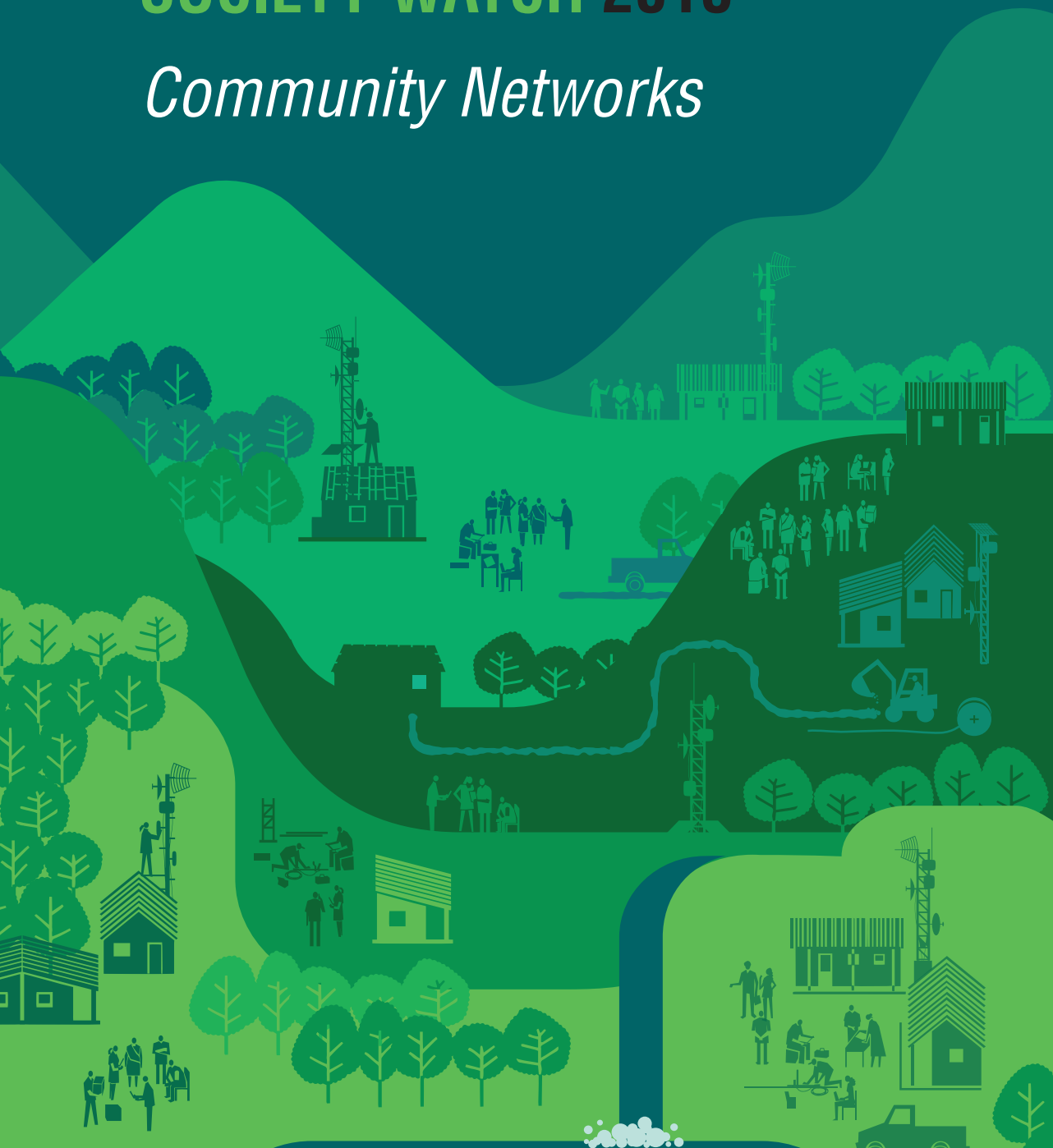
GLOBAL INFORMATION SOCIETY WATCH 2018

Community Networks



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This edition of GISWatch came into being alongside a brand new baby boy. Welcome to the world, Ronan Diga!

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COSTA RICA

THE COOPERATIVE MODEL AS AN ORGANISATIONAL MODEL FOR COMMUNITY NETWORKS IN LATIN AMERICA: THE CASE OF COOPELESCA IN NORTHERN COSTA RICA

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Introduction

This report focuses on the cooperative model used to develop community-run electricity services in Costa Rica as a possible business model for community networks in Latin America. It is based on the 53 years of experience of electricity cooperatives in Costa Rica, which, 10 years ago, started to expand their field of action to provide access to the internet and value-added digital services to the rural populations of this country.

Coopelesca[1] is one such cooperative with a long history in the country. It serves the northern zone of Costa Rica. Its history is similar to that of the other three electricity cooperatives in the country which were also started at the same time: Coopeguanacaste, Coopesantos[2] and Coopealfaroruiz, all of which have grouped into a cooperative consortium called Coneléctricas.[3] The consortium shares energy reserves and the benefits of technology transfer and also engages politically and purchases goods and services as a group.

The context in which the cooperatives started

It is important to highlight some relevant aspects of the Costa Rican context. Electricity was defined as a universal service provided by a public institution based on a solidarity model in 1949. From then until now, it is still a state service provided by the Costa Rican Electricity Institute (ICE), which develops the electricity infrastructure and provides services across the country.

However, not all of the country could be connected at the same time. Coverage had to be planned by zones. In four rural regions, the population decided to organise themselves to develop their own electricity infrastructure, administered by the communities themselves, to provide services to communities. This was so that the communities could have electricity without having to wait until their zones could be connected to the national electricity grid. As Coopelesca put it: "Here people lived off milk production and its derivatives. Families understood that electricity would generate a high added value to production, and that is why they organised."[4]

Consolidation of a technology cooperative organisation

In 1965, the Coopelesca cooperative was created by 365 members from the communities with a contribution of 25 Costa Rican colons (USD 0.0005 today) each. The total capital was around USD 80 at the beginning. They used this money to hold raffles and livestock auctions to raise money so that they could provide electricity to the communities. The cooperative has been strengthened and grown enormously. It is currently made up of 85,000 members, with 92,000 electrical connections.

Since electricity is the responsibility of the Costa Rican state, the cooperative had to negotiate a concession from the government so that 10% of the national territory would be electrified by Coopelesca. The total electrification of this entire territory was achieved in 2014, that is, 49 years later. This has been made possible by the effort of the people grouped together in the cooperative.

It is important to note that the coverage of the territory was complex due to its geography. For the electrification of each community, the cooperative had to open trails to be able to set up the infrastructure, then those trails were converted into community roads to provide maintenance to the infrastructure created. This had a knock-on positive impact in the territory: with the opening of the roads, access to health, education and markets, among other things, was increased, and development generally was accelerated. This has resulted in a rural area with greater access to opportunities.

This is another important aspect to highlight as a lesson learned: the cooperative model is a company that prioritises the development of the territory and the well-being of its members over the interests of capital accumulation. These principles are also relevant to the development of community networks.

1 www.coopelesca.com
2 www.coopesantos.com/contenido
3 www.conelectricas.com
4 Personal communication with Alvaro Chaverri, Coopelesca communication officer, 25 May 2018.

Ten years ago an important discussion was started in the cooperative on the convenience of incorporating information and communications technology (ICT) features as part of its services. This meant offering access to the internet and to digitally value-added services.

On the one hand, there were members of the cooperative who indicated that Coopelesca should focus on strengthening electrification services instead. They argued that connectivity must be left in the hands of the main telecommunications companies, Movistar,[5] Claro[6] and Kolbi.[7] On the other, there were those who proposed that the cooperative take advantage of the infrastructure it already managed to realise the community's rights to access internet services. This group also argued that it would be impossible for the telecommunications market to offer connectivity in many parts of the area that Coopelesca serves because the cost-effectiveness ratio was so poor – it implied making high investments on infrastructure for very small markets. "This is exactly why there had to be differences between technology access for the users in the central zone of the country compared to the most remote areas,"[8] Coopelesca stressed.

Through a majority vote, the members decided on the second abovementioned option. To be able to finance the connectivity, it was decided to include an additional amount of 500 Costa Rican colons (approximately 1 USD) on each electricity bill sent out to the members in the community. This surcharge was a contribution to capital – if a member withdrew from the cooperative, his/her capitalisation would be returned. This contribution to capital was accumulated to develop the necessary infrastructure for the connectivity of the most remote populations that did not have other alternatives.

The concentration of members is at the centre of the rural area. Even though they already have internet connectivity, they still contribute this monthly amount. The resources are then spent on connectivity for the more distant areas, for example, to 12 peasant settlements that could not have the connectivity service without the cooperative support. This, which we call the "solidarity model", is another of the principles that are applied in cooperatives that should be fundamental for the development of community networks. In this model, everyone pays to achieve the development of the most vulnerable.

Cooperatives that provide internet and related services are regulated at the national level by the National Superintendency of Telecommunications,[9] so the prices and costs are monitored by the state. Even cooperative members are free to choose an alternative service provider for connectivity or landline or mobile services, which means that prices should remain competitive.

It is important to mention that Coopelesca is a large cooperative whose employees are resident in the rural areas that it serves. The cooperative has been concerned to consolidate a very high technical capacity among its employees over the more than 50 years of its operation – and the same can be said for all the cooperatives that are part of the Coneléctricas consortium. Many of them, as in the case of Coopelesca, created and manage hydroelectric plants or, as in the case of CoopeSantos, they have wind power generation projects. It is the rural inhabitants themselves who have created these projects, securing credit from the government and banks, supported them with technical assistance, and run them according to solidarity business models, among other aspects. The people in these communities are trained in relevant engineering aspects, as well as in the basic management of hydroelectric plants or electrical issues such as the maintenance of wiring.

Not everyone in the community understands the technical details of setting up a connectivity project. However, any new project or investment must be approved in the general assembly of the cooperative where each member (male or female) has the right to one vote, guaranteeing that the ownership and investment are collective. It is important to mention that it is the decision of the assembly that the business model used in the cooperative is based on solidarity principles, but also that it must be profitable so that its services can be rolled out to unconnected areas. With unprofitable business models this would not be achieved – in other words, the cooperative would not be sustainable.

How is this relevant to community networks?

Three aspects are important to highlight and must be identified as good practices when talking about community networks:

- An autochthonous definition of needs by the communities, which emerges from the self-interest of their population.
- An autonomous interest on the part of the population in organising themselves to obtain the

5 www.movistar.cr

6 www.claro.cr

7 www.kolbi.cr

8 Personal communication with Alvaro Chaverri, Coopelesca communication officer, 25 May 2018.

9 https://www.sutel.go.cr

technology and the necessary infrastructure to solve this need.

- A public institution (in the case of electrification, the ICE) that supports the community network, is specialised and is willing to train the local population to allow the appropriation of technology without dependence on a third party.

In other words, community networks must be autochthonous, autonomous and independent.

With these as basic principles, the following can be highlighted about the development of community networks from considering the Coopelesca experience:

- In Costa Rica, the term "community networks" is not as well known as it is at the international level. However, the country has long-standing experiences in cooperative service provision with regards to the electricity cooperatives.
- People in rural areas can develop capacities of the highest technical level to attend to the needs of technology projects such as community networks.
- Organisations and community networks should not be conceived as small or weak organisations; they can be constituted as large, sustainable and influential organisations that are in the hands of the people they provide services to.
- The organisations that sustain the community networks must be anchored in a region, be concerned about the development of the region beyond providing digital services, and must be born from the needs of the population that inhabits the region, and not from external interests. It does not matter what sort of good intentions motivate those external interests; community networks must be rooted in the communities they serve.
- The basis of the organisational model should be the solidarity principle. Decisions should be made democratically and based on one person's vote carrying the same weight as any other. These principles should govern the collective prioritisation of actions and the technical training of the population.

Action steps

We propose the following action steps to strengthen the cause of community networks in Costa Rica:

- Our own experience as a cooperative, as well as the lessons learned in this study of Coopelesca, suggest to us that the cooperative model is one appropriate organisational model to consider for community networks in Latin America.
- At the same time, it is necessary to introduce the concept of community networks into our own country, since it is not so well known right now. We must create alliances in academia, the public sector, the private sector and civil society to strengthen the discussion on this issue in an environment where the telecommunications market was recently opened up, where there is a government fund available for connectivity projects, and where 40% of the territory is still without connectivity.
- It is critical for the public sector institutions promoting cooperatives and digital universal funds like INFOCOOP,[10] the National Telecommunications Fund (FONATEL)[11] and the Ministry of Science, Technology and Telecommunications (MICITT)[12] to develop policies for community network initiatives.
- We also must integrate the issue of community networks into the work that Sulá Batsú does with women in the digital sectors.
- Finally, the model of electricity cooperatives developed by community networks should be supported and replicated in other parts of the country, mainly in rural areas. Currently, its coverage is in four rural areas where it has been shown that the model not only works, but it also has an impact on social development generally.

10 www.infocoop.go.cr
11 https://sutel.go.cr/pagina/que-es-fonatel
12 https://www.micitt.go.cr

GLOBAL INFORMATION SOCIETY WATCH 2018

Community Networks

THE 43 COUNTRY REPORTS included in this year's Global Information Society Watch (GISWatch) capture the different experiences and approaches in setting up community networks across the globe. They show that key ideas, such as participatory governance systems, community ownership and skills transfer, as well as the "do-it-yourself" spirit that drives community networks in many different contexts, are characteristics that lend them a shared purpose and approach.

The country reports are framed by eight thematic reports that deal with critical issues such as the regulatory framework necessary to support community networks, sustainability, local content, feminist infrastructure and community networks, and the importance of being aware of "community stories" and the power structures embedded in those stories.

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