





- 1. Establish and develop a policy for information and communication technologies that fosters the development of infrastructures and technological instruments for our Nicaraguan families.
- 2. Advance with the expansion of bandwidth in high-speed internet service and its access throughout the country.
- 3. Develop new specific regulations and studies that allow the updating and development of telecommunications for the benefit of our Nicaraguan families.









Fair prices







In the period from 2007 to 2020 we have obtained the highest growth in Telecommunications.

Thanks to the Policies adopted by our good Government, we have promoted the development of telecommunications, guaranteeing an environment of trust in the sector and allowing companies to invest in continuing to create Telecommunications access for Nicaraguan families.

YEAR	Investment in Dollars
2007	
2008	\$160,000,000
2009	\$178,000,000
2010	\$99,000,000
2011	\$121,000,000
2012	\$117,000,000
2013	\$109,000,000
2014	\$143,000,000
2015	\$137,000,000
2016	\$264,000,000
2017	\$121,000,000
2018	\$145,000,000
2019	\$150,000,000

Total: \$1,744,000.000









YEAR	Fixed telephony users	Mobile phone users	Number of Fixed Internet Connections	Number of Mobile Internet Connections	Subscription TV Users
2007	257,588	2,503,051			
2008	254,438	3,108,854	49,312	521	
2009	254,686	3,344,563	94,949	7,752	153,016
2010	258,325	3,962,247	97,307	21,056	178,153
2011	287,618	4,823,534	116,681	26,719	198,765
2012	299,123	5,851,723	143,883	31,751	217,610
2013	324,917	6,808,930	172,389	290,462	239,271
2014	339,629	7,069,251	145,218	753,701	266,904
2015	354,017	7,265,542	164,771	1,126,740	294,914
2016	366,636	7,745,512	177,024	1,443,171	383,834
2017	375,856	7,304,701	181,838	2,369,527	291,567
2018	325,821	6,240,345	192,413	2,432,921	296, 485
2019	228,782	5,905,956	216,618	2,672,375	300,015
2020	235,401	5,961,569	237,048	3,306,666	304,214

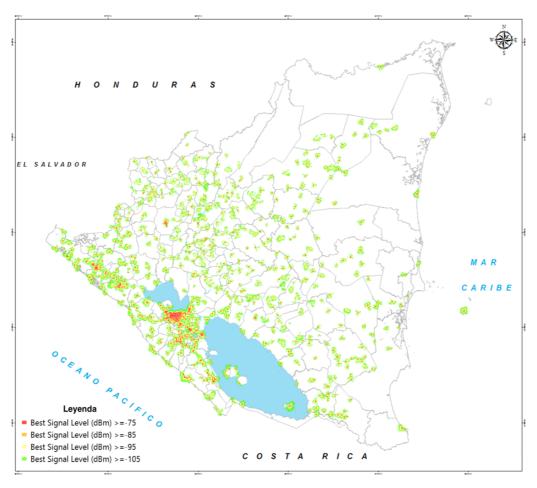








Cellular Telephone Coverage 3G Operators.











Broadband - Access - Infrastructure

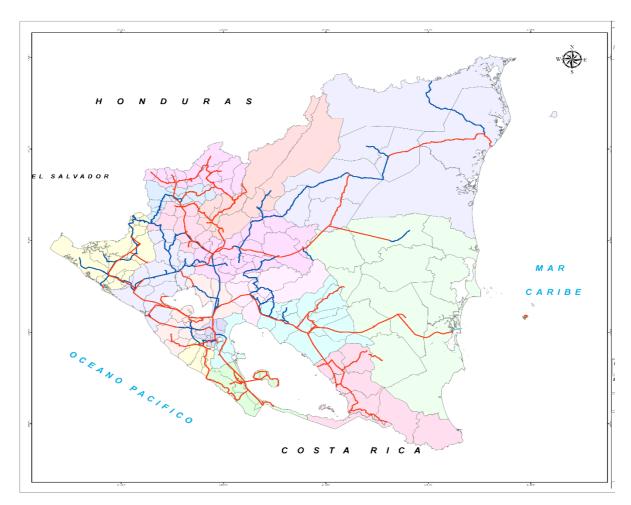
- The Broadband Program was born in 2016.
- Investment of 50 million dollars.
- IDB and South Korea financing.
- Objective: Expand the fiber optic infrastructure, modernize the Nicaraguan regulatory framework and empower the use of Information Technologies.
- Use are finalizing the deployment of fiber optics with a total of 2,580 km, benefiting 93 municipalities in Nicaragua.
- ☐ We achieved 60.78% of national broadband infrastructure coverage.
- It is estimated that around 4.9 million people have the possibility of accessing telecommunications services.







Fiber Optic Coverage of the State of Nicaragua.











Broadband - Access - ICT Empowerment

We are contributing with technological equipment and connectivity:

- 100 Telecentres whose beneficiary is: Institute of The Nicaraguan Agricultural Technology.
- Investment: C\$21,000,000.00
- Objective: Promote the of use information technologies and train our producers to improve efficiency and productivity.
- Approximate beneficiaries: 4,500 producers

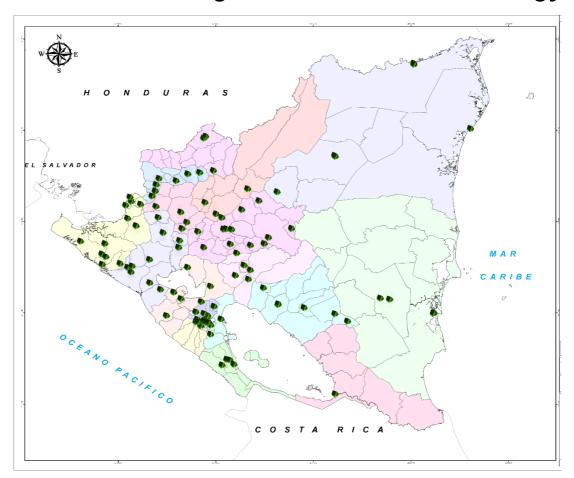








Coverage of Beneficiary Sites of the Nicaraguan Institute of Agricultural Technology.











Broadband Information Communication and Access **Empowerment Technologies**

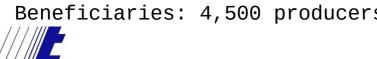
DEVELOPMENT 0F TECHNOLOGICAL APPLICATION Technological Institute of Agriculture.

OBJECTIVE:

Promote the use of information technology and connectivity through a technological application that improves the productivity and efficiency of our farmers.

Investment: C\$10,250.00.00 córdobas.

Beneficiaries: 4,500 producers.











Broadband - Access - Empowerment Information and Communication Technologies

We are contributing technological equipment and connectivity to:

- 149 Health Centers whose beneficiary is: Ministry of Health.
- Investment: C\$ 48,203.00.00
- Objective: Promote the use of information technologies in our health centers to improve efficiency and care for our Nicaraguan families.



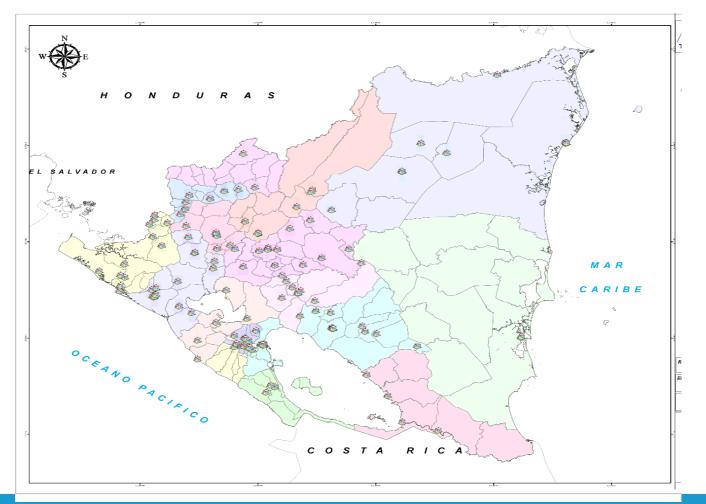








Coverage of Beneficiary Sites of the Ministry of Health.











Broadband - Access - Empowerment Information and Communication Technologies

DEVELOPMENT OF TECHNOLOGICAL APPLICATION - MINSA

OBJECTIVE:

The design of innovative applications or services related to diagnoses, treatment and electronic health records that use connectivity to <u>reduce maternal and child mortality</u>.

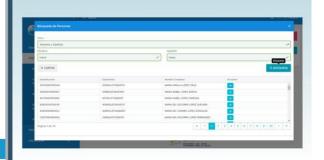
Investment: C\$ 10,250,000.00 córdobas

Beneficiaries: 7,000 doctors from health

centers.













Infrastructure Program for the Caribbean Region - CARCIP INFRASTRUCTURE - ACCESS

- The CARCIP Program was born in 2018
- Investment of 20.1 million dollars.
- Financing: World Bank.
- Objective: Expand the infrastructure of the Caribbean Coast and empower the use of ICT in the region.
- Use have connected **15 communities** of the RACCN, RACCS and the department of Río San Juan with an investment of: C\$ 119,700,000.00.
- We are currently carrying out the deployment of a 115 km Fiber Optic section between El Rama Kukra Hill and Laguna de Perlas in the RACCS that will benefit **5 communities**.









Infrastructure Program for the Caribbean Region - CARCIP INFRASTRUCTURE - ACCESS

- We will be enabling Broadband Access Networks to communities located in the Waslala Siuna Rosita Puerto Cabezas Waspam sections, using fiber optic as the Broadband program as transportation. With an investment of: C\$ 30,840,000.00, benefiting 32 communities in the Caribbean Zone.
- This will allow Telecommunications access to our Nicaraguan families in the Caribbean Zone.









Infrastructure Program for the Caribbean Region - CARCIP INFRASTRUCTURE - ACCESS - Empowerment of Information and Communication Technologies

- We have enabled infrastructure and Internet access in <u>14 Health Units</u> in Rural Areas of the Caribbean Coast, improving the health services provided to our Nicaraguan families. With an investment of: C\$ 6,800,000.00 córdobas.

1. Mongallo	6. Papaturro	11. Sukatpin
2. Guayabo Central	7. Wisconsi	12. Yulu
3. Zinica #2	8. Santa Clara	13. Maniwatla
4. Ocote Tuma	9. Francia Sirpi	14. Wasakin
5. Las Tatas	10. Awastingni	









PUBLIC TELECOMMUNICATION POLICIES IN NICARAGUA AND NATIONAL COVERAGE

Infrastructure Program for the Caribbean Region - CARCIP INFRASTRUCTURE - ACCESS - Empowerment of Information and Communication Technologies

We are starting the creation of Digital Classrooms in 5 schools in the Caribbean area through an interinstitutional effort between TELCOR and MINED with an investment of: C\$7,000,000.00 córdobas, benefiting approximately 1,300 students and 52 teachers.



- 1 2 in Waslala
- 2 in Siuna
- 1 in El Tortuguero









Infrastructure Program for the Caribbean Region - CARCIP ACCESS - Empowerment of Information and Communication Technologies

We are conducting training and certifications in soft skills, (communication, negotiation and innovation); English skills and world-class technical certifications.

Objective: That our low-income youth can opt for better jobs.

Investment: C\$ 53,221,000.00 córdobas.

Beneficiaries: 5,0000 Nicaraguan youth.









Infrastructure Program for the Caribbean Region - CARCIP ACCESS - Empowerment of Information and Communication Technologies

The following goals have currently been reached:

ENGLISH COURSES:

Trained: 1,294 young people.

In training ending in December 2020: 1,600

people.

SOFT SKILLS:

Trained: 1,710 young people.

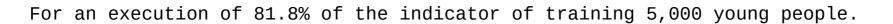
TECHNICAL CERTIFICATIONS:

Trained: 270 young people.

In training ending in December 2020: 780 young

people.











Infrastructure Program for the Caribbean Region - CARCIP ACCESS - Empowerment of Information and Communication Technologies

INNOVATION CENTER FACILITIES:

The fundamental objective of the Innovation Centers is to create a physical space with technological equipment, furniture and technical assistance, which serves the population as an instrument to incentivize and promote innovation through the use of information technologies, to generate innovative solutions to daily problems in matters of productivity, health and education.











Infrastructure Program for the Caribbean Region - CARCIP ACCESS - Empowerment of Information and Communication Technologies

We have inaugurated 2 Innovation centers in Bilwi and Bluefields. We contributed with furniture, technological equipment and connectivity, with an investment of: C\$ 14,650,600.00 córdobas for the benefit of our young people.

We are about to start the inaugurations of four additional innovation centers in:

- Unan University León: 3,000 young people benefited.
- BICU University of Bonanza: 1,200 young people benefited.
- URACCAN University of Siuna: 2,500 young people benefited.
- FAREM University of Estelí: 1,500 young people benefited.

With an Investment of: C\$ 8,100,000. córdobas.









CEABAD - CENTER FOR ADVANCED STUDIES OF BROADBAND

Empowerment of Information and Communication Technologies.

Actions:

-Installation of the Center for Advanced Broadband Studies for Development (CEABAD) in conjunction with South Korea in 2014.

This center has trained $\underline{1,556}$ employees faceto-face and $\underline{1,408}$ officials virtually on information technology issues and global trends in telecommunications.









"The development of Information and Communication Technologies (ICT), particularly Broadband, contribute to the unity of Latin American and Caribbean peoples."

Comandante President Daniel Ortega Saavedra Closing of the Regional Forum "Connectivity for All" in 2016

