

# The Role of Mutual Aid Organizations in Promoting Food Sovereignty in Puerto Rican Rural Communities: A Qualitative Analysis

Brook Lyn Mercado, MPH, BS; Sean Darling-Hammond, JD, PhD

Previous research has shown that, during both climate and non-climate disasters—such as hurricanes, the COVID-19 pandemic, and other climate-related crises—and despite political control from the mainland United States, mutual aid organizations in Puerto Rico have played a central role in supporting community health and advancing food sovereignty. However, this research has largely focused on urban contexts and post-disaster recovery. The present study examined how mutual aid organizations in rural Puerto Rico contribute to food sovereignty through their everyday practices and beyond periods of disaster. Semi-structured interviews were conducted with representatives from 5 mutual aid organizations serving rural municipalities across the island. The study findings identified 3 core themes that reflect how mutual aid organizations in rural Puerto Rico advance food sovereignty. The results suggest that mutual aid serves as a critical mechanism for decolonizing Puerto Rico’s food system, emphasizing local leadership and community-based strategies for sustainable self-determination.

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In Puerto Rico, the phrase *Solo el pueblo salva al pueblo*—only the people can save the people—captures the essence of mutual aid (1). Over time, as Puerto Ricans face compounding climatic and non-climatic disasters—defined as sudden, unforeseen events that cause damage, disrupt coping capacities, and require coordinated multi-stakeholder responses (2)—local food systems have become increasingly fragile. Building on the concept of disaster colonialism (the use of disasters to reinforce structural racial violence, dispossession, and colonial control [3]), this paper extends the notion of disaster beyond isolated events. Within this context, mutual aid emerges as both a survival strategy and a form of resistance embedded in daily life (4), as overlapping disasters continue to occur, exacerbating existing health inequities (5) and threaten the security of food, energy, and water (6). Recent research in Puerto Rico has shown that collaborative, locally driven initiatives deepen the collective understanding of the systemic interdependencies shaping nutrition security and help stakeholders identify feasible, community-based leverage points (7). Building as well on participatory approaches, this paper also seeks to prioritize community voices as co-producers of knowledge rather than passive subjects of research (8). In this sense, mutual aid functions as a decolonial praxis that builds solidarity and redistributes power through collective action. Spade (4) also notes that mutual aid strengthens social movements by challenging the very structures that produce inequality.

Disaster colonialism provides a lens to understand how the United States’ colonial governance continually reproduces dependence and instability within the food system of Puerto Rico. During Spanish colonization, local agriculture was dismissed as inadequate, and imported foods were prioritized to serve Spain’s colonial interests (9). Today, United States federal policies, which result in high import costs, along with limited agricultural subsidies and restrictive federal regulations, continue to undermine food

sovereignty in Puerto Rico (10). Prior studies have also linked agroecological movements worldwide to decolonization (11–13), highlighting how they resist these structural dependencies through local food production. In response to such structural dependencies in local food systems, mutual aid functions as a mechanism through which communities reclaim control over local food systems, strengthen resilience, and promote self-determination in the face of systemic neglect.

Existing research on mutual aid in the context of food sovereignty or security in Puerto Rico largely focuses on urban contexts and post-hurricane efforts (14–16). Few studies address rural mutual aid in contexts other than disaster response. This study fills the resulting gap by focusing on mountainous rural municipalities, where structural inequities are most pronounced. Compared with urban areas, rural Puerto Rico experiences higher unemployment (8.8% vs. 5.7%) and higher poverty rates (61.6% vs. 47.3%) (17). Additionally, rural communities are central to agricultural production (18) yet remain overlooked in both policy and research.

This study focused on the perspectives of rural organizations in Puerto Rico to understand how mutual aid operates as a community-led approach to sustaining local food systems. It asked: How do these organizations conceptualize their work in relation to mutual aid and food sovereignty? What initiatives have they implemented that use mutual-aid practices to strengthen local food systems? And in what ways have these efforts contributed to advancing food sovereignty across the island?

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University of California, Berkeley, Department of Community Health Sciences, USA

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Address correspondence to: Brook Lyn Mercado, MPH, BS, University of California, Berkeley, Department of Community Health Sciences, 2121 Berkeley Way, Berkeley, CA 94720. Email: [mercadobrook@gmail.com](mailto:mercadobrook@gmail.com)

## Methodology

This study was approved by the University of California, Berkeley, Institutional Review Board (protocol ID: 2024-05-17452; approved August 7, 2024). Data were collected from November 2024 through January 2025. For the purposes of this research, “rural” refers to areas outside urban centers; participants confirmed their organizations’ rural status based on their local understanding of rurality.

Participants were recruited using purposive and convenience sampling that targeted community-based organizations engaged in food sovereignty and mutual aid initiatives. Sixteen organizations met the inclusion criteria, which required involvement in at least one of the following: direct food distribution, agricultural production or education, or infrastructure efforts aimed at improving access to food and water. Eligible organizations also demonstrated a commitment to the principles of collective care, solidarity, and community resilience, even if they did not explicitly identify their work as mutual aid. Of those contacted, 5 organizations agreed to participate, resulting in 6 interviews (1 organization contributed 2 interviews). Ten organizations did not respond, despite 2 contact attempts by email and phone.

The 5 organizations that participated adopted diverse approaches to addressing food sovereignty. The first of them, Camp Tabonuco is an experiential ecology camp centered on sustainable living and organic farming. The next, Centro Paz Para Ti (CPPT) was selected due to its agricultural initiative, which teaches women how to grow produce in their own gardens, promoting both economic independence and food sovereignty. Unidos por Utuado was chosen because of its unique combination of renewable energy advocacy and direct contributions to food and water security. Following Hurricane Maria, the organization distributed water filters to communities in need and has since focused on long-term electrical grid stability. Tres Vidas and Trama collaborate to improve access to organic products and preserve traditional agricultural knowledge related to natural dye production. Finally, Such a Time as This addresses food insecurity through islandwide outreach and community programming.

Semi-structured interviews were conducted with the individuals involved in the daily operations at each organization. The interviews were conducted in English or Spanish, according to participant preference, and a live translator was present for Spanish-language sessions. The interviews lasted approximately 30–60 minutes. The participants provided verbal consent prior to audio recording and received a \$25 electronic gift card as compensation.

The interview guide was informed by the First Nations Development Institute Food Sovereignty Assessment Tool (19), which had been adapted to the Puerto Rican cultural context. The audio recordings were transcribed and translated using Vibe, an offline transcription/translation app. All the transcripts were reviewed and corrected by the primary researcher to ensure verbatim accuracy. An inductive thematic analysis was used to identify recurring patterns and concepts. The transcripts were coded line-by-line by the primary researcher, and the resulting codes were iteratively grouped into themes through multiple rounds of review. Reflective memos were maintained throughout the analytic process to ensure rigor and transparency.

## Results

Our analysis identified 3 core themes reflecting how mutual aid organizations in rural Puerto Rico advance food sovereignty. First, the organizations facilitate the sharing of physical resources, labor, and knowledge, strengthening community networks and supporting sustainable local food practices. Second, they engage in decolonizing education and agroecological initiatives, reconnecting communities with traditional agricultural knowledge and culturally relevant foods. Third, these organizations navigate structural barriers, including restrictive United States federal policies, while implementing strategies for building resilient, self-sustaining food systems. Together, these themes illustrate how mutual aid is operationalized at multiple levels to promote food sovereignty, foster resilience, and reclaim agency over Puerto Rico’s food systems.

### Interconnected systems

Participants emphasized that food sovereignty in Puerto Rico cannot be viewed in isolation and is deeply interconnected with broader social, economic, and infrastructural systems. Food production, energy, gender equity, and health all intersect to shape how communities access, grow, and sustain nourishment. For many organizations, this interconnectedness reflects the principles of mutual aid by both meeting immediate needs and building collective, long-lasting resilience. Participants described food sovereignty as a community-wide process, not limited to agricultural reform but requiring transformation across multiple systems that sustain daily life.

The participants from CPPT explained that teaching domestic violence survivors to grow their own food can contribute to reducing grocery expenses, provide emotional grounding, and promote financial independence. It was also emphasized that integrating agriculture into domestic violence prevention efforts helps build resilience by addressing both immediate needs and long-term well-being. Through this work, CPPT engages in mutual aid by redistributing knowledge, providing care, and offering support to foster healing and self-determination. Participants also highlighted the critical role of energy infrastructure in food sovereignty. Puerto Rico’s fragile electrical grid, severely damaged by Hurricane Maria and later compromised by indirect effects such as weakened infrastructure and fallen trees, continues to cause frequent outages that disrupt harvesting, cooking, and food storage. P4 highlighted external factors on the margins of the food system, emphasizing the role energy plays in keeping hydroponic systems running and in maintaining refrigeration to preserve food freshness. This participant explained that, in order to build a more resilient food system, all entities operating at the margins must work together.

Beyond issues related to energy infrastructure, the participants collectively emphasized that cross-sector collaboration is essential to achieving lasting food sovereignty. This perspective emphasizes that achieving food sovereignty requires collaboration among multiple actors—not just farmers and food producers, but also those involved in the energy sector, infrastructure, and community planning. Together, these elements shape the conditions that make a resilient and equitable food system possible.

Overall, these findings reveal that food sovereignty in Puerto Rico depends on much more than agricultural reform; it requires systemic resilience across the energy, economic, and social sectors. By integrating agricultural activities with programs that address domestic violence, energy instability, and infrastructure fragility, mutual aid organizations are enacting a holistic model of community care. The work of the participating organizations demonstrates that food sovereignty is both a material and social process rooted in collaboration, interdependence, and structural transformation.

Efforts to reclaim food sovereignty in Puerto Rico therefore occur across multiple interconnected levels, as illustrated in Figure 1. At the individual level, education on culturally relevant and sustainable agricultural methods empowers individuals within and beyond the agricultural sector to rebuild and participate in food production, supporting movement toward an independent food system that bypasses external distributors. The interpersonal level emphasizes the sharing of seeds, tools, and farming techniques among community members, strengthening community ties and civic engagement. At the organizational level, mutual aid organizations facilitate resource-sharing networks and provide education and training programs that foster relationship-building and generational learning. Finally, the community level focuses on linking farmers to consumers to bypass distributors and establish farm-to-table systems, decentralizing food distribution and ensuring access to fresh, nutritious, and affordable food for local communities. All of these efforts contribute to building self-sustaining agriculture, further dismantling oppressive systems.

### Organizations as Mutual Aid Entities

All the participating organizations identified themselves as both mutual aid and food sovereignty organizations, though some made this connection more explicitly during interviews. For example, Unidos por Utuado did not initially identify as a food sovereignty organization; however, as the discussion progressed and questions became more specific, this participant recognized the alignment between their work and the principles of food sovereignty.

Across the organizations, mutual aid emerged as a central component of their missions. The participants described their organizations as catalysts for mutual aid, whether by serving as communal hubs, creating “circuits” of farmers, or facilitating networks for resource sharing and collaboration. Most of the participants emphasized that food is a major focus of these efforts. As P1 explained, “I think mutual aid is absolutely, inevitably connected to food sovereignty because most of the mutual aid exchanges that happened have to do with food.” This sentiment underscores the reciprocal relationship between mutual aid and food sovereignty in organizational practice.

Participants also consistently highlighted that these networks are designed to be long-lasting and sustainable rather than temporary. By serving as communal spaces, distributing goods, and providing education and training, mutual aid organizations facilitate the connections that are a core function of their work and a crucial strategy for advancing food sovereignty. Together, these insights illustrate how organizations understand and enact mutual aid in ways that actively promote food sovereignty.

**Figure 1.** Applying the Socio-Ecological Model to Food Sovereignty and Mutual Aid in Puerto Rico



### Mutual Aid strategies for Food sovereignty

#### Sharing of Physical Resources and Labor

Participants emphasized that sharing resources is a foundational strategy for advancing food sovereignty through mutual aid. These exchanges occur across multiple levels, which include organization-to-organization, organization-to-community, and community-to-community, and encompass people, knowledge, physical goods, and seeds.

Participants mentioned the sharing of tools and labor that occurs at the organization-to-organization level. P5 described a circuit of farmers from various organizations, including a local agricultural school, who rotate to assist other farmers, bringing both tools and labor. Organization-to-community sharing includes organizations providing tangible tools, guidance, and training to community members to support local food practices. Community-to-community sharing also occurs, particularly through seed exchanges, which transfer agricultural knowledge and reinforce mutual aid networks.

Participants emphasized that, across all forms of sharing, material resources and education play intertwined roles in strengthening community ties and advancing food sovereignty. P2 described a group of community members pooling money to support someone in need, illustrating how collective action extends beyond material goods. By intentionally facilitating the multidirectional flow of resources and knowledge, mutual aid organizations empower communities to support each other, sustain local food systems, and foster long-term, sustainable improvements in food sovereignty. These efforts are just some of the ways that organizations operationalize mutual aid, demonstrating how such practices advance both food sovereignty and community resilience.

### Decolonizing Education and the Agroecological Movement

Across all the organizations, educational initiatives were identified as key components, though they took different forms in each context. Participants talked about efforts to provide non-traditional methods of education in the form of arts and cultural programs, such as medicinal herb workshops, lessons in traditional weaving, and cooking classes, alongside agricultural lessons. Many of the participating organizations recognize that reclaiming agricultural education is not only about learning to grow food but also about challenging colonial narratives that have historically devalued agricultural work. P3 reflected that families often encourage younger generations to pursue white-collar jobs rather than work the land, leaving many young Puerto Ricans disconnected from traditional agricultural knowledge and, at times, unable to recognize edible plants around them.

The participants also emphasized the importance of multigenerational knowledge, passing skills and practices from one generation to the next. Organizations viewed their role as cultivating and facilitating these exchanges rather than simply producing knowledge. By fostering these practices, communities preserve indigenous agricultural techniques while reclaiming agency over their food systems.

Education was described as a living process occurring in classrooms, gardens, homes, and community spaces, alike. Through this process, mutual aid networks not only preserve local agricultural traditions but also cultivate belonging, pride, and collective responsibility. P6 highlighted the importance of teaching communities to use culturally relevant foods in their daily diets, sometimes using conventional educational tools such as brochures. P5 remarked on the community's active engagement: "The people want to learn about every vegetable: how to cook them, their flavor profiles; and they want to try them alongside you." P1 emphasized that education provided through food-related projects is essential to ensure the sustainability of community food sovereignty efforts. The participants also reflected on the enduring impact of colonial influence on local agriculture and diet. For instance, many Puerto Ricans have become reliant on rice, a crop introduced by Spanish colonizers and now a dietary staple, illustrating the lasting effects of colonial policies on food knowledge and preferences.

Through mutual aid, community education, and the revitalization of traditional crops, Puerto Ricans are reconnecting with the land, rediscovering agricultural knowledge, and rebuilding local food systems. These initiatives demonstrate how mutual aid strategies integrate education and agroecological practices to promote food sovereignty, intergenerational learning, and community resilience.

### Policy Barriers and Visions for Food Sovereignty

The participants emphasized the need to strengthen Puerto Rico's food systems, identifying both challenges and opportunities for improvement. A central concern was the island's heavy reliance on imported goods from the mainland United States, which reliance limits local control, increases vulnerability to supply disruptions, and raises costs for consumers. This dependency was described as a structural issue shaped by federal policy, contributing to high food costs and constraining autonomy over what is grown, distributed, and consumed, locally. Although not

all the participants referenced specific policies, 2 highlighted the broader impacts of the Jones Act and federal agricultural programs that reinforce economic dependence. Restrictive shipping laws, unequal access to USDA resources, and bureaucratic certification processes were described as barriers preventing agricultural self-sufficiency and hindering communities' pursuit of food sovereignty. Participants also pointed out that improvements to Puerto Rico's food system would require more collaboration among key stakeholders, including government agencies.

To counter these challenges, participants proposed localized solutions that prioritize community resilience and equitable policy reform. Ideas included establishing permanent farmers' markets, food hubs, and direct distribution systems connecting producers and consumers without reliance on external intermediaries. Other participants emphasized the need for equitable government support that mirrors the subsidies available to farmers in the mainland United States, allowing Puerto Rican producers to sustain ecologically sound practices. These reflections underscored how transforming the island's food sovereignty requires both structural change and community-led innovation grounded in self-determination and sustainability.

The participants envisioned a future in which Puerto Rico's food system is self-sustaining, locally driven, and supported by more effective federal policies. By collectively navigating these policy challenges and implementing community-led solutions, these organizations are operationalizing mutual aid at the structural level, advancing food sovereignty and strengthening local food system resilience.

## Discussion

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Participants identified federal policies, including the Jones Act and limited USDA funding, as significant barriers to accessing fresh, culturally relevant foods, which barriers constrain food sovereignty on the island. These structural inequities are illustrated by the Federal Reserve Bank of New York's finding that shipping a 20-foot container from the United States mainland to Puerto Rico costs \$3,063—more than double the \$1,503 cost to the Dominican Republic (20).

To address this and other structural inequities, mutual aid organizations across rural Puerto Rico are resisting this colonial legacy by reclaiming agricultural knowledge, fostering self-sufficiency, and strengthening community-based networks to enhance food sovereignty. The participants described food sovereignty as functioning as a form of resistance and resilience. Even when resistance was not explicitly stated, participants' efforts to reconnect with culturally relevant foods and traditional agricultural methods inherently challenge colonial narratives that dictate what is grown and consumed. Several participating mutual aid organizations emerged after Hurricane Maria, when the fragility of Puerto Rico's import-dependent food system became evident (21). These mutual aid practices demonstrate that efforts toward food sovereignty extend beyond mere disaster response and represent an ongoing struggle for autonomy within a system constrained by United States mainland control, a situation consistent with disaster colonialism, in which federal agricultural policies deepen dependence rather than promote self-sufficiency.

Mutual aid disrupts colonial modalities by decentralizing power from external authorities and reinstating community control over production, distribution, and knowledge. Agricultural education functions as an anti-colonial tool, revaluing local ecological knowledge historically dismissed under colonial regimes. Through seed sharing, collective farming, and informal trade networks, communities assert sovereignty over both the material and intellectual resources that sustain life. These practices resist the extractive economic models imposed by colonial governance and cultivate interdependence rooted in reciprocity and care. Such anti-colonial practices occur through everyday actions across multiple layers of society, from individual education to collective organization, demonstrating that mutual aid is both a practical strategy and a broader form of systemic resistance that advances food sovereignty at the community level.

## Resumen

Las investigaciones previas han demostrado que, durante desastres tanto climáticos como no climáticos —como los huracanes, la pandemia de COVID-19 y otras crisis relacionadas con el clima— y a pesar del control político ejercido por Estados Unidos continental, las organizaciones de ayuda mutua en Puerto Rico han desempeñado un papel central en el apoyo a la salud comunitaria y en el avance de la soberanía alimentaria. Sin embargo, estos estudios se han centrado en gran medida en contextos urbanos y en la recuperación post-desastre. Este estudio examinó cómo las organizaciones de ayuda mutua en zonas rurales de Puerto Rico contribuyen a la soberanía alimentaria a través de sus prácticas cotidianas, más allá de los momentos de desastre. Se llevaron a cabo entrevistas semiestructuradas con representantes de 5 organizaciones de ayuda mutua que sirven a municipios rurales de toda la isla. Los hallazgos identificaron 3 temas centrales que reflejan cómo estas organizaciones promueven la soberanía alimentaria. Los resultados sugieren que la ayuda mutua funciona como un mecanismo crucial para la descolonización del sistema alimentario en Puerto Rico, destacando el liderazgo local y las estrategias comunitarias para una autodeterminación sostenible.

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