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**Working Paper**

## The Case of Butuan City: A Consistent Regional Outstanding Winner in Nutrition (CROWN)

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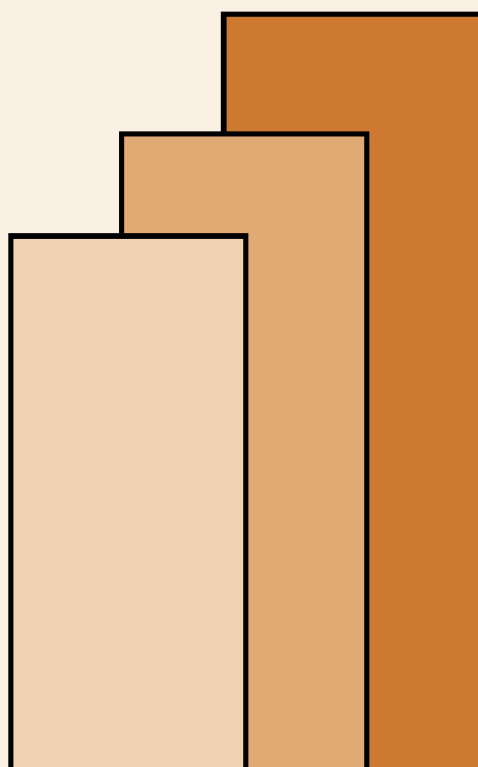
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## PREFACE

This paper is one of the eight case studies in the health sector conducted under the project, "Population and Urbanization: Managing the Urbanization Process Under a Decentralized Governance Framework." The project is jointly undertaken by the Philippine Institute for Development Studies (PIDS), the National Economic and Development Authority (NEDA) and the Development Academy of the Philippines (DAP). Among the components of the project are case studies of selected cities highlighting their innovations in health, housing, and environmental management.

The main objective of the case studies is to identify the strategies of model cities that can be replicated by other cities and local government units, particularly in the financing and delivery of basic services under devolution and increasing urbanization.

This case study focuses on Butuan City which was recommended by NEDA-Region XIII as a model city for health. The City's excellent performance in nutrition enabled it to gain the CROWN (Consistent Regional Outstanding Winner in Nutrition) Award in 1996 and maintain it in 1997.

The paper is organized as follows. The first section gives a backgrounder on the city, its land area and population, health facilities, financing, and performance. This is followed by a discussion of the city's nutrition activities and a presentation of its specific strategies to overcome malnutrition. The key elements for the success of these strategies are then identified in the succeeding section. The next part focuses on the strategies that other cities and LGUs can replicate. Finally, the paper ends with some concluding remarks.

**The Case of Butuan City:  
A Consistent Regional Outstanding  
Winner in Nutrition (CROWN)**

*Virginia S. Pineda and Jazmin D. Berido<sup>1</sup>*

## **I. CITY BACKGROUND**

### **Location**

Butuan City is located in the central portion of the province of Agusan del Norte in northern Mindanao. It is bounded on the north by the Butuan Bay and the municipality of Cabadbaran, on the east by the municipality of Sibagat, on the west by Buenavista and on the south by Las Nieves.

### **Land Area and Population**

The city has a total land area of 526.3 square kilometers. It is composed of 86 barangays, of which 27 are urban and 59 are rural. As of 1995, it has about 46,596 households.

In 1990, the city population was estimated at 227,829 persons. Of these, 40 percent live in the urban areas while 60 percent reside in the rural barangays. By 1995, population increased to 247,074 persons or by 8 percent (National Statistics Office Census). Population density per square kilometer also went up from 433 in 1990 to 470 in 1995. The proportion of population living in urban areas decreased slightly to 38 percent while that in rural areas rose to 62 percent.

### **Health Facilities**

Butuan City has three main health centers, 27 urban barangay health stations (BHSs) and 59 rural BHSs. It has two government hospitals and six private hospitals. The city owns and operates the City General Hospital and Medical Center which has a capacity of 150 beds. The other government hospital is the Provincial Hospital of Agusan del Norte which has a capacity of 100 beds. In addition, the city's six private hospitals have a combined capacity of 521 beds. The hospitals serve not only the patients from Butuan City but also those from other municipalities.

### **Health Expenditures/Budget**

In 1991, prior to devolution, Butuan City's health expenditures amounted to P12.3 million, which constituted 10 percent of its total expenditures. About 34 percent was spent for basic health and 66 percent for hospital. In 1994, after

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devolution, health expenditures increased to 27.5 million, which was 10 percent of the city's total expenditures. The proportion spent for basic health increased to 43 percent while that for hospital declined to 55 percent.

The city government's budget for health in 1995 is P 29.1 million which was 8 percent of the total city budget. About 54 percent of the health budget was allocated for hospital and 46 percent for basic health, nutrition, and miscellaneous health services.

### Health performance

Butuan City's infant and child mortality rates have been declining and lower than the averages for the whole country in 1990 and 1995. However, its maternal mortality rates, although decreasing, have been higher than the national average for the same years (Table 1). Nevertheless, the reduction in the city's maternal mortality rates (50 per 100,000 livebirths) was greater than the average for the Philippines (29 per 100,000 livebirths) from 1990 to 1995. Similarly, the percentage of the city's malnourished children fell significantly from 58 percent in 1990 to 32 percent in 1995, which were lower than the national averages.

**Table 1. Mortality and Nutrition Indicators, 1990 and 1995**

Indicator	1990		1995	
	Butuan City	Philippines	Butuan City	Philippines
Mortality Rates:				
Infant	45.9	56.7	36.7	48.9
Child	65.0	79.6	52.2	66.8
Maternal	251.3	209.0	201.0	179.7
Percentage of Malnourished Children (0-83 years old)				
Mild	43.6	41.3	26.5	30.7
Moderate	13.7	15.5	5.0	8.4
Severe	1.1	2.3	0.4	1.2
<b>Total</b>	<b>58.4</b>	<b>59.1</b>	<b>31.9</b>	<b>40.3</b>

Infant mortality: infant deaths per 1,000 live births

Child mortality: number of deaths among children less than 5 years of age per 1,000 children of the same age range

Maternal mortality: number of maternal deaths per 100,000 live births

Sources: Herrin (1998), National Statistical Coordination Board, Butuan City Nutrition Office, Department of Health Nutrition Service.

## II. NUTRITION ACTIVITIES

The Philippine government's measures to address the malnutrition problem include food assistance, micronutrient supplementation and fortification, growth monitoring and promotion, nutrition education, home and community food production, and credit assistance for livelihood. Butuan's Nutrition Committee take charge of these activities for the city. It is chaired by the mayor and meets once every quarter. Its composition and the tasks of each member are presented in Table 2.

**Table 2. Composition of the Butuan City Nutrition Committee**

<b>Agency</b>	<b>Activity/responsibility</b>
Department of Interior and Local Government (DILG)	Reactivation of Barangay Nutrition Committees (the Committees are funded by the barangays)
City Health Office (CHO)	Rehabilitation of malnourished children; In-charge of micro-nutrient supplementation
City Social Welfare and Development	Livelihood funding for family with malnourished child/children (poverty cases); Supplemental feeding
Office of the City Agriculturist	Food production/food security
Department of Education, Culture and Sports (DECS)	Nutrition education using TCP (Teacher, Child, Parent) approach. The teacher imparts nutrition information in class which the children echo to the parents; Food assistance program for children, e.g. hot lunch; Food production in schools
City Budget Office	Allocation of funding for nutrition
Philippine Information Agency	Assistance in nutrition information dissemination through the tri-media
City Population Office	Population control and population education
Butuan Host Lions Club	Food assistance through feeding in the barangays and distribution of food commodities; Responsible for training the Barangay Nutrition Scholars (BNSs) in Vitamin A deficiency and eye cataract detection
Catholic Women's League	Feeding activities for disabled persons, prisoners and hospitalized children

Source: Butuan City Nutrition Office

Butuan City has a separate City Nutrition Office (CNO). Headed by the City Nutrition Officer, the CNO acts as the Secretariat to the BNC and serves as the coordinating office for all nutrition program activities. The CNO has two assistant nutritionists, each of whom is assigned to 43 barangays. In every barangay, there is a feeding center and a Barangay Nutrition Scholar (BNS). Each BNS receives every

month P400 from the city plus allowance from the barangay (the amount varies per barangay). The barangays are grouped into 10 clusters. Each cluster meets once a month and all 10 clusters also meet once a month wherein the BNSs discuss plans, problems, and program implementation.

The barangay nutrition scholars serve as the contact persons for almost all city activities in nutrition, agriculture, social welfare, health, education, and population. The CNO and the DILG provide at least two (2) training/seminars per year to BNSs to equip them with the necessary skills in program management, basic information on nutrition program planning and implementation in the barangays.

With the supervision of Barangay Nutrition Committee members, the BNSs hold nutrition seminars in the barangays. Aside from teaching proper nutrition, the seminars also deal with responsible parenthood. Malnutrition is most likely when there are many children to feed and family income is low. The parents are advised to limit the number of their children since the share of each child in food and other provisions gets smaller as the number of children increases. Mothers of malnourished children are required to attend nutrition seminars at least twice a year. If they don't attend, their children are not given milk.

Every month, the BNSs weigh the children. While doing this, they also provide information to mothers on proper nutrition. They also conduct regular home visits once a month. During their visits, the BNSs make it a point to have a dialogue with residents regarding the different programs and projects offered by the city government.

The BNSs campaign for food production through barangay assemblies, meetings and mothers' classes. They encourage backyard gardening or even planting in the mountains if backyard space is not available. In every barangay, there is an agricultural officer to assist the farmers. To enable farmers to buy pre- and post-harvest equipment (power tillers and threshers), the mayor provides interest-free loans.

To monitor performance, the BNSs use a spot map and nutritional status table. The spot map indicates in which barangays there are many moderately, mildly, and severely malnourished children while the nutritional status table presents a yearly comparison of the number and percentage of children in Butuan City with severe, mild and moderate malnutrition.

For its livelihood program, Butuan City has allotted P4 million. Furthermore, its P50,000 CROWN prize was loaned to 25 families which come from the top 20 barangays having the highest malnutrition incidence and from the top five nutrition program implementors. The loans are used for livelihood projects such as sari-sari store and mushroom/bromeliad growing. They are interest-free and payable after two years.

Butuan City became a CROWN (Consistent Regional Outstanding Winner in Nutrition) Awardee in 1996. In 1997, it was honored again for maintaining this award. The city showed outstanding performance, having minimized malnutrition

incidence among children, 29 percent in 1996 and 26 percent in 1997 compared with the national averages of 38 percent and 34 percent for the same years (Table 3).

**Table 3. Malnutrition in Butuan City and the Philippines**

Percentage of malnourished children (0-83 months old)	1996		1997	
	Butuan City	Philippines	Butuan City	Philippines
Mild	24.0	28.5	22.5	26.2
Moderate	4.4	8.3	3.6	6.6
Severe	0.4	1.3	0.3	0.9
<b>Total</b>	<b>28.8</b>	<b>38.1</b>	<b>26.4</b>	<b>33.7</b>

Sources: Butuan City Nutrition Office and Department of Health Nutrition Office

Butuan City's budget for nutrition (including milk) amounted to P2.3 million in 1997 which constituted 0.46 percent of the total city budget.

### III. CITY STRATEGIES TO OVERCOME MALNUTRITION

The city is actively implementing the government's holistic approach to the malnutrition problem. In addition, it has its own strategies which enabled it to have outstanding performance in nutrition, as follows:

#### 1. USE OF FRESH MILK

Butuan city uses milk for feeding instead of nutripak. According to the city nutrition officer, milk is more convenient since it is ready-to-drink and can be taken on-site. In contrast, nutripak, which contains mongo and dilis, has to be cooked at home. It is also hard to monitor if nutripak was fed to the malnourished child only or served as food for the whole family.

Malnourished children are weighed every month and fed milk everyday until the normal weights are achieved. The BNSs distribute to purok leaders a specified quantity of milk based on the number of malnourished children. As a control measure, the parents' signatures are required certifying that their children drank the milk.

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Butuan City began to use fresh milk for feeding in 1993 after the phase out of the United States food commodity provision under Public Law 480. Initially, it sourced fresh milk from a farmers' cooperative in another city. However, there have been problems with this arrangement. The milk has to be consumed immediately to avoid spoilage. Storing it in the freezer extended its shelf life but many complained that it was too cold for drinking. Children also got diarrhea from drinking the milk. The city nutrition office was able to solve this problem by using imported liquid milk from Australia. Such milk can be stored up to nine months and was cheaper than local milk by 10 percent.



The city spent P1.4 million for milk in 1997. For 1998, its approved budget for milk is 1.5 million. Milk provision, however, is temporary. It may even be discontinued before the year 2000. The BNSs therefore tell the mothers not to be dependent on it. Rather, they should apply what they have learned from nutrition seminars concerning the right kind of food to feed their children.

## **2. BARANGAY NUTRITION COMMITTEE PROGRAM PLANNING SEMINARS**

Butuan City Nutrition personnel and DILG staff conduct nutrition program planning seminars with barangay leaders. They compare the nutritional status of the puroks in the barangay and guide the leaders in making their own plans for each quarter by asking them to identify problems, think of solutions, identify funding sources if needed, assign people to handle the problems, and make time table.

## **3. SEARCH FOR BULAWANONG (GOLDEN) BARANGAY**

Butuan City conducts an annual “SEARCH FOR BULAWANONG (GOLDEN) BARANGAY”. Every quarter, the performances of the barangays are evaluated using the following criteria: food production, clean and green, barangay record keeping, decrease in malnutrition, presence of herbal and communal garden, livelihood program, primary health care activities, barangay nutrition projects, presence of garbage receptacles, sports facilities, availability of drug abuse prevention program, parents-teachers assembly, maintenance of barangay facilities (such as health stations), and awards and citations for the past two years. Awards for each winner (an urban barangay and a rural barangay for each prize) amount to P100,000 for the first prize, P75,000 for the second prize, and P50,000 for the third prize.

## **4. IDENTIFICATION AND ANNOUNCEMENT OF WORST PERFORMERS**

The barangays are ranked based on the number of malnourished children. During ABC (Association of Barangay Captains) meetings, the ranking is announced – which barangays top the list in terms of malnutrition. The problems of those barangays and appropriate actions to deal with them are discussed accordingly.

## **5. SHARE-FOOD PROJECT**

Under the Share-Food project of Barangay Golden Ribbon, well-to-do families sponsor malnourished children for three months. The sponsoring family feeds a child every meal. As a result of the project, there are no more severely malnourished children in the area. Currently, the project concentrates on moderately and mildly malnourished children. Other four barangays of the city are likewise replicating the same project to help overcome the malnutrition problem in their areas.

## **IV. KEY ELEMENTS FOR SUCCESS**

### **1. Application of holistic approach**

The city nutrition office realizes that the feeding of children provides only immediate and temporary solution to malnutrition. The problem will remain and even worsen if its underlying causes are not addressed. Butuan City has identified the root causes as poverty/unemployment, mothers' lack of knowledge, and having many children. Accordingly, it addressed these problems through livelihood, food production, nutrition seminars, and responsible parenthood. Furthermore, its "search for the golden barangay" covers a wide range of concerns, thus, promoting cooperation from barangay leaders and their constituents in the implementation of nutrition, health, cleanliness and other programs.

### **2. Planning**

During program planning seminars and meetings of nutrition personnel with barangay leaders, problems and causes of low performance are known. Accordingly, specific plans and measures to deal with them are identified which help improve performance in the succeeding periods.

### **3. On-site feeding**

When food for malnourished children has to be cooked at home which is the case for nutripak, it is possible that the food is not given wholly to the malnourished children but shared with other family members who are not malnourished. Use of ready-to-drink milk enables on-site feeding which ensures that the target beneficiaries are reached.

### **4. Recognition of outstanding and worst performers**

Competition for the golden barangay award motivates barangay leaders and constituents to give their best performance. Likewise, ranking and announcement of worst performers is embarrassing, prompting leaders and their constituents to do better.

### **5. Leadership and commitment of city officials**

The leadership provided by the mayor and the rest of the Butuan City Nutrition Committee together with the active and sustained implementation of activities by the officials and staff of the City Nutrition Office resulted in the city's outstanding nutrition performance. The city officials' commitment to overcome the malnutrition problem is likewise shown in the allocation of funds for nutrition-related activities such as milk feeding program and livelihood projects.

## **V. STRATEGIES THAT CAN BE REPLICATED**

### **1. Barangay Nutrition Program Planning Seminars**

Nutrition Office and DILG personnel could initiate nutrition program planning seminars in every barangay. Initially, they could assist the barangay leaders in making their own quarterly nutrition plans and reviewing their accomplishments. This may be done by asking them to identify problems, devise solutions, specify funding sources if necessary, assign people to handle the problems, and make time table for accomplishing tasks.

### **2. Identification of outstanding performers and worst performers**

Other cities may also launch a contest for the most outstanding barangay. Cash prizes may be awarded to winners depending on the financial capability of the city. Butuan City's criteria for "Golden Barangay" may also be used or modified depending on the city's preference.

Barangays with the most number of malnourished children may also be identified and ranked. Meetings with these barangays may be set up to discuss problems and identify solutions and ways to improve their performance.

### **3. Share-food project**

The barangay officials could request well-to-do families to sponsor malnourished children by providing them meals for a certain period, such as three months.

### **4. Use of milk or ready-to-eat food**

On-site feeding may be done using milk or other ready-to-eat food. Instead of distributing food on a take-home basis, these may be cooked collectively in the feeding centers with mothers taking turns in cooking so that the children can be fed on site.

Some cities may not have the resources to provide credit for livelihood projects. They could search for possible loan sources such as NGOs (e.g., Tulay sa Pag-Unlad, Technology and Livelihood Resource Center or TLRC conduits) and disseminate these information to the people. Moreover, they could also encourage pooling the resources of people interested in having livelihood projects. In such system, called "paluwagan" the participants regularly contribute money into a common fund, and then take turns receiving the total collection for a specified period. To discourage delinquency and fund misuse, they could impose a punishment for a member who missed payment or used the money for other purposes.

## **VI. CONCLUDING REMARKS**

In dealing with the malnutrition problem, the Philippine government has adopted a holistic approach through food assistance, micronutrient supplementation and fortification, nutrition education, food production and credit assistance for livelihood programs. The extent of the implementation of such method, however, differs for each LGU. Butuan City can be considered a model city as it actively applied the holistic approach and even initiated additional strategies to address its malnutrition problem. Consequently, it won the CROWN Award for its outstanding nutrition performance. Following Butuan City's example and replicating its relevant strategies would help improve the nutrition performance of other cities and LGUs in the country.