

Nutrition-related Corporate Social Responsibility Programs of Selected Corporations in the Philippines

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RESEARCH ARTICLE

Abstract

Background: Solving a multi-faceted problem like malnutrition, with causes cutting across a number of sectors, requires a combination of efforts and programs. Many corporations have embarked on programs that can contribute to the reduction of malnutrition.

Objectives: This study aimed to describe and analyze the nutrition-related Corporate Social Responsibility (CSR) programs of six corporations and their contribution to reducing malnutrition.

Methodology: This study gathered data using a self-administered, pretested questionnaire and interviews with representatives from six corporations. Data were analyzed by profiling and characterizing the CSR programs according to five parameters and the programs' overall contribution to nutrition improvement.

Results: Corporations in the food and beverage industry implement the most number of nutrition-related CSR programs that are mostly focused on nutrition-specific interventions. The corporations were found to implement programs that were appropriate and effective.

Conclusion: The CSR programs have the capacity to contribute to nutrition improvement by being able to address some of the immediate, underlying, and basic causes of malnutrition.

Keywords: *Corporate Social Responsibility, malnutrition, nutrition-specific intervention, nutrition-sensitive interventions*

Introduction

Malnutrition is one of the world's most serious but least-addressed development challenges [1]. It encompasses both overnutrition and undernutrition and has a direct negative impact in terms of disease and disability, brain development, educational attainment, and income potential for individuals and communities [2]. Recent data from the World Health Organization show that 1.9 billion adults are overweight or obese while 462 million are underweight. Conversely, 41 million children are overweight or obese while 52 million children below 5 years old are underweight [3]. In the Philippines, stunting, a form of undernutrition characterized by accompanying negative repercussions in an individual (including poor cognitive ability and poor economic productivity), is still a public health concern affecting 3 out of 10 children under the age of 5. On the other end of the spectrum, 3 out of 10 Filipino adults are overweight or obese [4]. In the current setting of worldwide malnutrition, mitigating measures are not expected not only from

concerned organizations and the national government but also from the private sector also.

A growing concept of businesses today is Corporate Social Responsibility (CSR). The International Organization for Standardization Strategic Advisory Group on CSR describes it as "a balanced approach for an organization to address economic, social, and environmental issues in a way that aims to benefit people, community, and society" [5]. The term has been captioned under many names such as strategic philanthropy and corporate citizenship. One of the more straightforward definitions of CSR is "the voluntary actions that business can take, over and above compliance with minimum legal requirements, to address both its own competitive interests and the interests of wider society" [6]. Despite its several definitions and names, it carries with it a certain perspective on the role of business in society. The role of business is to create value for its shareholders but in such a way that it also creates

value for society, manifesting itself as a win-win proposition [7].

In the Philippines, various programs have been launched by some large corporations as part of their CSR. Although the most common and popular notion when it comes to nutrition and CSR deals mainly with food assistance such as feeding programs, supplementary feeding program, and offering of products that are tagged as 'healthy and nutritious. Looking at the concept of nutrition-sensitive and nutrition-specific interventions, one can see that several corporations also had efforts that could impact nutrition though they may not be able to directly recognize it. The following are some of the nutrition-related CSR programs implemented by notable large corporations in the country that can be categorized into nutrition-specific and nutrition-sensitive interventions. Nutrition-sensitive programs include: (1) food production, (2) water, sanitation, and hygiene, and (3) medical services. Nutrition-specific programs include: (1) feeding program, (2) food fortification, (3) product reformulation, (4) food labelling, (5) healthy lifestyle programs, and (6) nutrition education. These programs have counterparts in the existing government efforts.

The study aimed to describe the CSR programs of selected large corporations including their motivating factors; examine the link of the nature of the corporation to their nutrition-related CSR programs; and determine the contribution of the CSR programs to nutrition improvement.

Methodology

Research design

This was a descriptive study designed to gather information on the corporations' profile and the details of their existing CSR programs relating to nutrition that are being conducted in the Philippines.

Study participants

The corporations, herein referred to as respondents, were selected from the top 100 corporations in the Philippines as listed in the Securities and Exchange Commission [8]. Those belonging to the top 100 corporations were selected considering the expanse of their resources and their reputation as leaders and innovators in their respective businesses.

To determine the specific corporations that will be included in the study, criterion purposive sampling was used. To do this, five CSR program categories were established based on capacity to impact on nutrition improvement. The program categories include (1) nutrition information and education, (2) health protection, (3) food assistance, (4) food production, and (5) product improvement. Each program category is composed of subcategories which are nutrition-related CSR programs. Corporations with CSR programs that fall under the established program categories were selected.

A total of 19 corporations found to have programs that meet the established categories was shortlisted. Letters were sent to the shortlisted corporations via email to seek their consent and approval to participate in the study. Further coordination was made via phone calls and visits to the head office of the corporations. However, due to non-response, privacy issues of CSR details, and considerable length of time to coordinate with the corporations, only six were included in the study. A limitation of this study is the small number of corporations that participated due to the reluctance of other companies to disclose information.

The primary respondents of the corporations were a Project Officer from Corporation 1, a Program Officer from Corporation 2, a Project Assistant from Corporation 3, a Program Assistant from Corporation 4, a Corporate Affairs Executive from Corporation 5, and a Corporate Communication Manager from Corporation 6. These corporations are all based in Metro Manila, Philippines.

Development of instrument

A self-administered questionnaire was developed which had three parts: Part 1 asked for the company profile and CSR overview which included information on the industry and specific business type of the selected corporations. The motivating factors or why CSR is done by the selected companies were also asked. Part 2 focused on the implemented CSR programs that are related to or can impact nutrition. Part 3 focused on the detailed information of the CSR programs such as the name of the program, target population, program description, time-frame for the implementation of the program, and the indicators for the program's success. This part also looked into the basis for selecting their identified CSR programs.

Data Collection

The questionnaire was emailed to the respondents and answers were provided by filling-out the applicable items on the questionnaire. The questionnaire was developed to be self-administered, however, two of the respondent corporations requested a face-to-face interview and discussion of their CSR programs instead of typing their answers on the questionnaire. Other supporting data on the corporations' profile and programs were no longer asked by the interviewers as they were gathered from their respective websites and credible online references.

Data Analysis

Profiling was done to describe the general nature of the corporations as well as their CSR programs and specific-nutrition-related CSRs. Content analysis, on the other hand, involves classifying data with the aim of highlighting features and findings. For this particular study, a summative content analysis was used which involves counting and comparisons usually of keyword or content followed by the interpretation of the underlying context [9]. The summative content analysis was used in categorizing the corporations as well as their respective programs into clusters to draw existing patterns and the link between their nature, program motivators, and CSR programs.

Content analysis was also done to highlight the features and findings in the CSR programs of the corporations by characterizing the nutrition-related CSR programs based on five program assessment parameters. The parameters used were (1) efficacy, (2) appropriateness, (3) effectiveness, (4) timeliness, and (5) continuity. These parameters were adapted from the Department of Health Hospital Nutrition and Dietetics Service Management Manual (2004). The parameters were selected to characterize the programs as the description of each can assess the details across certain unrelated and different programs.

Descriptive analysis was done by using mean and frequency to further describe the characterization of the programs based on assessment parameters.

Results and Discussion

Profile of the corporations

A total of six corporations was included in the study (Table 1). The business and industry they cover are food and beverage, retail, property and banks, oil-refining, power,

and energy. All of the corporations have a nationwide presence of their operations, with market presence in Southeast Asia and some parts of the Middle East and the United States. Two of the corporations are global brands.

The CSR programs of these corporations are education, disaster response, environment, enterprise, livelihood development, and health and well-being. Two of the corporations handle their own CSR programs while four have created foundations that serve as the CSR arm of the mother corporations.

Motivating Factors for Companies to do CSR

The motivating factors for corporations to do CSR are (1) the corporations' vision and mission, (2) core values, and (3) response to national emergencies.

A company's vision describes the organization in its successful future state. A mission statement, on the other hand, explains the company's reason for existence by describing what it does and its overall intention. Core values describe the beliefs of the organization where it directs its behaviour [10]. Given that two of the main motivators of the corporations are their vision, mission, and core values, it can be inferred that the CSRs are value-driven. It is considered value-driven when the CSR is presented as being part of the company's culture, or as an expression of its core values [11]. CSR programs that spring from the influence of internal motivators such as corporate values, mission, and vision, gives an ethical direction to the behaviour of a company [12]. Table 2 presents the vision, mission and core values of the respondent corporations. Among the six corporations, only Corporation 5 has identified nutrition as a direct category of its CSR scope. As for the other cooperations, at first glance, the aspect of nutrition can be embedded under their health and well-being programs. The commonly occurring core values of the corporations include integrity, teamwork, innovation, responsibility, customer focus, and honesty (Table 2).

In this study, the focus was more on the identified motivator which are the corporations' mission and vision that were used as basis for comparison and discussion of the CSR programs. Brønn mentioned that "if a company is to be believed that it truly is committed to developing principles that guide its behaviour in society, then these principles must be incorporated in the organization's vision, mission, and values." The aligning of the CSR effort of corporations to their mission and vision drives all aspects regarding its implementation. In this way, the decisions made by a

Table 1. Corporate and CSR profile of the corporations.

CORPORATIONS	CORPORATE PROFILE		CSR PROFILE	
	INDUSTRY/ BUSINESS TYPE	GEOGRAPHIC MARKET	SCOPE OF CSR PROGRAM CATEGORIES	WITH OWN CSR FOUNDATION ARM
Corporation 1	Power, banking, financial services, food, land, construction, shipbuilding, and infrastructure	Nationwide, expansion in South East Asia	Education, enterprise development, environment, health and well-being.	Yes
Corporation 2	Fast food chain	Nationwide, South East Asia, Middle East, and United States	Disaster response, education, leadership development, livelihood development, issues that are also of relevance to the company's core business.	Yes
Corporation 3	Retail, property, and banks	Nationwide, some parts of South East Asia	Care for persons with special needs, disaster response, education, farmers' training, healthcare, shelter.	Yes
Corporation 4	Beverages, food, packaging, properties, oil refining and marketing, power and energy, infrastructure, other business (insurance brokerage, bank of commerce, shipping and lighterage, retirement fund, stock transfer)	Nationwide, some parts of South East Asia	Disaster management, community development, education, environmental stewardship, livelihood development, health, volunteerism.	Yes
Corporation 5	Food and beverage	Global	Health and nutrition, environment, rural development	No
Corporation 6	Food, beverage, cleaning agents, personal care product	Global	Health and well-being, environment, livelihood	No

company are not only for its best interest but are in consideration of the best interest of society as well.

Nutrition-related CSR Programs

The nutrition-related CSR programs included in the study were feeding program, food fortification, product labelling, product reformulation, healthy lifestyle program, nutrition education, food production, medical services, and water, sanitation, and hygiene. These programs were grouped into nutrition-specific and nutrition-sensitive interventions

(Table 3). Four corporations (Corporations 1, 2, 4 and 5) have CSR programs that fall under both nutrition-specific and nutrition-sensitive interventions, one corporation (Corporation 3) has a program under nutrition-sensitive intervention, and another (Corporation 6) has a CSR program under the nutrition-specific intervention.

Program Characterization

The nine CSR programs of the corporations were characterized based on a set of parameters which include:

Table 2. Core values, key focus, and CSR program scope of the corporations.

CORPORATION	CORE VALUES	KEY FOCUS	CSR PROGRAM SCOPE
Corporation 1 (Corporate Foundation)	Integrity Teamwork Innovation Responsibility	Empowered people Sustainable communities	Education Enterprise development Environment Health and well-being
Corporation 2	Excellence Honesty and integrity Frugality Teamwork Humility to listen and learn Respect for the individual Spirit of family and fun Customer focus	Improved access to basic services for Filipinos Empowered people	Disaster response Education Leadership development Livelihood development
Corporation 3	Building trust Valuing relationship Pioneering innovation Continuous learning and growth	Empowered people and sustainable environment. Create a program that promotes a cycle of positive change	Care for person with special needs Disaster response Education Farmers training Health care Shelter
Corporation 4	Passion for success Teamwork Respect for our people Customer focus Innovativeness Integrity	Promote productive and self-reliant communities	Community development Disaster management Education Environmental stewardship Health Livelihood development Volunteerism
Corporation 5	Values are reflected in the way business is done, always acting legally and honestly with respect both for the corporation's people and those they do business with.	Enhanced quality of life and contribute to a healthier world while ensuring long term success of the company.	Environment Health and nutrition Rural development
Corporation 6	Integrity Commitment Positive impact Setting aspirations Working with others	Grow business while reducing environmental footprint and increasing positive social impact.	Environment Health and well-being Livelihood

Table 3. Nutrition-related CSR programs of the corporations.

CORPORATIONS	CSR PROGRAMS								
	Nutrition-sensitive			Nutrition-specific					
	FP	WASH	MS	FPP	FF	PR	FL	HLP	NE
Corporation 1		✓	✓	✓	✓				
Corporation 2	✓			✓					
Corporation 3			✓						
Corporation 4		✓	✓	✓					
Corporation 5	✓				✓	✓	✓	✓	✓
Corporation 6				✓					

FP – food production; WASH – water, sanitation, and hygiene; MS – medical services; FPP – feeding program; FF – food fortification; PR – product reformulation; FL – food labelling; HLP– Healthy Lifestyle Program; NE – nutrition education

efficacy, appropriateness, effectiveness, timeliness, and continuity. A program is rated positive if it manifests the characteristic described by each parameter. Efficacy is when the program is able to accomplish the desired outcomes based on its objectives. Appropriateness, on the other hand, is when a program is relevant to the target population's needs. Effectiveness is when a program is provided in the correct manner in order to achieve the desired outcome for the target population. Timeliness is manifested by a program or intervention if it is provided at the most beneficial/necessary time. Continuity is when a program or intervention is coordinated among the stakeholders and organization and is sustained over time [14].

Table 4 summarizes the rating given to the CSR programs of each corporation.

Table 5 shows the summary of the average rating per program and the combined ratings of these programs per corporation. An average rating of 5 means that a specific program exhibits all of the 5 parameters. Feeding program got the highest rating (4.75) based on the five assessment parameters used. This shows that in terms of efficacy, appropriateness, effectiveness, timeliness, and continuity, the feeding programs of the corporations were found to highly exhibit all the said criteria. This is followed by food production with a 4.5 average rating. WASH and healthy lifestyle program ranked third with an average rating of 4. This is followed by medical services and product reformulation with an average rating of 3. Food fortification ranked fifth with an average rating of 2.5. Lastly, food labelling and nutrition education programs ranked 6th with an average rating of 2.0. It is noteworthy that the assessment of the programs was based on the general information provided by the corporations and rating for some of the programs cannot be justified using the available data, therefore no rating (marked by *) was given.

When ranked based on the combined average rating of their programs, Corporation 2 ranked first with a rating of 4.5. Corporation 2's CSR programs include food production and feeding program. Corporation 4 and Corporation 6 ranked second which both got an average positive rating of 4.0. Corporation 1 ranked third with an average rating of 3.5. Corporation 5, ranked fourth with an average rating of 3.2 and Corporation 3 ranked fifth with an average rating of 3.0. The mean rating for all the six Corporations is 3.31. This means that on the average, 3 out of 5 criteria are manifested by the Corporations' CSR programs.

Appropriateness, effectiveness, and efficacy are the most exhibited characteristics of the programs (Table 6). A

total of 16 out of the 17 programs assessed exhibit appropriateness, 15 out of 17 exhibit effectiveness and 13 out of 17 exhibit efficacy. This means that the CSR programs showed a high relevance to the need of the target population. They were also able to achieve their desired program objectives and that the programs were provided in the correct manner to achieve the desired outcomes for their target population.

Link of the Nature of the Corporations and Nutrition-related CSR Programs

The details of the CSR profile of the corporations were grouped into three clusters to further understand their nature (Figure 2) and to give a more comprehensive pattern of the nutrition-related CSRs discussed in the study. The main delineating component of each cluster is the presence of food and beverage component in their business nature. The CSR environment of the corporation ranges from a wide cluster of business industries; one common denominator is that Corporations 1, 2, 4, 5 and 6 have food and beverage in their main businesses or as part of their business portfolio; and only one corporation (Corporation 3) has no direct food and beverage component. Also, two of the five corporations have their main business on the food and beverage industry. For this reason, this was used to determine the three clusters. Since food corporations are more closely linked to the concept of nutrition, this was another reason to draw an overview of the nutrition-related CSR of such corporations. The details of the nutrition-related CSR programs of the corporations can therefore be better looked into; specifically distinguishing among those which have food and beverage as their main business, those with food and beverage as a component of their business portfolio and the corporation with no direct business in the food industry.

Cluster 1 includes the CSR programs of corporations whose main business is in the food and beverage. Included in this cluster are Corporations 2, which is the leading fast-food chain owner in the country, and Corporation 5, which is a leading global health and nutrition brand. Cluster 2 includes corporations which have food and beverage as part of their portfolio but not as their main business. Included in this cluster are Corporation 1, which has a food unit business, Corporation 4, which has a food manufacturing unit as well as beverage production and distillery business, and Corporation 6, which is a global brand that has a wide market distribution of packaged food as part of its product mix. Cluster 3 includes Corporation 3 which has no direct food and beverage component on its business ventures.

Table 4. Summary of ratings of CSR programs per corporations

CSR PROGRAMS PER CORPORATION	RATING				
	Efficacy	Appropriateness	Effectiveness	Timeliness	Continuity
Corporation 1					
WASH	+	+	+	*	+
Medical services	+	+	+	*	*
Feeding program	+	+	+	+	+
Food fortification	+	+	*	*	*
Corporation 2					
Food production	+	+	+	*	+
Feeding Program	+	+	+	+	+
Corporation 3					
Medical services	+	+	+	*	*
Corporation 4					
WASH	+	+	+	*	+
Medical services	+	+	+	*	*
Feeding program	+	+	+	+	+
Corporation 5					
Food Production	+	+	+	+	+
Food fortification	*	+	+	*	+
Product reformulation	*	+	*	+	+
Food labelling	*	*	+	*	+
Healthy lifestyle program	+	+	+	+	*
Nutrition education	*	+	+	*	*
Corporation 6					
Feeding program	+	+	+	+	*

A positive sign (+) indicates that a specific program exhibits the corresponding parameter, while an asterisk sign (*) indicates that there is no supporting data to justify if the program manifests the said parameter.

Table 5. Summary of rating per corporation and per program.

CORPORATIONS	POSITIVE RATING PER PROGRAM									
	Nutrition Sensitive			Nutrition Specific						
	FP	WASH	MS	FPP	FF	PR	FL	HLP	NE	Average per corporation
Corporation 1		4	3	5	2					3.5
Corporation 2	4			5						4.5
Corporation 3			3							3.0
Corporation 4		4	3	5						4.0
Corporation 5	5				3	3	2	4	2	3.2
Corporation 6				4						4.0
Average per program	4.50	4.00	3.00	4.75	2.50	3.00	2.00	4.00	2.00	Mean: 3.31

Table 6. Frequency of programs that rated positive on each assessment parameter.

ASSESSMENT PARAMETER	FREQUENCY OF PROGRAM WITH POSITIVE RATING
Efficacy	13
Appropriateness	16
Effectiveness	15
Timeliness	7
Continuity	10

*total of 17 individual CSR programs assessed

Business Nature	CLUSTER 1 Food and beverage as main business	CLUSTER 2 Food and beverage as component of business	CLUSTER 3 No direct food and beverage component
Corporations	Corporations 2 and 5	Corporations 1,4 and 6	Corporations 3
Highlight of Mission/ Vision (CSR Foundation and Company)	<ul style="list-style-type: none"> Improved access to basic services Enhanced quality of life Contribute to healthier world while ensuring long term company success 	<ul style="list-style-type: none"> Empowered people and sustainable communities Productive and self-reliant communities Reducing environmental footprint and increasing positive social impact while growing business 	<ul style="list-style-type: none"> Empowered people and sustainable environment Creates program that promotes positive changes
Scope of CSR Program Categories	Education, environment, leadership development, livelihood development, rural development, disaster response, health and nutrition	Education, environment, environmental stewardship, community development, livelihood development, enterprise development, disaster response, health and well-being	Care for persons with special needs, disaster response, education, farmers' training, healthcare, shelter
Nutrition Related CSR Programs	Health and well-being/ education: Feeding Program Livelihood development: Food Production Health and nutrition: Food fortification, product reformulation, food labelling, healthy lifestyle program, nutrition education	Health and well-being: Water, sanitation and hygiene (WASH), Medical Services, Feeding program Disaster response: Food fortification	Healthcare: Medical services
Type of Nutrition Related CSR Programs	Nutrition specific Nutrition sensitive	Nutrition specific Nutrition sensitive	Nutrition sensitive

Figure 1. Three CSR clusters with nutrition-related program component

The clusters are also based on the assumption that since the respondent corporations stated that their mission and vision are one of the main motivators for their CSR initiatives, the CSR program scope that arises from each cluster is somewhat influenced by the corporation's mission and vision. The specific nutrition-related CSR programs of each cluster, therefore, are influenced by the mission and vision of the corporations implementing them.

Looking at the three clusters of nutrition-related CSR programs, the following generalizations were made concerning the association of the corporations' nature and the nutrition-related CSR that they implement:

1. Corporations with food and beverage as their main business have the most nutrition-related CSR programs listed on the study and also the most number of nutrition-specific programs. The study showed that the two corporations under cluster 1 whose business is mainly on food have implemented the most number of nutrition-related CSR programs in the study. The importance of aligning CSR initiatives with core business competencies and strategies to produce a more effective and fit approach is often given emphasis [7]. It necessarily follows that food and beverage companies can center their CSR programs more on nutrition-related effort. Cluster 1 corporations also have mostly nutrition-specific interventions as part of their CSR. Nutrition-specific interventions are those that target nutrition improvement as their main goal.

2. Corporations with food and beverage components tend to implement nutrition-related CSR programs as part of their business strategy as reflected on the corporations' mission and vision. On top of their nutrition-related CSR effort, generation of profit or making their companies sustain economic growth by conducting CSRs are also noted on the mission and vision of the corporations. This can be directly seen on Cluster 1 or those with food and beverage as part of their main business and in Cluster 2 or those with a component food and beverage area of their business portfolio. It can be noted that introducing nutrition-related CSR programs particularly nutrition-specific interventions, is also embedded as a business strategy of corporations on the food and beverage business. This is in accordance with the Triple bottom line approach of addressing both the social concern (malnutrition) and economic aspect (business profitability and growth) to ensure sustainability of their business and CSR programs [15].

3. A corporation that does not have a food and beverage component under its business umbrella

implemented a nutrition-sensitive intervention. Corporation 3 with its business portfolio not covering any direct food and beverage business has implemented medical mission programs and a nutrition-sensitive intervention. Nutrition-sensitive interventions are programs that target the underlying causes of malnutrition.

Other generalizations noted on the three CSR clusters include (1) that a nutrition-related CSR program is not always regarded by the corporations as part of the health and nutrition or health and well-being programs even when it is a nutrition-specific program. The food fortification program of Corporation 1 for, instance, which includes the development of nutrient-packed biscuits is part of its disaster response CSR program. The reason is that this product is intended for distribution to disaster-affected families. (2) 'Sustainable communities', 'empowered people', 'improved access to basic services,' 'self-reliant and productive communities', 'contribute to a healthier world' and 'positive social impact' are seen as the key focus of the CSR strategies of the respondent corporation as reflected in its mission and vision, with health and nutrition part of its CSR programs. Considering that mission and vision are main motivators of the corporations' CSR, it can be noted that they are aiming to impact on not only giving help to their stakeholders but also 'empowering and uplifting their life condition'. They aim as well to contribute to a more 'sustainable environment and community'. Along with such aims, nutrition aspects are being addressed as part of their goals, based on the nutrition-related CSR programs implemented by these corporations.

CSR Programs and their Contribution to Nutrition Improvement

The programs included in the study have the capacity to impact on nutrition improvement by being able to address some of the immediate, underlying, and basic causes of malnutrition as reflected on the attainment of their programs' goals and objectives. These goals and objectives are relevant for targeting malnutrition.

Food Production Programs. The goals of the food production programs included in the study are (1) to generate livelihood for the participants and (2) enhance the knowledge of the beneficiary on gardening so as to help the beneficiary obtain better access to a healthy food supply.

One program helps improve the welfare of the Filipino farmers through an inclusive business approach that links smallholder farmers to institutional markets to increase their income. The implementing corporation partnered

with government agencies, non-governmental organizations, microfinance institution, and academe to address the challenges and build farmers' capacities. This addresses the basic cause of malnutrition which is access to a support network of beneficiaries and livelihood sources. According to the Food and Agriculture Organization (FAO), agricultural production and other food system activities can increase avenues for creating income selling of agricultural produce or labor [16]. This can contribute to improving nutrition directly by food production and indirectly through an increase in income to buy nutritious food.

Another food production program is the establishment of school gardens by one of the corporations in collaboration with the Bureau of Plant Industry of the Department of Agriculture. Under this program, an area of a school is allotted for the production of nutrient-rich fruits and vegetables. The product from the gardens is used to feed underweight school children. The implementing organization has also signed with an NGO to further expand its school garden training to teachers across the country. Data from the Department of Education, School Health, and Nutrition Unit (2012-2013) show that there are 2 million malnourished schoolchildren (14% of the total number of elementary students), making the program an appropriate complementary intervention towards further improving the nutritional status of the malnourished school children. The FAO of the United Nations also recommended to promote the establishment of school gardens as an integral part of school nutrition programs [17].

Water, Sanitation, and Hygiene (WASH). The goal of the WASH program of the corporation is providing access to potable water to communities without such facilities and improving water, sanitation, and hygiene practices. These goals target the underlying cause of malnutrition which is poor water and sanitation.

The WASH programs of the corporations include water system installation on communities without access to potable water along with sanitation campaigns. One of the corporations also organized barangay water councils in its partner communities. These water councils monitor and manage the water system within the community. Along with these programs, the corporations reported having achieved their goals, making their programs relevant to nutrition improvement of their target community.

The promotion of WASH has been cited by several references and studies as an important component of

fighting undernutrition. According to the World Health Organization, it is estimated that 50% of malnutrition is associated with repeated diarrhea or intestinal worm infections as a result of unsafe water, inadequate sanitation or insufficient hygiene [18]. WASH interventions are also important components of programs that target stunting, a chronic form of undernutrition. Recent findings indicate a relationship between stunting, and poor water, sanitation, and hygiene. It has also been found that even well-nourished children are highly susceptible to stunting when WASH condition is poor (UNICEF-EAPRO, 2016) [19].

Medical Services. The medical services programs of the corporations have objectives which include medical and ancillary services to indigent families as well as communities in underserved areas. The programs also aim for improvement on access to health services. These program goals can address the underlying cause of malnutrition which is inadequate health services.

The programs include mostly medical missions with the provision of medicines and medical equipment to their beneficiaries. Also part of the medical services is the setting up of community clinics which covers both common and specialized illness, and deployment of mobile clinics that provide diagnostic and laboratory services. These medical services of the corporations combined have nationwide coverage.

Although the conduct of medical missions is widespread, concerns have been raised regarding the totality of its effectiveness. One is the "paucity of follow up data, poor relations with the local health care system, and lack of sustainability that challenge the good intentions of missions" [20]. Also, medical missions are often unable to provide the full spectrum of care required for complex medical conditions [21].

The medical mission and community clinic CSR programs, however, seem to be addressing some of the previously mentioned concerns. For instance, most of the CSR medical mission programs were done in partnership with health authorities such as the Department of Health and provincial health units which may help ensure that interventions are administered in the most effective way possible through proper collaboration. The CSR programs also included a mobile laboratory which can provide laboratory and other diagnostic tests for more accurate handling of the medical condition of the beneficiaries. Along with the medical services, there are some complementary

trainings on health and sanitation for the families of the communities served as well as training of barangay health workers. These trainings help impart knowledge to the beneficiaries which can aid in the prevention and management of some of the preventable illnesses.

Feeding Program. The goals of the feeding programs implemented by the corporations are promotion of education and alleviating short term hunger by minimizing malnutrition, reducing the vulnerability of children to malnutrition, and improving the nutritional status of the beneficiaries. The objective of improving the nutritional status of the beneficiary according to the respondent corporations has been achieved.

The programs of the corporations include the provision of caloric-rich bread during snack time to grade 1 students thrice weekly, for 45 weeks. Another corporation implemented a daily serving of lunch for 120 days among undernourished Grades 1 to 3 students. This program also included the establishment of School Feeding Kitchen to further improve the services of the program. Another program involves a three-step model which includes (1) actual feeding program, (2) provision of recipe booklet and teaching mothers how to prepare nutritious and affordable dishes, and (3) supporting mothers to set up their own business via livelihood development modules.

There are several positive aspects of the implemented feeding programs that contribute to addressing malnutrition. For instance, one aspect of the CSR feeding programs included in the study which renders it more effective is that they were done not as a standalone intervention. They were done in conjunction with other programs such as nutrition education and backyard gardening. When activities like school gardening and nutrition education are linked to the school feeding program, they help address common nutrition and health problems, as well as enhance the overall impact [16]. The areas covered by the feeding program are dispersed around different locations in the country. The school feeding program, however, of Corporation 4 is notable due to its coverage of areas that are pointed to have a high prevalence of undernutrition (as per the 8th National Nutrition Survey). These areas include the regions of ARMM, SOCCSKSARGEN, and MIMAROPA. The programs were also conducted for a minimum of 120 days which is the minimum number of days to effect change in nutritional status in feeding programs. Complementary activities were also done with the feeding program such as the deworming activity. School-age

children have the most serious worm infections, the presence of which hinders proper absorption and utilization of nutrients during school feeding [22].

Another positive aspect of the feeding program is manifested in one of the corporations' three-step model. This model includes added activities that enhance the knowledge and capacity of mothers such as a cooking demonstration on healthy meals preparation. It also includes trainings on improving the livelihood of the mothers of the beneficiaries. This is a notable addition as empowering mothers is also a way of enhancing the impact of nutrition programs. Empirical evidence suggests that empowering women improves nutrition for mothers, their children, and other household members [23]. Increasing their source of livelihood is also a good feature of the program as some studies have found that women's discretionary income has greater impact on child nutrition and food security than men's [24]. Lastly, another positive aspect is the alignment of the corporations' efforts with the Department of Education's (DepEd) School Based Feeding Program (SBFP). One of the corporations' school feeding program has been mainstreamed into DepEd's SBFP. Their school feeding kitchen, as well as recipes from their own feeding programs, have also been consolidated to DepEd's SBFP. This effort of partnering their own feeding programs with DepEd's SBFP would not only broaden the reach of their CSR feeding programs but also enable a more sustainable program. According to an article published by the World Bank, the effectiveness and sustainability of feeding programs are assured when they are embedded in the education system [25].

Food Fortification. The food fortification program's goals included in the study are to provide immediate relief to hunger and adequate nutrition to families affected by disasters and to fortify 22 billion products in 2016. Both programs, though differing in target, addressed the immediate cause of malnutrition which is poor nutrient and dietary intake.

Under the food fortification programs, one corporation developed a high energy biscuit which is packed with energy and essential nutrients. The biscuit contains 450kcal which is almost equivalent to one full meal, and contains proteins, vitamins B1 to B12, carbohydrates, added sugar, fat, vitamins A, C, and E, iodine, iron, magnesium, and calcium. This biscuit is intended to be a disaster relief solution for disaster-affected families nationwide. For this reason, it is ready to eat, ready to transport, and easy to store and stack good. The implementing organization also mentioned that

this specific biscuit can also be used to supplement a school-based feeding program.

The second CSR program under food fortification is a product fortification (micronutrient fortification) effort of Corporation 5. This is a voluntary food fortification effort. The corporation's products have been fortified with any of the following ingredients: iron, zinc, vitamins A and C, and iodine. The fortified products are distributed nationwide to a wide range of consumers. To ensure its success, the Corporation partnered with the Food and Nutrition Research Institute-Department of Science of Technology (FNRI-DOST).

There are notable aspects of the food fortification programs included in the study which could address malnutrition. One of the corporations' product fortification was given a positive rating on the program characterization in this study as the micronutrients were placed on the right vehicle product – milk and seasoning. Both are widely availed of by consumers of their products. Also, the nutrients that they fortify their products with address the three most common forms of micronutrient malnutrition which are iron, vitamin A, and iodine deficiencies. Of the three, iron deficiency is the most prevalent (WHO and FAO) and is also responsible for roughly half of the global prevalence of anemia [26]. In the Philippines, deficiencies in vitamin A, iron, and iodine is a concern included in the Philippine Plan of Action for Nutrition for 2017-2022. Anemia is also considered a moderate public health significance for selected age groups, specifically among infants from 6 months to less than 1 year, pregnant women, and male adults 60 years of age and above [4]. The iron-fortified milk of one of the corporations covers the bracket of pregnant women and male adults 60 years and above who have a moderate level of anemia. Another notable aspect of the food fortification program is in accordance with the World Health Organization's (2006) recommendation that fortified food needs to be consumed in adequate amounts by a large proportion of the target individuals in a population. The food vehicles to be fortified should be preferably centrally processed which can be achieved by the support of the food industry. Considering that Corporation 5 is a food and beverage company, the reach of their products help ensure that their fortified goods can be consumed by a larger number of the population. The nationwide reach of its products helped attain its objective of fortifying 22 billion products.

Healthy lifestyle program. The healthy lifestyle program included in the study has a goal of promoting active lifestyle

via physical activity and nutrition. Their objective renders the program able to address the underlying cause of malnutrition which is inadequate feeding practices and behaviour as well as sedentary lifestyle behaviour.

One of the healthy lifestyle programs is a school-based program that promotes an active and healthy lifestyle among public elementary students. The program includes lectures on physical activity and “sports-themed” dance steps during flag raising ceremony. It is done in partnership with the Department of Education. Another healthy lifestyle program promotes eating right and engaging in regular exercise. It is composed of a 15-minute lecture on nutrition followed by a dance exercise conducted during the school's flag-raising ceremony. This program targets both elementary and high school students

The bulk target of these programs are school children and most of them are implemented in schools. According to FAO, developing healthy dietary and lifestyle practices at an early age can positively impact on nutrition and health through adult lives. The implementation of these activities in a school setting has a positive effect on nutrition promotion. According to the Food and Agriculture Organization of the United Nations, schools (from pre-school to secondary) are ideal settings for promoting lifelong healthy eating habits and lifestyles (IIRR, 2016) [27].

Nutrition Education Programs. The goal of the nutrition education programs of the corporation is raising awareness on proper and healthy food choices, balanced meal, physical activity, food safety behaviour and reading of food labels.

The programs include teaching children in school the value of “healthy eating habits, balanced and nutritious meals, physical activity, food safety, and understanding food labels.” Another program involves educating mothers on basic nutrition as well as preparing nutritious and affordable meals for their families. This is in line with the recommendation of FAO which states that nutrition education should focus on strengthening education and training opportunities, especially for girls and women. Apart from the lecture, it involves hands-on food preparation and cooking sessions. Implemented jointly with the local government unit, the program was rated positive in the characterization due to a combination of hands-on cooking preparation and nutrition lecture. As per the Food and Agriculture Organization, nutrition education should always employ a wide range of hands-on teaching/learning methods [17].

Another nutrition education program promotes wellness advocacy to shoppers in the supermarket. This program is also given a positive rating in the characterization because of the one-on-one counseling with the shoppers which was done by a registered nutritionist-dietitian. Collaborating with professionals who are capable of discussing the topic of nutrition to the target beneficiaries helps ensure that the objective of the program of educating people on basic nutrition as well as product knowledge is attained.

Nutrition education is important and beneficial because it empowers consumers to select healthy food and make good food choices for them and their family. It also enables women to improve their child's nutrition. It can improve the children's educational achievement. Lastly, it also enables people to determine between false and useful nutrition information [17].

Product reformulation. The objective of the product reformulation effort of one corporation was not indicated in the study. However, the description of the program shows that it can address an immediate cause of malnutrition which is poor dietary intake.

The program includes reduction of saturated fat, trans-fat, added sugar, and sodium content in a way that still preserves the quality and taste of the product. Reducing these contents can help in nutrition improvement as high consumption is linked to the development of certain non-communicable diseases, and to the rise in the incidence of obesity.

The implementing corporation has a policy and clear target on the reduction of such ingredients. Its prescribed criteria for reformulating its products are based on reputable health authorities such as the World Health Organization. This program has also the capacity to reach the general population as the products of this Corporation are distributed nationwide.

The World Health Organization and other official bodies, have identified product reformulation as a key tool that can be done by the food industry to help address public health nutrition priorities. This can also pave way to helping reduce excessive dietary intake of sugar, salt, and fats of the general population [28].

Food labelling. The food labelling effort included in the study has the capacity to effect on nutrition improvement by targeting the underlying cause of malnutrition which is

inadequate feeding practices and behaviour. The corporation's food labelling program enables customers to choose products based on their nutrient composition in relation to their needs and also serves as a guide to healthful food choices. The description obtained from the corporation's food labelling program was contrasted to some of the applicable guidelines on the Codex Guidelines on Nutrition Labelling (WHO and FAO,2007) [29].

The first principle is "Nutrient declaration. Information supplied should be for the purpose of providing consumers with a suitable profile of nutrients contained in the food and considered to be of nutritional importance". The corporations' food labelling state that they provide straight-forward information on ingredients, nutritional benefits, health information and portion size on all their packaging materials. Also, they ensure that the information provided are truthful, meaningful, transparent, and backed by science and are not misleading. They also strive for the accurateness of the labels.

The second principle which is also part of Nutrient declaration states that "The information should not lead consumers to believe that there is exact quantitative knowledge of what individuals should eat in order to maintain health, but rather to convey an understanding of the quantity of nutrients contained in the product." The corporation described its nutrition labelling effort as enabling consumers to make informed choices about the nutritional content of a product at point of sale, promoting healthy portion consumption and informing consumers about the nutritional content of a product. This is in accordance with Principle 2 of conveying an understanding of the nutrition content of a product.

The third principle 'Nutrition labelling. Nutrition labelling should not deliberately imply that a food which carries such labelling has necessarily any nutritional advantage over a food which is not so labelled." The nutrition labels placed by the implementing corporation on its products do not imply their nutritional advantage over other labelled food, which is in accordance with the third principle of Codex.

However, some studies are still looking at the effectiveness of nutrition labelling on influencing the consumer to select healthful food [30,31,32]. This can, therefore, be a focus of future studies.

In summary, based on the discussions, the CSR programs were found to address the immediate, underlying, and basic causes of malnutrition. The immediate causes addressed were poor nutrient and dietary intake. The underlying

causes include poor water and sanitation, inadequate health services, insufficient supply or access to healthy food, inadequate feeding practices and behaviours, and sedentary lifestyle behaviours. One program even addressed the basic cause of malnutrition, access to support networks and livelihood, which has also been linked to poverty.

Conclusion

The study showed that the nutrition-related CSR programs of the six companies are aligned with their mission and vision, and are primarily influenced by the nature of their business. Corporations in the food and beverage industry implement the most number of nutrition-related CSR programs that are mostly focused on nutrition-specific interventions. Analysis of the data obtained shows that the nutrition-related CSR presented in the study have the capacity to contribute to nutrition improvement by being able to address some of the immediate, underlying, and basic causes of malnutrition. This is further supplemented by the following findings: first, the programs were found to be appropriate, effective and efficacious, and shows minimal gap in contrast to guidelines. They were also coordinated and collaborated with relevant institutions such as government agencies, NGOs, and organizational authorities in the respective program fields which further add to the program's potential. Finally, given the resources attributed to the large nature of the corporations, the programs reached a large number of beneficiaries and areas nationwide; and were able to cover areas where nutrition-intervention is needed. From these results, it is recommended to advocate for the integration of nutrition in the existing corporate social programs of private companies.

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