pact of San José, signed in 1969, ratified by Colombia in 1972, and put into force in 1978, which establishes in Article 1.1:

The States Parties to this Convention undertake to respect the rights and freedoms recognized herein and to ensure to all persons subject to their jurisdiction the free and full exercise of those rights and freedoms, without any discrimination for reasons of race, color, sex, language, religion, political or other opinion, national or social origin, economic status, birth, or any other social condition. (Emphasis added).

In Article 24: "Equality before the Law. All persons are equal before the law. Consequently, they are entitled, without discrimination, to equal protection of the law". In addition, the International Covenant on Civil and Political Rights, signed in 1966, ratified by Colombia in 1968, and force since 1976, establishes in its article 2.2: "The States Parties to the present Covenant undertake to guarantee that the rights enunciated in the present Covenant will be exercised without discrimination of any kind as to race, color, sex, language, religion, political or other opinion, national or social origin, property, birth or other status. Also, the International Covenant on Economic, Social and Cultural Rights, signed in 1966, ratified by Colombia in 1969, and in force since 1976, provides in its Article 2.2: "The States Parties to the present Covenant undertake to guarantee that the rights enunciated in the present Covenant will be exercised without discrimination of any kind as to race, color, sex, language, religion, political or other opinion, national or social origin, property, birth or other status".

Article 2.1. provides for the obligation of States to progressively establish measures to make these rights effective.



# **ON TYPES OF DISCRIMINATION**

Emphasizing equality as non-discrimination, the following types of discrimination (direct, indirect, and intersectional) are discussed<sup>2</sup>, which must be prohibited in a State governed by the rule of law:

Direct discrimination occurs when an express distinction is made between groups of people, which results in individuals from some groups being less able to exercise their rights, e.g., a law that requires women, and not men, to provide proof of a certain level of education as a condition for exercising their right to vote, will constitute direct discrimination on the basis of sex.

Indirect discrimination occurs when a law, policy, or practice is presented in neutral terms (i.e., it makes no explicit distinction) but also disproportionately disadvantages a specific group or groups. For example, a law that requires everyone to provide proof of a certain level of education as a prerequisite for exercising their right to vote will have an indirectly discriminatory effect on any group that is less likely to have attained that level of education (such as disadvantaged ethnic groups or people of lower economic status).

Intersectional discrimination occurs when several forms of discrimination combine and leave a specific group or groups already disadvantaged at an even greater disadvantage, e.g., discrimination against women often means that women are paid less than men for the same work. Discrimination against an ethnic minority often means that people who are part of that minority are also paid less than other people for the same work. When women belonging to a minority group are paid less than other women, and men belonging to the same minority group, they suffer intersectional discrimination because of their sex, gender, and ethnicity. Amnesty International also warns and presents current empirical data from several countries specifying the forms of discrimination: by gender, ethnic groups, and castes, migrants (xenophobia), towards LGTBI groups, and the disabled (Amnesty International, 2022).

On Structural Discrimination: Structural discrimination or "structural inequality" incorporates "historical and social data" that explain inequalities in law (de *jure*) or in fact (*de facto*), as "the result of a situation of social exclusion or 'subjugation' of vulnerable groups by others, systematically and due to complex social practices, prejudices, and belief systems" (Alegre and Gargarella, 2007). According to Pelletier Quiñones, structural discrimination can occur in a given geographic area, in the entire State, or in the region (Pelletier Quiñones, 2014).

<sup>2</sup> See: Amnesty International (2022). Discrimination. Website: amnesty.org and available at the link: https://www.amnesty.org/es/what-we-do/discrimination/, source analyzed on this part of the types of discrimination.



In other words, contextually or historically excluded or disadvantaged groups share a common feature that identifies them: there is a history of discrimination, of negative social prejudices against these groups, susceptible to being reinforced by regulations, which "diminishes the possibility of defending the interests of the group" (Giménez Gluk, 2004).

In this sense, it is pertinent to highlight the concept of exclusion as those mechanisms that deprive individuals or groups of individuals of the ownership and exercise of social rights or a process that relegates a large part of the population from economic opportunities (Toledo and Romero, 2007).

## **EXCLUSION OF THE INHABITANTS OF A TERRITORY**

By virtue of the aforementioned classifications, all of which are pertinent and justified because they go against the equality and dignity of the human being, one aspect or factor that is not taken into account, at least by the majority of the typologies of discrimination when developing the theme of equality, is the one referring to the place, region, city or municipality that, within the same nation, constitutes an important cause of discrimination, which is proposed to be called "Territorial Discrimination", which, although related, does not strictly refer to territorial inequalities as a consequence of different levels of development, but rather how these affect the individual or groups of inhabitants who end up with fewer opportunities because they belong to a region of great poverty and needs, which prevents them from opting for better living conditions, access to goods and services, the exercise of fundamental rights, and even the right to have institutions that satisfy their needs.

Territorial inequality refers to heterogeneous territories, the result of a disparate settlement factor, accompanied by an imbalance in the distribution of wealth and opportunities for material well-being, which is why there are territories with successful dynamics in territorial development, while others are unable to escape from the stagnation trap, with high and persistent levels of poverty (ECLAC, 2016). That is why the territory is considered one of the structuring axes of social inequalities, as they have a great weight on the magnitude and reproduction of these in different areas of social development. They harm both, as a whole, and people living in lagging territories (Czytajlo, 2017).

To continue explaining this category of territorial inequality, we start with the relevance of the territory for the people or groups of people who live in it. In this sense, Toledo and Toledo (2007) point out the importance of territory:

o It is a socially constructed space based on physical, socioeconomic, and cultural aspects.



- o It is the place of life, of groups or individuals and societies, in which the political, social, and economic evolution of society takes shape.
- o It is the space where the social management of governments and communities is manifested.
- o It is the lived, affective, close space that can be smaller than normal circumscriptions, where individuals manifest a sense of belonging.
- o It is the appropriation of space, individually or collectively, where aggregation, exclusion, and segregation phenomena are evidenced.

Indeed, place does matter, inequalities by territories generate, reproduce, or aggravate inequalities of various types, because there are lagging territories where there is little development, and very precarious conditions for the achievement of well-being, such as access to basic public services, roads, health services, among others, i.e., there is more poverty: poverty as a need, linked to the deprivation of certain goods and services required to live and function as members of society (ECLAC, 2016).

As stated, "place of birth or residence determines socioeconomic opportunities and conditions, has an impact on the realization of political, economic and social rights, and can be a source of discrimination in itself, as can gender, race or religion" (ILPES, 2012: 12).

It is precisely in the territory where the social inequalities analyzed are crystallized, connected and intertwined...and where the intergenerational reproduction of poverty occurs. Moreover, some of the population groups that experience the most severe inequalities and deprivation of rights (especially indigenous peoples, but also in some cases Afro-descendants) tend to be concentrated in the places that lag behind. Conceiving territory as a structuring axis of social inequalities is not equivalent to a geographic determinism, i.e., it does not seek to attribute to geographic location a direct and causal effect, since more relevant than the space itself is the social structure that settles in it and the relationships generated with other territories. (ECLAC, 2016, pp. 62-63)

ECLAC, in the same 2016 study, presents an X-ray of several Latin American countries where it shows the lack of resources, services, and high levels of poverty in certain cities, provinces, or regions within the same State, with below-average levels, showcasing the region of Chocó within the Colombian context (ECLAC, 2016: 65).

Territorial inequalities have been a very reiterative and notorious topic in the social sciences, and have also been the subject of world summits and the policies of international organizations such as the World Bank, among others (Aché Aché, 2012), and the reason for this is because they generate dysfunctionality in the territories, and, consequently, according to Wilkinson and Pickett



(2009): It deteriorates social relations due to loss of trust in community life and political leadership; it prevents the formation of social and institutional capital, life expectancy is lower, as well as schooling, higher crime rate, and very low social mobility. The consequences are dire because they affect social and political stability: these exclusions are fertile grounds for the growth of terrorism, fanaticism, and crime, i.e., they can threaten peaceful and democratic coexistence (Aché Aché, 2012; Gorvachov, 2011).

When territories are excluded from basic needs, their inhabitants have fewer opportunities to carry out individual and collective life projects, and, as reiterated by Gómez and Duque (1998), freedoms are not only understood as those enshrined in civil and political rights, but also those referring to economic, social, and cultural rights, which are the main way to develop the basic capabilities to which one is entitled (Sen, 2000). Many of the groups or individuals who live in these conditions are well aware of this, and this is the reason for the classic exodus within the same countries from rural areas to the cities since it has been demonstrated that the territorial exclusion of rural areas is common and reiterated in the poverty of Latin American countries and other parts of the world.

# **DIGITAL DIVIDE AND TERRITORY**

In order to demonstrate the influence of territory on the exclusion of groups and individuals, we will delve into the category of the digital divide and the factors that influence it, where territory is one of the main factors.

According to Vega-Almeida (2007), the Digital Divide is a problem closely associated with "technological" revolutions, expressed in the difficulty for the majority to access new or emerging technologies and the capital resources to do so.

For this author, it is not a new problem, it has always been demonstrated throughout history that the technological evolution, new technologies, where as well as many enjoy and use them, others cannot, a problem that has to be renamed according to each era by the qualities of technology that vary over time.

However, in the complex reticular and digital reality where economic and social gaps are widening every day, unanimous attention is focused on that vast and deep exclusion space called the digital divide. It is the result of the economic and social inequalities of networks of individuals and groups in a society that focuses on the technological aspect.

Regarding Goméz Navarro et al. (2018), the digital divide makes mention of the global scope and within countries. The emergence of Information and Communication Technologies (ICT) and



their potential benefits have occurred mainly in a small number of developed countries, generating "technological and social gaps" that not only limit the social appropriation of these technologies between nations but also internally and between social groups.

It is a complex phenomenon of political, economic, and social elements and is closely related to structural problems in the global society of poverty, exclusion of social groups, unemployment or job insecurity, and other factors (Reygadas, 2008).

The Organization for Economic Cooperation and Development (OECD) defines it as the gap or differentiation between individuals, households, businesses, geographic areas, and socioeconomic levels in terms of opportunities for access to ICTs and their use for a wide variety of activities that can be achieved with them (OECD, 2001).

There are four types of digital divide, in terms of access to or appropriation of information and communication technologies: 1) differences in motivational access or interest in the use of new technologies, where social, cultural, mental, psychological, and economic aspects converge. 2) Differences in physical access or material appropriation or use referring to hardware, software, networks, and applications of new technologies, 3) digital literacy, training, referring to education to acquire digital competencies and skills, and 4) significant opportunities for use, i.e., the possibility of use for the achievement of improvements in the personal situation, such as the labor, social, economic aspect, among others (Gómez Navarro *et al.*, 2018).

Alva de la Selva (2015) has identified several dimensions of social appropriation of ICTs, with the digital divide being the product of the differences in this appropriation in each dimension or area: 1) technological: provision of infrastructure; 2) socioeconomic: the differences between different social and economic levels to access and use ICTs; 3) sociocultural: refers to the use, socialization, and significance of new technologies in different social groups; 4) subjective, individual or personal, regarding the activities people perform with ICTs, what they use them for, how useful and creative their use is; 5) praxeological: is related not only to access but also to the digital skills to use them becoming fundamental in their daily activities, being part of their socialization, and 6) political: refers to the differences in the actions of governments that promote the generation, access and use of new technologies in various social and cultural spaces or contexts. These actions should be encouraged at all levels, including excluded groups, territories, and people.

Di Virgilio and Serrati (2022) relate this phenomenon to the territories of cities and their inhabitants; indeed, the digital divide emerges as a constraint to access and effective use of technology, thus limiting the possibilities for cities and citizens to develop and manage a large part of



their daily lives in the new digital environments. Among the factors that these authors point out as determining factors in the differentiation and use of technologies and electronic devices are gender, age, and territory.

Also, to test the influence of territory on exclusion or technological and digital divisions, the authors carried out a study where they considered the territory of Buenos Aires in two parts: Greater Buenos Aires (GBA) and the autonomous city of Buenos Aires (CABA), showing that, in each of these subregions, there are great inequalities and differences, specifically between the northern and southern sectors of each of them. There is a North with better social and income conditions, as opposed to an impoverished South. What they call a "spatial segregation" is where territories are inhabited unequally by social classes, affecting the use of technologies.

For them, this distribution is typical of Latin America, where there is a metropolitan area with these characteristics, and marked inequalities between different territories not only in terms of social class but also in terms of basic services such as water, electricity, security, and, also, technology, that they intend to demonstrate in their work. Indeed, availing themselves of work carried out by the Software MAUTIC 2019 shows that as much as in the use of mobile or cellular and computer, both in the GBA and CABA in the southern sectors is 60-70 percent, and in the northern sectors it ranges from 80 to 100 percent. Also, shows the influence of age groups and educational level, which is linked to incomes<sup>3</sup>.

For Cuesta (2022), the digital divide refers to the difference in opportunities when accessing the Internet or new technologies in general, being a factor of social exclusion. For this author, people without technological and digital knowledge lose opportunities to improve their personal well-being.

The author makes a brief analysis of the situation in Spain, and she states that more than one-third, i.e. 35.2% of Spanish households, have what she calls "digital blackout", which translates into 1.8 million households that suffer the digital divide on a daily or habitual basis. Among the factors that influence this exclusion: people over 65 years of age, those living alone, but also some young people and those living in the rural population, highlighting therefore, in this country, also the territorial factor.

The author reiterates the digital divide in young people, who lost many educational opportunities to receive classes during the COVID-19 pandemic, i.e., it is important for the maintenance of

<sup>3</sup> For more information, see: "Digital divide and territory. Evidence from the case of the agglomerate Gran Buenos Aires", by María Mercedes Di Virgilio and Pablo Serrati. Revista Territorios No. 47. Bogotá 2022. pp. 1-39.



a more dignified life and is currently a relevant channel of communication, it remains so in the educational, labor, and, likewise, in the social sphere.

It is very important that young people also have digital competencies to learn to use the devices in a useful and responsible way, so that it is a tool and not a distraction for the fulfillment of their duties, and, thus, possess critical thinking, being able to discern what is truthful or not qualified information or disinformation, which will result in the use of technologies to improve their educational learning (Cuesta, 2022).

The difference in access to ICTs, according to Bautista Murillo (2021), during the COVID-2019 pandemic highlights the importance it had as a mechanism of adaptation, of favorability, to continue with access to education, the fulfillment of work, access to remote health care services, and even process social security benefits, with those who are in vulnerability, who do not have the technological and digital tools, and therefore have limitations in the exercise of their rights and difficulties in social adaptation. Sectors without access to technology, with obstacles to continuing their studies during the pandemic, and problems carrying out their jobs had to expose themselves to work in the street with the risk of being infected and receiving fines. The pandemic highlighted the differences that already existed, but it made them more visible in the technological and digital sphere, and that unfortunately continues after the COVID-19 pandemic.

The territorial factor in this digital divide or exclusion is highlighted, according to Cuesta (2022), by the situation in which rural territories find themselves, in this case considering Spain. Although rural areas represent 84% of Spain, they only comprise 16% of the total population; in these areas, many people do not have a good Internet connection, or, if they have one, it is not unlimited, while others do not have the indispensable technological devices to communicate. The people of this territory, about 7,618,405 people living in rural areas of a total of 47,615,034 inhabitants of Spain in 2022, according to statistics from the National Institute of Statistics (INE), will have problems accessing online education, remote work, and processing administrative matters that are done, in many cases, digitally.

Cañon *et al.* (2006) also use the concept of digital competence to outline the digital divide, in effect, digital competence is the effective use of ICTs in labor, educational, recreational, and civic participation spheres, the digital divide being the expression of the shortcomings to effectively use ICTs in these areas, i.e., it is not only the lack of access to ICTs but of ineffectiveness in digital competence.

These differences in access and competence generate unequal opportunities in access to information, knowledge, and education, i.e., an exclusion effect, depriving countries, individuals,



communities, and cultures of the possibility of social, economic, and human progress potentially offered by ICTs (Serrano and Martinez, 2001; Rogers, 2003). In these contexts, the lack of education influences the lack of competencies, which generates lower cognitive and educational levels than those that can be achieved with the appropriate use of ICTs (Martínez López, 2020).

Among the excluding factors of the digital divide, Cañón *et al.* (2016), next to age and income, also highlight the influence of territory, geographic localities deprived of access to ICT (Cañón *et al.*, 2016).

On territory, Bautista Murillo (2021) points out socio-spatial differences and some related variables, such as income level and economic activities.

The author verifies it by making an analysis, mainly at the time of the COVID-2019 pandemic in Argentina<sup>4</sup>, of the marked difference in access to technologies that also discriminated against access to rights for people living in certain provinces, sectors, cities, or neighborhoods that are in conditions of permanent social disadvantages, affecting the principle of equality provided for in the Constitutions of the Western world and the conventions of international human rights law.

Structural or robust equality raised by Saba (2016) is affected, consisting of the need to guarantee real and fundamental equality for disadvantaged groups in society, in this case, those affected by the digital divide located in certain marginalized territorial areas.

This has consequences in the responsibility or obligation of the State to establish and implement appropriate public policies and special measures, in order to dismantle the conditions that generate this inequality in access to new technologies (Bautista Murillo, 2021).

In other words, not only the State or civil society must raise the situation of violation of rights but also the need to restore and vindicate the enjoyment of these rights, progressively ensuring wider access to ICTs, the diagnosis and what Bautista Murillo (2021) emphasizes is positive in the sense of forcing the State to design and implement public policies to ensure the reduction of these inequalities that affect the exercise of rights.

<sup>4</sup> For more information on the territorial differences in access to ICTs in Argentina, see: "THE PLACE MATTERS: DIGITAL GAP AND TERRITORIAL INEQUALITIES IN TIMES OF COVID-19 A COMPARATIVE REVIEW OF THE ARGENTINE REALITY, ITS PROVINCES AND MAIN URBAN CENTERS" by Juan Carlos Bautista Murillo. Argumentos Magazine No. 24 of October 2021.



#### REFERENCES ON THE DIGITAL DIVIDE IN COLOMBIA

About Colombia in the 1990s, there was significant inequality between rural and urban realities, as poverty multiplied in rural areas and their inhabitants were discriminated against, bearing the stigma of embodying backwardness, the traditional culture of pre-modern societies (Gómez Jiménez, 2003).

The state administration has also discriminated against the countryside in favor of urban areas, for several reasons, according to Gómez Jiménez (2003):

- o Because it is eager to show more advantageous national results, it relegates rural areas.
- o The limited capacity to influence national trends, as they are less populated areas.
- o Because of the spatial difficulties of access, which are increased by the same state neglect.

At that time, income differences were very significant, three times greater in urban areas than in rural areas, in effect, the richest 10% in urban areas had three times more income than the richest in rural areas, and, at the other extreme, the poorest sectors in urban areas had three times more income than the poorest in rural areas, numbers that remained the same for the year 2000, according to data from the National Planning Directorate (2001).

Regarding recent data on the digital divide, i.e., the differentiation of capacity and access and enjoyment of ICTs, specifically the report on the 2020 Regional Digital Divide Index published by the Ministry of Information and Communication Technologies:

The lack of material access to digital technologies is 85 to 92% in the departments of Vichada, Guainía, Vaupés, Amazonas, Putumayo, and Chocó. Likewise, difficulties in access to ICTs range from 78 to 85% in Arauca, Guaviare, Caquetá, Nariño, Cauca, Córdoba, Sucre, La Guajira, and the San Andrés archipelago.

As can be seen in these more serious cases of the digital divide, little access to digital technologies, is witnessed in remote, border, rural, and dispersed communities, which contrasts with urban areas and in the capitals, where the lack of access is significantly lower, such are the cases of Cundinamarca, Antioquia, Santander, and Atlántico with the range of 56 to 63%, i.e. up to 30% differences with the departments with more inequality, however, in those territories where the digital divide is reduced, the percentage is significant, since, on average, just over half do not have access to digital technologies, according to the 2020 MINTIC report.



Regarding the digital divide by region, in the same 2020 report, the most worrying cases are recorded in Amazonia, Orinoquia and Pacific, with a range of 77 to 82% of lack of material access to technologies, as well as the Caribbean areas and part of the Andean region with 72 to 77%.

In 2021, considering the MINTIC Digital Divide report published in July 2022, entitled: "Regional Digital Divide Index: Results 2021", which precisely takes into account the digital divide index in Colombia and for each department, not considering connection percentages, nor the discrimination by regions, as in the 2020 study, however, it illustrates the situation of digital access, use and enjoyment of new technologies in Colombia in the same year using the referred index<sup>5</sup>.

In order to simplify and illustrate the results of the digital divide in Colombia, it is reiterated that the indicator of Material Access is considered, in which Vaupés, with 0.918, stands out as the department with the lowest access and the highest index of digital divide; and, successively, in decreasing order, but with a high index and among the thirteen departments with the least material access: Vichada, 0.9118; Guainía, 0.8487; Amazonas, 0.8136; Chocó, 0.7903; Putumayo, 0.7219; Guaviare, 0.6857; Cauca, 0.6796; La Guajira, 0.6735; Arauca, 0.6492; Córdoba, 0.6311; Nariño, 0.6226; and Sucre, 0.6217.

As can be seen, most of them coincide with the departments with the least connection in 2020, even though there may be an improvement in each one. Many of the departments with the least access are remote, border departments, with more rural areas.

In contrast, the areas or departments with the most advantageous connection, with the smallest digital gap, that is, with the lowest index from lowest to highest, that is, from highest to lowest connection, but always among the top 10 departments with the highest digital connectivity, are: Bogota, with 0.3496; Valle del Cauca, 0.4115; Risaralda, 0.4237; Cundinamarca, 0.4448; Quindio, 0.4714; Meta, 0.4752; Atlántico, 0.4754; Santander, 0.4766; Antioquia, 0.4782; and Caldas, 0.04786. These are departments where the most urbanized and least remote cities are located, and where most of the inner country is located.

Likewise, in the DANE Press Release of 2022 on the survey of information and communication technologies in households, specifically about Internet connection (ENTIC Hogares de 2021)

<sup>5</sup> The Digital Divide Index (DDI) is calculated as a complement to the Digital Access Index (DAI), which ranges between 0 and 10; therefore, the DBI is calculated as follows: The maximum value that the DAI can take, minus the actual value of the DAI, results in the DBI, which will range between 0 and 10 (See Ministry of Science, Innovation, Technology and Telecommunications (2016). Digital Divide Index 2006-2016).



published on July 28, 2022, the proportion of households with Internet connection in the national total was 60.5%, in settlements, 70.0%; and in rural and dispersed population centers, 28.8%.

Discriminating by departments, the same study shows that the areas (departments) with the least Internet access, from 4.6% to 29.1%, are: Vichada, 4.6%; Vaupés, 10.6%; Chocó, 14.6%; Amazonas, 16.7%; Guainía, 24.1%; La Guajira, 28.6%; and Putumayo, 29.1%.

In contrast, the departments with the highest percentages of Internet access are Bogotá, 81.5; Valle del Cauca, 79.0; Risaralda, 72.8; Tolima, 67.00; Caldas, 66.8; Boyacá, 64.3; Santander, 64.1; Norte del Santander, 63.4; Meta, 63.2; Quindío, 63.0; Cundinamarca, 60.8; Antioquia, 60.8; Atlántico, 60.7; and Caquetá, 60.5.

As an increase in Internet connection, a fundamental digital technology, concerning to the 2020 report. This aspect is highlighted in the DANE Communiqué of September 21, 2021, which states: "Colombia advances in its goal of being 70% connected by 2022: DANE".

The same text states that DANE revealed that in 2020 a historic advance in coverage expansion was recorded by achieving 9.2 million connected households in the national territory, which comprises an advance of 56.5% in the year, 4 points higher than the previous year of 2019.

Regarding the public policies implemented to reduce the digital divide, especially in rural areas, the communiqué states that:

- The training of digital skills through the distribution of 323 ICT digital trainers in 27 departments, carrying out rural digital literacy by training 23,233 Colombians, focused on digital centers located in the most remote areas of the country.

It is still recognized a limited number of computers in the country, reported that, in 2021, more than 88,000 million pesos were allocated for the acquisition of 106,000 computer equipment in the 32 departments to be delivered before the end of the year.

In the legal aspect, it is worth mentioning Ruling T-030 of 2020, which establishes that the Internet is an essential basic service for the fulfillment of the purposes of the right to education according to Article 67 of the Political Constitution, which consists of a social function that seeks access to knowledge, science, technology, and other cultural goods. This is because Internet access is encouraged and should be available in the most vulnerable remote rural areas:

- It is a means to achieve the effectiveness of the right to education.



The decision states: The operations of the educational process are carried out effectively through the Internet, such as the consultation of an infinite number of bibliographic sources, diversity of educational resources through innovative means such as virtual connection in the classroom, and also the realization of events such as conferences and educational forums, helping educators to impart in new and better ways the didactic strategies that can be accessed at school, and, in cases where access to remote sites is effective, no matter how physically far away the educational institution is located.

In this digital society, the Internet constitutes a guarantee for the realization of the right to education, especially in the case of primary and secondary schools, to which the judgment makes special reference.

Regarding current regulations, it is worth mentioning the progress of Law 2108 of 2021, "Internet as an essential and universal public service law", a law that aims to guarantee the universality of Internet access as an essential public service, ensuring the provision of continuous, sufficient, and permanent service to all inhabitants of the national territory, especially to vulnerable populations for ethnic or social reasons, or because they live in rural or remote areas.

#### CONCLUSIONS

Territorial exclusion is evident not only by the absence of basic services in general in certain dispersed, remote, and rural regions, but specifically in relation to the analyzed phenomenon of the Digital Divide, with a notable differentiation in favor of access in urban, central, headwaters or main areas, and on the other hand, little access in the aforementioned vulnerable areas.

The digital divide is accentuated in remote and rural areas with small populations, generating a loss of opportunities to make effective rights such as education, work, political participation, recreation, management of procedures before the public administration, and others for their inhabitants, therefore, the term used by Di Virgilio and Serrati (2022) is highlighted: "Spatial segregation" of the relegated spaces, in this case about access and use of new ICT technologies.

Recent empirical references from Argentina, Spain, and obviously Colombia, were specified, showing that territorial inequality had an effect on the increase of the digital divide of people living in the referred vulnerable localities. On the other hand, recent reports on Colombia, despite the increase in access and use of new technologies, highlighted the Internet connection as the main indicator, where, in 2020, a household connection of 56.5% was achieved, an increase of 4% compared to 2019. In addition to the reports for the year 2021, as mentioned, the national total was 60.5%, in capitals of 70.0%, and 28.8% in rural and remote populations.



However, there is much room for improvement, as there are still large areas of Colombia with an Internet connection of less than 10% in contrast to other regions where the connection improves by up to 90%, which generates problems of differentiation, exclusion, and discrimination in the inhabitants of the less favored territories of their rights, where technology is a fundamental means such as education, work, processing of public services, among others. Material justice is greatly reduced, and opportunities are ostensibly reduced in these cases, which brings problems to the dignity of the citizens of Colombia. The relegated areas already referred to in detail in the work are lesser citizens than the inhabitants of large urban centers, headwaters, and metropolitan areas.

However, evidence such as that demonstrated in the studies can be seen from a positive point of view in the sense that Bautista Murillo (2021) proposes, promoting public policies for technological development in vulnerable areas of Colombia, allowing their inhabitants to have access to greater opportunities and improved quality of basic or fundamental rights, such as education, work, health, and others.

The influence of territorial differences that generate a greater digital divide reinforces the thesis of the exclusion of the inhabitants of a territory from a series of rights such as access to basic public services, and technological rights that are nowadays guarantees of fundamental rights, such as health, work, among others. Consequently, it reinforces the need to enshrine the prohibition of territorial discrimination as a factor of unfair differentiation comparable to exclusion based on ethnicity, religion, age, political affiliation, sex, and economic status, among others.

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