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**CULTIVATING COMIDA:
PUSHING THE BORDERS OF FOOD, CULTURE, AND POLITICS**
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What Maria exposed to us

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It has been nearly two years since Hurricane Maria unleashed her fury on Puerto Rico, Dominica, and the U.S Virgin Islands in September 2017. Hurricane Maria caused an estimated US\$94 billion in damages, with the majority of those damages reported in Puerto Rico (Mercy Corps, 2019). It is estimated that 2,975 Puerto Ricans lost their lives because of the hurricane, though the

eventual death toll may have reached 4,000 (Mercy Corps, 2019). When Maria hit, the islands were still in recovery from Hurricane Irma, which had struck the north side of the main island just days before. The entirety of the archipelago, all 3.4 million residents, lost power after Maria, and it was estimated that Puerto Ricans, on average, went 84 days without power, 68 days without water, and 41 days without cellular phone service (Mercy Corps,

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Vermont,” in *Food Across Borders: Production, Consumption, and Boundary Crossing in North America*.

Outside the classroom, Dr. Mares has led a number of community food projects. She is co-director of *Huertitas*, a food security project for Latino/a dairy farmworkers connected to UVM Extension’s *Bridges to Health Program*, and was previously co-director of the *Food Justice Project for the Community Alliance for Global Justice in Seattle*. She is devoted to experiential, transformative modes of teaching and has advised dozens of students who seek to make a difference in the contemporary food system. She can be reached at Teresa.Mares@uvm.edu.

2019). Overnight, Puerto Rico became disconnected from the outside world. Prior to the 2017 hurricanes, Puerto Rico was already grappling with widespread poverty and a crumbling infrastructure after years of disinvestment and structural adjustment.¹ These inequalities left Puerto Ricans with a host of challenges related to their wellbeing. For instance, according to the National Resources Defense Council, in 2015, 99.5% of Puerto Ricans were served by community water systems that violated the Safe Drinking Water Act (NRDC, 2017). Before Maria, 1.5 million Puerto Ricans were food insecure, with children experiencing food insecurity at a rate of 56%—triple the U.S. average (Bread for the World, 2019).

It is impossible to discuss Puerto Rico's economic system—past, present, or future—without talking about the islands' relationship with the United States. Due to stipulations in the Merchant

Marine Act of 1920 (more commonly known as the Jones Act), 85% of food in Puerto Rico is imported (mostly from the U.S.), a figure that rose to 95% after Hurricane Maria (Ayala, 2017). Despite the immediate threats to food security and an outpouring of international support, the United States did not immediately waive the Jones Act, doing so more than a week after the hurricane hit and only for a period of 10 days—and only after Puerto Rico Governor Rosselló made a formal request. The Jones Act, a clear manifestation of the colonial relationship between the United States and Puerto Rico, limits the islands' autonomy and sovereignty over not only their food system, but their entire economy. The ongoing consequences of Operation Bootstrap also limit the islands' autonomy. Begun in 1947, Operation Bootstrap encompassed a series of economic projects led by the U.S. federal

government and the Puerto Rico Industrial Development Company, encouraging Puerto Ricans to move away from the agrarian traditions that had sustained them for years and into light manufacturing and white-collar work, particularly in the pharmaceutical sector. As a result of these large-scale trade and development policies, and from the pressures to grow mainly export crops such as coffee and sugar, Puerto Rican farmers have long struggled to sustain small-scale agricultural livelihoods.

Recently I spoke with two experts about the impact of Hurricane Maria on the Puerto Rican food system: María Elena Rodríguez, the founder and owner of Cosecha Caribe, a small business specializing in raw and fermented value-added, artisanal foods based in Carolina, Puerto Rico; and Luis Alexis Rodríguez Cruz, a doctoral student in food systems at the University of Vermont, who is currently studying the experiences of farmers, particu-

larly agroecological farmers, in Puerto Rico. María Elena and Luis share a commitment to strengthening Puerto Rico's food system, and both see their futures intertwined with the rebuilding of the islands. In my interviews with these two inspiring individuals, one thing became abundantly clear: for Puerto Ricans, there is a definitive dichotomy of Before Maria and After Maria. While the storm laid bare a painful history of colonial ties with the U.S. and decades of disinvestment and neglect, it also revealed a transformative opening for building resiliency and sovereignty into the heart of the islands' food and farming future. The transformation and revitalization of Puerto Rico's local food system—while temporarily derailed by the hurricane—is poised to bring new forms of local control and connection to food on the islands.

Although she was raised in Florida and lived

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¹ Structural adjustment refers to the delivery and administration of loans to states or regions in economic crisis, often loaned by institutions like the World Bank or International Monetary Fund. These loans are given on the condition of economic reforms. Structural adjustment is widely critiqued as a mechanism that deepens poverty and increases dependency.

many years on the West Coast of the mainland, María Elena Rodríguez was living on Puerto Rico during Hurricane Maria. Joining her family in Puerto Rico after becoming deeply involved in food justice work and receiving her undergraduate and graduate degrees (the latter a master's degree in community development at UC Davis), María Elena quickly became involved in the recovery efforts. In her view, the most immediate challenge following the hurricane was the physical destruction of farms across the islands, and the lack of funding and other resources to rebuild those farms. While money supposedly began to flow into Puerto Rico following the hurricane, as María Elena explained, "no one seems to know where that money is ending up." Most farms she worked with during the recovery efforts received little if any financial support, adding to a generalized sense of shock and sadness as people who saw their entire livelihoods destroyed overnight. While some farmers abandoned their land and joined the mass exodus of Puerto Ricans moving to the U.S. (a population drop forecast as 14% (Agence France Presse 2017), María Elena also emphasized the deep resilience she observed as farmers and other stakeholders in the food system began to "pivot" in the wake of the hurricane.

As a food justice activist and farmers market vendor herself, María Elena participated in this practice of pivoting, alongside farmers, restaurant owners, and other food system players scrambling to figure out what they could do with what remained. With the hurricanes "throwing a wrench" in people's plans, business models were shifted, farms were relocated, community networks were engaged, and new solidarities were built. Projects like Visit Rico and the grassroots Queer-led Guagua Solidaria (originally part of El Departamento de la Comida) sprang into action, with Visit Rico raising US\$450,000 in the weeks following the hurricane (despite the lack of reliable phone or internet service) and Guagua Solidaria sending its outfitted van out to its network of farms to assist in cleaning and rebuilding efforts. In our conversation, María Elena emphasized that community projects like these were successful because they were already working "on the ground" in the food system prior to the hurricane and were able to

quickly mobilize their networks afterwards. Their staff also took the time to really listen to farmers about what they needed to rebuild and mobilized resources directly into farmers' hands.

Prior to Hurricane Maria, there was an emergent and vibrant food movement unfolding in Puerto Rico, although as María Elena explained, this movement was largely an alternative movement to the mainstream and motivated by resistance to GMO crops, given the heavy presence of agricultural corporations like Monsanto on the islands. Since the hurricane, there has been a convergence of people who have been engaged in food justice and food sovereignty work, a convergence that, according to María Elena, has gained traction, and thus, a broader audience. As millions of Puerto Ricans confronted food shortages, there was—in some sense—a leveling mechanism at play that reminded the archipelago of its collective dependencies and vulnerabilities. She explained, "what I see now is that there is a lot of awareness to the fragility of a food system that imports more than 80 to 90% of the food that we consume. . . . That experience really woke up a lot of people to the need to pay attention and the need to buy locally and support local farmers and think about renewable energy." For María Elena, who plans to purchase a farm soon to support her business and put into practice her training in agroecology, this broadening of the food movement cannot come soon enough.

Luis Rodríguez Cruz was just beginning his first year as a doctoral student in Vermont when Hurricane Maria devastated his homeland. While completing his M.S. in food science and technology at the University of Puerto Rico, Luis had developed a deep knowledge of the islands' food system, particularly about the lives of small-scale commercial fisherfolks. It only made sense, then, that one of his first research projects as a doctoral student would be to examine the impacts of Maria on the islands' food system. With support from his doctoral advisor, Meredith Niles, Luis carried out a mixed-methods study in collaboration with the Extension Service of the University of Puerto Rico (Rodríguez Cruz & Niles, 2018). For this study, Extension agents surveyed 405 farmers on the obstacles they face toward recovery, their losses

due to Maria, opinions on policies, and other issues pertinent to their livelihoods. This study demonstrated that one of the biggest issues confronting farmers in the wake of Maria was food insecurity. The month that Hurricane Maria hit the islands, 42% of farmers surveyed were struggling to access food or were experiencing food shortages. This incidence of food insecurity rose to 59% one month after the hurricane before it began to slowly decline. Before Maria, less than 1% of farmers reported food insecurity (Rodríguez Cruz & Niles, 2018). As Luis noted in our interview, these issues of food access were not limited to farmers, as all Puerto Ricans faced the consequences of roadblocks, gas shortages, and closed ports following the hurricane.

According to the same study, 43% of farmers surveyed reported a total loss of their farming operation, and 43% experienced significant loss. Nearly half (49%) reported that one of the main challenges they experienced after the hurricane was a lack of governmental aid and/or delays in receiving insurance settlements to rebuild. During our conversation, and echoing what María Elena observed, Luis was quick to point out that farmers turned to their own networks of mutual aid and support in the absence of support and funding, “knowing they cannot depend on these institutions that did not provide after the hurricane.” He came to this observation both through anecdotes and from research conducted by Nayla Bezares and Alyssa Melendez (2019). Many Puerto Rican farmers are becoming more integrated into their communities now, particularly younger farmers and those farming in some of the more distant mountain villages. Luis also noted that one impact of the hurricane is a new and more vocal conversation among food system stakeholders about the relationship between Puerto Rico and the U.S., given that Puerto Rico has little control over its trade policies and that the austerity

measures imposed by the United States are not well attuned to the local context. Sixty-six percent of farmers surveyed by Luis and his colleagues agreed that the Jones Act negatively affected Puerto Rico’s food security and were not in support of the law. The majority (81%) also felt that food imports in Puerto Rico presented an obstacle for local farmers to increase their access to the Puerto Rican market.

In my interview with him, Luis offered similar observations about the movement for food sovereignty in Puerto Rico, emphasizing that discussions of food sovereignty are more common among farmers who are not “as closely related to the

Department of Agriculture or conventional ways of growing.” With an interest and training in agroecology, Luis sees that farmers in Puerto Rico who are drawn to agroecology and sustainable ways of farming, and particularly younger farmers, are devoting serious thought and effort to building more power and control over the food system and producing food for their own communities. Intertwined with these efforts is a desire for autonomy and freedom from ongoing dependence on U.S. imports. Through his doctoral research, Luis plans to work with farmers to build capacities for trans-

formative change to be more resilient and resistant to climate change. After he completes his Ph.D., Luis plans to return to Puerto Rico and continue farming a piece of land that has been in his family for decades, and hopefully, continue with his applied research efforts. He expressed, “I think I feel a responsibility to contribute to my society, to my home, to my community. I am where I am mainly because of the University of Puerto Rico, which is paid for by Puerto Ricans.” While the challenges confronting Puerto Rico and its residents are very real, there is also a real potential for building a more sustainable and locally controlled food system, especially if Luis and María Elena have anything to do with it.



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