

Line of Sight between the Mountains.¹

Researcher: Ana Müller²

Internet Governance

Líderes Program

Assigned Mentor: **Julián
Casasbuenas**

¹ **Disclaimer: The views and opinions expressed in this text/audio/video are those of the author and do not necessarily reflect the official policy or position of LACNIC.**

² Journalist. Territory Technician at the National Institute of Peasant and Indigenous Family Agriculture (INAFCI). Researcher and Professor at the National University of Salta. Member of the Board of Popular Communication of Salta and Jujuy and member of the Inter-University Network of Community, Alternative and Popular Communication of Argentina (RICCAP).
Note: María Estefanía Avella made contributions to some sections of this document.

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Glossary

National Communications Entity (ENACOM)

Grassroots Organizations Federation (FOB)

Federal Index of Territorial Inequality (IFIT)

National Institute of Peasant and Indigenous Family Agriculture (INAFCI).

Participatory Action Research (PAR)

Board of Popular Communication of Salta and Jujuy
(MDPSyJ)

Argentinian Northwest (NOA)

United Nations Development Program (UNDP)

Community Connectivity Networks (RCC)

Inter-University Network of Community, Alternative and Popular Communication of
Argentina (RICCAP)

Federal Registry of Local Governments (ReFeGLo)

Rural Communication Services (SCR)
Online Paperwork Platform (TAD)
International Telecommunication Union (ITU)
Popular Economy Workers' Union (UTEPA)
National University of Salta (UNSa)

Abstract

This research seeks to address the discussions about communication and connectivity inequalities in our continent while looking at transformative action taken by collectives and organizations that make efforts to connect various territories. This paper intends to explore the processes being developed, which we have been studying for a few years through research and extension projects, in order to change and challenge the logic and public policy conditioned by the telecommunications market by comparing them to others that take connectivity as a fundamental right and service. This allows individuals to exercise their citizens' rights (Mata, 2006), which are increasingly anchored in the digital world. The current landscape hinders access to connectivity and, thus, communication, mainly in areas that are still unconnected due to technological and/or economic reasons. It is fundamental that actions trying to change this reality be known.

From a Participatory Action Research (PAR) methodology, this document intends to identify the local challenges and potential strategies to contribute to digital inclusion in excluded areas deprived of internet access due to structural inequalities. To do this, there are spaces and information that enable us to devise strategies and exchange technical and practical know-how to help with the emergence and development of community networks and other connectivity models/initiatives in rural and peri-urban areas through collective efforts.

To accomplish this, we have conducted interviews and identified key organizations. We have also created a podcast series and audio interviews that are attached to this document.

1. Introduction

Our starting point is Salta, located in the Northwest region of Argentina (NOA). This research goes over a long history of collaborations between civil society organizations, the university and the research stemming from them.

From a PAR methodology, this document intends to identify the local challenges and potential strategies to contribute to digital inclusion in excluded areas deprived of internet access due to structural inequalities.

To do this, there are spaces and information that enable us to devise strategies and exchange technical and practical know-how to help with the emergence and development of community networks and other connectivity models/initiatives in rural and peri-urban areas through collective efforts.

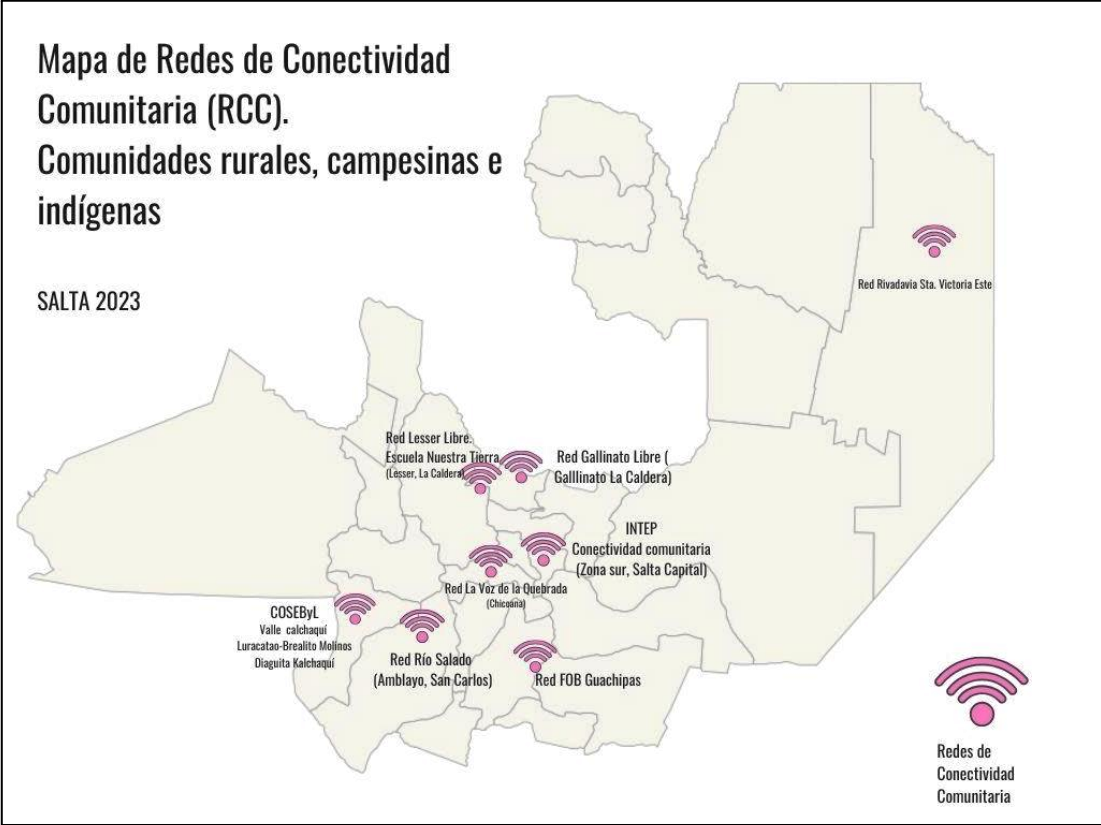
Several small efforts have been made since 2020 in multiple areas of the Province of Salta (Gallinato, Lesser, Amblayo, La Poma, Vaqueros, etc.), apart from those initiatives led by Argentina and Latin America. It is fundamental to support and collaborate with such efforts and all those involved in solving this issue. This is the foundation of this document, which includes a review of our collective journey and lessons learned.

Apart from providing support to several communities who have been exploring possibilities and deploying infrastructure, we have worked for the last few years (in the context of this grant) on creating a space for inter-sector collaboration in the NOA region to conduct a common analysis and start a dialog to set up an agenda addressing this issue. Therefore, on November 8, 2023 the First Meeting of Community Connectivity Networks in the NOA Region took place, a space we created that includes a comprehensive program and multiple participants, including members of already active networks, communities that are currently exploring the possibility to build community networks, public entities, private companies, and researchers³.

Existing networks shared their experiences in this space. Then, they identified current public policies and there was a panel of experts and researchers who have been studying this issue from different disciplines and using multiple tools in the region.

³ The program, flyer and other materials are included in the Annex.

Lastly, all participants attended a workshop to identify current challenges and create a roadmap for common future action. Toward the end of the meeting, participants were invited to be part of a local forum to address these issues, considering that intersectionality is key in these experiences and that sustainable approaches can help solve the exclusion and challenges of territories with diverse terrain, including rainforests, mountains and subsistence economies.



2. Exploring Disconnection – An Analysis of the Situation from a Communication Perspective

In the last few years, institutions, governments and cities have “become aware” of what it really means to be isolated due to the pandemic. In that context, devices and access to connectivity became fundamental tools to access basic services, carry on with educational processes and ensure work.

Confinement measures imposed by the pandemic resulted in an accelerated radicalization of digitalization in society to a degree that was unthinkable shortly before the outbreak.

“All societies, with their big differences related to social strata and geopolitics, located either in the North or the South, were thrown into the digital pool” (Cabrera Altieri and Angulo Egea, 2023, p. 24).

It was the only way the States found to try and keep the economy afloat. According to the authors, people found this experience to be “an open window in times of confinement” (ibid).

In this context, mobile phones, used to make calls and/or go on social media and platforms, became fundamental for human relations, getting health information and staying in touch with our loved ones. “Companies, people, institutions and governments experienced the possibilities of connectivity and the frailty of the human condition at the same time” (Cabrera Altieri and Angulo Egea, 2023, p. 24).

This research seeks to address the discussions about communication and connectivity inequalities in our continent while looking at transformative action taken by collectives and organizations that make efforts to connect various territories. This paper intends to explore the processes being developed, which we have been studying for a few years through research and extension projects, in order to change and challenge the logic and public policy conditioned by the telecommunications market by comparing them to others that take connectivity as a fundamental right and service. This allows individuals to exercise their citizens’ rights (Mata, 2006), which are increasingly anchored in the digital world. The current landscape hinders access to connectivity and, thus, communication, mainly in areas that are still unconnected due to technological and/or economic reasons. It is fundamental that actions trying to change this reality be known.⁴

Our confinement experiences can now make us sympathetic and take action to take communication as a fundamental value in human relations, not only in educational or work activities imposed to keep us “productive”. According to Cabrera, “communication creates meaning by establishing new configurations that unite us, separate us, break us and challenge us” (Cabrera Altieri and Angulo Egea, 2023, p. 24). Nowadays, it seems valid to reclaim communication for “development”, work, education and consumption, including entertainment and services, but it is worrying that communication is not only absent but also denied and consistently postponed when it comes to human relations. This is what

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this paper refers to as the human condition of communication or communication used for showing affection.

This paper provides an assessment of the situation in the continent as regards this inequality, which has persisted for decades. Our analysis uses a PAR⁵ methodology and the lessons learned in the Province of Salta, in the North of Argentina, and turns to peasant, indigenous and popular organizations and their Community Connectivity Networks (RCCs), which emerged mainly during the mandatory confinement imposed by the pandemic. Such networks have been strengthened and replicated after those circumstances.

The purpose of this analysis is to raise awareness and share new possibilities, experiences and discussions that emerge from collectives and social organizations in collaboration with universities to uphold the right to connectivity, in an attempt to “put this research at the service of transformative social action.” In line with the PAR approach and paraphrasing Ynoub (2023), this research is mainly organized under the criteria of knowledge validity and its usefulness in social struggles (p. 4).

3. Looking at Latin American Data

Before the pandemic, 53.3% of households in Latin America and the Caribbean had fixed broadband services. By 2020, after isolation was made mandatory, that number went up to 58.5% of households, doubling the growth rate of previous years, according to data from the International Telecommunication Union (ITU, 40). As we know, this was due to the changes and needs caused by confinement, including remote work, virtual learning, online medical care and home entertainment.

In this context, there are many figures that showed an increase in internet use and number of users of digital platforms and social media. According to the 2020 and 2023 Global Digital Reports by We are social and MeltWater, by January 2020, 66.7% of the South American population, 62.3% of the Central American population and 57.7% of the Caribbean population were internet users. By January 2021, Latin America and the

⁵ This perspective provides a social research approach, with the involvement of the affected population, which according to Sirvent, (2014, p. 33), is integrated in the process of objectivization of the studied reality, in order to create collective knowledge about such reality while transforming the conditions affecting the everyday lives of the people involved.

Caribbean had experienced a 14% increase in internet users. Most recent data show that, as of October 2023, 82.3% of people in South America, 78.7% in Central America and 86.6% in the Caribbean are internet users.

Internet access and use were extended during the pandemic in many Latin American and Caribbean countries. As COVID-19 boosted an increased demand for internet access, governments made great efforts to increase and facilitate it (UNDP, 2022, p. 15).

However, in spite of such efforts and increases in connectivity during the pandemic, inequality in internet access is far from solved in the region and the rest of the world.

By 2021, approximately 40% of the Latin American and Caribbean households did not have broadband access and 30% of the population remained unconnected. The experience we all have had in the context of the health crisis allows us to acknowledge that such inequality already existed.

Forty years after the creation of the web and almost half a century since the emergence of the internet, connectivity gaps still prevent a large portion of the global population from accessing the opportunities of the digital sphere. Only 19% of the population in developing countries is connected to the internet (ITU, 2022) (Ávila, 2023, p. 150).

Digital inequality in the region is a result of the socio-economic disparities typical of our continent. As regards communication and technology, the pandemic made it even clearer that there is an uneven distribution of technology, access to information, communication networks and digital platforms. This issue is not new. This had already happened with fixed and mobile phones, TV signals and cable systems, radio stations, roads and the availability of transportation services.

According to data from the UNDP (2022), a third of Latin American and Caribbean households lack fixed broadband access, a gap that is wider in rural areas. On average, by 2021, 74% of urban households in the region had access to a fixed internet connection, while in rural areas only 42% did. This gap, according to UNDP data, is more apparent in countries with more topographic diversity, such as Bolivia, Peru and the North of Argentina, where it is more challenging to provide the infrastructure needed for connectivity.

With the isolation measures imposed during the pandemic, the digital gap became more relevant and digitalization began to be seen as a fundamental tool to deal with the crisis, in particular economy-wise, as connectivity was a key element to keep the economy afloat. According to a study cited by Cepal (2021), during the pandemic:

Countries with at least 30% of households with fixed broadband (or 50% of penetration of unique mobile broadband users) experienced a less damaging recession than economies with lower degrees of connectivity. Furthermore, countries with a high level of connectivity (penetration of fixed broadband users over 90% and unique mobile broadband users over 75%) registered less economic loss (p. 7).

According to a UNDP report, there is a positive correlation between connectivity and a greater involvement of workers, greater labor mobility and an increase in the creation and growth of employment. It also points out that “in LAC, digital technologies can help address three structural issues: Low productivity growth, high levels of informal labor and significant income disparities” (UNDP, 2022, p. 2).

However, the urge to consider connectivity from a comprehensive perspective, as a right, beyond the economic and productivity approach, goes back many years. In 2011, this became explicit to the public when former UN Special Rapporteur on Freedom of Opinion and Expression Fran La Rue defined internet access as a human right (OHCHR, 2011).

According to La Rue, internet access is essential for the full exercise of human rights, including freedom of expression, access to information, political participation, the right to privacy and the right to education. In his report, he argued that the States have a responsibility to facilitate internet access for all individuals, especially those in vulnerable situations, and to protect such rights against restrictions and interference. This report was signed and adopted by the Organization of American States Special Rapporteur on Freedom of Expression in that year (Ávila, 2023, pp. 151-152).

In the region, Costa Rica (2011), Mexico (2013), Brazil (2014) and Colombia (2015) have already defined internet access in said terms. In Argentina, on the other hand, internet access was declared an essential service and human right under Decree 690/2020, during the pandemic: “The right to internet access is, currently, one of the digital rights that all

people should have in order to exercise and enjoy their right to freedom of expression.”

The Decree includes references to multiple UN documents that highlight the relevance of Information and Communication Technologies (ICTs) for the development of a more equal society and the importance for all people to have guaranteed access to them (Müller and Scorza, 2023, p. 139).

Clearly, while it is important to see connectivity as a key to mitigating the economic effects of the pandemic, we cannot see the full picture when available data only show productivity information about the impact of people's disconnection. Such data selection risks devaluing connectivity (and, consequently, communication) as a fundamental tool for human interaction and the exercise of citizens' rights.

4. Addressing Challenges – Public Policy Tools and Strategies to Deal with Known Issues

Inequality in communication and connectivity is even more tangible in territories with adverse geographic conditions, low and disperse population density and inhabited by low-income individuals. These conditions are not economically profitable for or functional to the interests of the so-called “digital colonialism”, which

“refers to the technological assemblies and operations through which new imperial corporate powers carry out the new configuration of capitalist accumulation, namely: massive data extractivism and the expansion of markets through artificial Intelligence” (Tello, 2023, p. 101).

It is in these territories that RCCs challenge the notion of “digital colonialism” and become strategies to address and solve this issue. Forty years after the creation of the internet, neither the market nor the States have found solutions to this lack of inclusion. In these territories, there are exclusive and concentrated relations as well as other types of violence, political conflict, social vulnerability, precarization and other inequalities. RCCs are organized in rural communities, indigenous peoples, urban villas or poor neighborhoods, where they gather insights and explore necessary action to access and

maintain connectivity both from the technical and organizational viewpoints, to depart from the logic that currently excludes them.

In September 2018, the Declaration of the First Latin American Summit of Community Networks took place in Argentina, with the participation of multiple collectives from across the continent. In the Declaration, RCCs were defined as networks owned and managed collectively by the community, with community purposes. They are built as collectives, indigenous communities or civil society organizations “who exercise their right to communication under the principles of democratic participation of their members, fairness, gender equality, diversity and plurality” (Baca *et. al.*, 2018, p. 51).

Furthermore, we include the definition suggested in the Declaration on Community Connectivity (2017) by the Internet Governance Forum Dynamic Coalition on Community Connectivity (DC3), which states that community networks are

structured to be open, free, and to respect network neutrality. Such networks rely on the active participation of local communities in the design, development, deployment, and management of shared infrastructure as a common resource, owned by the community, and operated in a democratic fashion (Declaration on Community Connectivity, 2016/2017, p. 238).

Community connectivity efforts provide training workshops to teach about deployment and maintenance and even develop apps and local content, such as news portals and messaging services (Alonso, 2016). As Belli (2017) points out, they also have a large participation base, with new bottom-up social networks and structures.

Not only are communities able to provide this essential service to themselves, but they also create their own strategies and plans in the process for the access to and appropriation of technology in line with their context and worldviews. This is the point made by Milán and Treré (2019) in their article titled *Big Data from the South(s): Beyond Data Universalism*, where they explain that digital technology is far from being imported unchanged from the North to the South. Instead, they state that social and cultural appropriations of technology in the Global South often unsettle hegemonic conceptions of innovation and technological development (p. 324).

This is why RCCs, as pointed out by Baca *et.al* (2018), are the example of communal organizational models and way of life, which are often “not completely anchored in market

logics and organizational dynamics set by the State” (p. 14). Thus, in this case, profit is far from being the main or only motivation to provide internet connectivity services. Instead, they rely on non-economic resources, such as time and collaborative and voluntary work among their members. Their intervention and incidence are achieved through collaboration with other public institutions and/or international funding.

“Many of them are part of larger projects for social transformation that seek to build more just and equal societies, pushing for the democratization of communications and all social relations in an increasingly concentrated and privative system. These initiatives develop democratic ways of management and decision making, where people accessing the internet are considered ‘the first mile’. This challenges the private-commercial model of internet service provision, which classifies them as ‘the last mile’” (Müller and Scorza, 2023, p. 139).

As stated by Belli (2018), these efforts are driven by the community, which directly benefits from connectivity and its positive external effects, paving the way for new infrastructure and “new governance models and new business opportunities that complement and fill the gaps left by the classic Internet access provision paradigm” (Belli in Baca *et. al*, 2018, p. 13).⁶

5. Transformative Experiences – Learning by Doing

RCCs involve learning processes that are under way. When building RCCs, new ideas, technologies, management and sustainability logistics are being explored and tested. In the case of Salta⁷, located in the NOA region, in general, these actions supplement strategies from popular, rural, peasant and indigenous organizations that, for decades, have been fighting for their land and access to water, the legal commercialization of their products related to food sovereignty, the acknowledgment of their identities and productive processes, among other topics that are constantly postponed. In this context, the appropriation of telecommunication technologies implies a learning curve different from

⁶ Luca Belli (2018b), *Ibid.* and Luca Belli (2017) Network Self-determination and the Positive Externalities of Community Networks in Luca Belli (org.) Community networks: the Internet by the people, for the people. Available at: <http://bibliotecadigital.fgv.br/dspace/handle/10438/19924>.

⁷ As of 2023, existing RCCs we have worked with in the Province are: Gallinato, Lesser, Río Salado, Amblayo, Red Guachipas, Escoipe and COSEByL, in rural areas, as well as Intep, which brings connectivity to low-income neighborhoods in the capital city of Salta.

the usual one, as there is a need to create the conditions for new knowledge, which depart from the everyday experience of such populations. This is different from, for example, projects related to water distribution and water collection, since such issues have been in the historical experience and everyday practices of these populations, in their rural and productivity settings, for a long time. This differs immensely from the abilities needed to address communication projects, also known as Rural Communications Services (SCRs), which also encompass connectivity efforts and key inter-sector collaboration from relevant organizations and institutions.

SCRs are an essential public asset, as they provide a framework to promote political dialog, social inclusion, participatory decision making, ICT appropriation and the strengthening of the relation between rural and indigenous institutions, made up by their assembled communities. To support such services, we need a comprehensive approach to developing capacities, advocacy initiatives and alliances among universities, research centers, community media and civil society organizations, especially in the Global South (Balit & Acunzo, 2020, p. 13).

This is where we need to create —using what is available— the necessary conditions for communication, taking into account that, in spite of the technological transformation driven by the pandemic, inaccessibility still prevails. Following the purposes of community networks, three communities in the Province of Salta (Gallinato, Lesser and Río Salado) decided to create connectivity experiences, during the pandemic, through extension and research projects led by the Popular and Alternative Communication class at the National University of Salta (UNSa) and civil association AlterMundi.⁸

Before this, in 2019, the first RCC was established in the Province, which led to the creation of the COSEByL cooperative, located in Luracatao, Department of Molinos. During the pandemic, among the mountains of the Calchaquí valley, this RCC went from having 50 access points to over 460 home connections in the territory of indigenous communities, members of the Diaguita Calchaquí nation.

⁸ It is defined as an experienced group of community network and open software activists who partnered to facilitate the deployment of such networks in digitally excluded areas, taking into account the particular characteristics of our region. Their main purpose is to develop a set of open software tools, documentation and hardware for the deployment of cost-effective, high-performance open community networks. Available at: <https://altermundi.net/>

Later, there came Escoipe, Intep in the capital of Salta and the Guachipas networks, from the Grassroots Organizations Federation (FOB), while an indigenous community network was deployed in the Chaco Salteño region, in the Department of Rivadavia.

Following the studies conducted by Ares and Venier (2023), we note that:

In the Province of Salta, Argentina, internet access is much more limited and deficient in indigenous populations than in non-indigenous ones. There is less availability of computers and internet-enabled devices in indigenous households than in non-indigenous ones. In indigenous territories, connectivity speed is low and unstable (...). In this context, internet access has become a necessary and indispensable tool to, for example, access various public policies (p. 184).

The paradox here is that, in order to proceed with such policies, the government relies heavily on digitalization for management purposes, which

in principle seeks to expand and facilitate access to rights, but has not taken into account the conditions, resources and internet connectivity capacities in territories inhabited by indigenous communities in the North of Argentina, which has contributed to exacerbating social and economic asymmetries (Ares and Venier, p. 184).

Deploying a community network involves the appropriation of technology and specific knowledge that most people normally do not have, as well as access to material and financial resources to make the deployment possible. This is why these networks are created and deployed based on the possibilities and realities of their specific communities.

Moreover, another issue identified in the supported projects is related to the availability of connection and entry points, i.e., finding an Internet Service Provider (ISP) that can provide access and allow the RCCs to re-use its megabytes⁹.

After that, a megabyte package is purchased¹⁰. In Salta, the package is obtained through the radio link system, also known as wireless connection¹¹.

⁹ ISPs can be private companies (big or small) or, in some areas, public state-owned companies (owned by the provincial or national state, such as ARSAT in Argentina).

¹⁰ Access is achieved through a dial-up internet access, fixed broadband (using coaxial cables, fiber or copper cables), satellite, mobile broadband or radio link, also known as wireless connection, or through mobile phones. Buying data plans to have internet access in mobile phones is certainly the most expensive service and, in general terms, it is the one used by low-income populations that do not have access to Wi-Fi connections.

¹¹ This is a system of wireless point-to-point or point-to-multipoint connections in areas that use electromagnetic waves for data transmission. One antenna sends information and another one receives it, enabling the exchange of information in hard-to-reach areas due to their geography and financial costs related to connectivity.

One of the main concerns of those who manage community networks for rural internet access has to do with the agreement they have with the transport network providers to which they connect. Not only does this agreement affect the availability of megabytes, but also the price they would have to pay, as most of the interviewed networks have to pay for such service. In addition, prices go up considerably when a small amount is purchased. Unit prices go down when purchased in bulk. However, intermediary providers offer small packages, as they buy them at wholesale prices from larger companies. This issue can be seen when analyzing the number of megabytes offered by the provider, the download and upload bandwidth for each network access point and the number of people who use the service. The studied networks have shown extreme data. One of the networks purchases 300 megabytes to distribute them in 460 points, while another one has 10 megabytes to be distributed among 7 users.

According to national data, the average download speed in Argentina is 58.44 mbps¹². Salta is part of a group of provinces with medium speed, with a 38.77 mbps average, which is 17 points lower than the Province of Buenos Aires and 40 points lower than the Autonomous City of Buenos Aires.

After months spent seeking ISPs, the network installed in the Gallinato community was able to contact two local private companies and reach two agreements that allowed it to run tests for over a year using a repeater initially located in mountain Pucheta to serve a portion of the community and another one on an opposite mountain to serve another portion of people who were unable to get a signal from the former. While these agreements set payments, they were able to increase the number of megabytes beyond a “simple family plan”, which would enable it to re-distribute megabytes among the families in the network. Such agreements are verbal, and therefore are not official contracts. This type of agreement can also be seen in the networks of Río Salado, in Amblayo, where the network reached an agreement with a private network and company called Killa, by which the former can re-use megabytes by using the Centro Vecinal Río Salado Las Juntas as an endpoint and distribution point. The Centro Vecinal is an organization that has been bringing families together for over 25 years.

All of these local RCCs mainly aim at communication, connecting customers to their family members who have left the community or are away. They also enable users to study, conduct other tasks by accessing several learning resources and to listen to music and

¹² According to data from the 2022 2Q “Fixed Internet Access Report” by the National Communications Entity (ENACOM). Available at: <https://indicadores.enacom.gob.ar/files/informes/2022/T2/2022T2-03%20-%20Acceso%20a%20Internet%20Eiia.pdf>

watch videos. In some cases, they developed strategies to promote the sale of their own products, such as goat cheese, plants, handicrafts, craftsmanship, etc. Messaging services also allow users to gather and be more aware of and warned about any emergencies and meetings.

6. Argentina: An Analysis of Current Developments

In the path to the consolidation of RCCs, two important precedents are noteworthy in Argentina.

The first one occurred in 2018, when RCCs were recognized by the national State as non-profit providers under Resolution 4958 by the ENACOM.

This would not have been possible without the push from the networks that gathered in the Latin American Summit of Community Networks (CLRC)¹³. Since then, networks can obtain their VARC (value-added service - internet access - Community Network operators) license, which exempts them from paying the tax required for commercial licenses (Baladrón, 2021).

The second milestone took place in 2021 with the creation of the Roberto Arias Connectivity Program. It was created after several inter-sector meetings and working groups, and it was financed by the Fiduciary Fund for Universal Service¹⁴. It is implemented by ENACOM's Sub-Department of Special Projects and finances projects for the deployment and upgrade of network infrastructure to provide Fixed Broadband Internet Access Services (ENACOM 799/2021)¹⁵.

Governments and all levels of the State must advocate for and listen to the organizations. The Roberto Arias Program is currently a world benchmark, as it is one of the few that

¹³ There are some materials available on AlterMundi's YouTube channel about the Latin American Summit of Community Networks and the Argentinian Summit of Community Networks.

• ¡Day 2! Latin American Summit of Community Networks

• 2nd Latin American Summit of Community Networks - Chapter 1

• Second Latin American Summit of Community Networks - Colombia 2019

¹⁴ Investment contributions from Universal Service programs are managed through the Fiduciary Fund for Universal Service, and the ENACOM is in charge of establishing their management rules, as well as other rules for the control and audit of their management, ensuring that contributions and the Fund's execution are under the national State.

¹⁵ In order to get these funds, one fundamental requirement is for applicants to have a VARC license. Both social organizations and individuals can apply to get such funds.

officially provides public funds for community and social investment, such as RCCs, in areas with low population density, where the market has no interest in ensuring citizens' rights. Its creation marked a difference among other countries in the region, as it enables organizations to be taken as potential actors for the implementation of infrastructure and communication services. However, accessing this resource involves a complex technical file, a series of initial investments and internet access to use the TAD system. This is why in Salta none of the studied networks have been able to overcome the difficulties of the current process to access this program's funds. This calls for real revision to actually take transformative action, which is currently at risk due to the new far-right government elected in Argentina in November 2023.

The principles in these projects are reciprocity, cooperation and the acknowledgment of the differences between our territories. We need to build relationships, strengthen communal trust and develop comprehensive communication projects based on common ground and possibilities. This is why it is important to supplement advocacy action with a management phase through a community communication and telecommunications cooperative in the territory (which is already registered).

We need to consider the particularities of northern Argentina, including its organizations, identities and history, which are significantly different from the ones in big cities and urban and commercial settings. In this regard, we note that there have been a series of efforts made by several institutions and over 10 years of territorial coordination among peasant and indigenous organizations across Salta and Jujuy, stemming from the work of the Board of Popular Communication of Salta and Jujuy as a political player in charge of coordinating community and rurality meetings. They work not only on the creation and support of non-profit community and indigenous radios but also on accessibility and the analysis of connectivity proposals in Latin America.

Unlike other areas, these regions require agreements with private players, so that the VARC license is not the only resource they can turn to. This regularization mechanism is an ongoing barrier to accessing the Roberto Arias Program or managing their own networks. Due to the number of families involved, it makes little sense to create this type of resources, which involve a significantly complex management mechanism not only with regard to ENACOM but also with AFIP and within the community itself. Instead, there is a need to promote agreements with specific plans for groups who can provide the service and access this right.

It is also fundamental to support local and national political advocacy efforts. Small, independent and isolated projects make an enormous contribution, but reciprocity and complementarity between the communities and the external world are fundamental for the improvement of different realities and the consolidation of new processes.

During the first three years of Alberto Fernández's administration, several social organizations managed to create programs through ENACOM in order to get funds and support from the State for connectivity infrastructure and network deployment, without commercial or lucrative purposes. The aim was to reach places traditional companies have not reached, as low-income customers require investments that companies are not interested in making. Social organizations voiced the need to implement specific programs to help ensure communities can access connectivity technology and deploy and maintain their own networks.

Months after the first meetings (February and March 2020, before the pandemic), the Popular Neighborhoods Program and the Roberto Arias Community Networks Program were created. Two other programs were left behind: one involving public institutions and organisms and a very interesting one called "Zonas Adversas" (challenging areas). In fact, during the implementation of these resources, we became concerned, as many rural areas, small villages and locations were excluded from a mechanism that has been designed for urban and peri-urban areas with higher population density. Territories with 30, 50 or 70 families —maybe even fewer— are again left behind under this scheme. They are unable to apply for a VARC license —a requirement to access the Roberto Arias Program— to create their own community networks and ensure sustainability, which private and/or state companies have failed to do for 30 years since the emergence of the internet.

Currently, most administrative procedures related to the State and the accessibility to certain resources, programs, plans, information and/or processing of public documents involve the use of virtual platforms. Without access to them, as is the case for these

rural communities, a giant gap is created between first, second and third-class citizens. This disparity has been apparent for long and is once again deepened by the barriers to connectivity and other services.

For example, through non-refundable contributions (ANR), which are being executed by private players and other financing lines, ARSAT gathers companies, municipalities and communities to reach agreements and —with corporate social responsibility and in coordination with the Argentinian Summit of Community Networks and other non-profit initiatives— provide inter-institutional and inter-sector tools and collaboration to ensure the flow and distribution of information.

What other connectivity alternatives are there?

Who are left behind under the existing layout? How can we build small unlicensed community networks through special agreements by which licensees can sell larger common packages that can be re-distributed in the community and, in exchange, let the community be in charge of network maintenance and deployment using dedicated funds?

It is vital to acknowledge the characteristics of the territory and to promote and support the process, which is necessary and urgent if we want to create opportunities for people in rural areas who produce healthy foods and have different and rich identities and ways of life.

We need to build a space specifically designed to work from the perspective of these territories, promoting necessary dialog with the communities, the State, the companies involved in accessibility and connectivity, with the purpose of creating tools, working groups, agreements and work plans. In this sense, it is also essential to create and/or strengthen specific areas of public rural communication and connectivity entities so that they can serve as a space for inter-institutional and inter-organizational coordination based on the local conditions, possibilities and players for communities with fewer than 2,000 inhabitants, in order to facilitate community network deployments and access in rural areas of Argentina. The objective is to provide communities with resources and opportunities to ensure access to connectivity in areas where sustainability is not an option and connectivity is still absent as a right. At the same time, a coordination strategy needs to be devised with the programs that are currently being developed for private, public and community non-profit companies to ensure access to all technical capacities that currently exist in rural communities.

7. Exploring Disconnection – Perspectives from All Corners of the World

We interviewed Dr. Emiliano Treré¹⁶ about the notion of disconnection, ever-present nowadays. The first step was to identify the considerable differences between the Global South and North as regards disconnection. On this topic, he said: “The academic debate on digital disconnection originated mainly in Scandinavian countries of Europe, in response to what is perceived as hyperconnectivity, an excessive degree of connectivity, in countries with over 90% of broadband penetration and connectivity and most of their population connected to the internet.”

These countries have a significantly stable and high-quality infrastructure, so the population can “enjoy the benefits of a digital society.” In this case, disconnection is a voluntary act, a choice. On the other hand, there are research projects focused on the commercialization of digital disconnection, as explained by Treré: “There is an increasing number of apps, programs and software dedicated to the commercialization of tools that help with disconnection, paradoxically. It’s a commercialization of disconnection instead of the market, and capitalism once again takes control over something that should be emancipating and liberating” (Treré, interview, 2023).

According to Treré, there are also studies about how disconnection has an impact on our wellbeing. This is all related to voluntary digital disconnection.

While there is a portion of the world that has a discussion about disconnection, hyperconnectivity and dependency, there is also a portion that is involuntarily disconnected, which needs to be addressed and solved. There is a significant difference between choosing to disconnect and being completely unable to make a choice.

When discussing disconnection in the NOA region, we asked Treré, “What about those around the world who are disconnected and have always been disconnected or poorly connected? He answered that there is a significant inequality in this sense. He referenced the concept of “majority world”, a term used as an alternative to “third world” or

¹⁶ Reader in Data Agency and Media Ecologies in the School of Journalism, Media and Culture (JOMEC) at Cardiff University, UK. Widely cited author in digital activism, social movement, critical data and disconnection studies with a special focus on Latin America and the Global South. Member of the Data Justice Lab and Co-PI of the project ‘Towards Democratic Auditing: Civic Participation in the Scoring Society’ funded by the Open Society Foundations. He has published over 50 publications in 5 languages in journals and books. His most recent book, *Hybrid Media Activism* (Routledge, 2019) won the Outstanding Book Award of the ICA Interest Group ‘Activism, Communication and Social Justice’.

“developing world”, to refer to nations or regions whose economic, social and technological situation is worse than in more developed and powerful nations.

Treré here refers to a “world of majorities, where the majority of people live and conduct their digital practices.” We now explore the notion of involuntary disconnection, given that “while they want to connect, there are infrastructural barriers due to lack of funds or extremely high connectivity prices set by large corporations, which prevents most of the population from connecting. In this case, we are dealing with digital inequalities, a long-standing issue around the world, which started with the digital gap. We used to speak about one notorious digital gap, but then the concept evolved and it is now several digital gaps” (Treré, interview, 2023).

There are gaps created by socio-political, economic, cultural, geopolitical and historical inequalities. “There are multiple types of gaps that overlap and intersect. This debate has evolved to a discussion about digital inequalities, from what we used to call ‘the digital gap’. Digital inequalities are associated with gender, ethnicity and social class. Thus, we can analyze the digital challenges and disparities at a global level. It is clear that social inequalities are more profound in poor contexts, particularly in the Global South. Disconnection here is not a voluntary choice, as connection and connectivity are not guaranteed. However, we cannot overgeneralize and say the whole Global South has this experience. There are marked differences and profound social inequalities, especially in Latin America. Some parts of the population have a solid connection, an experience similar to the one in prosperous European countries.

In this context, voluntary digital disconnection and digital inequalities are seen as crucial points of analysis to understand our modern society. Both are equally important and must be addressed in tandem. It is essential to start a dialog in order to understand what is happening in global contexts, considering voluntary disconnection, data extraction, hyperconnectivity and the stress caused by digitalization and persuasive identification. Importantly, significant challenges in connectivity are not the same across the globe and there are very persistent inequalities. A dialog between these two phenomena is imperative, as both are experienced frequently, even in places considered underserved or having a poor connection” (Treré, interview, 2023).

8. Notes on the First Meeting of the NOA Community Networks (Argentina)

Several organizations that have been working on the RCCs participated in this meeting. Among them, we highlight the participation of a network run by indigenous women from the Province of Formosa and internet workers' cooperatives. This meeting underscored that, while the Universal Service Funds are essential for the RCCs, they are not a one-size-fits-all solution. Complementary approaches must be explored when addressing the needs of the most marginalized. A crucial element was the process of gathering community initiatives from all over the country and promoting existing efforts. Through this process, information on existing initiatives and how to address them was made available to the communities.

The opening session, with over 80 participants, highlighted the relevance of a multi-stakeholder space to engage the community, academics and the industry with a clear goal: communication and connectivity as fundamental rights. National and provincial officials took the floor. Rodolfo Grecco, from the National Institute of Peasant and Indigenous Family Agriculture (INAFCI), stated that the first step toward connectivity was access to FM broadcasting. He underscored the importance of peasant organization and how the law has been crucial for the historical reparation of family agriculture. He emphasized that the struggles for land have historically revolved around water, land and means of production and that connectivity helps people become settled in rural areas.

From a state perspective, he said they intended to support rural ways of life through coordinated efforts by multiple state agencies. Grecco also referenced his participation in the FAO Committee on World Food Security, where he saw an erosion of State support in such space. He warned about the influence of private funds, such as the Bill & Melinda Gates Foundation, which has been setting the agenda, and stated he finds this dangerous. In addition, he spoke about the need for data protection policies, as people who live in rural places are particularly vulnerable to abuse in this sense.

Natalia Vinelli, from ENACOM Special Projects, said that the tools in the Popular Neighborhoods and Roberto Arias programs have been developed in coordination with the

popular movement with the purpose of making the most out of the available resources. Currently, 70 community network licenses have been granted in Argentina.

Later, Martín Güemes, Director of Modernization in Salta, addressed the access gap and the appropriation gap in this Province. He put emphasis on the lack of public policy on connectivity thus far. A federal program called “Mi Pueblo Conectado” (My connected people) is currently being implemented in Salta. This project was announced in 2022 and its purpose is to provide satellite connectivity and digital resources to some locations with poor or no internet access in Argentina. Locations were selected by using two tools provided by the Municipal Observatory from the Sub-Secretary of Municipal Relations of the Ministry of Interior, namely: the Federal Registry of Local Governments (ReFeGLO) and the Federal Index of Territorial Inequality (IFIT). Salta created a public company called SALTIC, with majority state ownership, which applied to receive Universal Funds for some low-income neighborhoods. In addition, open Wi-Fi access points are being installed at public parks in 60 small towns.

There was a clear consensus about the need for inclusive processes to accommodate to the realities and the needs of the community.

During the second panel, only community connectivity networks took the floor. Guillermo Núñez is part of a community radio called “La Voz del Cerro” (the voice from the mountain), which was created to provide young people with an alternative to reduce anxiety and prevent them from being left with what the street had to offer. From this initiative, they decided to set up a self-financed internet network in coordination with other indigenous and community organizations and networks. This network, known as an urban wireless network, has been a remarkable project.

Rodrigo Cuevas, from the Red Río Salado, Amblayo network mentioned that a network has been deployed in his community by using LibreRouter. Those involved were trained by the ITU and have recently published an article about their experience at <https://democraciaenred.ar>. They highlight the collaboration of community networks with small providers, who find it difficult to go back to these territories, given that the community network is able to maintain itself thanks to the members’ technical knowledge.

The Paraje Brealito Cooperative, a connectivity cooperative, was represented by Viviana Chocobar. They began their project through a provincial program called “Emprende Turismo Salta” (promoting tourism in Salta), through which they gained internet access to commercialize their regional products. Their participation in the Emprende Turismo program seeks to support entrepreneurs and increase tourist contributions to the socio-economic development of the Province. The cooperative received support from Father

Lucas Galante, from the Luracatao community, for the creation of its internet and electricity cooperative. The Luracatao community network has 400 users. It was created 7 years ago, with funds granted by the Ministry of Science and Technology.

Yamila Romero is a member of the Intep workers' cooperative, which works to improve popular economy. She shared their experience. This cooperative stemmed from the Grassroots Organizations Federation (FOB) and participated in AlterMundi's 2022 Community Networks Meeting. In spite of initial difficulties, it was able to deploy a network in Guachipas using LibreRouter, which allowed it to become a fruitful project. Focused on more traditional connectivity, Intep uses radio links and is part of the Popular Economy Workers' Union (UTEP). Its members received a 7-month training course on network deployment, management and billing, imparted by ANTANET, and then received support from programs like "Empoderar el Trabajo" (empowering workers). The cooperative has faced financial challenges when making capital investments (CAPEX), especially due to the fluctuating value of the US dollar in Argentina. The cooperative works on continuously training its members. Over half of them are women, who are receiving programming training as well.

Finally, Jessica Sosa, a craftswoman and Coordinator of the Pilagá Women's Association of Crafts in Campo del Cielo, Formosa, shared their experience. Jessica is also in charge of the Secretariat in the workers' cooperative, which oversees over 2,600 indigenous craftswomen. The association receives financial support from the Gran Chaco Foundation and, for the last 5 years, has been promoting strategies for accessing connectivity. She listed difficulties both in the management of equipment and the financial contributions needed to pay for monthly internet bills. Connectivity plays a vital role in their activities, particularly in communication and the commercialization of their products. ISP Sol Rural provides them with the bandwidth needed for their network. Some other networks that participated in this event include El Gallinato, La Poma, Wayruro, Movimiento Nacional Campesino (National Peasant Movement) and two companies from Salta (ANTANET and Saltic).

The event organizer informed participating organizations that there was a community network survey being conducted in the Northwest of Argentina, carried out through visits in the territory and/or phone calls.

At the closing panel, Natalia Vinelli presented her book titled “Desconectados”¹⁷ (disconnected).



Video of the [NOA Community Connectivity Networks Meeting, Argentina](https://milcampanas.com.ar/product/conectividad-popular/)

9. Conclusion

The efforts made to solve inequalities, regardless of the number of families directly involved in RCCs, are a reflection of how fundamental communication is for all relations. Isolation is more damaging than the geographic challenges of these locations. Technologies and equipment change over time, but inequalities are now deeper and multiplying in our societies.

According to Cabrera Altieri and Angulo Egea (2023), communication as a movement was born not only from incompleteness, but also from dysphoria, i.e., from a discomfort between what is and what could be. From this perspective, RCCs also fight against binary strategies and categories that make communication a tool for the global generalization of marketing (p. 20).

Technology is not a tool in itself. Undoubtedly, it relies on the relationships that are built through it and the contexts where it is introduced. Additionally, there is not just one single type of technology. As Yasnaya Aguilar (2023) points out, the technology we usually speak about is capitalist, but there are other technologies from the periphery that are part of other cultures' interest in innovation and creation. These non-traditional peripheral

¹⁷ <https://milcampanas.com.ar/product/conectividad-popular/>

technologies, which the author calls “Tequiologies”¹⁸, are characterized by reciprocity and a collaborative technological development.

The processes of technological appropriation and resignification can be understood from different perspectives. We have taken the ecological approach, which “forces us to pay attention to contextual conditions that shape collective and political action, digging into the roots, the history and origins of social movements” (Treré, 2020, p. 34), as well as action or inaction by governments, political parties and institutions.

In conclusion, we find it relevant and necessary to highlight these initiatives, which explore alternative models to internet access through active community participation in the processes of creation, design and deployment of RCCs, including their everyday management for growth and sustainability. Many of the networks studied for this research were created during the pandemic, when mandatory confinement highlighted the connectivity inequalities across the country and the world. While disconnection has historically affected these areas, we here note how the health crisis promoted the creation of instruments and public policy on this issue. Over time, it is important that we remember the interest and awareness raised during the COVID-19 pandemic in order to keep getting support for existing and potential community projects from multiple stakeholders who can and/or should intervene.

All RCCs participating in this process are significantly different from one another, including their regions and cultures. However, they also show an incredible capacity for adaptation.

They face multiple barriers, including lack of infrastructure, little access to devices, little availability of computers —unlike the impressive penetration of mobile phones—, which further complicates digital literacy and the possibilities to gain technological knowledge. On top of this, prices of non-urban connectivity plans are high and these are low-income populations. In addition, RCCs are also heavily reliant on third parties, private players, technical experts and the public sector for the initial deployment of infrastructure. The challenges of achieving greater technological autonomy due to costs, lack of knowledge or

¹⁸ This term comes from the word “*Tequio*”, which means “social institution for collaboration and collective reciprocity.”

access to resources, such as radio spectrum, create significant barriers to getting this service and exercising this fundamental right in this age and the societies we live in. This is why we need to keep fighting for and recognizing the need to obtain financial resources for this while forming alliances and taking coordinated action with prolonged presence in the territory.

In this regard, this paper presents some approaches to supplementing existing knowledge and actions. Considering rural appropriation of and right to communication is not by chance. We understand the people who transform their environment, where knowledge, know-how and practices come into play to create and strengthen spaces for communication to solve territorial issues (Müller and Agüero, 2021, p. 63).

The telecommunication landscape is complex and, in many cases, it is profoundly unknown by those who work in communication and social sciences. However, it is fundamental and urgent to have an understanding of the players, issues and inequalities that have been present in these places for decades. Learning and inventing new ways of changing their realities has helped communities improve their situation —before and after the pandemic— and devise strategies to promote, create and maintain their RCCs. They were also able to work in collaboration with organizations, universities and other communities, expanding their horizons and becoming part of the continent while creating alliances from Mexico and its indigenous networks all the way down to the Argentinian mountains.

10. Podcast Miniseries

To conclude, below is the Line of Sight podcast miniseries, which features five episodes recorded for this research.

<https://open.spotify.com/show/1J1zUvzmhqSCEQmAgFHUde?si=af0d5226507d4981>

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12. Annex

Salta RCCs Data Sheet

1. Red Río Salado, Amblayo (Department of San Carlos, Province of Salta, Argentina)

 Red Comunitaria de Internet ComunidadRioSalado - Salta

Network Representatives	Rodrigo Cueva / Walter Roberto Tapia
Position within the Network	Facilitators
Contact Information	03874454604 / arcuevas849@gmail.com
Trade Name	None

Operating since	2020
Location/Network Coverage Area	Village Río Salado, Amblayo (Department of San Carlos, Province of Salta)
Local Population	Approximately 45 people in the village and surrounding areas.
About the Network	We are a group of family farmers who produce, among other things, home-made goat cheese, and grow corn, potatoes, green peas, etc. for self-consumption. We then sell the remainder. Our mission is for every family to have optimal communications so that they can receive training on several topics, commercialize their products and keep in touch with their families. Our vision is to expand our network to other little villages.
Main Economic Activities in the Community	Family agriculture, cheesemaking and small-scale animal husbandry.
Motivations for Deploying a Community Network	By the end of 2019, the Board of Popular Communication of Salta and Jujuy invited us to the Argentinian Summit of Community Networks (CARC) held in the Province of Córdoba. This meeting was highly anticipated and it was exciting to get to know other experiences and available technologies, even though it was very expensive for our community to attend. The projects by AlterMundi and the University during the pandemic were fundamental to accessing the only existing equipment in the area so far. In 2021, we attended the Course of AC Telecommunications Network Facilitators remotely thanks to Rodrigo Cuevas' expertise.
Challenges Faced by the Network	Operating this network involves difficulties related to the small number of megabytes made available by the private provider and geographical barriers (mountains, hills, etc.)
Network's Potential	An organized community is in charge of managing the network and solving potential problems. One of its potentialities is the agreement reached with private network Killa to re-use the contract on megabytes for community network use.

Type of Access Provided by the Network	Home connections and connection at a public/community location.
Participants (Individuals/Households)	The people connected monthly to the network currently include 5 households and 30 locals who attend regular meetings held in the organization's venue, as well as passers-by and visitors, as one of the nodes is located by the road.
Equipment Specs	LibreRouter equipment provides households with photovoltaic power to connect them. For internet access, Ubiquiti equipment is used. The equipment is assembled on pipes and a re-purposed tower (the network's origin), which is not the best, as they do not have ideal resistance.
Bandwidth (Download and Upload)	Symmetrical 10 MB.

2. Gallinato Libre. (Department of La Caldera, Province of Salta, Argentina.)

Gallinato Community

Network Representatives	Juan Martin Moreyra and Marcelo Lozano
Position within the Network	Juan Martín Moreyra: Manager
Contact Information	3875006106 / juanmartinmoreyra49@gmail.com
Trade Name	Gallinato Libre
Operating since	2021
Location/Network Coverage Area	Rural area. El Gallinato, Department of La Caldera (approximately 30 km off the city of Salta).
Local Population	Approximately 50 people.
Purposes of the Network	To provide communication services and opportunities. To reach everyone through internet service.

Main Economic Activities in the Community	Farming and animal husbandry.
Motivations for Deploying a Community Network	Communication and work needs.
Challenges Faced by the Network	Its current limitations are related to the mountains. Installing taller antennas could be a solution.
Network's Potential	The network is currently operating.
Type of Access Provided by the Network	Home connections and connection at a public/community location.
Participants (Individuals/House holds)	8 households (approximately 25 people).
Equipment Specs	LibreRouter equipment (mesh networking).
Bandwidth (Download and Upload)	Symmetrical 10 MB.

3. Red Fob. Guachipas (Department of La Viña, Province of Salta, Argentina.)

Network Representatives	Romero Yamila
Position within the Network	Coordinator in charge of community network deployment
Contact Information	3875999465 / fobsalta@gmail.com Social media: FOB SALTA – Zonal centro y sur @fobsalta
Trade Name	Red Fob Guachipas
Operating since	2022
Location/Network Coverage Area	Guachipas, Salta.

Local Population	3,100 inhabitants.
About the Network	We are a social and political movement fighting to improve the lives of the less privileged, through trade schools, self-managed work and leveraging the community to bring transformative change to small towns and cities.
Main Economic Activities in the Community	Farming, animal husbandry and crafts
Motivations for Deploying a Community Network	Incapacity to access private providers due to high prices. Also, this network has been located in community spaces where educational and recreational activities take place to serve children, adolescents and adults with limited resources, especially educational ones.
Challenges Faced by the Network	The network was supposed to extend to other villages farther away, but as there are no providers there, we had to deploy it in Guachipas to later extend the network and provide internet services to said places.
Network's Potential	
Type of Access Provided by the Network	Home connections and one open public access point (community space)
Participants (Individuals/Households)	Coverage is provided to approximately 5 households and the community center, with approximately 50 people.
Equipment Specs	There are 4 LibreRouter devices connected via mixed technology (links and cables).
Bandwidth (Download and Upload)	3 MB.

4. Equipo Siglo Luracatao - Cooperativa COSEByL. (Department of Molinos, Province of Salta, Argentina.)

Network Representatives	Lucas Gabriel Galante, Ernestina Lopez, Gabriel Fabian, Nerio Guaymas, Demetrio Yapura, Jose Valdiviezo, Viviana Chocobar
Position within the Network	Lucas Gabriel Galante: President
Contact Information	2346688542

Trade Name	Equipo Siglo Luracatao
Operating since	The team requested this information remain confidential.
Location/Network Coverage Area	Brealito, Laguna, Cuchillaco, Aguadita, Cieneguilla, Patapampa, Cabrería, La Puerta, Buena Esperanza, La Sala, Alumbre, Condorhuasi (Province of Salta).
Local Population	3,500 inhabitants.
About the Network	Our team installs and maintains internet services in the area of the Calchaquí valleys, especially in Brealito and Luracatao, fulfilling the needs of the underserved and isolated families in our communities.
Main Economic Activities in the Community	Animal husbandry, farming and textile weaving.
Motivations for Deploying a Community Network	No other means of communication were available.
Challenges Faced by the Network	
Network's Potential	The lack of other means of communication has made it possible to get support for this network, as it is essential for the local population.
Type of Access Provided by the Network	Home connections and an open public access point
Participants (Individuals/Households)	402 households and 17 institutions.
Equipment Specs	Mostly, Ubiquiti antennas and some Mikrotik ones, with management by Mikrotik through its appropriate apps and software.
Bandwidth (Download and Upload).	5 MB to 8 MB for households and 10 MB to 40 MB for institutions.

5. Rivadavia and Santa Victoria Este (Department of Rivadavia, Province of Salta, Argentina.)

Network Representatives	Pablo Sebastián Vera, Hugo González, Guilfredo González, Reinaldo Carrizo
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Position within the Network	Pablo Sebastián Vera: Management and Structure.
Contact Information	3885721161
Trade Name	Wifi Comunitario
Operating since	2022
Location/Network Coverage Area	Santa Victoria Este, Rivadavia
Local Population	
About the Network	This project was led by Pata Pila in coordination with La Garganta Poderosa under an initiative by the Infancia en deuda collective. Its purpose is to enable communication in the communities of Santa Victoria Este to address issues including healthcare, education, welfare and communication.
Main Economic Activities in the Community	When in season, members of these communities sell fish. There are also a few farmers and many members receive social welfare allowances.
Motivations for Deploying a Community Network	Communication purposes
Challenges Faced by the Network	There are currently 6 community antennas out of which 4 are operating properly and the remaining 2 are experiencing weather-related technical issues.
Network's Potential	There are currently 6 community antennas out of which 4 are operating properly and the remaining 2 are experiencing weather-related technical issues.
Type of Access Provided by the Network	Open public access point at a public/community location.
Participants (Individuals/House holds)	It is hard to estimate the number of people covered by the network, but 400 people might be a close estimate.
Equipment Specs	We use LibreRouter Wi-Fi equipment, specially designed for decentralized community networks. It supports all other types of Wi-Fi equipment. By using it, a local network can be deployed and connected to the rest of the internet.
Bandwidth (Download and Upload)	6 MB.

6. **Red Escoipe (Department of Chicoana, Province of Salta, Argentina.)**

Network Representatives	La Voz de la Quebrada community radio Erica Pastrana, Magalí Condorí, Diego Acosta, María Laura Agüero
Position within the Network	Erica Pastrana: Network Facilitator
Contact Information	3872127675 / virginiacollivadino@gmail.com
Trade Name	Red Escoipe
Operating since	Launched on November 23 (an invitation flyer is attached)
Location/Network Coverage Area	Quebrada de Escoipe, Department of Chicoana, Salta.
Local Population	380 households
About the Network	As a team of community managers and communicators, we represent all 11 villages in Quebrada de Escoipe. We seek to connect Quebrada to the internet as it is an essential resource for everyday life.
Main Economic Activities in the Community	Farming, animal husbandry and tourism
Motivations for Deploying a Community Network	No company is interested in investing in the area. This is why our community network represents an autonomous way to provide local families with a means of communication. Communication is a right for all the community.
Challenges Faced by the Network	The internet base node (school of San Fernando de Escoipe) receives 2 megabytes from a company called Level3. This is not enough to feed the mesh network through LibreRouter equipment. In addition, distances between nodes are considerable and it is difficult to install LibreRouter technology in mountainous terrains.
Network's Potential	Our parent organization, community FM radio La Voz de la Quebrada is a frequent meeting point to address matters related to the network.

Type of Access Provided by the Network	It is intended for home connections and one community location: the community FM radio.
Participants (Individuals/Households)	10 households, as those are near enough to get coverage.
Equipment Specs	LibreRouter equipment and Saltic and ARSAT connection through an agreement made by the community radio, INTA and the Province to facilitate an access point at the radio facilities.
Bandwidth (Download and Upload)	10 MB

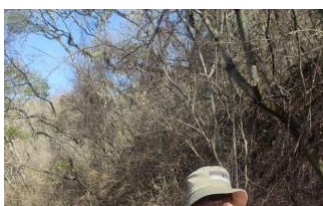
1^{ER} ENCUENTRO DE REDES DE CONECTIVIDAD COMUNITARIA DEL NOA CON LÍNEA DE VISTA

Intercambios intersectoriales y diagnóstico para lograr acceso y conectividad en la ruralidad.

8 DE NOVIEMBRE DE 2023 | 10:00 HS.

Aula Virtual de Ciencias Exactas
Universidad Nacional de Salta
Salta, Argentina

MESA DE COMUNICACIÓN POPULAR | INAFCI | INTA | UNSa | UNJu | FES 1 COMARCAS



A handwritten signature in black ink. The signature consists of a large, stylized initial 'A' followed by 'na' on the top line and 'Müller' on the bottom line. A horizontal line is drawn across the top of the 'na'.