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Food as a vector for change: lessons from the third sector on improving livelihoods with nutritional knowledge in Medellín and Bogotá

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**Food as a vector for change:
lessons from the third sector on
improving livelihoods with nutritional
knowledge in Medellín and Bogotá**

GLOBAL STUDIES HONORS THESIS

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Abstract

In this thesis I argue that improving diet in communities depends on building nutritional knowledge. In examining the role of community level organizations, I look specifically at how knowledge is conveyed through agricultural and gastronomy. This project analyzes how civil society organizations work to reintegrate individuals into food systems, compelling consumers to take agency over their diets and pursue better livelihoods. The industrialization of food systems has fundamentally changed the way humans connect with food and diet. In Colombia, internal displacements and urban migration have accelerated a loss of connection with the land and food processes. At the same time, Colombia and countries around the world suffer from epidemic rates of obesity and non-communicable disease. The education processes and community initiatives introduced by organizations seek to build nutritional knowledge and connect people to food systems. Through interviews with community members and civil society leaders, I paint a picture of what knowledge-based diet interventions look like in Medellín and Bogotá. The actions of organizations at the community level represent one tool in a landscape of interventions needed to reverse diet-related disease. Interventions range from policy changes at the government level to broad changes across corporate food systems. This project focuses specifically on the unique positioning of civil society. In creating my argument for how dietary changes can serve as a vector for social change, I also unpack the historical context shaping the current food and nutrition landscape and the implications that history has for current interventions. In contrast to humanitarian efforts aimed at providing temporary solutions to endemic issues of poverty and malnutrition, I look at the ways organizations foster agency through education and community building.

Acknowledgments

My interest in this project began as a desire to explore the relationship between food and health. I am passionate about food cultivation and preparation. As I have spent time working on farms in the US and abroad, I have reflected on the connections preparing and eating foods. Cultivation and consumption are fundamental to the human experience, yet one does not have to look far to see how detached humans have become from these processes. Tapping into the knowledge of agricultural practice and the science behind how food interacts with the body is seeking to understand our existence. The widespread availability of food has relegated eating practices to an afterthought shaped by the availability of time and money. This project explores the broken relationships humans have with food and the incredible potential for reestablishing that connection.

I would like to begin with a huge thank you to all my professors at Colby who have together shaped my interests and passion for taking on this project. I especially want to thank Patrice Franko, who has served as a mentor in guiding me through this process and my academic career at Colby—I would not have decided to write a thesis if it was not for her encouragement and excitement around the project. I also want to thank Nadia El-Shaarawi, the reader of my thesis and the professor whose class fostered my initial interest in the relationship between population health and environment. I want to thank Jen Yoder and the Global Studies department for their support and guidance in carrying out this project. I also want to thank the Spanish department; my progression in Spanish enabled me to conduct interviews and connect with communities across the globe.

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Chapter 1: Introduction

Understanding and reversing obesogenic environments in Colombia

Current estimates suggest that nearly 60% of the adult population in Colombia is either overweight or obese,¹ and these rates have grown rapidly over the past several decades. In Colombia, in keeping with WHO guidelines, obesity is defined as a BMI of over 30 and overweight: a BMI of over 25.² There is some debate over how weight classification is defined. By overweight and obese here, I refer to excess body fat accumulation that presents a risk to health. While a more exact definition of obesity regarding BMI exists, for the sake of clarity, I am concerned with the associated health risks and disabilities—the conditions of being overweight and obese and how they pose a threat to health.

The prevalence of childhood obesity is especially significant and alarming. Recent studies suggest 1 in every 10 Colombian children is obese and 25% are overweight.³ Higher rates of obesity lead to a rise in other comorbidities that shorten life expectancies, increase the risk of becoming disabled, and reduce quality of life. Rates of hypertension, type II diabetes, heart disease, and stroke have increased alongside weight gain. As is the case globally, in Colombia trends in obesity often fall along lines of socioeconomic status and race. A Medellín study looking at the relationship between abdominal obesity and social status found the highest rates of obesity in underserved areas where education levels are low.⁴ Alarming, rates of adolescent obesity are expected to climb in the years to come.⁵ This increase in noncommunicable diseases has a tremendous burden on healthcare expenditures and the economic well-being of individuals affected. Crippling health conditions brought on by weight-related diseases limit the potential for participation in the economy, creating a ripple effect.

¹ “Obesidad, Un Factor de Riesgo En El Covid-19,” accessed October 31, 2022, <https://www.minsalud.gov.co/Paginas/Obesidad-un-factor-de-riesgo-en-el-covid-19.aspx>.

² “Lucha Contra La Obesidad,” accessed March 31, 2023, <https://www.minsalud.gov.co/proteccionsocial/Paginas/Lucha-Contra-La-Obesidad.aspx>.

³ Mario A. Jimenez-Mora et al., “Association of Overweight, Obesity and Abdominal Obesity with Socioeconomic Status and Educational Level in Colombia,” *Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy* 13 (2020): 1887.

⁴ Luz S. Álvarez-Castaño, Laura I. González-Zapata, and Juan D. Góez-Rueda, “Socioeconomic Determinants of Abdominal Obesity in Medellín, Colombia,” *Revista Española de Nutrición Humana y Dietética* 18, no. 4 (July 18, 2014): 194–204, <https://doi.org/10.14306/renhyd.18.4.87>.

⁵ As I will explain in later chapters, Medellín and Bogotá have unique methods for characterizing the socioeconomic status of zones within cities. These zones are highly stratified with issues of nutrition access and obesity distributed unevenly across neighborhoods.

⁶ “Statistics & Facts,” Global Wellness Institute, accessed October 17, 2022, <https://globalwellnessinstitute.org/press-room/statistics-and-facts/>. <https://www.statista.com/study/48424/colombia/>.

In this chapter, I will lay the groundwork for my investigation by providing an understanding of obesity. I will explore the primary factors causing diet-related disease in Colombia and look into some of the initiatives in place to reverse these trends. This chapter will help contextualize the landscape in which NGOs are taking initiative to facilitate change.

Childhood Obesity

Childhood obesity first rose in Colombian youth amongst upper-class communities.⁷ With a growing upper class, Colombians started taking after their northern neighbors: eating a diet high in excess calories and living a more sedentary lifestyle. But these trends have shifted to lower-income communities. This phenomenon is seen across Latin America as communities of lower socioeconomic status (SES) lack access to whole and fresh foods.⁸ With increased accessibility to cheap foods high in calories, excess body mass has become more prevalent among lower-income communities.⁹ Colombia was historically more worried about health issues on the opposite end of the weight spectrum. Undernourishment in Colombia has hovered around 10% over the last 20 years, although, after a decrease from 2010 to 2015, rates have rebounded and are back on the rise. But many of the individuals suffering from malnutrition today are also suffering from obesity. This paradox is known as the double burden of malnutrition¹⁰ and is especially prevalent in lower SES communities, particularly in rural areas. Children can suffer from undernourishment in the early stages of their life, resulting in stunting and other developmental challenges. Those same children are later exposed to an abundance of calories from a diet of foods high in calories but low in nutritional value; their metabolisms are unable to process this caloric overload.

High rates of obesity are also linked to poorer educational outcomes: a 2020 OECD study also found that a higher BMI is associated with poorer academic performance.¹¹ Obesity and related non-communicable diseases are connected to poor nutrition, low-quality sleep, and low rates of physical activity.¹² These factors are associated with cognitive hurdles for students. Physical conditions are also linked to emotional and mental health problems. Obese children experience

⁷ Christine M. McDonald et al., “Overweight Is More Prevalent Than Stunting and Is Associated with Socioeconomic Status, Maternal Obesity, and a Snacking Dietary Pattern in School Children from Bogotá, Colombia,” *The Journal of Nutrition* 139, no. 2 (February 1, 2009): 370–76, <https://doi.org/10.3945/jn.108.098111>.

⁸ Georgina Gómez et al., “Socioeconomic Status Impact on Diet Quality and Body Mass Index in Eight Latin American Countries: ELANS Study Results,” *Nutrients* 13, no. 7 (2021), <https://doi.org/10.3390/nu13072404>.

⁹ Gómez et al.

¹⁰ Allison Aubrey, “Malnutrition Hits The Obese As Well As The Underfed,” *NPR*, December 23, 2019, <https://www.npr.org/sections/goatsandsoda/2019/12/23/785566796/malnutrition-hits-the-obese-as-well-as-the-underfed>.

¹¹ OECD, *The Heavy Burden of Obesity: The Economics of Prevention*, OECD Health Policy Studies (OECD, 2019), <https://doi.org/10.1787/67450d67-en>.

¹² OECD.

higher rates of low self-esteem as well as lower levels of life satisfaction. Attaining a good education is crucial for students looking to gain employment opportunities in the future. Like the health problems that begin at a young age, the ensuing mental health and social challenges only become more problematic over time. These individual challenges can also have a substantial impact on the human capital of an economy.

Obesity as a determinant of human capital

Obesity should be understood for its direct impact on health outcomes. The threats obesity poses to decreasing life expectancy, causing disability, and increasing the risk for other NCDs are undeniable. But understanding obesity should not be limited to individual health impacts. Making the link between individual health and societal economic activity is necessary to form compelling arguments for change—arguments that strengthen intervention narratives for both governments and NGOs.

There is already significant literature linking obesity to economic outcomes.¹³¹⁴ Mazhar and Rehman, experts in social policy and development, analyzed the effects of obesity on productivity¹⁵ from 1990-2019 to understand excess body weight at the macroeconomic level. The study compiled data from countries across the globe, including Colombia. The findings suggest that governments and private firms have incentives to promote healthier lifestyles and invest in policies that improve health outcomes. Mazhar and Rehman suggest that improving productivity and human capital in society depends on public policy that builds better nutritional habits in youth populations. Using the framework of human capital, population vulnerability also poses a threat to productivity.¹⁶ By human capital, I refer to the ways humans can be contributing members of society through participating in the labor force and adding to the economic productivity of a community. Later in the thesis, I will expand on the concept of human capital as it relates to nutritional knowledge and the ways individuals can create positive change in their communities. The phenomenon of population vulnerability is highlighted in the effects of Covid-19 on populations with pre-existing health conditions as the effects of transmissible diseases are elevated with preexisting health conditions.¹⁷

¹³ David N. Weil, “Chapter 3 - Health and Economic Growth,” in *Handbook of Economic Growth*, ed. Philippe Aghion and Steven N. Durlauf, vol. 2, *Handbook of Economic Growth* (Elsevier, 2014), 623–82, <https://doi.org/10.1016/B978-0-444-53540-5.00003-3>.

¹⁴ David E Bloom, Michael Kuhn, and Klaus Prettnner, “Health and Economic Growth,” *IZA Discussion Paper No. 11939*, 2018, 28.

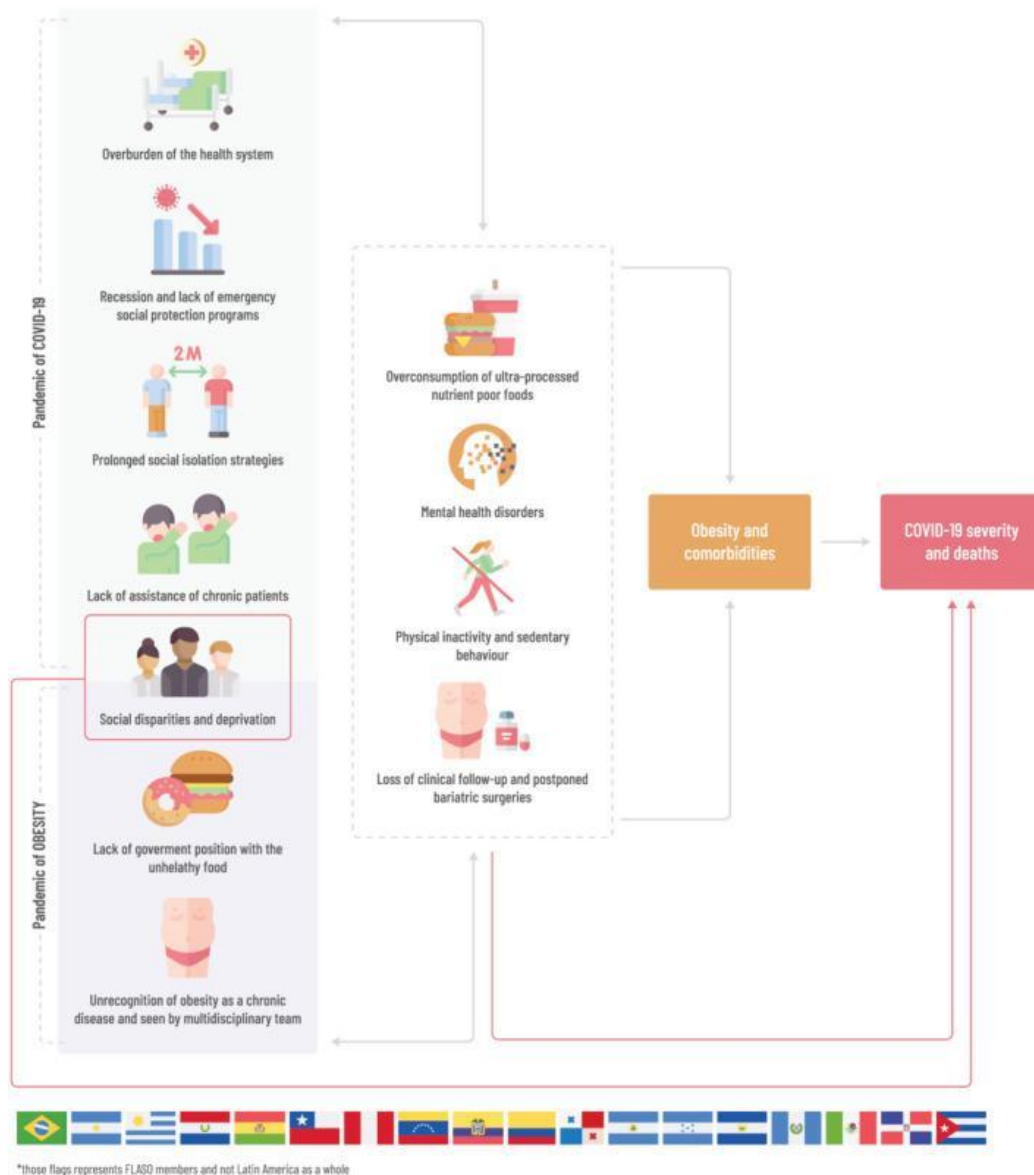
¹⁵ Ummad Mazhar and Fahd Rehman, “Productivity, Obesity, and Human Capital: Panel Data Evidence,” *Economics & Human Biology* 44 (2022): 101096, <https://doi.org/10.1016/j.ehb.2021.101096>.

¹⁶ Mazhar and Rehman.

¹⁷ Bruno Halpern et al., “Obesity and COVID-19 in Latin America: A Tragedy of Two Pandemics—Official Document of the Latin American Federation of Obesity Societies,” *Obesity Reviews* 22, no. 3 (2021): e13165, <https://doi.org/10.1111/obr.13165>.

On the following page, I provide a diagram demonstrating how individuals encounter diet-related disease at the center of confounding forces. As shown in Figure 1, Covid-19 both enhanced and underscored the risks obese populations face in day-to-day life.

Figure 1: Modeling obesogenic environments



Halpern et al. *Obesity Reviews*, Volume: 22, Issue: 3, First published: 23 November 2020, DOI: (10.1111/obr.13165)

The diagram above demonstrates how obese individuals faced more severe threats to their health during the pandemic. For a large group of Colombia's population, and populations around the world, the Covid-19 outbreak was a tale of two pandemics: Covid-19 and Obesity. With an overburdening of the healthcare system and a lack of resources to address problematic conditions contributing to obesity, obese individuals were more susceptible to Covid-19. The pandemic also

impeded efforts to create change as individuals were forced to maintain unhealthy practices that led to diet-related diseases initially.

A paradox emerges here as corporations depend on healthy workforces and yet fail to prioritize health outcomes in how they target consumers. Mazhar and Rehman point to the increased mechanization of industry as a method to overcome diminishing productivity in human populations.¹⁸ Growing rates of obesity globally accelerate mechanization as corporations adapt to populations with physical challenges. This phenomenon situates obese populations outside of development narratives. A cycle emerges in which increased mechanization of industry can exclude obese populations while simultaneously contributing to more sedentary lifestyles and poorer diets. While mechanization is not the only reason for more sedentary lifestyles, it can be understood as a primary force in forming obesogenic environments.

Globalization and the spread of obesogenic lifestyles

Economists have applied economic models to try to understand the ways obesity poses a threat to human capital. By looking at obesity as an externality of globalization, economists can visualize and quantify how trade liberalization and increases in FDI relate to increased rates of obesity.¹⁹ High rates of obesity first emerged in higher-income countries. But as trade has increased, middle- and lower-income countries have increased access to factors contributing to obesogenic environments. Miljkovic et al. describe how countries are integrated into a global network of “economic, technological, socio-cultural, political, and biological factors.”²⁰ The more integrated a country is into global trade, the higher the rates of obesity can be expected.

Miljkovic et al. isolated the relationships between obesity and different indicators of globalization. In developing countries across the world, including Colombia and a significant portion in Latin America, they found a correlation between trade openness and the global social index (GSI) of a country with the prevalence of obesity. Obesity is a global socioeconomic disease, defined by its spread across the world by way of living standards and working conditions. Wealthier countries export products to developing countries that both contribute to and enable more sedentary lifestyles. These lifestyle changes are coupled with higher caloric consumption, leading to unhealthy weight gain.

The spread of culture and products across country lines is woven into the business model of today's multinational and transnational corporations. Successful companies look to expand their business by tapping into markets abroad. Lower and middle-income countries often attract

¹⁸ Mazhar and Rehman, “Productivity, Obesity, and Human Capital: Panel Data Evidence.”

¹⁹ Dragan Miljkovic et al., “Globalisation and Obesity,” *The World Economy* 38, no. 8 (2015): 1278–94, <https://doi.org/10.1111/twec.12260>.

²⁰ Miljkovic et al.

investment when sales of products in higher-income countries level off.²¹ In countries such as the US, consumption of ultra-processed foods has peaked; companies like Coca-Cola and Nestle access foreign markets through localized distribution networks. Companies tap into globalized production networks, personalized advertising streams, and branding. These tactics are evident in the sponsorship of local sports teams and the acquisition of smaller food companies by mega-corporations. All the while, as Moody demonstrates, corporations lobby to weaken regulation and dilute science around the effects of diets high in ultra-processed foods.²²

There is a paradox in which globalization enables unprecedented benefits while burdening populations with high social costs. It is important to note that the negative externalities of globalization cannot be divorced from the positive effects of increased standards of living, decreased starvation, and better access to health-enabling technologies.

Quality of life can be hard to measure. When looking at the OECD Better Life Index, individuals are surveyed on aspects like housing, safety, health, environment, education, and jobs. While overall Colombia performs relatively poorly across the board in comparison to other middle-income countries participating in the study, it has made considerable progress over the last decade.²³ Colombia still underperforms compared to other countries in categories such as income, life satisfaction, education, and work-life balance. These indicators help contextualize nutritional issues within more complex problems of wealth disparities and weak infrastructure. Issues of diet do not occur in a vacuum. They stem from compounding forces that both restrict access to healthy foods and foster dependency on cheap, nutritionally poor foods. These issues of access deprioritize and eliminate healthy practices in an individual's day-to-day life.

Shifting consumption patterns through corporate influence

One of the greatest drivers of added caloric intake is the widespread availability of highly processed foods.²⁴ The food industry in Colombia had created increased dependence on and consumption of shelf-stable food. Coca-Cola normalizes the consumption of sugary beverages through media campaigns and philanthropic initiatives. Postabón, the largest Colombian beverage company, owns a soccer team and is part of the conglomerate Organización Ardila

²¹ Edwin Kwong et al., “How Big Companies Are Targeting Middle Income Countries to Boost Ultra-Processed Food Sales,” *The Conversation*, September 13, 2021, <http://theconversation.com/how-big-companies-are-targeting-middle-income-countries-to-boost-ultra-processed-food-sales-166927>.

²² Rob Moodie et al., “Ultra-Processed Profits: The Political Economy of Countering the Global Spread of Ultra-Processed Foods – A Synthesis Review on the Market and Political Practices of Transnational Food Corporations and Strategic Public Health Responses,” *International Journal of Health Policy and Management* 10, no. Special Issue on Political Economy of Food Systems (2021): 968–82, <https://doi.org/10.34172/ijhpm.2021.45>.

²³ “OECD Better Life Index,” accessed November 16, 2022, <https://www.oecdbetterlifeindex.org/countries/colombia/>.

²⁴ Moodie et al., “Ultra-Processed Profits: The Political Economy of Countering the Global Spread of Ultra-Processed Foods – A Synthesis Review on the Market and Political Practices of Transnational Food Corporations and Strategic Public Health Responses.”

Lülle, which owns over 50 media companies in Colombia. Corporations convey “healthy narratives” by displaying ads of healthy individuals indulging in their products. Cereal companies promote sugar-coated cornflakes as a great way to start the day. Ads for chips and candy are found next to schools, tempting onlookers with their calorically dense snacks. These highly processed foods are everywhere, and they are highly addictive. Each highly processed food is carefully created to appeal to consumers and encourage repeated consumption.²⁵ Chips are loaded with sodium and covered in fat, directly catering to the brain’s reward system. The sugar, hidden in the starch of the potatoes, spikes glucose levels, causing consumers to reach back for another chip. Beverages too are loaded with sugars, artificial flavors, caffeine, and colors that appeal to both children and adults. The sizes of snacks and drinks have changed over time. Producers created larger servings for growing appetites and smaller sizes that appeal to consumers and children who can buy a small Coke or bag of chips with pocket change. This phenomenon is not unique to Colombia and can be seen across Latin America and the globe. Habits of junk food consumption are ingrained in people's lives. Taste and preference within populations develop into subconscious practices shaped by corporate influence.

Interventions to control the influence of food corporations are needed to shift consumption patterns. But many of the government efforts to rein in industry influence are constrained by food and beverage corporations with high stakes in policy.²⁶ The Colombian government and the Ministry of Health and Social Protection have taken steps to address the problematic consumption habits of Colombian youth. Colombia has demonstrated that health policy is on the agenda by regulating school cafeteria menus and restricting the marketing of highly processed food and beverage companies. In 2021, the president of Colombia, Iván Duque Márquez signed a law known popularly as the “junk food law.” The new legislation mandated front-of-label warnings on processed foods with excess amounts of sugar, saturated fat, trans fat, sodium, or artificial sweeteners.²⁷ The implementation of warning labels followed similar moves in Chile, Mexico, and Peru. The new law in Colombia includes mandates for the Colombian National Radio Television to air ads promoting healthy lifestyles.

Shifting diets through policy and regulation is a complex undertaking. Policies are not one size fits all; thus, initiatives must focus on specific products or producers. One corner of the food industry that has been a target for policy is the soda industry. The excess calories in sugar-sweetened beverages (SSBs) have been targeted as a cause of poor diet. This move follows those of many other nations struggling with epidemic levels of obesity. In 2014, Mexico implemented a 1 peso per liter tax for SSBs. The tax successfully reduced soda consumption, particularly

²⁵ Michael Moss, “The Extraordinary Science of Addictive Junk Food,” *The New York Times*, February 20, 2013, sec. Magazine, <https://www.nytimes.com/2013/02/24/magazine/the-extraordinary-science-of-junk-food.html>.

²⁶ Paul Christopher Webster “Health in Colombia: The Chronic Disease Burden.” *CMAJ* 184, no. 6 (April 3, 2012): E293–94. <https://doi.org/10.1503/cmaj.109-4126>.

²⁷ “Junk food Law: Colombia implements front labeling warning,” accessed April 13, 2022, <https://unperiodico.unal.edu.co/pages/detail/junk-food-law-colombia-implements-front-labeling-warning/>.

among lower SES communities. A study from the University of North Carolina found that over the first two years following the tax implementation, there was a 7.6% decrease in purchases of SSBs.²⁸ These findings indicate that raising the tax further could have a greater impact on consumer habits. Colombia can look to the peso-per-liter tax as another tool to combat excessive consumption habits. Countries across the world are initiating taxes and seeing substantial decreases in sales of SSBs. In many ways, the moves by governments to curb junk food consumption resemble the kind of reforms aimed at reducing tobacco use—as characterized by the responses from multinational food corporations.

Regulatory Pushback

Taxes on sugary beverages have seen pushback from corporations, down to small-scale sellers, and beverage consumers. Individuals uninterested in shifting their habits see the tax as invasive. For shop owners, a reduction in sales means less income. But these responses can be expected as normal reactions to what, over time, should result in a cultural shift in consumption habits. The biggest powers combating the regulation of junk food are the corporations producing and selling unhealthy products. In response to backlash from public health officials, large food corporations have promised self-regulation to combat the public health crisis. While promoting self-regulation, corporations have also been directly involved with policymaking. The close ties between the government, media, and the food industry are apparent. But these ties have received little attention.²⁹ Corporations have been instrumental in reframing discourse on noncommunicable diseases as they relate to consumer habits and lifestyles. Consumer habits and lifestyle choices undoubtedly play into the health outcomes of those individuals. But individual habits are shaped by the market. Humans are not born craving soda and chips; they are conditioned through widespread access and availability.

NGOs and activists who have spoken out against SSBs and promoted moving away from cheap, processed junk food have experienced tremendous pushback from corporations. The organization Educar Consumidores works to promote education around diet-related health issues and supports taxing SSBs and other processed foods. I will go into further detail on the organization in the following chapter, where I provide an outline of the varied organizations working to improve nutrition in Colombia's urban areas. Educar Consumidores produced an ad supporting a 20% tax on SSBs.³⁰ The 30-second ad showed consumers how much table sugar can be found in four soft

²⁸ M. Arantxa Colchero et al., "In Mexico, Evidence Of Sustained Consumer Response Two Years After Implementing A Sugar-Sweetened Beverage Tax," *Health Affairs* 36, no. 3 (March 1, 2017): 564–71, <https://doi.org/10.1377/hlthaff.2016.1231>.

²⁹ Melissa Mialon et al., "'The Architecture of the State Was Transformed in Favour of the Interests of Companies': Corporate Political Activity of the Food Industry in Colombia," *Globalization and Health* 16, no. 1 (December 2020): 97, <https://doi.org/10.1186/s12992-020-00631-x>.

³⁰ Andrew Jacobs and Matt Richtel, "She Took On Colombia's Soda Industry. Then She Was Silenced.," *The New York Times*, November 13, 2017, sec. Health, <https://www.nytimes.com/2017/11/13/health/colombia-soda-tax-obesity.html>

drinks and the dangers of diabetes and disease stemming from excess sugar consumption. The ad ended by encouraging people to consume more water, milk, and tea instead of SSBs. The organization was pushing consumer awareness for what can otherwise be an unconscious habit. Postobón, the largest Colombian food corporation, filed a complaint that the ad was inaccurate. Under pressure from Postobón, the head of the Colombian Consumer Protection Agency ordered the ad be taken off the air.

The case of Educar Consumidores exposes a hostile environment where activists and journalists are constrained in expressing concern over the widespread consumption of sugary drinks. The proposed 20% tax on SSBs was blocked. *El Espectador*, one of Colombia's most popular newspapers, was historically targeted by cartels. While they are no strangers to intimidation tactics, *El Espectador* was not expecting the kind of targeting they received from Coca-Cola following an article and informational video about the effects of sugar on health outcomes. The informational video was aired on a popular YouTube channel “La Pulla.” The reporter at *El Espectador* uncovers ties between the soda industry and Congress. The feature of a Sprite bottle triggered litigation threats and the withdrawal of ad revenue from Coca-Cola.

To build public goodwill, Postobón has focused its efforts on social initiatives unrelated to the consumption of sugar. The company notably launched a campaign to provide fortified beverages to impoverished populations and maintains education initiatives focused on the importance of exercise. On the company's website, there is an entire page dedicated to being a conscious person. The page highlights the importance of sleep, exercise, and sustainable initiatives focused on climate change. However, nowhere are there recommendations about reducing the consumption of SSBs or the potential harms of excess sugar consumption. Shifting culture around dietary habits depends on the dissemination of dietary knowledge.

In this chapter, I have set the stage for understanding the forces shaping the current nutrition landscape across Colombia's urban centers. The need for change in policy around junk food and nutrition is clear. But I am focused on organizations operating within current systems to foster change at the ground level—to which we now turn.

Chapter 2: Filling the Gap: Interventions at the community level

In the first chapter I laid the groundwork for understanding the dynamics shaping nutrition and health outcomes in Colombia, particularly in Bogotá and Medellín. I have already introduced NGOs as key players in the narratives of change. This chapter will provide further context on the organizations selected for a case study in this project.

NGOs across Colombia have emerged to combat nutritional problems. Many of these organizations cover a breadth of issues, ranging from youth malnutrition to education on the importance of eating healthier diets. There are many organizations that deal with a breadth of issues related to poverty and social mobility, including problems of diet and food access. The range of techniques used by NGOs and the types of problems they confront reflect the complex landscape of food security and nutritional challenges in Colombia. The NGOs selected for this study work to bring individuals closer to their food and use diet as a tool for empowerment. The NGOs included in the study are Platos Sin Fronteras (PSF), Fundación Soydooy, Corporación Simbionte, and Colectivo Sumak Kawsay. The study also looks at the work done by the Medellín Food and Nutrition Security Team and the Bioali group at the University of Antioquia. The inclusion of these other agencies helps situate NGOs into a greater arena that encompasses an array of interventions.

The organizations were selected because they address central issues of access to nutrition while simultaneously working to build economic agency within communities. I spent 2 weeks in Bogotá and 2 weeks in Medellín engaging with the organizations mentioned, learning more about their work and the communities where they are embedded. I was focused on documenting how the organizations understand issues of diet and health, the possibilities and limitations for change, and the techniques employed. The organizations and agencies included in this study reflect only a portion of all the actors working to foster better nutrition and food access. This project should be understood as a case study.

Platos Sin Fronteras, Medellín

In Medellín, Platos Sin Fronteras (PSF) started as an organization focused on nutrition and health, but it has morphed into something else: an organization that builds social cohesion and brings economic opportunity to impoverished communities.³¹ Food can transform realities. PSF

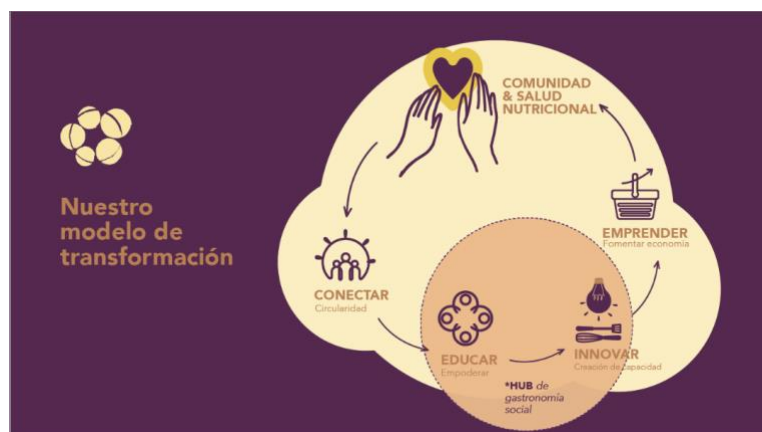
³¹ Ana María Ocampo Cuesta, “Platos Sin Fronteras: Alimentación, solidaridad y futuro,” *Hojas de Inspiración* (blog), accessed November 20, 2022, <https://hojasdeinspiracion.com/platos-sin-fronteras-alimentacion-solidaridad-y-futuro/>.

fits into a greater movement of Social Gastronomy (SGM), which uses the power of food to improve individual lives.

Platos Sin Fronteras team



Platos Sin Fronteras Team



PSF Transformation model [from the top, clockwise: Community, health and nutrition, business and promoting economy, social gastronomy hub: creating capacity for innovation & education and empowerment, connections, and circularity]

Paola Pollmeier, the founder of PSF speaks to the power of SGM; “as an international movement, SGM is human-centered. By using food as a tool to connect people, enable dignified livelihoods, minimize social inequities, care for the planet, and learn with each other, we can generate a more equitable, inclusive, innovative, and caring society.”³² Instead of food and nutrition being the goal of interventions, they become a means of achieving better livelihoods.

³² “Social Gastronomy Movement,” Social Gastronomy Movement, accessed November 21, 2022, <https://www.socialgastronomy.org>.

In 2020, PSF initially began with a mission of empowering women through education on the importance of healthy eating. Now, the efforts are split into three categories: building strategic alliances and cross-sector partnerships to create solutions for Medellín's most resource-poor neighborhoods; educating and certifying community leaders with nutritional training; and integrating resource poor-areas into Medellín's economy through innovation in the gastronomy space.³³

The project was built with a focus on mothers, who often bear the majority of household responsibilities. Located in the Moravia neighborhood of Comuna 4, the project has expanded to include programs for children and entire families. The work of PSF increasingly fills a gap in youth education around the importance of health and dietary choices. Paola Pollmeier speaks to how the organization was born out of a need to address the lack of food consciousness in Colombian mothers and youth. When children grow up not thinking about the food they eat, those patterns translate into habits that follow throughout life.

The organization seeks to shift dietary patterns in the families of participating mothers, as well as the social circles that surround those women.³⁴ The organization looks for both direct and indirect impacts, affecting the diets of individuals who have not necessarily participated in organization events. Human capital is improved through nutritional knowledge.

PSF partnered with *Servicio Nacional De Aprendizaje* (SENA) or Medellín's National Training Service, a vocational training school to create a nutritional certification process. Through the partnership, individuals become agents of change in their community. With the certification, individuals can employ other community members and increase economic opportunity within their circles. The knowledge individuals acquire through the certification process expands across different community relationships.

Nayibe Arroyo, a graduate of the SENA-PSF certification program, reported being able to incorporate what she had learned from PSF into her own restaurant.³⁵ She sells lunch to other members of the community and helps spread awareness of the importance of eating balanced diets. This case exemplifies the way PSF has rippling effects within communities, affecting individuals who have not necessarily participated in events. In the following chapters, I will explore in greater depth the relationship PSF has with communities.

³³ Ocampo Cuesta, "Platos Sin Fronteras."

³⁴ "Platos Sin Fronteras | Nutrición Para Todos."

³⁵ *Te Contamos Más Sobre Nuestra Bonita Alianza Con El SENA*, 2020, <https://www.youtube.com/watch?v=er7wc8YD2Es>.

PSF was still a young and growing organization when it was forced to adapt to the changing times of Covid-19. With growing restrictions and the closing of businesses, PSF needed to find new ways of reaching community members. This also meant that some community members no longer had access to the same fresh fruits and vegetables they had previously.

The work of PSF underscores the dynamic purpose of food-based health organizations. Issues of nutritional access cannot be isolated from the web of other tensions impacting an individual's diet. Using food as a tool for empowerment magnifies the impact. Organizations are not just reducing malnutrition and nutrition deficiency, they are also filling an education gap, creating job opportunities, and encouraging more sustainable, localized food systems.

Colectivo Sumak Kawsay, Medellín

The Sumak Kawsay Project was born in the center of Medellín. In 2016, the organization started with a project to create gardens at the Latin America Autonomous University. The group brought together university faculty and students, artists, and other local actors from social movement organizations. Esteban Garces, a founding member of the organization defines the name Sumak Kawsay as

“a word from the Quechua language, Sumak is the ideal, the good, the realization, cause, causal and it is life. Sumak Kawsay is the good life, the good life, life to the full, a way of life in balance and in harmony with Mother Earth, with nature and with all the beings that inhabit it, including animals, humans, minerals, plants. and all the forms of existence that can inhabit this world, even the microscopic forms. Sumak Kawsay is a worldview that is inherited from the ancestral peoples of Latin America, it is a cosmogony of life itself, of existence itself.” Esteban Garces, Leader at Colectivo Sumak Kawsay (2023)³⁶

The organization runs rural and urban organic agricultural projects, among a host of other initiatives. They also work on academic social research and education projects that often center around the recovery of ancestral knowledge. Garces and the organization use agroecological practices to bring the community together around a shared heritage while promoting biodiversity and sustainable practices. And the agricultural processes are always tied to music. Art is infused into all educational programming. For the Sumak Kawsay team, the process of planting is a method of tapping back into historical roots and recovering lost identities.

When the collective began planting a garden at the Latin America Autonomous University, Bees and other insects emerged. The garden became a small green oasis in an area otherwise characterized by concrete and asphalt. The history of the organization's projects reflects the

³⁶ Jhon Mario Marin Davila, “Colectivo Sumak Kawsay: Semillas Que Florecen En El Concreto,” *El Colectivo: Comunicación Popular* (blog), November 23, 2020, <https://elcolectivocomunicacion.wordpress.com/2020/11/23/colectivo-sumak-kawsay-semillas-que-florecen-en-el-concreto/>.

challenges posed by violence in the city. One of the projects in Robledo Aures, located in the middle of an urban conflict zone, initially served as a way of bringing people together despite violence. But eventually, it became too dangerous for individuals to travel there from other neighborhoods, forcing the garden to shut down.

Esteban Garces found a plot of land outside medellín's urban center in Santa Elena. There he now operates a small farm focusing on all the same initiatives. The municipality of Santa Elena has a long history of agriculture and a strong cultural heritage. The region has changed tremendously as more wealthy Colombians look to buy farms and convert farmland into weekend estates outside the busy city. The region is famous for its flower productions, supplying bouquets to the annual festival of flowers. But over the years, the farms have been conditioned to use intensive chemical inputs. In contrast to the other farms in Santa Elena, Garces uses an agroecological model for local production and pedagogical purposes.

Corporación Simbionte, Medellín

The organization Simbionte was formed in San Antonio de Prado, a town located in the rural outskirts of Medellín. The area of San Antonio is a melting pot for displaced people from around the country, mostly families from the Chocó region to the west of Medellín. The organization formed out of a desire to have a community agriculture program. Many of the displaced people that ended up in San Antonio lost their land due to armed conflict. The opportunity to cultivate land brings generations together around rekindling and appreciation for lost practices. The organization works to cultivate native plants that have been lost to current industrialized food systems. The cultivation of these plants is also tied to bringing back indigenous cuisine and cooking practices.

The organization has narratives of displacement at its roots; the director himself was displaced. Through agricultural projects, Simbionte aims to foster a lost relationship with the land and food systems. The initiatives of the organization serve as a way of reclaiming identity—identity attached to lost lands and practices. The gardens are located on land provided by the government. Aside from agriculture, Simbionte also works on projects of environmental restoration. Many of the individuals who initially got involved through the organization now have their own personal gardens.

The organization uses the garden as a place to engage community members. Through the garden, individuals find empowerment to start entrepreneurial endeavors and seek employment opportunities. The gardens, located in an area prone to conflict and gang activity, serve as an alternative to getting involved in organized crime. Similar to Sumak Kawsay, Simbionte also incorporates art and other workshops to bring people together and form a community.

Fundación Soydoy, Bogotá

The Soydoy Foundation in Bogotá began in 2008 with a mission of investing in Colombian youth by tackling issues of food insecurity and promoting sustainable development.³⁷ Soydoy operates through both the direct supply of food products to consumers, as well as offering educational courses on building healthy eating habits and ensuring food safety. Located on the border of La Calera and Bogotá, the organization is situated to support communities cut off from the capital's municipality.

But the Soydoy Foundation is not only focused on improving access and awareness for healthy eating practices. The NGO also works to help communities grow vegetable gardens and create more resilient sources of nutritious food.³⁸ Through their sustainability initiatives, helping families create gardens can help reduce food costs and empower community development.

The organization has partnered with a local school, Escuela La Aurora, to create a teaching garden. The program, *nutrihuertas*, offers a way to combine education, nutritional knowledge, food system understanding, and a source for local nutrition. The organization focuses on children and youth, integrating nutritional education into conventional education.

The Soydoy Foundation was built on addressing Colombia's most vulnerable populations, and obesity is still prevalent in communities suffering from malnutrition. The Soydoy Foundation helps address these issues by supporting the development of social entrepreneurship. Projects include the making of nutrition supplements, local agricultural initiatives, education courses, and community-building events. Through their model for change, Soydoy aims to train community members to become agents of change in other communities across Colombia. Women who became involved in La Calera have traveled to other parts of Colombia to teach communities their newly acquired skills.

³⁷ "Soydoy: About | LinkedIn," accessed November 22, 2022, <https://www.linkedin.com/company/soydoy-fundaci%C3%B3n/about/>.

³⁸ Soydoy, "Nutrihuertas," *Fundación SoyDoy* (blog), accessed November 22, 2022, <https://soydoy.org/fr/nutrihuertas/>.

Soydoy workshop



Soydoy Community Event: workshop in school advocating for the importance of consuming vegetables and washing hands before eating. December 14 2022, Facebook³⁹

EducAR Consumidores, Bogotá

While Platos Sin Fronteras and the Foundation Soydoy work on the ground, engaging directly with consumers, EducAR Consumidores (noted previously) takes on a more macro-food systems approach to shifting consumption patterns. The organization still engages with local communities through social mobilization, but the organization also engages in high-level political advocacy.⁴⁰ EducAR Consumidores, which translates directly to “educate consumers,” is centered around the need for greater consumer transparency. The education campaigns of EducAR Consumidores work to shift consumption patterns through the spread of knowledge.

EducAR Consumidores began 10 years ago and utilizes a multi-faceted approach to understanding contributors to human health. The team of professionals is made up of nutritional experts, economists, political scientists, communications experts, anthropologists, and lawyers. Together they work to protect human health while simultaneously bettering the health of the environment. Their projects span from climate-related issues to initiatives focussed on food systems and the tobacco industry.

The organization is known for its contributions in the policy sphere, advocating for front-of-label information on food packages; taxes on harmful products like sugar-sweetened beverages, junk food, and tobacco; and restricting the advertising power of food corporations. The organization

³⁹ “Facebook,” accessed April 7, 2023, <https://www.facebook.com/Fundacionsoydoy/photos/6074016189297440>.

⁴⁰ “EducAR Consumidores-Quiénes Somos,” *EducAR Consumidores* (blog), accessed November 23, 2022, <https://educarconsumidores.org/quienes-somos/>.

builds transparency for consumers to understand what they are eating, but additionally, they create transparency by revealing how deeply entrenched mega corporations are in politics.

Educar Consumidores also works on a host of other issues like advocating for better road safety, breastfeeding, and climate initiatives. These other issues help frame corporate food systems in a wider narrative of exploitative business practices. In the context of fighting obesity, Educar Consumidores is on the front lines with governments and corporations through their use of strategic litigation.⁴¹ Their work is distinct from PSF and SoyDoy in how it aims to shift consumer practices by targeting the producers and suppliers in food systems.

While Educar Consumidores is not directly featured in the case studies of this project, the organization's perspective is crucial in creating a sustainable and lasting impact. By incorporating the work of Educar Consumidores into this project I hope to show how both community-based organizations and legislative-level organizations are individually vital to shifting consumer diets. Both organizations work on different sides of the same issues. By observing the organizations, I paint a more holistic picture of the diverse tools used to shift consumption patterns.

Research & Methodology

Through my research, I investigate the successes of NGOs in Colombia working on bringing better nutrition to communities. By looking at the narratives of NGOs, as well as their impact on local communities, I provide a framework for what interventions can look like. My work contributes to a more holistic understanding of what diet-based health interventions can look like to reduce NCDs. Organizations have already taken root in the urban areas of Medellín and Bogotá. Organizations such as Platos Sin Fronteras, Fundación SoyDoy, and Educar Consumidores work to educate consumers and shift consumption practices. These organizations work against the influence of food systems that have failed to provide equitable nutrition, consumer transparency, and access to fresh foods.

By interviewing NGO leaders, other professionals, and community members I provide a window into the daily operations of featured organizations. I supplement these interviews with analyses of OECD studies, data from other international organizations like the WHO and FAO, and literature providing further historical context. By examining a more diverse sample of individuals both involved in implementing diet-related health interventions and individuals affected by nutritional work, I provide a snapshot of the successes and constraints of community-based interventions.

⁴¹ "Educar Consumidores-Quiénes Somos."

This project weaves personal testimonials into data analysis of trends in diet and food availability and how diets have been impacted by NGOs. My research includes interviews with five NGO leaders (n=5), eight community members (n=8), two leaders in Academia (n=2), and five government employees (n=5). All the interviews were conducted in Spanish, transcribed, and translated into English.

To summarize, my investigation consists of the following:

- Community interviews: interviews with community members impacted by NGOs
- Interviews with academics and governments employees: (Universidad de Antioquia, Medellín Nutrition and Food Security Team)
- Staff interviews: interviews with NGO staff aimed at understanding the capabilities and limitations for leaders of NGOs (Soydoy, PSF, Sumak Kawsay, Corporación Simbionte)
- Analysis of websites, educational material, Youtube footage of events, social media engagement

A sampling of interview questions:

For leaders of NGOs:

- How did you decide to get involved in the work you are doing?
- Education about the importance of nutrition is lacking in schools. In what way does the work of the organization fill gaps in nutritional education?
- In what ways are the techniques used by the organization to improve nutritional outcomes scalable? Is there a way the kinds of education campaigns and community empowerment projects used by the organization can be scaled nationally? Or internationally?
- How do you measure success? What drives the organization to continue? What have been the most successful ways of engaging community members?
- What are the greatest challenges to the work of the organization?
- What are the greatest financial constraints to reaching community members?
- In thinking about the fight to enable equal access to nutrition, what makes Colombia's situation unique?
- How do you decide where events should take place? What are the primary ways people find out about events?
- Has the organization made any big mistakes in how they reach community members? How has the organization learned from those mistakes?
- What motivates you to continue doing the work you do?
- How do you see the organization growing in the next 5-10 years?
- Where does obesity fit into the conversation around nutritional security? While undernourishment is still prevalent in Colombia, how do you balance a need to address problematic rates of obesity in youth?

For Community Members:

- How did you initially come into contact with the organization? Have you met other community members through attending organization events?
- How has your interaction with the organization impacted your diet? Has your perception of ultra-processed foods changed?
- How have your consumption practices changed since you began participating in organizing events? Do you still shop at the same places? Cook the same foods?
- How has the organization changed the way you value cooking?
- What is the greatest barrier to maintaining a healthy diet?
- How important is diet when you are thinking about general health? What are the most important factors?
- Throughout your life, how has the culture around food consumption changed? How have the types of food people eat changed? And how have eating practices changed?
- How has your relationship with food changed throughout your life?
- Are you concerned about younger generations? Do you worry about their eating practices or how they think about food?
- What do you think about processed foods? What are your priorities in consuming a healthy diet? What does 'healthy' mean to you?

Literature Review

The rapidly rising rates of global obesity have attracted the efforts of scholars to understand changes in population health. Data on rates of obesity, the rise of other NCDs, and the ensuing financial impacts of the disease are covered extensively in country reports and OECD data.⁴² These studies help lay the groundwork for understanding what changes in populations mean from both a macro, society-wide focus, as well as at the individual level. The data provided by the OECD study: *The Heavy Burden of Obesity: The Economics of Prevention*, provides evidence of how pressing the epidemic of obesity is on a global scale and within Colombia. The projections outlined in the study also elucidate the future effects of obesity on healthcare systems, government budgets, and the welfare of citizens.

The data from OECD is crucial in establishing the severity and urgency of addressing obesity as a preventable disease; the study even goes so far as to address effective government and corporate-led interventions through shifting consumption patterns. In table 1, found below, I summarize key impacts of obesity from the OECD study mentioned.

⁴² OECD, *The Heavy Burden of Obesity*.

Table 1
The Heavy Burden of Obesity: The Economics of Prevention

Economic Impacts	<p>“Through the combined effects of overweight on life expectancy, health expenditure and the labor market, GDP will be 3.3% lower on average in OECD countries”</p> <p>The economic benefits produced by diet and health interventions, when combined with the savings in health costs and labor market gains, are greater than the costs of running interventions.</p>
Effects of obesity on education outcomes and labor force participation	<p>“Obesity reduces the employment rate, and increases early retirement, absenteeism and presenteeism. As a result, the workforce in the 52 countries will be reduced by the equivalent of 54 million full-time workers”</p>
Socioeconomic status as a predictor of overweight/obese	<p>“Obesity rates are not uniform across all social groups; certain groups display higher rates of obesity depending on sex and socio-economic status. In general, there is a higher prevalence of women with obesity compared to men. For the majority of countries, individuals with the lowest incomes or least education are two to three times more likely to be overweight or obese than individuals in the highest income group or with high levels of education”</p>

Source: OECD

Situating obesity and diet-related disease requires taking a step back and looking at the role food systems play in dictating diets. To understand the intricacies of how food systems look the way they do in Colombia, scholars have turned to investigate greater structural patterns that exist across Latin America. The work of Eduardo J Gomez (2021) looks at the international and domestic politics of junk food regulation in Latin America. Gomez’s work is important in framing the issue of food systems as they relate to health outcomes as a matter of consumers’

rights.⁴³ What does it mean to have consumer rights? Who decides what those rights are? Gomez discusses the human rights perspective by looking at initiatives from the Food and Agriculture Organization of the UN's (FAO) work to introduce domestic policies that secure food security and nutrition as a human right. Gomez references previous initiatives to secure universal access to medicine in response to HIV/AIDS as examples of what food system interventions could look like. While diseases like HIV have triggered coordinated international responses in the provision of medicine and policy implementation, we are yet to see the same kinds of steps taken to prevent NCDs like obesity.

The framework Gomez provides helps contextualize obesity in a pattern of government intervention. If we look specifically at the case of Colombia, there have been measures to intervene at the legislative level, but efforts are constrained by corporate pushback. Dr. Mélissa Mialon, a food engineer with a Ph.D. in nutrition, has characterized the structure of the food industry in Colombia as it relates to the architecture of the state.⁴⁴ Mialon argues that narratives around the food industry in Colombia are shaped by corporate contributions to population prosperity and employment opportunities. Large corporations are known for the jobs they provide, particularly in areas with little economic opportunity. Food corporations also gain credibility through association by forging partnerships with local media, academia, and community leaders. While these contributions cannot be discounted, they fail to address public health goals. Instead, the food industry promotes self-regulation while industry actors are directly involved in policymaking.

While implementing policy and regulation in the food industry continues to be a challenge, studies by Gomez and Mialon et al. indicate that taxes and other regulatory measures have been successful in impacting rates of obesity. Nutrient-deficient diets high in excess calories are prevalent due to the accessibility of cheap, unhealthy food. I touched on this tactic in Chapter 1, but when looking at the data, tax-based interventions are even more compelling. Taxes aimed at curbing the consumption of sugar-sweetened beverages (SSB) have proven successful in reducing consumption and shifting dietary patterns. Vecino-Ortiz and Arroyo-Ariza (2018)⁴⁵ looked at the effects of taxes on SSBs and found that the tax could reduce the number of overweight individuals by 1.5-4.9 percentage points, and the number of obese by 1.1-2.4 percentage points. The study was based on simulating the effects of a tax on data from a 2010 Colombian National Nutrition Survey. The results from the simulated data were compared to outcomes in northern European countries where SSB taxes have already been implemented. The

⁴³ Eduardo J Gómez, "Getting to the Root of the Problem: The International and Domestic Politics of Junk Food Industry Regulation in Latin America," *Health Policy and Planning* 36, no. 10 (December 1, 2021): 1521–33, <https://doi.org/10.1093/heapol/czab100>.

⁴⁴ Mialon et al., "The Architecture of the State Was Transformed in Favour of the Interests of Companies."

⁴⁵ Andres I. Vecino-Ortiz and Daniel Arroyo-Ariza, "A Tax on Sugar Sweetened Beverages in Colombia: Estimating the Impact on Overweight and Obesity Prevalence across Socio Economic Levels," *Social Science & Medicine* 209 (July 1, 2018): 111–16, <https://doi.org/10.1016/j.socscimed.2018.05.043>.

study also points to secondary, indirect benefits of the tax. Front-label information and taxes work to educate consumers and shift consumer sentiment around products.

Some of the largest proponents of government-led interventions, like taxes, have been NGOs. But smaller organizations struggle in a landscape dominated by industry influence. A New York Times article documented how activists standing up to the food industry are silenced.⁴⁶ However, organizations like Educar Consumidores continue fighting for more corporate accountability. The challenges in changing food policy at the legislative level point to a greater need for consumer-led initiatives. Community-based interventions work through changing consumer habits instead of waiting for change from governments and corporations.

In my investigation into the work of nutrition and health organizations in Medellín and Bogotá, I frame and pose an understanding of how these organizations engage with local communities. There is significant literature outlining health issues, diet changes, and food systems in Colombia. But there is a gap in the literature looking at the role of NGOs in mobilizing support for nutrition access as a path to both health and prosperity. Most of the literature surrounding health and nutrition access is characterized by quantitative research. Urke et al.⁴⁷, in exploring the positive experiences of mothers in improving child nutrition in low-income areas, point to the need for more qualitative analysis in the space of diet and health.

Urke et al. analyze the role of NGOs in addressing nutrition in a low-income area of the Peruvian Andes. They critique the quantitative analysis of public health literature as lacking sensitivity to proximal influences on child health. The study demonstrates how families facing economic constraints are still able to provide substantial nutrition to their children. Particularly compelling, the authors of the study suggest their findings can be useful to health practitioners. The study examined how community-based interventions can raise the consciousness and skills of mothers regarding their feeding practices. The study sought out community members with reputations for engaging with NGOs.

The work of Urke establishes a framework for how my investigation takes form—bringing qualitative analysis that illuminates the potential for impact at the community level. Through interviewing community members on the incorporation of healthier food into their diet, I can establish a better understanding of the potential and limitations of change within communities constrained by economic status. Urke utilizes a conceptual framework that inspires the structure I employ to observe organizations in Colombia. Urke divides the investigation into five factors:

⁴⁶ Andrew Jacobs and Matt Richtel, “She Took On Colombia’s Soda Industry. Then She Was Silenced.,” *The New York Times*, November 13, 2017, sec. Health, <https://www.nytimes.com/2017/11/13/health/colombia-soda-tax-obesity.html>.

⁴⁷ Helga B. Urke, Torill Bull, and Maurice B. Mittelmark, “Child Diet and Healthy Growth in the Context of Rural Poverty in the Peruvian Andes: What Influences Primary Caregivers’ Opportunities and Choices?,” *Global Health Promotion* 20, no. 3 (2013): 5–13, <https://doi.org/10.1177/1757975913499031>.

local contextual factors, local food culture, household feeding practices, food availability and quality, and local social and health programs relevant to child nutrition.⁴⁸ The factors I use are slightly modified to fit the context of Colombia but follow the same logic. I add a sixth variable: nutritional knowledge, which refers to the literacy of individuals in understanding the scientific breakdown of diet choices. In the following table, I outline how my factors are defined:

Table 2
Factors influencing diet and nutrition

Factor	Definition
Local contextual factors	Geography, infrastructure, neighborhood safety, parental education level, occupation
Local food culture	Beliefs about certain foods, native plants, value given to different foods, traditions
Household eating practices	Timing, frequency, and location of meals; preparation and cooking customs
Food availability and quality	Foods people have access to, the quality of food available, the price of foods
Local social assistance programs	Government assistance programs, NGO led food distribution
Nutritional knowledge	Knowledge of food groups, what constitutes healthy eating, understanding of food systems & agricultural processes

My work aims to contextualize the role of NGOs within the greater issues of NCDs and access to nutrition. The investigation has multiple dimensions. I am interested in the rhetoric used by NGOs to communicate the meaning and importance of the work they are doing. In thinking about how I assess the techniques NGOs employ, I turn to the work of Laestadius et al. (2013)⁴⁹ which looks at the ways NGOs in the US, Canada, and Sweden advocate reducing meat consumption. The study examines how narratives of climate change play into the ways NGOs engage consumers. Qualitative analysis of the work of NGOs was carried out by interviewing

⁴⁸ Urke, Bull, and Mittelmark, “Child Diet and Healthy Growth in the Context of Rural Poverty in the Peruvian Andes: What Influences Primary Caregivers’ Opportunities and Choices?”

⁴⁹ Linnea I. Laestadius et al., “Meat Consumption and Climate Change: The Role of Non-Governmental Organizations,” *Climatic Change* 120, no. 1 (September 1, 2013): 25–38, <https://doi.org/10.1007/s10584-013-0807-3>.

NGO staff, analyzing websites, and looking at educational materials/literature produced by the NGOs.

The study by Linnea et al. examines the tactics NGOs use to engage individuals and the justification employed behind arguments. The study also looks at what is omitted in different educational campaigns. As I look at NGOs working in Colombia, I am interested in how diet changes promoted by organizations align with global data on nutritional recommendations from organizations like the OECD.⁵⁰ The study also looked at overlapping dimensions of educational campaigns in how they argue against meat consumption or for a reduction in consumption. This will be central to my investigation as I understand how nutritional campaigns are framed. Campaigns advocating for better nutrition are intertwined with movements to improve planetary health and combat social inequality.

As I investigate further into the dimensions of NGO work, I must focus on specific intervention points. My investigation can be broken down into two overarching categories: access and knowledge implementation. By access, I am referring to the ways NGOs improve access to nutritious food by fostering affordable avenues and better supply chains. By implementation, I refer to the ways NGOs convey the importance of nutrition and integrate an appreciation for healthy practices into daily life.

As globalization shapes food systems around the world, diets shift in favor of larger producers of highly processed foods.⁵¹ With diets that are increasingly characterized as high-fat and high-calorie, the need for affordable fruits and vegetables should be central to public health policy.⁵² A study by Guarín et al. looks at the importance of domestic supply chains in Colombia in determining access to food and the quality of food available. Guarín points to the important role of intermediaries in supply chains—the formal and informal markets where producers sell to consumers. These markets are resilient, but as more of the market is privatized, how can NGOs and governments promote consumer transparency and access across food markets?

This is where my investigation arrives to analyze the role NGOs play in redefining linkages between food sources and consumers. When NGOs empower local food producers, they strengthen local agricultural communities. I investigate how NGOs in Medellín and Bogotá work to create better access to local fresh fruits and vegetables. I am also interested in how NGOs are working to improve supply chains between local producers and urban consumers. For incentivizing more nutritious diets, what role do supply chains play in enabling/restricting access to consumers? What role does geography play, and how are actions by NGOs working to combat

⁵⁰ OECD and The World Bank, *Health at a Glance: Latin America and the Caribbean 2020* (OECD, 2020), <https://doi.org/10.1787/6089164f-en>.

⁵¹ Mialon et al., “The Architecture of the State Was Transformed in Favour of the Interests of Companies.”

⁵² Alejandro Guarín, “The Value of Domestic Supply Chains: Producers, Wholesalers, and Urban Consumers in Colombia,” *Development Policy Review* 31, no. 5 (2013): 511–30, <https://doi.org/10.1111/dpr.12023>.

geographic limitations? These questions fuel my research and guide my interviews with NGO staff.

Improving access to healthy fresh food also requires nutritional education. I use the word integration to describe the way an appreciation for the importance of nutrition needs to be integrated into daily life. One of the main avenues for teaching the importance of nutrition is through the kitchen. Cooking classes for youth and community members are central to the work of organizations in both Medellín and Bogotá.

Caraher and Lang (2014) stress the need to consider cooking practices as they relate to health inequalities.⁵³ While access to food can be one barrier to eating a nutritious diet, so too is a lack of cooking skills. While Caraher and Lang's investigation is based in the UK, the dimensions of cooking introduced in their piece apply to the Colombian context. The authors identify different theoretical perspectives for understanding cooking. These perspectives include understanding cooking as unpaid labor, unequally shared between genders, a class issue, a source of creativity and empowerment, and a necessary skill. With increased urbanization and changing ways of life, cooking practices have shifted.⁵⁴ Through looking at Caraher and Lang's framework, we can see how cooking classes can also serve as an opportunity for communities to reclaim their agency. The framework demonstrates a need for better education about food preparation, particularly among low-income groups. The policy recommendations for better education in cooking align with my desire to understand the scalability of NGO interventions—what I see as the purpose of this project. Below, in table 3, I provide a list for reference of the organizations featured in this study.

⁵³ Martin Caraher and Tim Lang, "Can't Cook, Won't Cook: A Review of Cooking Skills and Their Relevance to Health Promotion," *International Journal of Health Promotion and Education* 37 (January 1999): 89–100, <https://doi.org/10.1080/14635240.1999.10806104>.

⁵⁴ Doris Cristina Quintero-Lesmes and Oscar Herrán, "Food Changes and Geography: Dietary Transition in Colombia," *Annals of Global Health* 85 (March 2019): 28, <https://doi.org/10.5334/aogh.1643>.

Table 3
Actors featured in this case study

Organization	Location	Key Concepts	Informants
Platos Sin Fronteras (PSF)	Medellín	Community building, entrepreneurship, social gastronomy movement	1 staff member 1 Community member
Sumak Kawsay	Medellín	Agroecological model for education, recovery of ancestral knowledge, communication through art	Founder
Corporación Simbionte	Medellín	Agroecology in rural areas of Medellín, working with displaced populations, community agriculture	1 staff member
Fundación Soy Doy	Bogotá	Nutritional assistance and education programs, community gardens	1 staff member 7 community members
Educación Consumidores	Bogotá	Influencing policy, building consumer knowledge	0
Bioali University group	Medellín	Academic partnership for better nutrition and urban agriculture	1 professor 1 student
Medellín Nutrition and Food Security Team	Medellín	Government services, social assistance, community centered projects	5 nutrition specialist

Chapter 3: Contextualizing dietary shifts

Situating poor nutrition within a historical break and changes in food systems

“Displacement is one of the factors that has influenced the loss of this knowledge. There is a territorial rupture that has also caused people not to know, to forget. And also, marketing, that is to say, the market follows food demand... So, we eat, let's say, only rice, bananas, carrots... the amount of things we consume is reduced, because those are the things that are marketed due to financial incentives.

We come from a history of people who are displaced, who are left without land. And our generation, none of us have land, we come from families with land, from farmers, from peasants, but we no longer have any. So, there is a rupture and so we keep searching for ways to continue working the land. That is why community agriculture also becomes a way of sustaining our heritage” Laura Lopéz, Community leader and founder of Simbionte⁵⁵

In this chapter I will expand on the historical background shaping populations and their relationships with food. The brief sections introduced on displacement and the industrialization of food systems offer a glimpse into what are very complex issues. In my brevity I do not seek to oversimplify what are complicated problems, instead, I draw attention to some of the factors shaping nutritional knowledge and access, narratives that extend far beyond the scope of my project. The focus of this study limits the depth I go into for these topics. But this historical background is essential to contextualizing the following chapter, where I unpack the narratives of interventions. Later I will explore the notion of food as cultural capital, a concept central to the efforts of every organization I interviewed and one that will reappear throughout the paper. The following chapter will give greater meaning to this concept as it relates to the potential for change.

When I set out to understand the forces behind the high rate of diet-related disease, the literature pointed me to the financial constraints and access issues that limit people in how they choose their diet. Colombia today still suffers from a high level of food insecurity. While there has been progress, systemic issues still hold Colombia back. In 2022, Colombia was ranked in the top 20 “hunger hotspots” in the world, the only South American country included in a Food and Agriculture Organization (FAO) and World Food Program (WFP) report for February-May

⁵⁵ Personal Interview. Laura Lopéz, Medellín. 20 January 2023

2022.⁵⁶ While the positioning of Colombia on the list reflects existing food security problems, the placement of the country over others in the region was largely motivated by the impending migrant crisis due to the situation in Venezuela. Colombia's feature in the list reflects desires by FAO to attract funding and support for Venezuelan migrants.⁵⁷ The report cited a population of nearly 2 million migrants from Venezuela among other factors leading to high levels of food insecurity. Other key drivers of food insecurity were political and social instability as well as the economic impacts of Covid-19. To make matters worse, humanitarian efforts have been constrained by the worsening of conflict in areas across the country. In the most recent report of hunger hotspots, Haiti has taken Colombia's spot as the country of primary concern in Latin America.⁵⁸

In 2022, 7.3 million Colombians were food insecure.⁵⁹ Meanwhile, in the same year, 60.4% of the population or around 30 million individuals were forecasted to be overweight,⁶⁰ a condition which can be understood as a vector for developing non-communicable diseases. Colombians suffer from a surplus of calories, but a simultaneous lack of nutrition.

The phenomenon of food and nutrition security needs to be contextualized in terms of financial constraints and geographic access. The physical conditions of poverty associated with poor access to nutrition and inadequate diet practices are paired with what I define as a lack of nutrition consciousness. It is not only that individuals are unable to eat the diets that they aspire to; there is also a lack of understanding of what a nutritious diet looks like and an under-appreciation of the multifaceted benefits a diet has on all aspects of an individual's life.

In the previous chapter, I introduced the NGOs of focus in this project. The historical context presented in this chapter incorporates the narratives of community members I interviewed for this study. I pair the narratives of Colombians reflecting on their own experiences with research into the role displacement and other generational phenomena have on people's knowledge of food systems and nutrition.

In this chapter I will begin by distinguishing consumers from producers in the Colombian food system. I will then dive into the ways the consumers have become detached from food systems

⁵⁶ Adriaan Alsema, "UN Flags Colombia as 'Hunger Hotspot,'" *Colombia News / Colombia Reports* (blog), January 31, 2022, <https://colombiareports.com/un-flags-colombia-as-hunger-hotspot/>.

⁵⁷ Natuur en Voedselkwaliteit Ministerie van Landbouw, "Is Colombia at Risk of Becoming a 'Hunger Hotspot'? - Nieuwsbericht - Agroberichten Buitenland," nieuwsbericht (Ministerie van Landbouw, Natuur en Voedselkwaliteit, February 5, 2022), <https://www.agroberichtenbuitenland.nl/actueel/nieuws/2022/02/05/colombia-at-risk-of-becoming-a-hunger-hotspot>.

⁵⁸ *Hunger Hotspots*.

⁵⁹ *Hunger Hotspots* (FAO; WFP, 2022), <https://doi.org/10.4060/cb8376en>.

⁶⁰ Statista. (October 21, 2022). Forecast of the overweight population share in Colombia from 2013 to 2028 [Graph]. In *Statista*. Retrieved February 14, 2023, from <https://www.statista.com/forecasts/1166491/overweight-population-share-forecast-in-colombia?locale=en>

due to displacement and the industrialization of agriculture. In conclusion, I highlight the ways in which food operates as a vessel for cultural heritage, and in the same vein, an opportunity for cultural change.

Making the case for interventions beyond solely food delivery

Humanitarian interventions and social assistance programs aimed at improving access to food at a basic level are essential to feeding families facing acute poverty. But by looking at interventions at the community level, a secondary narrative emerges: one in which the delivery of food should be supplemented by education around nutrition awareness. As indicated in the introduction of NGOs in Chapter 2, these interventions are built around empowering individuals to take ownership over their diets and reintegrating families into food systems. In a society built around markets, how people relate to food can be characterized by monetary transactions. For the majority of consumers in Colombia, food comes from markets. The consumer and producer are separated by a series of intermediaries that create physical distance between the individual and food production. This physical distance fosters a sense of detachment for the consumer. But the consumer is inherently linked to and situated within the food system. This disconnect has implications on nutritional knowledge, diet awareness, and the potential food has to influence individual livelihoods. The relationship the consumer has with food reflects their detachment from agricultural processes. In the Colombian case, this disconnect is deepened by decades of civil war that has displaced growers from their land.

Vaarst et al. explore the concept of agroecological food systems in urban contexts, identifying the disconnect between consumers and producers and addressing the need for radical shifts. Vaarst et al. utilize the language of “rural producers” and “urban receivers” to bring attention to the relationship food systems have with issues of nutrition, food waste, environmental considerations, and the diversification of agriculture.⁶¹ Identifying as receivers suggests that those consumers are somehow excluded from the agricultural process, further reducing their sense of agency in food choices.

The NGOs I engaged with imagine many of the necessary dietary changes as situated within a greater agroecological narrative. These organizations are working to reconnect and reintegrate individuals into the food systems of which they are inherently a part. Fighting malnutrition isn't only about delivering sustenance to people in need and reversing the condition of being overweight is not only about reducing caloric intake. Organizations such as Platos Sin Fronteras and SoyDoy fill an education gap brought about by forced lifestyle changes and a loss of cultural capital. Filling this gap can take the form of educating families on preparing traditional staples

⁶¹ Mette Vaarst et al., “Exploring the Concept of Agroecological Food Systems in a City-Region Context,” *Agroecology and Sustainable Food Systems* 42, no. 6 (July 3, 2018): 686–711, <https://doi.org/10.1080/21683565.2017.1365321>.

like tamales using healthy ingredients or reinserting agricultural knowledge into childhood education. In Chapter 4 I will expand on the specific programs utilized by the NGOs.

For many diet-related interventions, the process of improving people's nutrition and food system knowledge is not teaching newfound concepts but employing indigenous knowledge native to Colombia. The language of 'returning' emerges in the discussion of revitalizing lost practices as a reminder that introducing healthy practices into people's lives is also a form of identity restoration.⁶² Lost practices reflect the forced movement of families, a breaking of the ties between Colombians and their land. Amaya-Castellanos et al. examine the relationship between lost ancestral practices and health outcomes in Nariño, Colombia.⁶³ They articulate the relationship between identity and food: "it should be recognized that the value of traditional food practices goes beyond simply consuming food, and that foods can be healthy or of little benefit. Ancestral means seeing the underlying symbolic content and how knowledge gives a community identity."⁶⁴ In speaking specifically to the revitalization of lost indigenous practices in the US and Canada, Coté terms the process of revitalization and restoration of lost practices as "indigenization."⁶⁵ The term encompasses a broader definition of the ways indigenous peoples tap into a historical relationship with the land and agricultural practices to build agency.

Internal Conflict and Displacement

Internal conflict and the forced displacement of people have accelerated the divide of people from their land. In 2023, the UNHCR reported that internally displaced people in Colombia numbered over 6.7 million.⁶⁶ Colombia suffers from some of the highest levels of internal displacement in the world. The Colombian Internal Conflict or *Conflicto armado interno de Colombia* has been active since 1964, when the FARC (Revolutionary Armed Forces of Colombia) and the ELN (National Liberation Army) emerged as two major guerrilla groups.⁶⁷ And while there was a Colombia-FARC peace deal in 2016, violence persists across the country. Conflicts in disputed territories continue to push families off their homelands, sending many to informal settlements in and around large urban centers. In 2021, the national registry of victims reported 130,000 newly displaced people just that year. Women, children, and ethnic minorities

⁶² Personal Interview. Esteban Garces, Medellín. 20 January 2023

⁶³ Amaya-Castellanos et al., "Loss of Ancestral Food Practices and Perception of Its Effect on Children's Health among Inga Indigenous Grandmothers, Nariño, Colombia."

⁶⁴ Amaya-Castellanos et al.

⁶⁵ Coté, "'Indigenizing' Food Sovereignty. Revitalizing Indigenous Food Practices and Ecological Knowledges in Canada and the United States."

⁶⁶ "Colombia Situation," UNHCR: Global Focus, accessed February 14, 2023, <http://reporting.unhcr.org/colombiasituation>.

⁶⁷ Cabrera v. Jiménez Naranjo, "Colombia, The Center for Justice & Accountability," accessed February 15, 2023, <https://cja.org/where-we-work/colombia/>.

are disproportionately affected by displacement, with 41% of those displaced in 2021 being indigenous or Afro-Colombian.⁶⁸

Today, paramilitary groups continue to operate around the country in collaboration with political elites. Displacement in Colombia should not be solely understood as a byproduct of war, but more directly a tactic of military groups to gain control of areas of economic interest.⁶⁹ The unique geography of Colombia influences the movement and nature of the conflict. With its rugged landscape, the Cordilleras offer covert areas for military activity as well as illicit production. Many of the paramilitary groups are also involved in the drug trade, such as *Los Urabeños*, who have a presence in 22 of the 32 departments in Colombia.⁷⁰ As conflict continues around the country, displacement will persist.

For the Colombian forced to move to informal settlements, displacement is often unidirectional.⁷¹ Most families are displaced for life and often for multiple generations. As more communities are displaced year after year, the tally grows as previously affected families are unable to return to their locations of origin. For this reason, Bogotá and Medellín can be characterized by their sprawling unofficial settlements—areas that further accelerate a loss of generational customs. Beyond physical loss, displaced peoples lose generational customs.

Displacement and the loss of cultural capital

Displacement, beyond a physical loss, can be understood as identity erasure. The Colombian situation is unique in that the victims of displacement do not share a common identity. Scholars have characterized displacement in the region as an “enemy-less enterprise.”⁷² The victims of displacement are not enemies of the state, nor enemies of the armed groups pushing them off their lands. As Shultz et al. frame the situation “no armed group has declared war against the Colombian campesino. Campesinos have no defining identity, no unifying organization, and no historical enemies” (19).⁷³ The common link between the diverse population of displaced Colombians is their loss of livelihoods. *Campesinos*, the peasant-farmer class of families working off the land, have been forced into urban areas where they must find new ways to feed their families and sustain themselves financially.

⁶⁸ “Colombia Situation.”

⁶⁹ David Maher and Andrew Thomson, “A Precarious Peace? The Threat of Paramilitary Violence to the Peace Process in Colombia,” *Third World Quarterly* 39, no. 11 (November 2, 2018): 2142–72, <https://doi.org/10.1080/01436597.2018.1508992>.

⁷⁰ Maher and Thomson.

⁷¹ James Shultz et al., “Internal Displacement in Colombia: Fifteen Distinguishing Features,” *Disaster Health* 2 (January 16, 2014): 1–12, <https://doi.org/10.4161/dish.27885>.

⁷² Shultz et al.

⁷³ Shultz et al.

The rapid loss of land experienced by families in Colombia triggers a sudden disconnect from cultures rooted in native lands and practices. When communities are forced to uproot, there follows a loss of social structure, language, culture, and identity.⁷⁴ As one indigenous Siona man from the Amazon region put it: “To lose our land is to lose our self. To go is to take one step closer to death”⁷⁵

Displacement disrupts the continuity of generational knowledge. As families are forced to grapple with new ways of supporting themselves, embracing new lifestyles can mean losing touch with old practices. Culture is passed on through memories, knowledge, and narrative. The loss of those memories leads to a loss in the contextualization of the present. History can be misunderstood as an objective account of what happened in the past. Instead, history is a present-day understanding of the past, one that is manipulated by conflict, social circumstances, political power, and communication. Forcibly separated from environments conducive to maintaining culinary practices, future generations may lose interest in keeping the heritage practices once central to their ancestors. The lure of easily consumable, processed foods in urban areas appeals to tight budgets as well as taste buds.

Industrialization of food systems

The relationship between conflict and displacement also fits into a greater narrative of agricultural industrialization. Inequalities brought about by changes in the structure of agriculture have led to territorial disputes around the country.⁷⁶ Pressure from an export-based economy pushes farmers to adopt unsustainable farming practices that depend heavily on intensive methods and inputs.

The conversation around changes in agriculture must begin with the seed. The diversity of crops, practices needed to cultivate a successful harvest, and politics of agriculture all begin with planting. Seed sovereignty, the long-standing practice of saving a trading seed in Colombia precedes the privatization and regulations of the current seed industry. Farmers can save the best seeds from their harvest for planting in future years. Those same farmers can trade their seeds with other farmers as part of maintaining a diverse crop. Until the 1930s, farmers around the world enjoyed nearly complete sovereignty over their seed usage.⁷⁷ Localized customs and

⁷⁴ “‘To Lose Our Land Is to Lose Ourselves’: Indigenous People and Forced Displacement in Colombia - Colombia | ReliefWeb,” March 4, 2010, <https://reliefweb.int/report/colombia/lose-our-land-lose-ourselves-indigenous-people-and-forced-displacement-colombia>.

⁷⁵ “To Lose Our Land Is to Lose Ourselves.”

⁷⁶ Angela Serrano and Andrew Brooks, “Who Is Left behind in Global Food Systems? Local Farmers Failed by Colombia’s Avocado Boom,” *Environment and Planning E: Nature and Space* 2, no. 2 (June 1, 2019): 348–67, <https://doi.org/10.1177/2514848619838195>.

⁷⁷ Jack Kloppenburg, “Impeding Dispossession, Enabling Repossession: Biological Open Source and the Recovery of Seed Sovereignty,” *Journal of Agrarian Change* 10, no. 3 (July 1, 2010): 367–88, <https://doi.org/10.1111/j.1471-0366.2010.00275.x>.

traditions around seed saving and trading were generally conducive to the wide dissemination of seed. Colombia's relationship with regulatory measures has helped accelerate the industrialization of its agriculture. In 2010, the Colombian Agriculture and Livestock Institute (ICA) introduced Resolution 970 mandating that:

“They should also use legal seed and admit technical recommendations for planting and seed management by producer, importer or trader, always following planting recommendations established by ICA.”⁷⁸

The 970 law was further solidified with conditions of the US-Colombia Free Trade Agreement (TPA) of 2012, wherein the Colombian government adopted the UPOV 1991 Convention, strictly restricting the seeds farmers can plant.⁷⁹ The convention stipulates that farmers only use seeds certified in accordance with the UPOV convention. The hybrid seeds certified for use cannot be saved from year-to-year, necessitating yearly repurchasing, lowering the margins for farmers while benefiting foreign seed producers. The convention also made Colombia the second-largest market for US agricultural exports. In 2020, agricultural trade between the US and Colombia reached \$2.9 billion.

Informal seed markets are crucial to maintaining agro-diversity now and into the future, as well as maintaining food security and community-level farmer autonomy.⁸⁰ Laws mandating the use of certified seeds benefit large producers of genetically modified seeds that require specific fertilizers and pesticides. Legislation around the certification of seeds claims to be in the interest of food security and promoting health and safety in agriculture. But a question persists: which parties benefit from the legislation?

The institutionalization of seed regulation invalidates local knowledge, relegating native practices as inferior.⁸¹ History, culture, and native values become ‘obsolete’ or barriers to overcome. These policies should not come as a surprise, they instead fit into a long legacy of policy guided by racialized views of groups inferior to the West not being able to manage their own resources. As documented by Sundberg, this pattern dates to the colonization of the

⁷⁸ “New Era for Seed and Agriculture Agro Industries in Colombia | ICA - Instituto Colombiano Agropecuario,” Portal Corporativo ICA, accessed February 16, 2023, <https://www.ica.gov.co/noticias/agricola/2010/nueva-era-para-la-agroindustria-de-semilla-y-las-s>.

⁷⁹ Diego Silva Garzón and Laura Gutiérrez Escobar, “Revolturas: Resisting Multinational Seed Corporations and Legal Seed Regimes through Seed-Saving Practices and Activism in Colombia,” *The Journal of Peasant Studies* 47, no. 4 (June 6, 2020): 674–99, <https://doi.org/10.1080/03066150.2019.1668780>.

⁸⁰ Tamara Wattnem, “Seed Laws, Certification and Standardization: Outlawing Informal Seed Systems in the Global South,” *The Journal of Peasant Studies* 43, no. 4 (July 3, 2016): 850–67, <https://doi.org/10.1080/03066150.2015.1130702>.

⁸¹ Wattnem.

Americas. Hegemonic perceptions of appropriate land use and who has the right to make environmental decisions have transformed landscapes and economies across the continent.⁸²

This process of industrializing and commodifying agriculture accelerates biodiversity loss and land degradation in the face of climate change. Intensive, unsustainable farming practices push ecosystems toward collapse, depriving communities of their wealth. The changes in agricultural systems also have profound effects on the foods Colombians access. The more affordable foods are the ones produced at the largest scale, raising the premium for more nutrient-dense foods.

The prices and availability of local, fresh fruits and vegetables are also influenced by export policy built around specialization in products that are not necessarily native or dietarily beneficial to local populations. Colombia's focus on the export of flowers, particularly in Cundinamarca has altered the landscape of agriculture in the region. Patel-Campillo suggests that "an examination of export-oriented crop specialization and trade liberalization reveals that national export-oriented development strategies and trade liberalization are at odds with the aims of poverty alleviation and food security at the sub-national scale" (291).⁸³ Patel-Campillo looks beyond the loss of diversity in affordable food products in local markets. The commodification of labor locks workers into vulnerable positions while depriving them of the financial benefits of exports. The comparative advantage of specialization fails to address issues of food security and the preservation of rural livelihoods.⁸⁴

Agriculture and gastronomy as vehicles for cultural transmission

In the face of changing food systems, opportunities remain for the preservation of customs and local knowledge. Cultivation and cooking can be understood as acts of expression that encompasses a multiplicity of meaning. The energy and intentions put into producing plants reflect generations of accumulated knowledge. Creativity is embedded in the process of selecting ingredients and determining which processes to employ while cooking. Recipes bear cultural capital, conveying heritage and history. The tastes and smells that emerge from preparatory processes evoke memories, feelings, and emotions unique to specific locations. Dishes have the power to tell stories, composed of ingredients that reflect historical phenomena.

Humans communicate through food; the art of cooking can be understood as a language and the practice of sharing meals is central to forming a community. In discussing commensality, Abarca

⁸² Juanita Sundberg, "Placing Race in Environmental Justice Research in Latin America," *Society & Natural Resources* 21, no. 7 (July 15, 2008): 569–82, <https://doi.org/10.1080/08941920802111538>.

⁸³ Anouk Patel-Campillo, "Agro-Export Specialization and Food Security in a Sub-National Context: The Case of Colombian Cut Flowers," *Cambridge Journal of Regions, Economy and Society* 3, no. 2 (July 1, 2010): 279–94, <https://doi.org/10.1093/cjres/rsq011>.

⁸⁴ Patel-Campillo.

argues that the processes involved in food cultivation and preparation bring people together.⁸⁵ Abarca states that “Food should be recognized as a seed to be planted and cultivated in order to nourish healthy relationships by actively engaging with the communities we encounter throughout our lives’ journeys” (678).⁸⁶ She looks at the word *cocina* in how it is used in reference to the locations of cooking, the process of cooking, and the individual completing the action. Raw materials are converted into meals that carry cultural meaning—a process that can open doors to building shared food and nutrition consciousness.

Meals are also an expression of class, condition, and politics.⁸⁷ Individuals cook with ingredients they have access to, or because their palettes have been shaped by ancestral conditions. The rituals and methods of consuming food pair with preparations that also carry meaning. Consumption practices form cultural capital, a way in which norms and values are passed from one generation to the next.

Colombia is a region built on rich, diverse culinary practices. The biodiversity of its land, coupled with the mix of populations from distinct ethnic groups form unique dietary practices in communities across the country. The central ingredients to Colombian fare reflect a clashing of forces where sacred pre-Hispanic practices meet the output of specialized agriculture introduced with the emergence of global commodity markets. Corn, Cacao, and Coffee, which are exported globally, reflect both roots in international trade and indigenous populations.⁸⁸

With growing populations in urban areas where working schedules change, families are constrained by time and money in preparing meals. To fill this gap restaurants and street vendors offer inexpensive and affordable food options. Hamburgers and hotdogs are as ubiquitous as empanadas on the streets of every urban area. Some of the original alternatives to home cooking emerged as *almuerzos ejecutivos* (Executive lunches), *corrientazos* (run-of-the-mill) or *caseritos* (‘like at home’ or ‘mothers cooking’) as alternatives to the lunches traditionally prepared in homes. But these lunches are often not as healthy as they are cheap. As food prices have increased and workers are stretched for time, a lunch costing 8,000 to 20,000 COP, or \$2-5 can be a more affordable option than venturing home or bringing a meal to work, shifting consumption practices and nutritional intake.

The urban development in Colombia does not change the fact that the country is the second most biodiverse in the world, providing Colombians with a diverse array of fruits, vegetables,

⁸⁵ Meredith E. Abarca, “Commensality: Networks of Personal, Family, and Community Social Transformation,” *The Sociological Review* 69, no. 3 (2021): 664–80.

⁸⁶ Abarca.

⁸⁷ Juliana Mahecha, “A New Culinary Culture in Colombia: Equality and Identity in the Interpretation of Traditional Cuisines” (Cornell University, 2017), https://ecommons.cornell.edu/bitstream/handle/1813/51611/Mahecha_cornellgrad_0058F_10287.pdf?sequence=1&isAllowed=y.

⁸⁸ Mahecha.

legumes, grains, and tubers.⁸⁹ Yet the diets of Colombians increasingly do not reflect the diversity and abundance within the country's borders. Instead, the diets of Colombians reflect internal conflicts, international policy, corporate influence, and a cultural shift.

Colombia as a nation, and particularly its urban centers, have been successful in creating a new narrative of transformation. Medellín is mentioned around the world as a prototype for change. In 2021, Medellín was featured as Latin America's smartest city.⁹⁰ The urban center has transformed from its violent past into an example for how informal settlements can be incorporated into the formal economy. Green infrastructure and transportation systems have changed the dynamics of the city and thus its narrative and identity. But in the face of sudden transformation, it is crucial to think about the narratives lost and the opportunity for cultural restoration, particularly in the food space. In the next chapter I explore the variety of interventions led by NGOs—interventions central to revitalizing people's relationships with land and food.

⁸⁹ "Gastronomy for Development," Colombia Country Brand, October 4, 2013, <https://www.colombia.co/en/colombia-culture/gastronomy-development/>.

⁹⁰ "Medellín," Future Cities, accessed March 2, 2023, <https://www.futurecities.nl/en/cities/medellin-en/>.

Chapter 4: Interventions

Zooming in on the interventions of NGOs as pathways for improving nutritional knowledge

Introduction to Case Study Analysis

Community-level organizations have the unique ability to understand the nuanced dynamics affecting people's consumption patterns and reach individuals through ground-level programming. In this chapter, I analyze the ways NGOs bring a new understanding of diet and the pathway to better nutrition. As organizations struggle to find success in reaching communities in Colombia, they form a model for what interventions can look like in addressing nutritional deficiencies. Issues of nutritional knowledge, food access, and consumption practices are woven into intersecting narratives of sustainability, historical legacy, and financial empowerment. Through educating consumers on their diet, NGOs also communicate environmental initiatives that tie into food systems. This chapter will cover the techniques used by organizations and how they contextualize their work in Colombian society.

In this chapter, I begin with a general discussion of the organizations I engaged with in my research. The information supplements the organization overviews provided in the second chapter. By pulling from interviews with individuals working for NGOs, community members, government officials, and academics, I form a multidimensional view of interventions. I break down the chapter into three categorical concepts: captivation, education, and integration. By captivation I mean the techniques employed by organizations to reach individuals; education refers to the strategies used to deliver knowledge; and integration refers to how changes manifest within communities. The successes of the selected NGOs are largely dependent on how they each form narratives around their respective work. By breaking my discussion into these categories, I construct a blueprint for how organizations can work to reintegrate individuals into food systems through knowledge education and practice.

The Case for NGOs and Community-based organizations

In a landscape defined by its barriers, organizations in Colombia are redefining how successful interventions should be understood. The metrics conventionally used in diet-based public health initiatives can paint an oversimplified understanding of how non-communicable diseases should be addressed through nutrition. In the OECD's latest report on the burden of obesity in the 21st century, the findings concluded that a 20% reduction in calorie content for energy-dense food would have significant impacts on the rate of non-communicable disease, particularly heart

disease.⁹¹ The report added that physical activity should also be considered and cannot be neglected as a contributor to poor health outcomes. While data collected in the study support the relationship between caloric density and the tendency for overconsumption, it can be difficult to imagine the results of such recommendations at the ground level. Beyond pronouncements, facilitation of adoption is critical; this fails to address the lifestyle factors impacting people's decisions.

The organizations I engaged with in Colombia start with the relationships individuals have with food to foster consumer agency. In a market dominated by industry influence, policy initiatives aimed at shifting consumption patterns in society at large are slow to pass and limited in scope. The initiatives I focus on start with an individual. As individuals learn new ways to feed themselves and the benefits of a more nutrient-dense diet, they share those values with their family and friends. The rippling effects foster a culture of change with roots in communal practices.

Community-based interventions are also distinct in their ability to operate through multiple narratives. Organizations like Platos Sin Fronteras work not only to improve consumption practices, but also to use nutritional knowledge as a basis for agency and empowerment. Individuals gain nutritional knowledge that impacts their own life as well as their ability to enter the workforce. The organization Sumak Kawsay connects individuals to the native farming practices in Colombia through music and community-building exercises—practices that have a secondary purpose of generating consciousness in youth that were never educated on how food systems work. These organizations together form a web for how food can operate as a tool for building better livelihoods, self-esteem and empowerment, environmental sustainability, and community.

Captivation

Engaging individuals facing food insecurity and nutritional challenges is a complex undertaking. Several variables impact the ability of an organization to reach individuals. The neighborhoods where organizations operate are often defined by challenges, whether that be geographic limitations, political context, or fitting into the busy lives of families. The regions facing the highest levels of nutrition insecurity in Colombia's urban areas are informal settlements. With rapid urbanization due to internal displacement, settlements formed on the peripheries of cities. In Bogotá and Medellín, the low-income areas rise out of the valleys into the mountains surrounding the cities. The Soydooy Foundation, while located within the city limits of Bogotá, works with a community just beyond the city's border known as La Calera.

⁹¹ OECD, *The Heavy Burden of Obesity*.

Because the population living in La Calera is just beyond the city's limits, they are also not tapped into the city's water and gas. For families already suffering from economic hardship, the added burden of paying a premium for necessities eats into budgets for food. For each of the six women I spoke to in La Calera, the high cost of utilities framed our conversation around the possibilities for diet change. Food prices are also rising, as Jessica Garibero, a community member noted:

"Meat is expensive...This year everything has gotten more expensive, from transportation to groceries. And the minimum wage does not keep up with the rising prices. Everything is complicated" Jessica, community member in La Calera⁹²

The women I spoke to worked minimum wage jobs, they were stretched thin, making about 50,000 pesos per day as housekeepers for wealthier families in the city. Healthy food options were often outside their budgets and constrained by pressing realities.

Soydoy, like the other organizations I interviewed, seeks to provide families with pathways toward healthier habits, social mobility, and community building. These goals are not always immediate or tangible. Instead of providing physical items like food, the organization provides valuable services. One of the ways Soydoy engages families is through *Tamizaje* or medical examinations and checkups. Each family working with Soydoy gets a check-in about their health, is weighed, and assessed as to whether they may be overweight or underweight. The families then participate in programming; every 3 months Soydoy checks on their progress in adopting a healthier lifestyle. This program helps draw attention to health conditions that may otherwise go overlooked. One team member at Soydoy, Johana, spoke to the culture of concern in Colombia:

"There is a tendency in Colombia to focus on cases of malnutrition as being problematic when obesity and conditions of being overweight are often more prevalent. This is a cultural phenomenon brought about by a custom of worrying more about youth being underweight. Soydoy works to uproot this tendency by stressing the importance of health using a more comprehensive set of factors" Johana, Soydoy team member⁹³

The checkups offered by the NGO foster trust in the organization and open doors for participation in other activities. Through checkups, Soydoy broadens the definitions of health for community members. Johana spoke about the ways specialists ask individuals about aspects of their health beyond physical metrics. The continued check-ins couple biometrics with information that conveys how Soydoy impacts the behavior of families. Community members are questioned about how they are feeding themselves and the changes they have made. These

⁹² Personal Interview. Jessica, La Calera, 13 January 2023

⁹³ Personal Interview. Johana, Bogotá, 13 January 2023

feedback loops are vital to creating a sense of accountability for families working to make changes in their diet. The families are treated as individuals that form a unit. This is important in understanding how diets and practices are shared across generations and within families. Individual family members cannot be isolated from their familial context. Cira, one of the mothers interviewed summarized the connection:

“We come from a culture of rice and potatoes. Because our parents never taught us, or they didn't know how to eat well and have a plate of fruits and vegetables or because the cost was too prohibitive” Cira, community member in La Calera⁹⁴

Understanding the histories of family practices such as Cira's help identify resistance to change. It is also important to note here how success can take many forms. For families on the path to better livelihoods, a step in the right direction is not necessarily a few lost pounds. Buying and preparing more nutritious meals or removing unhealthy products from their diet can be forms of taking agency over their diets. Diet shifts can have immediate impacts on how people feel on a daily basis, regardless of their long-term health goals.

Captivation is also about bringing people together around a shared purpose. For Sumak Kawsay, the revitalization of ancestral knowledge brings together diverse groups of individuals. As Garces noted:

“You find indigenous people from Putumayo, from Nariño, from the Sierra del Cauca, from different regions of Antioquia, from Riosucio, Caldas. Well, there are indigenous people from all over the territory, because the University of Antioquia has some programs and there are also certain public policies that have progressively allowed the indigenous population to have access to the university, scholarships, and special support. Then many indigenous people go to the capital cities to study... We began to walk a lot with the indigenous communities and from there also our interest in resignifying this ancestral knowledge.” Esteban Garces, founder of Colectivo Sumak Kawsay⁹⁵

As discussed in Chapter 3, displacement and movement can pull people away from their identities. The agricultural projects are unifying in their ability to pull from diverse pools of knowledge.

Partnerships

The partnerships the organization forms also open avenues for community reach. In La Calera, Soydo reaches families through the local school where they have implemented a community

⁹⁴ Personal Interview. Cira, La Calera, 13 January 2023

⁹⁵ Personal Interview. Esteban Garces, Medellín, 20 January 2023

garden. Over the last 7 years, the garden has evolved into a central component of youth education, a program I will speak about in greater depth later in the chapter.

For other organizations like PSF, gaining traction in the community also depends on making a compelling argument for participation in the organization. The SENA partnership, or National Service Training, enables community participants to walk away with new marketable skills. The free workshops PSF offers in the Moravia community center are built around learning a new recipe while providing free instruction and food to participants. At Sumak Kawsay, Esteban Garces brings people together through music and other expressions of art.

“You come in making a song and people flock. And after you have them there, between songs, you also leave a message. So, I have seen that art has been a very useful tool for me in the territory. For example, for children and for conveying complex subjects, art makes it more digestible” Esteban Garces, founder of Colectivo Sumak Kawsay Medellín⁹⁶

Esteban uses the language of digestibility to describe the ways knowledge is interwoven into mediums like music to reach a wider audience. This is a common theme for every organization in this study as part of their efforts to create cultural ripples. In the presence of new and foreign information, individuals can feel overwhelmed. For information to be digestible it needs to be rooted in tangible steps. For organizations to captivate an audience, the first steps for community members must be small.

Social Media Presence

One of the ways organizations convey tangible first steps is through their social media activity. All the organizations mentioned have a presence on social media. Their platforms advertise community events as well as provide a stream of consumer-centered advice. The content provided by organizations reinforces the same lessons introduced through community events.

Following events, organizations post photos recapping highlights of speakers and participants. These posts have a dual function of reinforcing a sense of community, while advertising initiatives to individuals who may attend future events. Community members are excited to get involved and can have their participation validated through features on Instagram and Facebook.

In a generation defined by technology use, social media platforms represent a digital space for community building. The accounts of the organizations offer platforms for dialogue where leaders, community members, donors, and other stakeholders can interact in one place. The primary NGOs I interviewed, Platos Sin Fronteras and Soydoyle, have a network of collaboration on social media that enables them to spread their message across larger audiences. These

⁹⁶ Personal Interview. Esteban Garces, Medellín, 20 January 2023

collaborations reflect the ways in which organizations make up a web of actors operating on the same level. The collaboration creates a legitimizing force in which each organization backs up the other by finding public support.

Joint post with Platos Sin Fronteras and Fundación Soydooy



“Habit and diet consciousness in a plant-based kitchen with Camilo Perea” Platos Sin Fronteras & Fundación Soydooy [@platossinfronteras]. Photo advertising workshop in Bogotá. Instagram, 18 feb. 2023, <https://www.instagram.com/p/Coz319tug2c>.

I emphasize the importance of social media in the section on captivation because of the growing role the network plays in shaping global interactions. In addition to captivating individuals and family units in changing practices, social media situates the role of NGOs as community organizers. Platos Sin Fronteras is part of the Social Gastronomy Movement, which aims to form a network of organizations working to build social change, foster community, and transform individual lives through food.⁹⁷ The network echoes the role of social media I emphasize here, indicating strength in the number of collaborators on a city, state, and international level.

Education and Integration

So far, I have expanded upon the way organizations gain traction and establish a voice in communities. But getting families interested in attending events is not adequate. Organizations are ultimately looking for ways to instill knowledge that facilitates change in people’s habits. PSF and Soydooy pull from their position in civil society to bring together actors across the private and public sectors. NGO leaders can echo the realities and frustrations of communities as

⁹⁷ “Social Gastronomy Movement.”

they meet engaged corporations and government agencies interested in collaboration. In an interview with Daniela Correa, a team member at PSF, she spoke to what separates NGOs from other actors in the nutrition space:

“Working with a food ecosystem does make us different in that we can link different actors in the territory to address both the pedagogical and social advocacy aspects. That is, we can work with the Food Bank, but also with the supermarket, with the community, with the universities, with the private sector. I believe that this is something valuable and it is the strengthening of the social and community fabric that we can have.” Dani, Platos Sin Fronteras team member⁹⁸

The language of food ecosystems speaks to how the work of NGOs defies conventional structures which isolate actors and limit cross-sector communication. “Ecosystems” conveys the way building better nutrition depends on many different actors working collaboratively. The events that Soydooy and PSF put on are not explicitly advertised as workshops on cooking healthier; instead, the events are framed around building community and culinary capital. In doing so, the program works to empower women by building self-esteem and integrating new knowledge and techniques. The spread of nutritional knowledge is often only one factor in the range of events organized by NGOs.

Both Soydooy and PSF offer cooking classes primarily attended by mothers. I had a chance to speak with six mothers who have been participating in Soydooy programming in La Calera, just beyond the border of Bogotá. The mothers spoke of the changes they had made in their own lifestyles since working with Soydooy. Some of the mothers had cut back on soda and processed foods while others had implemented new dishes into their repertoire. One mother, Soldeza, spoke to the transformations in her own life:

“I’ve learned that I can use different vegetables to make all kinds of dishes. I never knew that I could use eggplant to make spaghetti, it was a small experiment, but now I make it for my kids with protein.”

“I learned how to make sorbet with carrots in papaya with a little bit of spinach. I learned all of this from Soydooy. I have taken what I learned how to do and gone to other areas of Bogotá to show them new techniques. I taught them how to make vinegar from bananas, strawberries... I went there and met a lot of people. Soydooy gave me the opportunity to become a leader, they gave me hands-on experience. And the kids are learning too.” Soldeza, community member in La Calera⁹⁹

⁹⁸ Personal Interview. Daniela, Medellín, 18 January 2023

⁹⁹ Personal Interview. Soldeza, La Calera, 13 January 2023

The passion in Soldeza's story conveys the ways knowledge and empowerment are linked. The six mothers I spoke to became friends through the organization and now attend and lead events, work on gardening projects, and maintain a wider support network. In the Colombian landscape, where wealth inequality is high, imagining ways to empower people beyond just financial terms is crucial to establishing a sense of self-worth. Part of building the agency of an individual is giving them the confidence and the desire of wanting to spread the knowledge to more people. Impacted mothers become a contact point for improving nutrition and diet for the next group of women.

Soydoy focuses on educating the public on the ways consuming diverse food groups affects day-to-day health. The women I spoke to talked about how children in the community may be sick, but mothers do not draw the connection between poor nourishment and disease. From the standpoint of community members, Soydoy focuses on drawing a connection between diet and health—a connection that does not necessarily exist or one that may be skewed in people's consciousness.

Education in schools

In filling the educational gap for families where food and health are conceptually separated, the neighborhood school of La Calera has transformed into an example of what food education can look like. The modest school sits atop a large hill overlooking the sprawling capital. Inside the gates, the schoolhouse is surrounded by lush gardens, composting areas, and raised beds full of plump vegetables. The women explained to me that the gardens serve as an extension of the classroom, a way for the teacher to integrate more tangible lessons into the standard curriculum. Cira, one of the mothers, spoke about the power of having gardens at the school:

“The farm is a way of teaching, there is math, colors...geography, history, where can this plant be grown? The children learn, usually you have to go to a private school for this kind of education...There are kids that don't know if a carrot comes from above or beneath the ground! It's great for the kids to be able to learn this stuff in school.” Cira, community member in La Calera¹⁰⁰

Through including gardening practices in school, the lessons learned in the garden become foundational to early childhood development. This aspect is crucial in thinking about the ways habits developed in youth have legacies for the rest of an individuals' lives. Connecting students to food systems through physical practice makes the lessons tangible. Students learn about composting practices and how food grows from a seed to become the dishes they consume for lunch. The lessons seek to bridge the disconnect brought about by displacement.

¹⁰⁰ Personal Interview. Cira, La Calera, 13 January 2023

McCune and Sánchez argue that bringing agroecology into the classroom, particularly in peasant communities, is a form of “territorialization.”¹⁰¹ Whereas traditional schooling is primarily based on teaching subjects that pull students away from the peasantry, incorporating agriculture into the classroom embraces livelihoods that have long sustained agricultural communities. In the case of the families in La Calera, the gardens offer a link to agricultural heritage. In the case of Sumak Kawsay, the practices employed in agricultural education vindicate local techniques and practices and instill a sense of pride in maintaining cultural heritage.

The teaching garden at the La Aurora school in La Calera



Source: photos taken by Solomon Treister, January 2023

Beyond education, students receive lunch through the La Aurora school. Soydox has partnered with the school to create a more nutritious menu. For many of the students, lunch is the one guaranteed meal of the day. The importance of schools as primary delivery mechanisms for nutrition operates in two ways. For academic spaces, the need to offer a balanced diet is critical in compensating for the lack of access many students face at home. But there is a secondary effect of keeping students in school by guaranteeing access to food every day. This is true for schools across Colombia, and the globe at large. Later in this chapter, I will look at the initiatives by the Medellín Department of Nutrition that mirror those of Soydox.

¹⁰¹ Nils McCune and Marlen Sánchez, “Teaching the Territory: Agroecological Pedagogy and Popular Movements,” in *Critical Adult Education in Food Movements* (Springer, 2022), 75–90.

In the rural areas of Santa Elena, there are other initiatives to integrate agroecological practices into the curriculum. Esteban Garces is involved in an educational project called Bosque Escuela Santa Elena. The school, named after the forest, is an alternative, community-based education project aimed at challenging traditional classroom practices by bringing in indigenous knowledge, ecological practices, art, and cultural management: preserving heritage practices. Garces runs workshops on regenerative farming practices, leading workshops on how to produce organic fertilizer (as seen in the photo below). Garces also works to generate awareness around the production of indigenous species. When I had a chance to visit his farm, Garces harvested a fresh Yacón, a fruit native to the region that is known for its sweet and nutritious flesh. He pointed out the Yacón as an example of one of the nutrient rich native plants that many Colombians today are no longer familiar with. Garces is committed to cultivating not only fresh produce, but appreciation for biodiversity and the revitalization of native species.

Sumak Kawsay Collective in Santa Elena



Source: photos taken by Solomon Treister, January 2023. (Left) View of teaching farm and Santa Elena in the background, (right) fungal compost project

The project at the Bosque Escuela highlights the process McCune and Sánchez call territorialization. In building social movements that foster more localized production and improve nutritional awareness, community members need to understand how realities and future

possibilities are shaped by historical narratives and practices.¹⁰² The knowledge cultivated through community programming prepares individuals to fight against systemic, institutionalized issues in food systems. Consumers need language and expertise to speak to their needs and rights, to push for changes in their communities. Participating in agroecological workshops allows individuals to imagine processes that exist outside of existing food systems and markets. Imagining processes outside the status quo is vital in thinking about potential solutions to epidemic rates of diet-related illness.

Making the link: food as a source of livelihood

The connection between food and health is driven by the common theme of understanding food as a source of livelihood. Food is empowering in its universal nature; it is a grounding force connecting individuals with what it means to be alive and the starting point for becoming physically well. Another mother in the Calera community, Jessica, shared the emotional story of how she arrived in La Calera from another municipality. She was displaced after one of her sons was killed at age 18; the violence her son faced left the family no choice but to relocate to La Calera. The heartbroken mother spoke to the hardships she faced and the ways her work with Soydox helped to connect her to a community and move through a healing process:

“We came here as displaced people. It's been really hard; they don't teach you how to move forward after losing your son. I found work in a kitchen and was able to move forward. I am accustomed to living here now... You never overcome the death of your own son. I have lived ten years with this burden... I keep going for the ones that are still alive.” Jessica, community member in La Calera¹⁰³

The burden of loss that Jessica faces is a layer atop the financial struggles she encounters caring for her 6 children as a single mother. Her younger children have participated in the program, and she has been able to incorporate lessons learned into her own life. Soydox does not have the financial resources to lift people out of poverty overnight. What the organization can do is give families a sense of direction, allowing them to see where change is possible within challenging circumstances and difficult pasts.

Jessica has worked with Soydox for nearly ten years and continues believing in its mission. The snacks and meals provided at the school are helpful for Jessica as well as the fruits and vegetables distributed by the organization. Through programming and community farming, she has learned how to use vegetables and legumes as replacements for meat, which has become more and more expensive.

¹⁰² McCune and Sánchez.

¹⁰³ Personal Interview. Jessica, La Calera, 13 January 2023

“All of these little farm projects serve us, they are a help, we can get lettuce and carrots from here.” Jessica, community member in La Calera¹⁰⁴

Farming helps Jessica and other women in the community experience a sense of autonomy. Where everything from water to food and gas needs to be paid for, the ability to cultivate food on her own is empowering.

Like Soydooy, PSF builds empowerment through initiatives in entrepreneurship. When women are certified through the SENA partnership, they gain knowledge that can be leveraged into financial opportunities. But they still carry the lessons learned into their own life. Food-centered entrepreneurship is multi-faceted. Cooking is personal. The act is a form of expression that conveys personal value. Entrepreneurs provide a product that benefits the public while also reinforcing strong personal values.

“We launched a brand, we helped [community members] to promote a brand that was called Bueno, it is now called Sabora Moravia. And from that, [the women] can have economic empowerment. In other words, many of them may not have graduated from high school, or even from university. Some are illiterate because they do not know how to write... but gastronomy, or food, is universal and unites us. You can sell a product and make money” Daniela, Platos Sin Fronteras team member¹⁰⁵

For individuals who have not had the opportunity to receive a full education, the kitchen offers a dignified opportunity to enter the economy. For the women working with Soydooy in Bogotá, empowerment takes the form of spreading knowledge throughout the community. For NGOs, this serves as a way of expanding reach:

“The session may reach 35 or 40 people. But if they bring that knowledge to their families, we become like 150 people” Daniela, Platos Sin Fronteras team member¹⁰⁶

Every NGO I engaged with stressed the importance of scaling up their programming to continue operating and increase impact. The ability to create scale through community-delivered knowledge is crucial as it does not depend on the addition of funding and resources. The greatest barriers to spreading knowledge are developing networks of trust and legitimacy. Participants in programming need to internalize the lessons conveyed enough that they are compelled to convince others of the importance of making changes. Through this process of transferred knowledge culture shifts and communities benefit.

¹⁰⁴ Personal Interview. Jessica, La Calera, 13 January 2023

¹⁰⁵ Personal Interview. Daniela, Medellín, 18 January 2023

¹⁰⁶ Personal Interview. Daniela, Medellín, 18 January 2023

Transforming habits and changing perceptions

“Let's say that from that point of view or from the indigenous cosmovision, there is a more integral view. So, when one speaks of good living, of living well, undoubtedly there are territorial elements, there are community elements, there are political, economic, relational, and practical elements. Therefore, we try, as far as possible, to ensure that the processes can be integral and transversal in this way...For example, education also has a bit of ritual” Esteban Garces, leader of Colectivo Sumak Kawsay¹⁰⁷

Organizations such as the Colectivo Sumak Kawsay seek to blur the boundaries between what may be conventionally understood as isolated components of a person's life. Some of the greatest barriers to encouraging new consumption practices are the lack of reasoning provided to justify the need for change. Esteban frames lifestyle choices in a wider, more compelling argument. If a person is told that they should eat more fruits and vegetables because they are healthier in comparison to ultra-processed foods, they may recognize the validity of the statement. But when fresh produce is significantly more expensive and cravings under time and budget constraints push individuals towards processed foods, building healthy habits can be a struggle.

Creating narratives with a more holistic understanding of diet and health offer a more compelling argument than the polarities of ‘unhealthy’ and ‘healthy.’ Esteban uses the term integral to describe the ways different components of individuals and their environments are related. Communities need to broaden their appreciation of how health is defined to comprehend the many ways their diet is implicated. In a broader sense, healthy eating is located at the center of many overlapping variables: macro and micro nutritional breakdown; environmental sustainability; exposure to toxicity; cultural heritage; eating practices; and agency and choice. I break down these terms in table 4, found below.

When individuals consider all the variables affected by diet choices, the decision of what to eat gains deeper meaning. In the programming of PSF, Soydo, Sumak Kawsay, and other organizations, contextualizing diet choices into narratives helps rationalize the need for diet changes. Knowing that processed food is high in calories carries a certain level of meaning, but understanding the other chemicals found in that food and how they impact health can push people a bit further in changing the way people feed themselves. For women living in La Calera, reducing meat intake for the sake of health is only slightly compelling compared to the overwhelming reasoning when considering environmental considerations and potential economic savings. The same argument can be made for classroom education. The inclusion of gardens and orchards in programming helps bring agricultural processes to life by exemplifying how food and consumers are situated within a singular system.

¹⁰⁷ Personal Interview. Esteban Garces, Medellín, 20 January 2023

Table 4
breaking down the components of diet and health

Variable	Definition
macro and micro nutritional breakdown	The makeup of different nutrients and their biochemical impact on a person
environmental sustainability	The ways dietary habits are directly linked to environmental health Certain foods are better or worse for planetary health when considering GHG emissions, land degradation, and agricultural inputs
exposure to toxicity	The chemicals found in foods can have effects on people's health beyond their nutrient intake
cultural heritage	Food has the potential to connect people to their ancestral heritage Understanding that food and identity are inherently linked
eating practices	When and where people eat affect people's relationships to food and their overall health The social aspects of eating also affect consumption
agency and choice	Recognizing where choices exist within the confinement of access and availability indicate that individuals are still making choices when resources are scarce

Understanding the Limitations

The details I have provided thus far outlining the interventions occurring in Medellín and Bogotá point to the successes at reaching individuals at the community level. But these programs are not without their constraints. NGOs face several challenges from the way they are structured to the environments they navigate. Interviews with NGO leaders on how they perceive their greatest barrier identified key constraints such as cultural challenges, funding issues, and scalability.

Cultural challenges

In this chapter, I have stressed the ways lifestyle changes proposed by organizations can be reflective of native regional practices. While this is accurate, the changes presented by organizations can feel foreign to families set in their own habits. The organizations are predominantly led by young women, adding another dimension to the barriers impeding people from embracing new ways of thinking. In communities dominated by machismo culture, young women are not respected in the ways they deserve. Conveying the legitimacy of knowledge is especially challenging when discussing the need for change.

Particularly in the remote communities where NGOs work to improve nutritional knowledge and access, the dynamics within participating families can be a barrier. One staff member at Soydo spoke to the challenges in neighboring indigenous communities where traditional practices still dominate. In some cases, heads of family are prioritized over the women and children when it comes to feeding. A child may be malnourished, but the father is still prioritized at dinner time. Overcoming these cultural barriers is complex. In certain communities, the condition of being overweight or obese is not seen as a priority—pointing to the need for building more comprehensive and compelling narratives around the varied implications of diet-related disease.

Funding Constraints

As mentioned earlier, the organizations I featured are focused on scaling interventions through fostering cultures of change in communities. The organizations depend on impacted community members spreading newfound understanding into their social circles. Organizations themselves are small, and restricted by the funding they receive. Organizations seek to reach more people than their tight budgets allow. And those agendas can be constrained further by corporate donors who have their own interests. If PSF or Soydo receives donations to have an event featuring a specific product, that limits the freedom of the organization. Other donors have rigid views of how events should take place, visions that can at times conflict with those of organization members.

One of the women I spoke to discussed the contradictions at play in taking on specific corporate sponsors. The holistic narratives of change introduced by NGOs encompass social, environmental, and nutritional values. Many corporations are more narrowly focused, creating tensions where there are conflicts of interest. NGOs walk a line between taking advantage of all the resources they can while not walking away from their own core values. While the tension between donors and organizations can be a burden, it also poses an opportunity for dialogue. NGOs depend on the support of corporate partners, but corporations also learn from the organizations working on the ground. The contact point between the two forces is necessary for triggering greater, systemic change.

NGOs recognize the need for corporate partnerships to build organizational momentum. But keeping the funding flowing and the dialogue open is no easy pursuit. It can be difficult to convey measures of success to funders that desire tangible impacts. Small changes in community health, financial security, and social cohesion can be hard to measure on paper. This lack of reportable data becomes particularly important when funding cycles are short. NGOs need to ensure that funding will keep their operations sustainable throughout the year. The changes that NGOs imagine and seek in communities at times exist outside of the capitalistic framework to which corporations are bound.

Scalability

Access to resources undoubtedly impacts the scalability of NGO interventions. Other partnerships with government entities also enable and impede organizational growth. When asked about the staffing constraints organizations face, one of the leaders pointed to the immense amount of work carried out by a small team. It can be difficult for organizations to determine the percentage of time that should be spent on grassroots interventions versus developing more partnerships. While partnerships are necessary, the process of gaining support can feel unbearably slow. In the following chapter, I will discuss the role of government and academic partners, all of which face their own set of challenges in pursuing change.

Conclusion

This chapter has outlined the context where NGOs and communities come together. Despite their limitations, the strategies NGOs employ find success in the changes seen throughout communities. I have highlighted what sets apart community-level knowledge-based interventions with conventional efforts aimed at improving food security. The NGOs highlighted in this thesis integrate a need for building agency, empowerment, and financial security through diet. Instead of being the primary goal, nutrition becomes a vector for a host of changes in people's livelihoods. In the following chapter, I investigate the role city governments and partnerships with academic institutions play in aiding cross-sector alliances and scaling up impacts.

Chapter 5: The Role of Governments and Academic Institutions

Contextualizing other interventions happening at the community level

“We are already talking about nutrition sensitive to agriculture, food production issues, who is the food producer. So, I think that just as people are making progress in understanding the problems of food, nutrition and food insecurity are related to everything that is not even the consumption of food, but the environmental, social and economic impacts in relation to everything that a food system implies. I think the food safety team understands this and we are continuing to work to respond to these needs and the new challenges that are being imposed on us globally” Staff member, Medellín Nutrition and Food Security Team¹⁰⁸

In the previous chapter I explored the role NGOs play in fostering better knowledge of nutrition and improved food access at the community level. While I am focused on the role community organizations play in implementing education and agroecological models to build agency in communities, NGOs are not the only actors catalyzing change. In the section on partnerships in Chapter 4, I discussed the challenges and opportunities of cross-sector collaboration. In this chapter, I will expand on the potential of collaboration while also introducing initiatives that run parallel to the ones described previously. In thinking about scalability, understanding the role of partners is crucial.

Kraak et al. describe the potential benefits and limitations of partnerships when assessing the potential for scaling nutrition-based interventions.¹⁰⁹ Kraak et al., when looking at the potential for partnerships with organizations working to address the double burden of malnutrition, break down potential challenges into six categories:

“(i) balancing private commercial interests with public health interests; (ii) managing conflicts of interest and biases; (iii) ensuring that co-branded activities support healthy products and healthy eating environments; (iv) complying with ethical codes of conduct; (v) undertaking due diligence to assess partnership compatibility; and (vi) monitoring and evaluating partnership outcomes” (509).¹¹⁰

¹⁰⁸ Personal Interview. Staff member, Medellín Food and Nutrition Security Team, Medellín, 24 January 2023

¹⁰⁹ Vivica I Kraak et al., “Balancing the Benefits and Risks of Public–Private Partnerships to Address the Global Double Burden of Malnutrition,” *Public Health Nutrition* 15, no. 3 (2012): 503–17, <https://doi.org/10.1017/S1368980011002060>.

¹¹⁰ Kraak et al.

These challenges come into play with NGOs when they receive funding from private companies with their own financial interests. Governments also run into conflicts when they are forced to contract private companies through a bidding process. And in the case of university groups, funding can shape the direction and potential of different projects.

Governments and academic institutions have access to resources, data, and expertise necessary for expanding operations. When in dialogue with the NGOs embedded in communities, the impact is amplified and becomes more sustainable. But government organizations and other institutions are not without their own challenges. This chapter will provide a blueprint of other actors working to use food as a vector for change and foster better nutritional knowledge.

In this chapter, I focus on the Medellín Food and Nutrition Security Team as well as initiatives that have formed at the University of Antioquia, located at the center of Medellín. While these organizations are only two of many institutions operating in the urban areas of Colombia, they offer insight into the strengths and weaknesses true of organizations around Colombia and the globe.

Medellin Food and Nutrition Security Team

Similar to the ways NGOs can serve as intermediaries, connecting vulnerable populations to resources and opportunities, Medellín's Food and Nutrition Security Team serves as an intermediary between the local actors, diverse communities, multilateral organizations, and state governments. Founded in 2009, Medellín is the first city in Colombia to have a team dedicated to food and nutrition security.¹¹¹ The team has various programs and operates as part of the Secretariat of Social Inclusion, Family, and Human Rights. The group is primarily focused on assisting vulnerable populations through public policy and food security and sovereignty. The team has a particular emphasis on “knowledge generation,” having to do with the collection of data that can implement policy and decision-making. The lack of data available on the food security situation was brought up in both meetings with NGOs and members of the Food and Nutrition Team. The team has a diverse array of ambitious projects, but they still lack the scale needed to reach the overwhelmingly large population facing food insecurity. As one member of the nutrition team put it:

“We need to reach a much larger population so that individuals at that stage of consumption perceive themselves as part of a food system, which is one of the most complex links” Staff member, Medellín Nutrition and Food Security Team¹¹²

¹¹¹ “Unidad de Seguridad Alimentaria | Medellín | Facebook,” accessed March 7, 2023, <https://www.facebook.com/profile.php?id=100067080363872>.

¹¹² Personal Interview. Staff member, Medellín Food and Nutrition Security Team. Medellín, 24 January 2023

The programs of the nutrition team range from more knowledge-based projects aimed at generating awareness and disease prevention to creating avenues for the delivery of food. The main programs of the team fall under the following categories: Basic Basket of Rights, Social Strengthening Actions for Care and Protection, and Public Policy and Governance of Food and Nutrition Security.¹¹³

Understanding the programs and their challenges

The Medellín program works to deliver assistance to the families most in need through food vouchers and a school feeding program. One of the programs works to deliver vouchers to families in need of nutrition assistance. The program takes pride in allowing citizens to maintain agency over their shopping practices. For individuals to obtain the vouchers they must also participate in an education program. The program is crucial in providing families with knowledge on how to use vegetables, legumes, and other products; employ safe food storage strategies; as well as prepare economical meals. The families participating in the program attend education sessions regularly where general health information is also on the agenda, such as strategies for incorporating physical activity and developing healthy habits. Currently, 10,000 individuals participate in the voucher program.

The number of individuals in the program may seem impressive upon first glance, but in a city where 53.6% of the population faces some level of food insecurity, there is great room for expansion. One of the most successful programs has been the school feeding program (PAE). The program ensures students get nutritious lunches on a daily basis as well as breakfast and supplementary snacks.

The nutrition team is proud of their work in implementing the school feeding program, but they do not shy away from mentioning the program's challenges. Due to the government structure and public bidding process, the companies providing food in schools are only contracted for 3 months at a time. The team thus spends a significant portion of their time working on setting up contracts and must repeat the process multiple times a year. The process is lengthy with technical specifications that occupy a large portion of the team's time. Logistical issues are layered on top of basic infrastructural problems like having adequate spaces for the preparation of lunches.

One of the team's programs built around education is the community gardens and orchards initiative.¹¹⁴ The team employs a strategy of self-sustainability by distributing kits for personal

¹¹³ "Equipo de Seguridad Alimentaria y Nutricional de Medellín," Alcaldía de Medellín, accessed March 7, 2023, <https://www.medellin.gov.co/es/secretaria-de-inclusion/subsecretaria-de-grupos-poblacionales/equipo-de-seguridad-alimentaria-y-nutricional/>.

¹¹⁴ Proyecto de Actualización de la Política Pública y Gobernanza de Seguridad Alimentaria y Nutricional, "Plan de Educación En Alimentación y Nutrición: Política Pública de Seguridad y Soberanía Alimentaria y Nutricional" (Alcaldía de Medellín: Distrito de Ciencia, Tecnología, e Innovación, 2022).

and community gardens. The aim of the project is to foster self-sufficiency for families in both the urban and rural areas of the city. The program introduces a new stream of access to fresh fruits and vegetables while also demonstrating how individuals can be integrated into food production processes. In certain cases, the gardens can also be utilized for commercial use, giving families financial opportunity. The department demonstrates how sustainable, small-scale agriculture can be a source of livelihood.

In creating lucrative pathways for low-income families, the nutrition team also works on creating channels for delivering products to market. Intermediation is one of the biggest barriers impeding producers from having profitable operations. By intermediations, I refer to all steps to get food from where it is produced to customers. The team works to subsidize transportation costs, enabling producers to see more of the profit that would otherwise go to intermediaries. These subsidies are paired with technical assistance which educates families on sustainable production practices, pest management, and disease prevention. So far, the team has helped 2,500 families implement personal gardens with an additional 300 families cultivating farms commercially.¹¹⁵

These programs are impressive in their ability to imagine solutions to nutrition security that exist outside of existing food markets. The team understands that conversations around food security cannot stand alone. Education on how environmental dynamics tie into food security initiatives is crucial. As one of the staff members stated:

“I think that people are making progress in understanding that the problems of food, nutrition and food insecurity, are related to everything beyond the consumption of food, the environmental, social and economic impacts in relation to everything that a food system implies. I think the food safety team understands this and we are continuing to work to respond to these needs and the new challenges that are being imposed on us globally” Staff member, Medellín Nutrition and Food Security Team, 24 January¹¹⁶

With all their ambitious programs, the nutrition team faces a series of challenges that reduce their efficiency and reach. The primary constraint for the agency is access to resources. The team does not have the funds to reach every individual facing nutrition insecurity. Furthermore, government agencies are siloed. While there is overlap between what the nutrition team does with the Territorial Management and Control Secretariat, as well as the Secretariat of Economic Development, the agencies have limited collaboration.

Within community interventions, the nutrition team seeks to instill a higher level of self-sufficiency. Personal and community gardens experience success, but then there are lags in programming due to contract renewals, and gardens may die. These programs then lose

¹¹⁵ Personal Interview. Staff member, Medellín Food and Nutrition Security Team. Medellín, 24 January 2023

¹¹⁶ Personal Interview. Staff member, Medellín Food and Nutrition Security Team. Medellín, January 2023

momentum and require more resources to start up again. Figuring out how to create programs that can be sustained within communities is central to ensuring lasting improvement. The nutrition team hopes to improve citizen participation. Currently, the team engages with roundtables of 15-20 community members in each of the zones where there is a project. The roundtables are aimed at building groups of community leaders, but often people show up solely for educational opportunities. The nutrition team aspires to engage citizens in a way where they feel part of the policy-making process. But the team wants to reach more individuals so that programs can continue through lags in government presence. These aspirations are tied to an overarching lack of awareness within government of the critical role of the nutrition team.

There are other more basic technological challenges that the agency faces. While data collection is one of the main initiatives of the group, the process is still inefficient. Within programs, the lack of adaptation to available, more advanced technology also poses challenges for the team. The vouchers distributed to families for buying groceries are still paper, while the nutrition team is working to implement a credit card system. The team also seeks to update the school lunch program by incorporating facial recognition. Currently, each student has to physically sign off to receive their daily portion. The agency could also have a greater presence in the digital space as a way to reach more individuals.

In broader terms, the agency also understands some of the more fundamental shifts necessary to address the changing landscape of nutrition challenges. As it stands, the agency is primarily focused on issues of malnutrition in a deficit. But with growing rates of obesity and diseases related to the excess consumption of calories, the agency will need to widen its focus. The agency is also targeting partnerships with more organizations. The partnerships enable leaders from the NGO space and academia to have a say in public policy. The public policy of food security and sovereignty was born in 2005, but this year (2023) it is being updated. The agency is currently engaged with 27 population groups as well as 27 stakeholder groups.¹¹⁷ Strengthening these partnerships creates a two-way effect where initiatives benefit from outside expertise and organizations are empowered by the opportunity to participate in policymaking.

The role of academic groups

University groups are uniquely positioned between the public and private sectors. Universities are key players in the imagination of and development of solutions to issues of nutrition and food security. There is a long tradition of social movements and activism on university campuses in Colombia. Issues of public health, particularly when framed as a result of changing food systems and socio-economic conditions, pose an opportunity for students to get involved. Through learning about the history of food systems, the geopolitical dynamics impacting food availability,

¹¹⁷ Personal Interview. Staff member, Medellín Food and Nutrition Security Team. Medellín, Colombia. 24 January 2023

and the cultural shifts that have occurred within Colombia, students develop a greater appreciation for the possibilities for change.

At the University of Antioquia in Medellín, students and faculty come together around a shared desire to improve the nutrition situation in Medellín. Similar to the initiatives of NGOs and the nutrition team at the mayor's office, the group utilizes an agroecological model to facilitate knowledge building while empowering greater food sovereignty. The Bioali group at the University of Antioquia was formed in 2004, bringing together professors and students from diverse disciplines. Faculty from the areas of biotechnology and food science convene to conduct research projects, work on product development, and create social initiatives. The group has projects to reduce food waste, create better packaging, and build food sovereignty in areas of the city that have historically lacked access to healthy, fresh foods.

The broad focus of the group on issues ranging from food waste to production demonstrates how these issues are tied together. The harmful health effects of ultra-processed food on population health are not isolated from the toxic threats packaging poses to the environment and local ecosystems. These relationships enter into projects of the Bioali group.

In an interview with a group member, Associate Professor Juan Carlos Amaya Gómez, he characterized the food space in Colombia by its lack of innovation in recent years. While there have been many changes in the last 50 years due to the industrialization of agriculture, the university team imagines agricultural systems that exist outside of the structure of current systems.

One of the projects of the Bioali group is a high-tech greenhouse located in a resource-poor area of Medellín. The greenhouse is productive in providing fresh fruits and vegetables for the local community, but for the university team, the most important aspect of the project is its positioning at pedestrian level on the sidewalk. The greenhouse is also a community-building space, bringing together mothers and children from the community around education and financial empowerment. There is an educational facility attached to the greenhouse as well as a lab where women from the community work to produce vegetable protein.

The lab serves another purpose in offering a space for small-scale producers to innovate minimally transformed products. If farmers are able to convert raw produce into market-ready products, they can generate value-added revenue, making small-scale production more viable. Just outside of Medellín in the city of Marinilla, a group of students worked with mothers to create a business selling vegetarian proteins and other food products. The brand, 'Somos Campo,' is now sold around Medellín. The Somos Campo project also has a significant presence online where the group produces educational content aimed at making gardening and healthy

eating more accessible.¹¹⁸ The project is also tied to culinary restoration, a way of incorporating heritage into narratives of change.

“The focus is not French cuisine or Italian cuisine. No, the focus is the rescue of culinary traditions and Colombian cuisines. So what does that bring? Basically, it is a matter of making the most of what we have. It is a matter of valuing traditions and rescuing traditions. It is also a matter, of course, of vindicating the cook's profession” Professor Juan Carlos Amaya, University of Antioquia, Medellín¹¹⁹

The process of culinary restoration is deeply intertwined with agricultural narratives. The university group works to restore corn varieties for consumption. In a country with a long heritage of corn consumption, Colombia now imports most of its corn from the US. The initiative has planted over 3,000 hectares of native corn. For the university group, the project is also about restoring memory. The group works to grow plants that haven't been cultivated for generations. The group also works to cultivate land that was taken by paramilitary groups and later redistributed by the government.

The efforts of the group are not capable of creating the systemic change needed to address the root issues of food insecurity. The root issues are structural, embedded in institutions that stand powerful against the desires of civil society. But the programs bring new ideas to the table:

“This is not a massive program. Well, we are not, we are not the mayor's office, we cannot change an entire territory, but there is a focus or an example that changes can be made” (Professor, University of Antioquia, Medellín, 24 January 2023)¹²⁰

The university group also has their own way of defining and creating narratives around food insecurity. Returning to the concept of food security as a vector for social change, the university group focuses on academic outcomes as a measure of impact. In homes where students grow up with limited exposure to role models supporting their academic careers, every hardship works against them. The added costs of living in informal settlements, the lack of dependable sources for nutritious food, and the lack of infrastructure in those communities all act against the potential for academic success. Getting students involved with community gardens isn't only about eating more vegetables, it's about showing families that there are pathways to success that begin in their underprivileged neighborhoods.

¹¹⁸ Marinilla, *Es Despensa Agrícola Nacional - Somos Campo.Tv*, 2020, <https://www.youtube.com/watch?v=NKLNcOkQUzE>.

¹¹⁹ Personal Interview. Professor, University of Antioquia, Medellín, 24 January 2023

¹²⁰ Personal Interview. Professor, University of Antioquia, Medellín, 24 January 2023

Conclusion

Bringing together narratives, recognizing limitations, and exploring future possibilities

Throughout this project I have explored the ways food can act as a vector for social change. I began with a question: how is diet related to poor health outcomes? But questions of physical and mental health fit into a much larger picture of livelihoods. In understanding livelihoods, we have to look beyond biometrics and see the ways health manifests in socioeconomic status, social mobility, academic outcomes, community involvement, and all the other variables that shape individuals' lives and contributions to society.

As grounded in the work of the OECD, McDonald et al., Miljkovic et al., Gomez et al., etc, it became clear that diet affects not only the lives of individuals, but economies and environments as well. The growing rates of non-communicable disease in Colombia represent just one piece of the puzzle when situated within narratives of lacking financial resources, poor opportunities, food access issues, barriers to education, and forced migration.

The relationship between diet, nutrition, and health can be characterized as a self-perpetuating cycle. The urban communities most affected by poor nutrition are the ones facing the highest costs of living. Where residents are cut off from municipal utilities, everything from gas and water to meat and produce is more expensive. But individuals still must find ways to feed their families. Through my research into the interventions of NGOs in Medellín and Bogotá, I came to understand a more comprehensive narrative for characterizing the relationship between diet and health. By looking at environmental, agricultural, political, and social histories, it becomes evident how individuals have been disconnected from food systems. In a nation with a strong agrarian heritage, displacement has severed the relationship between individuals and their land.

The interventions of NGOs focussed on nutritional knowledge as a vector for change seek to reframe how we address diet-related diseases—particularly when contrasted with humanitarian interventions focused on solely supplying access to food. In a country with an extensive agricultural past and access to some of the most biodiverse lands on earth, individuals have lost touch with the food systems in which they are embedded. The organizations Platos Sin Fronteras, the Soydooy Foundation, Colectivo Simbionte, and Sumak Kawsay seek to reintegrate consumer consciousness into communities. And in doing so, food becomes a richer aspect of people's lives. Instead of solely a form of subsistence, food becomes an opportunity for health, community building, entrepreneurship, and cultural expression. Choices in diet become more intentional, and

in turn, individuals are more in tune with their own health and aware of how daily eating choices impact their well-being.

These organizations work to build empowerment within communities through education on culinary and agroecological practices. Through learning new techniques for food preparation women are empowered to care more about the foods they consume and provide to their families. Knowledge of the negative health impact of certain foods and the possible benefits of others create tangible channels for agency. Through community and family gardening projects NGOs generate both access to fresh produce and appreciation for how food systems operate in a way that is accessible to individuals of all backgrounds.

Food becomes a vector for social change that encompasses dietary shifts, increased self-awareness, community building, and entrepreneurship. Communities can see their diet not as a byproduct of impoverished conditions, but instead as an opportunity to develop wealth in the face of challenging circumstances. The knowledge introduced around food cultivation and preparation opens doors for other conversations about the environment, social issues, and broader health considerations beyond diet. Part of what organizations are doing is drawing connections between isolated components of people's lives and their understanding of the world. The more educated consumer is better equipped to support other social and environmental initiatives.

The interventions included in this thesis are relatively small in comparison to widespread cases of nutrition insecurity across Colombia. I believe that looking at these interventions is crucial for developing scalable programs that include the kind of programming employed by NGOs. Smaller, community-level organizations are limited by resources. But larger multilateral organizations and federal governments can employ similar techniques to reach a wider audience. Partnerships between governments, corporations, and larger organizations with local leaders can help build understanding of the complexity of community interventions.

The interventions are not without their own shortcomings and face a series of challenges when thinking about the potential for scalability. The practices of personal cultivation, seed preservation, and shifting diets can be understood as imaginary solutions outside of the market-driven structure of society. The influence of multinational corporations permeates everything from local politics to cultural norms around how people understand and relate to food systems. But the first step is establishing knowledge. Individuals need to be equipped with the knowledge to articulate the nutritional issues they face and the systemic issues of current food systems. This knowledge allows individuals to tap into other environmental struggles.

Beyond the community and personal gardens changing the way families consume and think about food, these initiatives point to larger needs within the food system to become more

sustainable. By generating greater awareness in consumers, communities are able to leverage their desires to push for changes in the large producers of the world. In a report from the International Panel of Experts on Sustainable Food Systems (IPES), analysts outline the consequences of industrialized food systems and the need for diversification.¹²¹ While current food systems characterized by monoculture crops and heavy chemical inputs have been successful in feeding a growing population, the current systems have had profound effects on population and planetary health. Widespread GHG emissions, land degradation, and ecosystem pollution have introduced high levels of toxicity into our biome. The changes in food production are tied to obesity and other diseases which make populations more vulnerable.

The report points to the loss of biodiversity as a threat to future sustainability initiatives and a reason to invest in agroecological initiatives.¹²² Box 1 below highlights one of the recommendations from the report.

Box 1

Uniformity to Diversity: a paradigm shift from industrial agriculture to diversified agroecological systems (2016), pg 71.

Recommendation 5: Strengthen movements that unify diverse constituencies around agroecology.

Many of the most promising developments profiled in Section 3.a are grassroots, bottom-up, farmer- and consumer-led initiatives. Where they are making the biggest inroads, they are doing so by reaching across divides and creating new constituencies of pooled interest.

The report suggests a need for better education on the functioning of food systems within school curriculum, as well as support for better research to fill the gaps in agroecological knowledge. The findings also suggest governments adopt agricultural subsidies for sustainable initiatives. Expert information and recommendations from organizations like IPES, CGIAR, FAO, and WFP and individual communities can help build pressure on governments from multiple angles. This is also true for large transnational corporations, which adjust to the desires of consumers.

The populations at the center of this paper often lack the kind of consumer power needed to have an impact on corporations. For consumers in resource-poor areas in and around urban areas, diets are shaped by a lack of choice. But the desire to imagine food systems outside of reliance on traditional markets indicates a desire for change. More localized food systems change the foods people have access to and the prices they pay. Governments can look to this desire as a reason to reduce trade liberalization policies that disempower local, small-scale farmers.

¹²¹ Emile A. Frison, "From Uniformity to Diversity: A Paradigm Shift from Industrial Agriculture to Diversified Agroecological Systems," *IPES-Food*, 2016, <https://hdl.handle.net/10568/75659>.

¹²² Frison.

I bring in the need for broader changes in agricultural systems to highlight how the NGO interventions in Bogotá and Medellín fit into a much larger narrative of institutional change. The individuals I interviewed are looking for ways to create improvements in their own lives while situated within a system working against their health and in need of fundamental transformation. Understanding how localized projects fit into national, and global narratives of food system transformation help foster legitimacy and support across movements. The community garden initiatives and culinary classes designed to foster a better understanding of nutrition and food systems are a tangible starting point in the face of systemic issues.

Elevating the voices of indigenous populations who have long employed what has been termed ‘agroecological practices’ is crucial in imagining a society-wide change in Colombia. Since European Enlightenment, the separation of nature and man has long been a cornerstone of Western society, fueling imperial pursuits across the globe and extractive relationships with environments.¹²³ We can understand the deterioration of population health as a byproduct of extractivism, leading to the poor health outcomes ubiquitous in the 21st century.

In summary, this thesis demonstrates how NGOs use food to create social change at the community level and foster cultural shifts in how people think about food systems. Building nutritional knowledge empowers individuals to take agency over their own diet and the ways they interact with the environment. The work of organizations in the urban areas of Medellín and Bogotá contains lessons and other pursuing pathways of agroecological change.

¹²³ Jay T. Johnson and Brian Murton, “Re/Placing Native Science: Indigenous Voices in Contemporary Constructions of Nature,” *Geographical Research* 45, no. 2 (June 1, 2007): 121–29, <https://doi.org/10.1111/j.1745-5871.2007.00442.x>.

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Appendix of Interviews

1. Claudia Rubiogirardo, team member at Platos Sin Fronteras, over zoom 5 July 2022
2. Daniela Correa, team member at Platos Sin Fronteras, in Medellín 17 and 24 January 2023
3. Laura López, community organizer with the Corporación Simbionte, in Medellín 20 January 2023
4. Esteban Garces, Founder of Colectivo Sumak Kawsay, in Medellín 20 January 2023
5. Juliana Reina, team member at Fundación Soydo, in Bogotá 13 January 2023
6. Cleida, Community member in Moravia, in Medellín 24 January 2023
7. Soldeza, community member in La Calera, in La Calera 13 January 2023
8. Cira, community member in La Calera, in La Calera 13 January 2023
9. Monica, community member in La Calera, in La Calera 13 January 2023
10. Maria, community member in La Calera, in La Calera 13 January 2023
11. Jessica, community member in La Calera, in La Calera 13 January 2023
12. Liliana, community member in La Calera, in La Calera 13 January 2023
13. Juan Carlos Amaya Gómez, Professor at the University of Antioquia and member of the Bioali group, in Medellín 24 January 2023
14. Ana Isabel, Student at the University of Antioquia and member of the Bioali group, in Medellín 24 January 2023
15. Cesar Augusto Trujillo Morales, Medellín Food and Nutrition Security Team, in Medellín 24 January 2023
16. Michell Dyan Barrientos Arango, Medellín Food and Nutrition Security Team, in Medellín 24 January 2023
17. Karen Valeria Montaya, Medellín Food and Nutrition Security Team, in Medellín 24 January 2023
18. Luis Bello, Medellín Food and Nutrition Security Team, in Medellín 24 January 2023
19. Jenifer Puerta Zapata, Medellín Food and Nutrition Security Team, in Medellín 24 January 2023