
Executive Summary

Malabon City has long been one of the areas with the highest rates of malnutrition in the capital region of the Philippines. In 2013, 16.3 percent of children in the city were stunted, or short for their age because of low nutritional intake. Stunting causes diminished cognitive and physical development, which limits the productive capacity of children. The high stunting rate meant a huge loss in human capital potential for the city. The city’s Nutrition Office had found it difficult to reduce the incidence of malnutrition because of budgetary constraints and a lack of awareness among mothers and caregivers about proper child nutrition. In 2014, the local government started to prioritize eliminating malnutrition by drafting a comprehensive nutrition plan that involved attracting donors and educating mothers. The city encouraged businesses to donate goods and facilitated community participation in delivering feeding programs. The city also encouraged mothers to attend family development sessions and provided school supplies, groceries, and free meals to participants. By 2017, the city had cut stunting rates to 5.13 percent.

Introduction

In the Philippines, three babies are born every minute, but the country’s 12 million children often receive inadequate childcare and nurturing services (Philippine Statistics Authority 2017). Child poverty has been on the rise since 2009, with malnutrition being among the biggest contributing factors (Reyes
et al. 2014). In 2017, Save the Children, an international nongovernmental organization (NGO), ranked the Philippines 96th out of 172 countries in its child development index, a tool used to measure child well-being around the world (Geoghegan 2017). According to 2015 government figures, more than 3.7 million Filipino children ages 0 to 5 were stunted, meaning they had low height for their age (Aquino 2016). Stunted children suffer from diminished cognitive and physical development, and they experience reduced productive capacity and an increased risk of degenerative diseases.

Chronic child malnutrition was highly prevalent in Malabon City, part of the National Capital Region surrounding Manila, the Philippine capital. Located at the northwestern tip of the Manila metropolitan area, Malabon City was home to about 350,000 people in 2017. The Department of Social Welfare and Development considered about a quarter of the households poor (National Housing Target System for Poverty Reduction, as cited in Malabon City 2017b). More than 6,000 businesses were registered in the city, and the employment rate was high at 95 percent; however, a significant portion of the labor force was engaged in vulnerable, low-income employment (Malabon City 2017a, 70).

For years, the city had one of the highest rates of stunting as well as wasting (that is, a low weight for height) in the capital region. In 2013, the World Health Organization recorded a 16.3 percent stunting rate in Malabon City, meaning that about 5,700 of the 35,000 children in the city who were under five years old were stunted. Other nutritional status indicators, such as being underweight and wasted, were relatively low at 3.79 percent and 2.75 percent, respectively.

Part of the reason for the high stunting rate was that some families simply did not have enough income to buy food for their children, but parents’ lack of awareness of proper nutrition and food preparation was also a major factor. Families with low nutrition awareness are often those in which the parents have a low level of education, and in Malabon City, just 58 percent of the urban poor had reached secondary school. A high incidence of teenage pregnancy among low-income families is usually correlated with poor nutrition awareness because young girls in this socioeconomic bracket often lack the education, experience, and maturity to take care of their children. Their lack of education also keeps them from getting employment with sufficient pay, making it difficult for them to buy basic household requirements such as food. In 2016, Malabon City recorded a total of 888 pregnant girls, some as young as 10 to 13 years old (Malabon City 2017a, 24). The largest number of young mothers was found in Catmon, the barangay that also had the highest prevalence of malnutrition (Malabon City 2017a, 24). A barangay, which is loosely translated in English as “village,” is the smallest administrative unit in the Philippines.

The National Nutrition Council, the country’s policy-making and monitoring body for nutrition, recommended that each city’s first lady become a champion of nutrition, appointed as a city nutrition action officer. Following those guidelines, Malabon mayor Antolin Oreta III appointed his wife, Melissa Sison-Oreta, as city nutrition action officer in 2014, putting her in charge of the city’s Nutrition Office. Sison-Oreta had previously been a chef and a program director of the Center for Culinary Arts, a leading culinary education institution in the Philippines. Her extensive experience in food preparation and nutrition made her a good candidate for the role of nutrition action officer.

Delivery Challenges

Financial Constraints

In 2012 and 2013, Malabon City’s Nutrition Office had a budget of just P300,000 (about US$7,000 at the time), reflecting the low priority the government placed on nutrition programs. With such a low budget, the office could fund only an annual weighing program called Operation Timbang Plus (OPT+) that compiled data on child malnutrition (see figure 1) and some promotional activities during “National Nutrition Month” in July. Feeding programs occurred only when the national government or NGOs sponsored such activities.

Lack of Skilled Personnel

The Nutrition Office lacked sufficient personnel to provide effective nutrition services. In 2014, the government employed just one nutritionist for all of Malabon City. Before 2011, Malabon City had five nutritionists, but when four of them resigned in 2011, the government did not hire replacements. The nutritionists in the office played a critical role because their

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1 Population data, as of 2010, provided by the city government.
responsibilities included managing nutrition programs and submitting project proposals related to improving the nutritional status of the children. They coordinated with the barangay nutrition scholars and barangay health workers, who worked at the village level, and with higher-ranking officers such as the city nutrition action officer (Sison-Oreta). The nutrition scholars and health workers implemented and monitored the nutrition programs on the ground while the nutritionist provided the general vision and direction of the team, with the approval of Sison-Oreta.

**Poor Stakeholder Engagement**

Lack of coordination between members of the city’s Nutrition Committee (an interdepartmental unit composed of offices that are supposed to work together to tackle nutrition deficiency) was a major hurdle. The committee consisted of the Department of Education, the City Social Welfare and Development Department, the Public Employment and Services Office, the City Environment and Natural Resources Office, the Public Information Office, the Planning Department, and the Budget Department, which were all located in City Hall, and the Nutrition Office, which was in a different location. The distance between the offices prevented the Nutrition Office, which chaired the committee, from establishing close communication with the other committee members. The Nutrition Office collected reports on each unit’s activities but struggled to coordinate the committee’s efforts.

The local office of the Education Department, part of the national government, had its own school-based feeding program for students in kindergarten through sixth grade (students approximately 3 to 12 years old). The local arm of the government’s Social Welfare and Development Department had another supplementary feeding program for five-year-olds. Neither program was linked to the city’s overall nutrition plan.
For the Nutrition Office, which aimed to ensure overall city health and nutrition through its feeding program and through OPT+ (the latter of which mainly focused on children ages zero to five from poorer families), it was crucial to facilitate smooth coordination with the different programs. OPT+ measured the weight and height of children less than six years old, generating baseline data for local planning and monitoring.

Household-level food insecurity posed a major threat to the continuing improvement of the children’s nutrition status. The government’s expenditures on meal preparation and efforts to educate mothers would be useless if parents were unable to afford food for their children. For that reason, the Public Employment and Services Office played an important role on the committee, because it helped provide employment to city residents.

Coordination with local communities also proved insufficient. Although barangay nutrition scholars, who collected data for the weighing program, sent the data to barangay captains (chief executives of the barangays), the captains were unable to interpret the information properly. Without a good understanding of the problem, barangay captains often underestimated the severity of malnutrition and prioritized other responsibilities and programs.

**Lack of Awareness and Misconceptions about Nutrition**

The city government also encountered low participation of mothers in nutrition-related activities. The nutrition scholars, who acted as the main project managers at the barangay level, often found it difficult to ensure that caregivers attended OPT+ sessions. The nutrition scholars said that parents often engaged in personal or social activities, such as watching TV shows or gambling, instead of attending the program. Other mothers found it difficult to attend because of the distance between their homes and the OPT+ venue, forcing some nutrition scholars to do house-to-house data gathering, taking time from other tasks. Some parents chose not to attend because of a widespread myth regarding deworming (which was part of the OPT+ program). The misinformation caused some parents to think that worms would come out of their children’s ears or mouth. In addition, some mothers chose to skip national government–sponsored feeding programs that their children could have benefited from.

In some cases, parents lacked the knowledge or ability to take care of their children in general. Mothers often fed their children unhealthy and easy-to-prepare foods, such as instant noodles, and nutrition scholars said they regularly observed poor hygiene among children across the city, with some children being unclothed and others wearing dirty clothes.

**Flood-Prone Location**

Whenever a typhoon or strong rain hit the city, OPT+ attendance plummeted even lower than usual. Being in a low-lying floodplain, Malabon City is among the most flood-prone areas in Metro Manila (see figure 2; Francisco 2017a). The Asian Development Bank also noted that Malabon City is among the most vulnerable cities in the country to a one-meter rise in the sea level (Francisco 2017a). Flooding is particularly problematic between May and October, the Pacific typhoon season, during which an average of 27 typhoons hit the Philippines each year.

**Tracing the Implementation Process**

After taking charge of the Nutrition Office, Sison-Oreta immediately reorganized her unit to better coordinate with other members of the city’s Nutrition Committee. From a cramped office detached from City Hall, Sison-Oreta relocated her team to the ninth floor of the City Hall building. From there, the Nutrition Office, which chaired
the Nutrition Committee, had better access to other committee members. Through improved coordination and regular meetings, the Nutrition Committee developed a more comprehensive annual City Nutrition Action Plan that included livelihood, social, and medical services. The plan detailed the malnutrition rates of each village, and the programs set out to reduce the incidence of malnutrition. Sison-Oreta knew it would take more than just a new action plan to turn malnutrition around. She and her team had to convince mothers to begin attending the Nutrition Office’s programs, to make sure children in the city were getting enough nutritious food, and to ensure that parents understood the importance of nutrition for their children.

**Incentivizing Attendance**

The government had to get parents and children to participate in OPT+, the annual weighing program, to properly monitor malnutrition rates and measure the effectiveness of OPT+ programs. In addition to collecting data, OPT+ provided deworming pills and vitamin A to children to help combat malnutrition.

To improve attendance rates, the government in 2014 decided to provide an incentive: free afternoon snacks for all children who participated.

Keeping with the program’s goals of improving nutrition, the Nutrition Office chose to provide boiled bananas, a healthy and common Filipino snack. Aside from motivating attendance, the bananas also ensured that the children had eaten before deworming.

**Piloting a New Feeding Program**

The Nutrition Office wanted to launch a new feeding program to tackle malnutrition in Malabon City directly and to reduce dependence on the uncoordinated national feeding programs. In 2016, the office decided to pilot the idea for 90 days in Catmon, the barangay in Malabon City that had the highest level of undernourishment. The program targeted 102 children in Catmon who were classified as malnourished.

The city government increased the Nutrition Office’s budget to ₱600,000 (about US$13,000 at the time), but the budget was still insufficient to fund the Nutrition Office’s activities as well as the pilot program that Sison-Oreta envisioned. To overcome the lack of resources, Sison-Oreta launched a donation drive to collect the goods the program needed. Forty private firms, institutions, and individuals made donations to the program, and the goods received included a gas tank; sacks of rice, garlic, and onions; condiments; meat; and multivitamins. Given the wide variety of donations, the Nutrition Office had to be creative in designing a menu that used all the donated goods. Sison-Oreta’s technical expertise as a chef came in handy as she improvised recipes that were based on the ingredients available. A traditional Filipino rice porridge that she cooked with a donation of Hershey’s chocolates proved to be extremely popular (Francisco 2017b).

**Scaling Up the Pilot**

The success of the pilot program motivated the Nutrition Office to expand action to other barangays. Consistent positive outcomes and the Nutrition Office’s innovative pilot feeding program prompted the government to augment the office’s budget. In 2017, the budget increased to ₱2.5 million (about US$50,000 at the time). It grew further to ₱6.5 million (about US$125,000) in 2018.

Sison-Oreta tapped the barangay nutrition scholars to help implement the expanded feeding program. The nutrition scholars, who were volunteers in most cities but were city employees in Malabon City, were stationed in the barangay health centers to develop familiar and friendly relationships with the people at the community level. Barangay health centers are offices in each barangay that are stocked with health supplies and that have local health officers who attend to citizens’ health concerns. Sison-Oreta put the nutrition scholars in charge of the grocery shopping and cooking for the feeding program, and she asked them to monitor each child’s status daily for the 90-day feeding program. The city provided cooking classes for the nutrition scholars and asked them to transfer this knowledge to mothers through cooking lessons. In recognition of their expanded duties, the city government provided a monthly allowance of ₱4,000 (about US$100) to the nutrition scholars on top of their ₱12,000 (about US$225) basic pay.

At the same time as the expanded feeding program began, barangay captains became more involved in nutrition. The Nutrition Office met with the village chiefs to inform them of the nutritional status of their young constituents. Most captains had been unaware of the extent of the malnutrition problem because, in previous years, the nutrition scholars had simply asked for the captains’ signatures for the nutrition reports, without sitting down with them to discuss the implications of those reports. Having a higher authority explain...
the meaning of nutrition statistics and compare their barangay’s status with that of other barangays prompted the barangay captains to act. The city government provided an additional incentive for action, agreeing to recognize the best-performing barangay during City Hall’s annual flag ceremony.

In the local context, the essence of this village-level unit, the barangay, goes beyond governance to comprise a network of households related to one another through their daily interactions and cooperation as a community. The unit is headed by a barangay captain, who serves as an authority that the residents look up to, not only because of that person’s position but also because of the relationship that he or she has fostered with them.

All barangays have their own nutrition committees to implement the programs of the city’s Nutrition Committee for their residents. After relations between the city’s Nutrition Office and the barangays improved in 2017, the Nutrition Office began crafting its annual action plan with input from the plans each barangay submitted.

The city government hired two additional nutritionist-dieticians—one in 2015 and another in 2016. The new hires helped relieve Soledad Martinez, the only remaining nutritionist at the time, from the overload of duties that came from monitoring all 23 barangays with a total of roughly 1,000 malnourished children as of 2017.

**Incentives for Mothers**

Hot weather and extreme rainfall often kept mothers from commuting to the venue for the feeding program. In addition, some parents chose to spend their time engaging in social activities rather than attending the program. Persuading mothers to attend the program proved to be a challenge in the early days of the implementation, especially because of their lack of awareness regarding malnutrition. To change that behavior, Sison-Oreta wanted to find a way to incentivize attendance.

Because the Nutrition Office did not want to distribute cash, it decided to give out groceries, something that mothers could use to further improve their households’ nutrition. The pilot feeding program in Catmon produced excess food ingredients from the donations, and the Nutrition Office used those surplus goods to make up grocery bags. After those pilot incentives proved successful in boosting attendance, the Nutrition Office institutionalized the distribution of grocery packs for attendance for the expanded feeding program in other barangays, which began in 2017. Complete attendance for 30 days guaranteed a mother one grocery pack with rice, milk, and other foods. After the 90-day duration of the program, the Nutrition Office gave another grocery pack to those with full attendance.

To continue the feeding program during periods of flooding, the Nutrition Office gave out meals in packs so that mothers did not have to cross floods to get to the centers and participate. This practice also kept up momentum during the weekends or holidays when the nutrition scholars were on leave. Sometimes the team distributed raw ingredients so that mothers in a common area could get together and cook meals based on a menu set by the Nutrition Office. Nutrition scholars also incentivized children’s participation by providing completion certificates to all those who completed the feeding program.

**Educating Mothers**

As the Nutrition Office expanded its programs, it became clear that mothers needed more support in taking care of their children. The nutrition scholars held a weekly class for mothers, but few parents showed up. To improve participation, the Nutrition Office decided to incorporate the class into the feeding program. Doing so saved time and effort for the nutrition scholars because they no longer had to call mothers to attend two separate events. At the classes, the nutrition scholars taught parents about the government’s immunization programs and the benefits of breastfeeding, as well as other topics covering proper nutrition and childcare. Although the nutrition scholars measured the success of educating mothers mainly through the nutritional status of their children, the scholars also conducted pretest and posttest assessments to gauge participants’ learning outcomes.

Through cooking classes, the nutrition scholars taught mothers how to prepare inexpensive but healthy meals for their families. Many mothers believed that a nutritious meal required costly ingredients, and they usually fed their children cheap canned goods to save money. Through the classes, the nutrition scholars helped mothers create nutritious meals that were also affordable. Mothers also applied what they learned by helping to prepare the food for the feeding program. The classes were especially beneficial for areas such as Hulong Duhat, a barangay with a high incidence of teenage pregnancy.
In 2017, the training sessions for mothers expanded to incorporate beauty, wellness, and cleaning services, with the goal of helping the women get jobs in salons and other businesses. The local environment department also helped the nutrition scholars teach households urban gardening, which served as a sustainable source of food ingredients for indigent families.

**Tapping Wives of Barangay Captains**

Because Sison-Oreta served as the city nutrition action officer, she wanted to tap her fellow first ladies, the wives of the barangay captains, to be barangay-level nutrition action officers. She thought that the first ladies were in the best position to push their husbands to prioritize the issue of malnutrition. Some barangay captains were hesitant to put their wives in the political spotlight, so the head of the village health committee served as the nutrition action officer for those barangays. The newly created barangay nutrition action officers worked hand in hand with the nutrition scholars to come up with strategies to encourage mothers to attend the program and to promote proper child care and nutrition.

The key success factor in the wives’ participation was that they were able to relate to the beneficiary mothers as women and mothers themselves who live in the same neighborhood. This connection with an authority figure was very important in persuading community members to buy in to the program. For example, Salome Trinidad, Acacia’s nutrition action officer, conducted house visits with the nutrition scholars to talk to mothers who had skipped days during the feeding program.

The two highest-performing barangays—Acacia and Concepcion—both had first ladies serving as the barangay nutrition action officers. This success could be attributed to Sison-Oreta’s strategy. Concepcion was consistently ranked in the top 10 of Malabon’s 21 barangays for improving nutritional status for all three indicators—underweight, stunting, and wasting. In 2017, it ranked second, after Acacia, in improving the indicator for wasting among children. The National Nutrition Council conferred the Outstanding Barangay in Nutrition Program Management award to Acacia in 2017 (National Nutrition Council 2018).

**Feeding Program in Village Diners**

By 2018, it was clear that the increased workload of the nutrition scholars had become unsustainable. The nutrition scholars had found that they spent most of their day shopping for ingredients and preparing food for the afternoon feeding program, diverting their attention from other important tasks, such as the fortnightly weight monitoring and the annual OPT+ program. To reduce the workload of nutrition scholars, in March 2018 the Nutrition Office began implementing the feeding program through small eateries known locally as *karinderyas* (Manila Standard 2018). These diners sold homemade Filipino meals and were usually located in residential areas.

Low-income families are the main customers at karinderyas, which sell a full meal for less than US$1. Hygiene standards at some karinderyas are low, however, so the Nutrition Office required karinderya owners to secure a health permit from the city’s Sanitation Office to participate in the feeding program. The government also made it mandatory for the owners to attend lectures on sanitation.

To improve results, the Nutrition Office extended the program to 120 days. The city’s nutritionists had suggested the move to Sison-Oreta after monitoring results showed that a number of children stagnated in the boundary between normal and underweight. Adding 30 days to the intervention became possible with the significantly larger budget allotted to the Nutrition Office in 2018. The nutrition education and cooking demonstration programs were also extended.

**Institutionalizing the Reforms**

After her reforms succeeded in reducing the stunting and wasting rates in Malabon City, Sison-Oreta realized she needed to take steps to institutionalize the Nutrition Office’s new programs. Without a legal framework, the city’s progress on reducing malnutrition could go to waste after an administration change if the next political leaders did not place the same emphasis on nutrition. In May 2018, therefore, the city passed its First 1,000 Days Ordinance to institutionalize its efforts to reduce malnutrition rates. The ordinance, so named because ensuring proper health and nutrition is especially important during a child’s first 1,000 days of life, made Sison-Oreta’s reforms city policy (Villaraza-Suarez 2016). The local legislation was based on the national congress’s Healthy Nanay (Mother) and Bulilit (Child) Act, filed in August 2017. In crafting the legislation, the Nutrition Office also visited Quezon Province, which
had been the first province in the Philippines to enact and implement this kind of ordinance.

**Lessons Learned**

**External Support: Stimulus Needed for Momentum**

The Nutrition Office was unable to achieve its goals with the meager ₱300,000 budget it had before 2015. However, it forged a way out of this operational paralysis by seeking donations from the private sector for its pilot feeding program. The extra resources allowed the Nutrition Office to give away grocery gift packs and distribute weekly rations, which were found to be effective tools to encourage participation. Positive results encouraged even more donations as Malabon City became better known for its efforts against malnutrition as a result of National Nutrition Council recognitions. After boosting its performance using external resources, the Nutrition Office was able to attract more public funding. In addition to the increasing private aid, the government augmented the office’s budget by 60 percent in 2018.

**Mixing Top-Down and Bottom-Up Approaches**

Malabon City’s nutrition program is a good example of blending top-down and bottom-up governance approaches. The city’s nutrition action plan, the comprehensive blueprint of the activities done in a year, is crafted considering the plans submitted by barangays, grassroots government units that are aware of their residents’ situation. The Nutrition Office integrated the input from the barangays with the plans of the Nutrition Committee members to create the city’s nutrition agenda. The governance structure cannot be strictly hierarchical or strictly participatory because both the top management and the community actors must implement the agenda. The city government leaves some autonomy for the barangays to implement the program as they deem fit. For example, each barangay is free to devise its own strategy for encouraging mothers’ attendance and providing additional incentives for those who complete the program. That aspect of the program shows an understanding of how local situations should be considered in implementation. The mixed model used in this case works because communication lines are open at all government levels, from the political to the bureaucratic and up to the community level. The tight link and constant coordination enables efficient implementation.

**Out-of-the-Box Community Engagement**

Community mobilization is another key element of success in this nutrition program. It is the barangay captain’s duty to promote the health and wellness of the constituency. That mandate does not cover the captains’ wives, but they are indirectly obliged to perform the same duty because they are considered the “mother” of the community. Enlisting the support of the wives added a friendly authority figure to whom the mother beneficiaries would listen and relate because of their common experience as women and as mothers.

Barangay-level implementation is effective in the Philippine context because Filipinos are indigenously relational.2 Listening to a barangay captain manifests deeply rooted cultural traits. Because the captain is living with the beneficiaries in one collective unit, he or she is able to foster relations with them. At times, it is the barangay captain who fixes small disputes in the area or even lends money to families struggling to make ends meet. Hence, captains are very influential in the administrative unit.

Karinderya owners are additional stakeholders who are not traditionally part of this type of program. Yet they took part when the Nutrition Office realized their potential contributions in the midst of the expansion of the program. Their involvement not only helped reduce the workload of the nutrition scholars but also helped the karinderyas boost their income.

Another distinct aspect of Malabon City’s community engagement is that the program let mothers apply what they learned from the classes within the context of the feeding program. Because mothers also helped out in food preparation, they directly applied what they learned in the cooking demonstration and sanitation lectures. This step went beyond the standard capacity-building procedure of simply conducting lectures or seminars.

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2 Psychologist Virgilio Enriquez developed the concept of shared identity, or kapwa, as a core Filipino trait. He explains that when there is an ibang-tao (outsider) in a community, Filipinos treat him or her with pakikitungo (civility) and pakikibagay (in conformity). They have a different treatment for a hindi-ibang-tao (insider), who is accorded pakikipagpalagayang-loob (understanding) and pakikiisa (being one with). See Pe-Pua and Protacio-Marcelino (2000).
References


Appendix

Hon. Antolin A. Oreta III
Local Chief Executive

Chef Melissa Sison-Oreta
City Nutrition Action Officer

Nutrition Secretariat

Mitzi Tanchoco, MD
City Medicine Nutrition Coordinator

Soledad D. G. Martinez, RND
Nutrition Officer III

Edna R. Divina, RND
D2 Nutritionist

Fidel Baltazar Dela Cruz, RND
D1 Nutritionist

District 1
Barangay Nutrition Scholar
(15 barangays)

District 2
Barangay Nutrition Scholar
(15 barangays)