



# NICARAGUA

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## THE PROJECT

**Project Location:** Leon, Nicaragua

**GPS Coordinates:** Latitude:12 22.102 N Longitude:086 50.219 W

**People Served:** 300

**Report Presented To:** Messiah United Methodist Church

## THE COUNTRY

According to the most recent UNDP report, Nicaragua is ranked 115<sup>th</sup> out of 169 countries with comparable data in the United Nations Human Development Index. Nicaragua is the second poorest country in the Western Hemisphere (after Haiti), with almost half of the population living below the poverty line. Approximately 40 percent of the population has no access to health services. Nearly one quarter of the population lacks access to sustainable sources of drinking water, a figure that rises to 53 percent in rural areas, while 52 percent of the country is without adequate sanitation services. Efforts toward poverty reduction, including advances in health education in rural areas, have been slow.

Despite recent efforts made in the areas of economic growth and poverty reduction, Nicaragua still has highly unequal income distribution and low levels of development. The country is also extremely vulnerable to natural disasters, including earthquakes, volcanic eruptions, drought, flooding, and hurricanes. Hurricane Felix, which struck in 2007, affected 33,000 families and destroyed nearly 80 percent of the country's infrastructure. Following Hurricane Felix, rising oil and food prices as well as the international financial crisis further damaged Nicaragua's attempts to rebuild.

With over 75 rivers, 32 lagoons, and two lakes, 15 percent of Nicaragua's surface is water. Still, more than 20 percent of Nicaraguans lack access to a source of clean, safe water, and more than half do not have access to adequate sanitation services. Out of every three Nicaraguan children, one is chronically malnourished.

## OUR WORK IN NICARAGUA

Living Water International has been drilling wells along the Pacific coast of Nicaragua since 2001. Living Water Nicaragua has an established team of trained nationals currently drilling boreholes and repairing broken handpumps for communities in need. In 2005, volunteer teams began traveling into Nicaragua to drill wells and conduct hygiene education in these areas. More than 320 water projects have been completed since operations began in Nicaragua. Mission teams drill wells of 80 feet or more that are capable of producing clean, safe water for villages of 150 to 200 people. Living Water Nicaragua hopes to continue to increase drilling production in the future, with 45 well-drilling trips projected for 2011.

## THE DATA

**Population:** 5.8 million

- 21% without access to an improved water source
- 52% without adequate sanitation services
- 45% living below the poverty line

**Life expectancy:** 73 years

**Infant mortality rate:**  
23 per 1000 live births

**GNI per capita:** \$2567 USD

Sources: World Bank, UNICEF, USAID, UNDP, CIA World Factbook

Official statistics often understate the extent of water and sanitation problems, sometimes by a large margin. Insufficient resources for monitoring population and/or coverage as well as varying definitions of coverage and access contribute to statistical variability.



## GENERAL INFORMATION

When the team arrived, community members were utilizing an unprotected hand dug well located in the community to meet all of their water needs. The LWI Nicaragua team was pleased to learn of the community's use of a VIP latrine as this will help prevent further spread of disease in the area. During the team's stay, community members assisted the team with the water project whenever possible, provided any materials they had available, made lunch for the drill team and provided security over the water project during the night. Most community members sustain their families by working odd jobs or field work for daily wages. The nearest school is located two kilometers away from the community whose students, teachers and administrative personnel all have access to the new, safe water source. Before leaving the community, the team provided community member, Mariela Perez, with a LWI Nicaragua contact number in case their well were to fall into disrepair, become subject to vandalism or theft.

## TESTIMONY

The LWI Nicaragua team had an opportunity to meet with thirty-two year old community member and housewife, Mariela Perez, who stated, "Now we have clean water!"

## CHARACTERISTICS OF THE WELL

### Project Details

Region/Province/District	Leon, Nicaragua
GPS Coordinates	Latitude:12 22.102 N Longitude:086 50.219 W
Altitude	94 m
Total depth	33.53 m
Static level	17.07 m
Diameter of casing	100 mm
Casing material	PVC
Pump type	India Mark II
Depth of cylinder	24.38 m
Well yield	160 liters per minute
No. of people served	300

## HYGIENE TEACHING

Hygiene was taught to the children and adults. During the hygiene education, the team addressed: Disease transmission, germs, hand washing, proper water saving techniques, causes of diarrhea, healthy and unhealthy communities, Oral Rehydration solution, community mapping and identifying good and bad hygiene behaviors, clean hands and clean hearts and dental hygiene.

## CHRISTIAN WITNESS

A LWI Nicaragua team member stated, "It was a blessing to work with local pastor." Before leaving the community, the team had an opportunity to share the Jesus film and distribute 30 Bibles to community families.

## PHOTOS



Previous water source depended on by the entire community to meet their most immediate water needs.



Project in process.



Completed water project.



Community member pumping clean drinking water.



Community members who were served by LWI Nicaragua with clean, safe drinking water.



Plaque on pump.



Community member, Mariela Perez, interviewed by LWI Nicaragua and who stated, "Now we have clean water!"



Local school served by LWI Nicaragua.