



The History of Pollution and Social-Political Injustices Caused by La Chureca Dumpsite and its Slow Road to Recovery

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Founder of Right Path Projects 501c3: *Any action considered to bring positive change towards environmental and humanitarian injustices starting with photography*

ABSTRACT The following data collected here is based on reliable facts that have been recorded from scholarly, peer-reviewed resources and many interviews conducted by myself, Timothy Bouldry, over the course of 10 years. It is in observation of a dumpsite named La Chureca located in Managua, Nicaragua. The purpose of this report is to bring together various sources to prove the complexity and the environmental destruction this dumpsite has caused, to discuss the major health risks associated to it and the political disobedience that is slowing down the progress for cleanup of the region. It will mention how this open dumpsite pollutes Managua Lake, is making the local people sick with diseases, asthma, bacteria, mercury in their bloodstream, and the discovery of polybrominated diphenyl Ethers (PBDEs) in people living amongst the dump. The history of natural disasters and war as it relates to the dumpsite will be explained. There will be acknowledgment of relief efforts from European governments to remove the community from the dumpsite and relocate them to a subsidized community, the construction of a sorting plant to create jobs, as well as the projects that are helping to clean the dumpsite and Managua Lake. Lastly, solutions will be recommended for continuing on the right path with cleanup campaigns and relief efforts. A brief overview of other dumpsites within Nicaragua will be addressed to state that La Chureca is not the only dumpsite in Nicaragua with this problem. In fact, La Chureca is one of thousands of dumpsites in Latin America causing major environmental complications, health risks and dangers.

HOW LA CHURECA CAME TO BE

In 1972, Nicaragua experienced an earthquake that would forever shape the direction of the country. A 6.3 magnitude quake destroyed 80% of Managua city causing 250K-300K persons to become homeless (70% of Managua) and leaving many thousands dead. It was criticized that the current Somoza government did not respond adequately. This opinion combined with years of failing to recuperate would eventually lead to the Sandinista civil war in the late 1970's. As the story is told through various interviews at La Chureca, the rubble from the buildings and homes were to be placed on this once farmland on the coast of Managua Lake. With a quarter of a million people suddenly homeless, groups migrated to the rubble to seek refuge and to build new homes from the materials they found there. This place would eventually become home to people who wanted to fall off the map of society. The country soon moved into a civil revolution in which the rebel Sandinista party would eventually win over the Somoza government. People seeking political asylum would go to the dumpsite to hide from the politics of war. Later, La Chureca became the city's informalized municipal city dumping ground and eventually a booming market for selling recyclables. Being the second poorest country on the Western Hemisphere after Haiti, this called attention to all of the people in the entire country of Nicaragua who were looking for work. They could move to a free land and work at their own leisure with materials and leftover food that were delivered to them in dump trucks. At its peak, La Chureca was to become the home to 1800 individuals (half being children) and 250 families. Families moved there from all over the country and even some came from Costa Rica.

A DAY IN THE LIFE OF LA CHURECA IN THE 1990's – 2000's

The dumpsite claimed a very negative title of being one of the dirtiest places in Latin America. The entryway was referred to as "the gates of hell" and inside you would find thousands of people living and working on a mountain of trash that reached a few stories high and stretched for 4.5 square miles. Alongside countless dogs, cows, vultures, flies and other animals were people covered in dirt searching for plastics, metals, papers and materials they could repurpose or build into a shack for living. The leachate from the dumpsite directly flowed into Managua Lake from countless non-source points as it critically polluted the watershed of that region. Managua Lake became the second most polluted lake in the world and people feared entering the lake. However, for many, it still became a place to bathe, play and fish. Studies have shown high levels of mercury in the blood of individuals working at the dumpsite, as well in aquatic life and autotrophs. Mercury is very toxic to the central and peripheral nervous systems. High levels of polybrominated diphenyl ethers (PBDEs) and bioaccumulative hydroxylated PBDE metabolites were also discovered through testing in the youth of the surrounding area. PBDEs are flame retardants found in many products that are dumped in La Chureca and can cause many health-related problems. People

burned a lot of trash daily in search of metals to sell and make more space. This caused major breathing problems for the locals. The community not only looked for recyclables, they searched for food that they would directly eat out of the trash. There were many reports of accidents with the trucks as well. People were hit or ran over by trucks that did not see them while dropping off trash. Huffing glue became an acceptable form to deal with hunger pains leading to many becoming addicted to the substance. Underage prostitution was also a common service for the truck drivers or anyone that wanted sexual relations with minors. Various diseases, parasites, STDs, bacteria, illnesses, asthma and bronchial disfunctions were common amongst the community and the local animals.

FOREIGN CURIOSITY, NEOLIBERAL MUNICIPAL SOLID WASTE PROJECTS AND WATER CLEAN UP EFFORTS

The reputation surrounding La Chureca spawned the curiosity of foreign NGOs, missionary trips, environmental students and European governments. It became a place of poverty tourism, but the documentation and awareness building reports called attention for help for this area. The Sandinista government run by President Daniel Ortega, and the Vice President (Ortega's wife) Rosario Murillo were not willing, nor completely capable of supplying adequate need to the environment and community. Therefore, two major foreign funded projects were developed to improve conditions of the dumpsite, the lake and how that affects the surrounding community and agriculture.

The *Spanish Agency for International Development Cooperation (AECID)* offered a noble grant of 39 million Euros (\$45 million dollars USD) to clean up and cap La Chureca dumpsite, create proper housing for the community in a nearby open land and provide jobs through a formalized sorting facility. The project was a large step in the right direction, but it came along with some hits and misses. The removal of the families from the dump was the most successful part of the plan. People received titles to well-constructed houses. They began living in a more dignified manner. However, not everyone was ready for change. Many sold the furniture they received with the house and returned to La Chureca to informally sort trash while converting their home into a mini sorting plant. During the construction on the Spanish made homes there was extreme rain fall and hurricane-like weather that flooded much of the communities living on the shores of Managua Lake. One barrio named Manchester was particularly hit hard and so the Nicaraguan government moved them into the Spanish made homes intended for the people of La Chureca. This created an outrage amongst the dumpsite community and the local government was forced to create a second section to the Spanish homes that they built themselves with nearly half the same quality. The walls were made from sheet wood rather than cement and most are all rotted now and removed. This new neighborhood became known as Villa Guadalupe and it housed approximately 3900 people from both flooding victims and the dumpsite. The government was later criticized because

it was in their plan to relocate this community anyways, so they could extend their politically self-promoting park along Managua Lake. Also, the government twists the concept of the project at La Chureca to appear to everyone that they are the reason they have homes and that the entire project was of their own doing. When in fact it would never have changed if not for AECID and the Spanish government. The largest complaint about the project is the lack of employment opportunities. A sorting plant was built called EMTRIDES. It offered 580 jobs for the community of La Chureca. They make approximately 250 cordobas (\$7.75 USD) each day. That is about \$155 a month to support their families in today's exchange rate (32.50 in 2019). The average family size is 7 persons. For the new neighbors from Manchester, they had no work after they moved to Villa Guadalupe. Therefore, they went to La Chureca to informally recycle. The AECID cleaned the dumpsite, capped it, placed methane pipes to release gas and directed the leachate into pools. However, they receive a small portion from the government toward the budget they claim that they need in order to function. Managua produces 1500 tons of trash a day. 300 tons of that trash gets lost in the city's drainage waterways and never gets to a dumpsite. The plant says that they can process 140 tons of trash an hour, but a significant amount cannot be processed and ends up piling on top of the previously cleaned and capped dumpsite. This is where people come to work informally and now illegally. The plant tried to keep the people out by building a wall, but the people climb over it, go around it or dig a channel underneath it to get in. Police are placed to guard it and will shoot at informal workers with rubber bullets. If caught, they will go to jail. Therefore, the people work throughout the night hours instead. They bring their horses and carry all the trash down into Villa Guadalupe where they can sort in peace as a little dumpsite is now developing within Villa Guadalupe.

In 1927, the government allowed the flow of sewage into Managua Lake where it has been flowing ever since. Managua Lake became the second dirtiest lake in the world until the *Inter-American Development Bank as well as mostly German and other European governments* provided 85.5 million dollars to build a water cleanup plant called Biwater. Biwater is responsible for cleaning up Managua Lake by separating pollutants from the water and redirecting the water back into the lake. The pollutants removed make a black sludge that is later processed into fertilizer that is sold to farmers. The water will never be drinkable again, but after 20 years of filtering the lake it will become swimmable. People have already noted the change in a higher quality of fish and the water looks blue, as compared to brown and greenish like before. However, today 36% of Managua's sewage still flows into the lake. Biwater is really helping clean the lake, but no sewage should be directed into the lake at all if they really want to make progress. If there are more hurricanes and earthquakes, this will disturb these cleanup methods as well.

SOLUTIONS VS POLITICS

The projects of EMTRIDES recycling plant, Biwater, the cleanup of La Chureca and the housing projects in Villa Guadalupe were all steps in the right direction. It brought a lot more elevating circularity as a solution to the problem that was downward spiraling fast. It is a great step, but it needs more work if it wants to become more sustainable. To be sustainable, maybe even one day in the distant future, renewable, there will need to be funding, the right people working who care about the results and a government that supports this. Currently, they do not have an adequate amount of support in these areas. The largest problem is that the government is run in a dictatorship fashion. They will place a few trash cans around the city with their logo and government colors on it, but they will not really do anything that matters to support a proper cleanup of the city. Those trash cans overflow with trash until someone complains about it and the city will eventually come to pick it up. Also, the trash cans are made of metal. People here are so desperate for money that they steal trash cans, street signs and manhole covers in order to sell the metal. The government also likes to keep the country under suppression, intimidation, in their control and their version of history. This past year the government announced that they used everyone's social security and now taxes are going to rise. Most of the country knows that the government is corrupt and so they took to the streets to peacefully protest and voice their opinion. The result was widespread violence all over the country. The government, who runs the police, army, news and media ordered to have demonstrators (or "terrorist" as the government likes to interpret them) to be killed or jailed. Around 500 people were killed. While thousands were injured, imprisoned, and tortured. The government also runs the public-school system. There are many students who cannot write their own name, but have excellent grades. They teach the students of the government's propaganda. The president's photo is posted on every door and billboard. They want these students to think they are smart, when they are really brainwashed. The government needs their people poor and ignorant to keep themselves in control. Places like Villa Guadalupe are recruiting stations in case there is a war. For example, the Sandinista party comes to the barrio for people to fill out fake ballots in favor of the government in exchange for small benefits and promises. Anyone in Villa Guadalupe who participated in the marches or protests have lost their homes and are now refugees fleeing the country. The government has their own best interest in mind; not people and certainly not the environment.

These obstacles and instabilities prevent the forward direction of public health and a cleaner environment. With all the money and time put into promoting the government already in power, they could use that energy to promote how beautiful Nicaragua is and the best ways to keep it clean. If they are going to shoot people holding up Nicaraguan flags in a parade with real bullets, they could shoot people with rubber bullets when they litter and trash the country. That may sound like a ridiculous suggestion, but it points out where different peoples' hearts are and their priorities. Independent of the political problems, there is lack of funding for these projects and at any moment

another earthquake or hurricane could destabilize everything all together. This is why everyone's interest would be best in putting the environment first; along with education and human rights.

CUT/PASTE PROBLEM REPEAT

This information is centered around La Chureca which is considered a semi-regulated to regulated dumpsite. However, it is one of many dumpsites in Nicaragua and none of those are regulated. There is a dumpsite for almost every town. Each dumpsite has a unique story and each causes damage to human health and the environment in unique ways. Beyond Nicaragua, Latin America has thousands of dumpsites similar in nature and we are still only speaking of the Western Hemisphere. It's difficult to accept and conceptualize the waste produced on Earth each day and how it is managed. More people of power should see the opportunity in waste for the long-term benefits. Both from the birth of a new product or packaging that is 100% biodegradable to the other end where the conversion of waste can produce other alternative benefits such as energy or nutrients used the correct way. This will take more education, international agreements, funding and the people with the right hearts in charge. For now, it is a continued battle of persuading powers to support the environmental and humanitarian ticket towards sustainability, prosperity and justice.

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AFTERWARD + PERSONAL CONTRIBUTION

I have been following and documenting the changes at La Chureca for many years. My contribution to the cause came in the form of not only my photography, but my presentations. This had eventually led towards grants that created The ISWA Scholarship Programme for the people at the dumpsites. The ISWA Scholarship Programme is designed to remove people from the dumpsite through educational opportunities. This year we have 70 participants ranging from 4 years old to 43 years old. Most are out of the dump, but there are still some individuals we are struggling with, but not giving up on.

Here is a graph showing our success rate. This graph is an expression that divides 19% who are still going to the dump but are in a public school. 24% NOT in the dump and going to a public school. 57% are NOT in the dump and are succeeding in a private school. That means that 81% of our students are not going to the dump and ALL are going to school. The program supports students from elementary, high school, college, university and technical courses. In addition to school we have built The ISWA Centre. It is home to our tutoring classes, English classes, as well as our activities and meetings. This year we have also expanded the program to Uganda where we are funding three children from the Kampala dumpsite to go to a live-in boarding school.

WEBSITES:

www.RightPathProjects.com

www.ISWAKids.com



