

## **5. Nicaragua loses half its water supply to drought and deforestation**

Nicaragua's three year long drought, exacerbated by El Niño and continued deforestation, has resulted in a 60% loss of surface water and 50% of underground sources which have either dried up or been polluted, according to former Minister of the Environment and Natural Resources Jaime Incer Barquero. Incer is currently president of the Nicaraguan Foundation for Sustainable Development (FUDENIC-SOS). He cited the disappearance of 100 rivers and tributaries and the contamination of lakes Tiscapa, Nejapa, Venecia, and Moyua. He also pointed to the drop in depth of Lake Cocibolca which has left boat piers far above the water, and Lake Managua where in some areas the lake has receded 200 meters.

The Coco River, which forms the Caribbean border with Honduras can be crossed on foot in some places and there are stretches as long as 8 kilometers that are dry. Despite dredging in the San Juan River, which forms the border with Costa Rica, sand bars disrupt navigation on increasingly large segments of the river. FUDENIC-SOS blames climate change and the El Niño phenomenon, and also the government's lack of policies to restrain deforestation. The Bosawas, Indio Maiz, Cerro Silva and Punta Gorda nature preserves have had massive forest loss that has accelerated in recent years. Environmental Resources Management (ERM), the firm hired by the Chinese company HKND Group to do an environmental impact study for the proposed shipping canal, reported that, between 1983 and 2011, "nearly 40 percent of the natural land cover in southeast Nicaragua was lost."

The National Livestock Commission of Nicaragua (CONAGAN) stated in February that it was concerned about water shortages in areas that account for 30% of the country's livestock. Ironically, the cattle industry is a major contributor to deforestation as it pushes the agricultural frontier farther and farther into what was unspoiled forest in search of more grazing land. The effects of El Niño are not expected to moderate until August of this year. The Union of Agricultural Producers in Nicaragua (UPANIC) estimates that US\$200 million was lost to the drought in 2015. Nicaragua's Central Bank also reported that low water levels affected hydroelectric production in 2015 which is the cheapest form of renewable energy. Family food security is another victim of the drought. Although the government has responded by distributing food and water, critics call the response "band-aids." They want the government to declare a national emergency.

On April 5, the director of the National Water Authority, Luis Angel Montenegro, announced that the government's National Water Resources Plan was in draft stages and would be released soon. He said that all Nicaraguans should ask themselves "what they can do to support the government in the solution to this crisis." (Interpress Service, Apr. 5; Informe Pastran, Mar. 31, Apr. 1, La Prensa, Apr. 5)

## **6. High temperatures cause suffering and increase energy demand**

Government communications coordinator Rosario Murillo urged families to take particular care of the very old and the very young during the heat wave that is hitting Nicaragua. "We have to know how to live in this extreme weather that we have," she said. She added, "We must take care in a special way of our older adults and our children." March and April are already the hottest month of the year and in March they peaked at 38.8°C (almost 102°F) in Chinandega and 37°C (98.6°F) in Managua, putting a special burden on the majority of people who have no access to air conditioning. High temperatures are causing record demand for electricity according to Cesar Zamora, president of the Nicaraguan Chamber of Energy. Zamora noted that "energy consumption shoots up as the heat becomes more suffocating." Additionally, Zamora noted that more farmers are using irrigation and the sugar mills are running more hours, both of which mean more electricity use. Other industry and commercial enterprises also use more electricity when temperatures rise. On April 3, Managua temperatures hit 39°C (102.2°F). (El Nuevo Diario, Apr. 3, 4; Informe Pastran, Mar. 30)