The Gap in Access to Information and Communication Technologies in Rural Colombia

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Abstract: *For decades the rural sector in Colombia has been submerged in the needs and the inexistence of policies that allow eliminating the gaps with respect to the conditions of the rural sector. In relation to education, the situation has not been different, so this analysis seeks to raise a controversy in relation to inequality regarding access to information and communication technologies in educational processes in the rural sector in relation to the urban sector. In order to fulfill the objectives, the descriptive methodology was used, and it was possible to conclude the need to implement policies and measures to guarantee quality education in the rural sector through the use of ICTs.*

Keywords: Information and Communication Technologies, Education, Rural Sector

I. INTRODUCTION

The daily activities of human beings have been revolutionized with the advent of information and communication technologies. Accordingly, the education scenario has also been permeated with tools that have enabled continuous improvement and strengthening of students' cognitive competencies.

In the Colombian scenario, education was conceived as a right as of Article 67 of the Political Constitution, indicating it as a right and a public service for which the State is responsible. Subsequently, Law 115 of 1994 was issued as the General Education Law, where the State, the Society and the family are responsible for the quality of education in the country, provided through the certified territorial entities (Congress of Colombia, Law 115 of 1994).

However, the panorama of access and quality of education in the urban and rural sectors is not on equal terms. According to figures reported by the Agustín Codazzi Geographic Institute, IGAC, 99.6% of the national territory is rural, characterized by demographic factors such as extreme poverty, low quality of life and few opportunities to access services such as education, health and others, due to the neglect of the Colombian State. [1]

Continuing with this theme, it was found that the National Administrative Department of Statistics, DANE, in 2018 reported a total of 15.8% of the Colombian population, inhabiting dispersed rural areas. From this information, we begin to characterize the context of Colombian rural education, developed in dispersed areas, in centers distant from populated areas, with little infrastructure, technology and without the quality conditions for access to education.

In this regard, [2] state that in Colombia, ICTs represent an important factor in the structuring of educational projects, which in turn permeates the closing of educational gaps. However, there are a significant number of institutions with limited access to new technologies, which reduces the possibilities of implementing new learning pedagogies.

With respect to the above, it is necessary in this analysis to develop a study to determine inequality with respect to educational access framed in the availability of the benefits offered by ICTs in educational processes.

The research will be developed under the following structure: first the context of information and communication technologies in education will be analyzed, then the current landscape of access to education in rural areas will be studied, and finally it will be concluded about the gap that education presents in this area. [3]

II. THEORETICAL FRAMEWORK

The incorporation of ICT in the educational sector had its first initiatives in the eighties, permeating the teaching processes at the elementary, middle and high school levels (Molina & Mesa).

In line with the above, [4] assures that it is precisely ICTs who represent a transversal axis today in the learning processes. That is to say, that ICT have prospered towards the globalization of education through the use of such tools in the classroom.

In Colombia, state policies have been designed to harmonize the incorporation of ICTs in education, such as the National Science and Technology Policy 1994-1998 with the purpose of implementing projects to enhance the use of information and computers in education and science.

In a study by different authors, it has been stated that technologies have had a direct impact on education, including the so-called emergent education, improving the educational learning process, in terms of the formation of different topics or themes of large and important topics for the different professions, the progress of the same in terms of the [4]

However, Valencia states that in Latin America, policies to eliminate poverty and inequality gaps, as well as to enhance the inclusion of people in vulnerable situations, are deficient. In other words, education on the continent has serious problems to solve, even though it has evolved in other contexts, since state policies are not sufficiently effective to guarantee a quality process.

From another theoretical perspective, [6] assures that education is limited when it seeks to collect only quantitative indicators. However, today there is a new perspective, which is framed to overcome the past stages and move towards a better educational quality, through socio-formative evaluation. (Page 12).

[7] assures that within the learning processes, not only the institutional commitment prevails, but also a teaching process directed to the integral formation, to the knowledge and learning of competences to serve society, with axiological criteria and social responsibility. That is to say, that nowadays education is not only seen from the scenario of imparting mechanical knowledge, but the sense of educational processes is moving towards a student prepared to develop a role in society.

Based on the above arguments, we describe some positions that frame the needs of the educational system today, especially when it comes to the incorporation of ICTs in these processes.

III. METHODOLOGY

The context of the study will be analyzed under descriptive research, which aims to determine the inequality gaps that frame rural education with respect to education in the urban sector.

IV. RESULTS

Education is a right and a public service as recognized by the 1991 Political Constitution and the internal regulatory regime, which has led to the implementation of public policies that allow for quality education throughout the Colombian territory.

However, the term indigenous and peasant has been associated with exclusion and lack of state presence in all these remote and difficult to access areas, where people sometimes have to choose between studying and working in the fields to support their household needs.

At the pace of these needs to be met in these territories. It has also been possible to glimpse the absence of ICTs in the rural education sector. However, with the turn of the century, education underwent a transformation, in relation to the forms of teaching and learning, emerging different roles for the teacher and for the student.

Around 1957, a computer acquired in the private sector arrived for the first time in Colombia, and then its implementation began in some of the country's universities. From then on, the establishment of the dynamics of updating ICT in education began, becoming a central tool for the new learning processes.

Based on the above, the enactment of public policies framed in this dimension began in the country. Thus, Decree 2647 of 1984 was issued, which planned the implementation of some educational innovations and the General Law of Education, which incorporated the use of ICT in educational processes.

Later on, the Ministry of Education implemented the document Guia 30, which incorporates the use and appropriation of technologies in educational processes. [5]

Recently, with the Covid-19 problem, the shortcomings of the Colombian educational system in the implementation of ICTs in formal education became evident, having to dynamize the educational processes for two years, with the support of technologies, and evidencing the shortcomings of the rural sector in different areas.

However, the situation has become more visible in the rural sector, especially in events such as the failed ICT contract to bring internet to the most remote areas of the country, where a contract was tendered for about 70,000 million pesos, and the process was flawed, leaving children without hope of access to information and communication technologies.

When analyzing the scenario of gaps between access to ICTs in the education sector in rural and urban areas in Colombia, it is possible to perceive a very unequal scenario in the management that has been given to Internet coverage, implementation of technology tools and other determining elements to be able to materialize quality education in the rural sector, since the public policies presented in this analysis respond temporarily or during each government period. Finally, it is appropriate that on the eve of new presidential elections, the need to intervene in the rural sector should be determined in order to optimize the conditions in which citizens survive in the Colombian rural sector.

V. CONCLUSION

In contextualizing the problems of the rural sector in relation to the multiple advantages of the urban sector, it is important to point out that for decades the rural areas have been forgotten by the State, as evidenced by the situation of their access roads, land tenure for the peasant sector, the high costs of production in these areas, and also being the sector most affected by the armed conflict, This has had a negative impact on quality access to education for children and adolescents, especially when information and communication technologies do not reach an efficient coverage, allowing each child to enjoy without limitations the education and tools that facilitate the strengthening of their cognitive skills through ICTs. Finally, it is evident that Colombia needs a new program for the activation of the rural sector in all aspects, since in terms of roads, infrastructure, housing, public services, education and health, there is a depressing panorama, in addition to a total disregard for the fundamental rights of the citizens who live in and have been rooted for decades in the Colombian countryside.

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