

BURSARY AWARD

Title: Making food Go Further: Hunger Mitigation, Urban Food Security Project

With soaring food prices and rice production shortfalls, more and more Filipino families are falling into poverty and experiencing hunger. Results of a survey conducted by the Social Weather Stations in the second quarter of 2008 revealed that 2.9 million Filipino families said they were suffering from hunger. The National Capital Region, which includes Parañaque City, posted the highest “self-rated” hunger incidence of 22.

According to the Philippines Food and Nutrition Research Institute, there was a significant increase in the cases of underweight children from 24.6 percent in 2005 to 26.2 percent in 2008. The malnutrition cases are highest in some provinces in Mindanao, Southern Tagalog, and Eastern Visayas. The same areas where high percentage of self-rated hunger was found (SWS, 2008). FNRI (2008) pointed out that the increase in malnutrition cases is brought primarily by the rising food prices and so less food intake. Rice prices have increased by an average of 28 percent since December 2007, prompting two-thirds of Filipino families to reduce food spending and consumption. About one in four families have already cut back on rice spending/consumption, which could eventually have a telling effect on household nutritional status given that rice accounts for up to 20 percent of total food expenditures and is the bulk of the Filipino diet.

With this unfolding scenario—and the reality that one-third of the total Philippine population lives in poverty— it is unlikely that the country’s hunger situation will drastically improve in the foreseeable future. In the Philippines, food insecurity is exacerbated by large family size, particularly in poor households. The average family size in the city of Parañaque is 5 higher than the national average of 4.2. Data from the 2006 Family Income and Expenditure Survey (FIES) showed that a five-person family in the National Capital Region (NCR), where Parañaque City is located, has an average annual income of Php 313,000 (\$6,388). Historical data shows that poverty incidence increases as families grow. According to the 2003 FIES, families with six or more members had double-digit subsistence (food poor) incidence compared to families with five or fewer members.

2. Goals & Objectives

The intervention goal is to mitigate hunger and malnutrition among families and children. The assumption of the intervention is based on the conceptual framework of food security and the theory of change. That is people get hungry and subsequently may become malnourished when there is no food or they have no access to food and they utilize inadequate and inappropriate food. This is addressed by way families and children produce their own food in schools, households, and communities to ensure they have access to healthy and nutritious food. Based also on the assumption that when families are producing their own food they can have savings to buy other food needs that they do not produce. This way, families especially mothers have food items to contribute, from their own food gardens and from savings, to collectively feed their malnourish children.

3. Key Activities

Integrated School, Household and Community Food Production to Ensure Access to Healthy and Nutritious Food. This intervention is only a component of Making Food Go Further: Mitigating Hunger and Ensuring Future Resilience and Stronger Households in the Philippines Program.

The main intervention focuses on building the capacity of beneficiaries in schools, households and communities to address food availability and nutrition issues. This is being done through two key activities: organic food production at schools, homes and communities; and the implementation of an integrated community approach to addressing malnourished children.

1. Small-scale, diversified organic food production at schools, homes and communities

Parents, students, teachers, community leaders, and government officials and agency heads were trained on how to produce organic crops, fish, and vegetables using the Permaculture¹ approach. The trainings have always hands-on activities and done on site and during learning visits to different organic production systems. Participants were also trained on how to do seed banking, organic fertilizers and pesticides making to ensure they will have seeds and organic inputs for the succeeding cropping. Beneficiaries were regularly taught on the health, nutrition, and environmental benefits of organically produced foods to the family and children during community meetings. Though organic food production is laborious by nature, the approach done to encourage families to practice organic food production was by mobilizing small groups of organic gardening enthusiasts in the community to demonstrate that a small-scale (based on the family's capacity and the availability of area at home, schools, and community) vegetable gardening using Permaculture approach can really produce organic foods.

This approach designs a food production system that does not exploit or pollute the environment. It uses only organic production inputs that create a natural ecological balance in a particular location. It promotes the creation of a harmonious relationship between plants, buildings, animals and infrastructures on the way these are placed in the landscape. Sufficiency at home and not for commercial purposes. This way they can be efficient with the available labor they have in the family to grow organic vegetables. The project also emphasized that savings from not using expensive chemical inputs also serve as income for the family which can be used to buy other food items and for other investment of the family. This is aside from the health & nutrition benefits of using organic inputs. To intensify the promotion of organic food production at schools, households, and communal areas, a food gardening competition was implemented. All the criteria used were consistent to the Permaculture principles so that participants are actually doing organic food production practices. A regular valuation activities and participatory monitoring and evaluation of the progress of food gardening at the three levels are done through the project management team composed of all the partners and stakeholders from the community, schools, and local government units including community health units. In all the activities and phases of organic food production, all the partners and stakeholders are always given the leadership in planning, decision-making, and implementation of plans and decisions. The project management team which is led by the project beneficiaries is the venue where they discuss, decide, and agree to collectively work as a team as they address the same targets—hungry families and malnourish children. Small-scale organic food gardening give women and men of a household the opportunity to work together to increase food availability. This was done through scheduling of works and responsibilities based on their capacity. The small-scale food gardening enabled women and men to participate in areas where they choose they are capable of doing for them to produce and access food. The products from the schools, households and group/communal food gardens become source of protein, carbohydrates, vitamins, and minerals of beneficiaries. These include but not limited to fish, mushrooms, legumes and lentils (e.g. string beans, mung bean, winged bean), root crops (e.g. cassava, taro), corn, leafy and green vegetables (drumstick tree, pechay, mustard, spinach, amaranth, swamp cabbage, Malabar nightshade) yellow vegetables (e.g. squash), fruit vegetables (tomato, eggplant, pepper), and edible herbs (e.g. oregano, basil, mints).

2. Rehabilitating malnourish children through integrated PD Heart Sessions.

This involves mothers and caregivers in rehabilitating malnourished children by practicing effective cooking, feeding, and hygiene and child caring behaviors. The sessions are done over a 12-day period in the comfort of their homes which reinforce collective support system that allows mother to help one another. Produce from schools, households, and community or group food gardens are pooled together by involved parents to feed their malnourish children. These activities enable parents to collectively rehabilitate their malnourish children while at the same time experiencing through the progress in their children's health and nutrition. The sessions also open opportunities to share with each other their experiences in food production, child feeding, and child caring (through collective nutritious menu development and health and nutrition discussion) which cannot be realized if done individually. The involved mothers and caregivers were trained on how to implement the PD Hearth session. This capacitate them to do the rehabilitation sessions including identification of malnourish children using mid-upper arm circumference (MUAC), weighing of children, feeding, caring, and other health and nutrition management of children. The intervention emphasized that there exist a practice or behavior that other parents especially mothers with the same culture, economic status, and other household characteristics who were able to nurture and provide for their children not to become malnourish. And so when involved mothers found out and practice the positive behavior or system they can also make their malnourish children become normal. The intervention also emphasized that one of the key elements in rehabilitating malnourish children is having a regular supply of nutritious food from organic food production at schools, home, and community. The best practice identified in this intervention was introducing several venues and process (eg. of venues: school food gardening, household food gardening, small-group food gardening; e.g. of process: vegetable gardening competition, management team by the beneficiaries, participatory regular valuation meetings, learning visits) so that partners and stakeholders can determine and decide based on their capacity to participate and help addressing hunger and malnutrition. The process always emphasized community ownership and appreciation of what the beneficiaries can do with their collective strengths and resources. The innovation identified in food production approach was the introduction of receptacle gardening and small-scale but diversified and permaculture-base food gardens to create organic food supply. The established approach was to grow crops or produce food using garden plots. This cannot be done in space-challenged areas particularly in urban environment where households are closely built. Another established approach was monocropping system to favor for commercial production. If the food production is intended for household consumption only, monocropping (e.g. rice farming only) cannot provide for other food needs of the family. Diversifying the crops planted and food produced (e.g. combination of fishpond and crops) in the garden was introduced to increase diet diversity of families for nutrition purposes. The use of space-saving designs for food gardens also maximizes space as well as equates family's labor capacity and resources in producing organic foods for household consumption. The innovation identified in rehabilitating malnourish children was integrating the activities of school, household, and community including the health units. The established approach was doing the rehabilitation either through the mothers and community health units or through the school feeding.

4. Effectiveness/Evidence of Success

Below presented are the targets of the interventions:

1. Reduction in the prevalence of self-rated hunger among targeted families
2. Improve household food diversity scores
3. Reduction in the number of underweight children.

The actual impacts of the interventions are the following:

1. Out of 120 malnourish children, 116 children became normal (by MUAC system) after the two complete PD-Hearth sessions—collective feeding of malnourish children in Paranaque City. This is based on the internal tracking of the Project.
2. Parents who are engaged in urban vegetable production were able to secure their daily food
3. A single parent able to provide for the needs of her two children from the produce of her receptacle vegetable gardens. This is based on a testimony of Amy Abing, 39 years old, solo parent of two girls aged 14 & 13 in Paranaque City
4. Increased dietary diversity in family's table with the household food gardening.
5. The vegetable gardens of two Indigenous People's mothers were able to help send their children to school.
6. "Pupils are instead served freshly cooked vegetable soup prepared on-site by their mothers. The vegetables are picked from plots in the school or home gardens".
8. 9th Asian Corporate Social Responsibility Awards on Poverty Alleviation for its integrated school, household, and community food production.

5. Equitable Outcomes

The intervention opens different venues such as food gardening in the schools, homes, and community. This has introduced opportunities for both the men and women to participate in areas where they have capacity to do land preparation activities, planting, care and maintenance, organic fertilizer preparation, and harvesting of crops. This enables equal opportunity for participation between and among men and women. In school gardening and feeding activities for example, women participate in the care and management of 24 school gardens as well as provide help in the preparation of menu, cooking activities, and serving of food to the school children. The men or fathers are the ones producing vegetables used by family members at home. In some occasions produce are brought to the school by their children for their feeding sessions. In two years of intervention, about 70% of the total 876 families engaged in schools, households and community food production are women. In the school feeding program, all the 98 volunteers in three different sites are mothers. This empowers mothers to plan and decide on the kind of food to produce and prepare for the benefits of their children.

6. Efficiency/Cost-Effectiveness

The estimated cost per beneficiary including children is PhP1, 127(\$26)² comprising food for school feeding, production inputs, garden tools, transportation cost, mobilization expenses, and capacity building trainings. The direct cost in food production, including production inputs and garden tools, per family is PhP500 (\$12), which is 44% of the total cost per beneficiary. **\$1=PhP43**

7. Sustainability

The integrated school, household and community food production system while directed at different groups, are mutually reinforcing. This system supports the same target families within a particular location. When the school cannot provide from its produce then household and community will have to provide for other needed food items. The integrated school, household and community food production system also enables beneficiaries to implement support project that ensure food for children is always available. One good example is the school mushroom house and school fishpond which produce for the school feeding and the families in the same community. Mushroom sales make it to sustain its operation. Another sustainability measure through the integrated food production

system is the seed banks and production of vermin and indigenous microorganisms (IMO) which the schools and households food gardens are doing. There are schools and families that already have their seed banks in place and are also producing vermin and IMO for distribution to other interested families so that there is continuity in the supply of organic production inputs. Involving the different agencies of local government units in Project sites in all the interventions' stages and activities created project ownership. This also facilitated their pooling of resources together from their office budget to support the initiatives and make it continue and expand in similar areas

4). Local ordinances are also being passed through the champions and allies in the local government units so that the intervention is integrated in the local annual development plan for regular programming and funding.

8. Challenges & Lessons Learned

The main challenge faced in this intervention was the passive attitude of target families in addressing the problem of hunger and malnutrition because they saw it as an obligation of the government. This was addressed through a collective school, household, and community food gardening competition with the leadership of project management team composed of representatives from the partner schools, target families and communities, NGOs, private sector, and the local government units. The contest and prizes offered motivated them to participate. After having experienced the benefits of their efforts during gardening competition in terms of food supply and incomes, they began to help mobilize other families to establish their own household and group/community garden. The initial impacts of gardening activities also prompted the local governments to provide additional financial resources to increase the number of beneficiaries. This resulted in a more than 200% increase of the total beneficiaries in two years period based on the three-year projected targets both for the food production and school feeding.

The most important lesson from this experience is the magnitude of accomplishments in working collectively to address hunger and malnutrition. The intervention involved all the interests of the different actors from the school, families and communities, government, NGOs, and private sector to address the same problem that each unit is addressing independently before.

9. Enabling Factors & Recommendations

The collective engagement and commitment of school, families and community, local government units, NGOs, and private sector in combating hunger and malnutrition was the key to the success of this intervention. Without people's ownership and participation, the intervention would have never achieved its intended targets. The special technical approach being integrated food production systems and PD Hearth sessions facilitated the collective support from the schools, families and communities, and local government units as the approach involves partners and stakeholders' interest and thrust to address the same problem. Other important factors to the success of the intervention were 1) the commitment of staff to work beyond the required working hours to work at the available time of target families; 2) the staff skills in mobilizing the local government units' support in terms of production inputs, personnel and funding paved the way so that there is a leveraging, continuity, and expansion of the initiatives; and 3) the good reputation of the organization in the area made the intervention acceptable for the partners to engage with.

BUDGET:**1. Preparatory phase**

Meeting	15 pax x Php150 x 12 meetings =	Php 27,000.00 (\$622.48)
Training of trainors	100pax x Php250 x 2 Days =	50,000.00(\$1,152.74)
Orientation	50pax xPhp150 x 16 barangays =	120,000.00(\$2,766.57)
Training of households	30pax xPhp250x 16 barangays x 2 days =	240,000.00(\$5,533.14)
Training supplies	Bond paper Php175 x 10 reams=	1,750.00 (\$40.35)
	Pencils Php70 x 46 boxes =	3,220.00 (\$74.24)
	Ballpens 45 x 46 boxes =	2,070.00 (\$47.72)
	Pentel pens 540x 8 boxes =	4,320.00 (\$99.60)
	Notebooks 10x 100 pcs =	1,000.00(\$23.05)
	Plastic envelop 15 x 560 pcs =	8,400.00 (\$199.66)
	Manila paper 100 x 1 roll =	100.00 (\$2.30)
	Masking tape 25 x 5 rolls=	125.00 (\$2.88)
	Metacards 75x 2 packs =	150.00(\$3.46)
	ID sticker 150x 5 boxes =	750.00(\$17.29)

2. Implementation phase

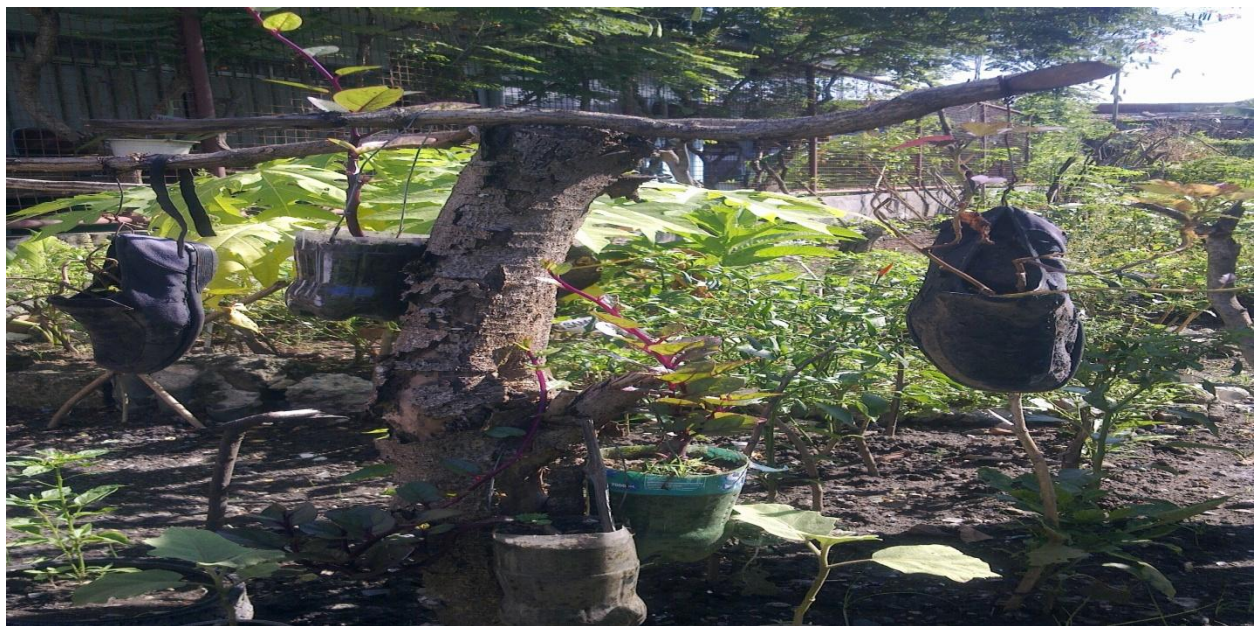
Agricultural equipments & supplies (1 set/household)		
(1 set= seeds, soil, gloves, boots, hats, drums)	=	500,000.00 (\$11,527.38)
Lakbay Aral (20pax/batch/2 batches)	=	50,000.00 (\$1,152.74)

3. Evaluation of intervention

Report	=	15,000.00 (\$345.82)
Post evaluation summit meeting 600 pax x Php250	=	150,000.00 (\$3,458.21)
Prizes for the most productive barangay	=	60,000.00 (\$1,383.29)

Total Amount Php 1,233,885 (\$28,452.92)









- 2010 up to the present Hunger mitigation project being implemented (Urban Gardening)