SPECIAL REPORT

Food and Nutritional Status of Filipinos and Nutrition Integration

CECILIA A. FLORENCIO

Presented at the 2003 University of the Philippines' Alumni Council Meeting held at Ang Bahay ng Alumni, U.P. Diliman on 20 June 2003. The theme of the meeting was Population and the Quality of Life of the Filipino.

INTRODUCTION

More than 25 years ago former President Ferdinand E. Marcos issued Presidential Decree No. 491, the Nutrition Act of the Philippines. The decree declared nutrition a vital and integral part of social reform and economic development and a priority of the government. Since then the country has had six national plans of action for nutrition, including the present Medium-Term Philippine Plan of Action for Nutrition, 1999-2004 (MTPPAN). Every single plan sought to reduce or eliminate malnutrition in the country.

The 1999-2004 Plan is very much like the 1993-98 version both in its formulation and content. Was the predecessor plan deserving of a re-appearance because we had become a nutritionally-improved country? The first part of the paper addresses this question.

The same decree stipulates the planning and implementation of a Philippine Food and Nutrition Program in an integrated fashion by both the government and the private sector. The second part of the paper briefly looks into the integration of nutrition and food, population and gender and the use of scientific knowledge.

This paper drew from a study titled "Looking Back, Looking Ahead: An Analysis of the Medium-Term Philippine Plan of Action for Nutrition, 1999-2004."

NUTRITION IMPROVEMENT?

The country's nutrition program in 1993-1998 had five intervention schemes or impact programs as the National Nutrition Council (NNC) labeled them. These were home, school and community food production; supplementary feeding; micronutrient supplementation and food fortification; nutrition education; and credit assistance for livelihood. The NNC assessed the performance of these interventions as satisfactory to very satisfactory in terms of accomplishing planned targets. The fact is only four of the 20 specific targets were met (Table 1). Based on a passing grade of at least 75% less than half of the interventions made the grade.

"Impressive" was the overall descriptor used for micronutrient supplementation. Yet, not one of the eight targets of the intervention was reached. Moreover, there were large variations in outreach among the three micronutrient supplementation schemes (vitamin A, iodine and iron). The number of beneficiaries ranged from 6% for iodine supplementation for young children to 93% for vitamin A supplementation for preschoolers. There were also large intra-scheme variations. Iodine supplementation reached only 6% of the young children but 75% of women of child-bearing age.

What about the program's impact on the nutritional status of Filipinos? According to some government documents and key government nutrition officials, positive changes in the nutritional status of Filipinos were noted after implementing the national nutrition program from 1993-1998 and, that overall, there have been improvements in the nutritional status of Filipinos.

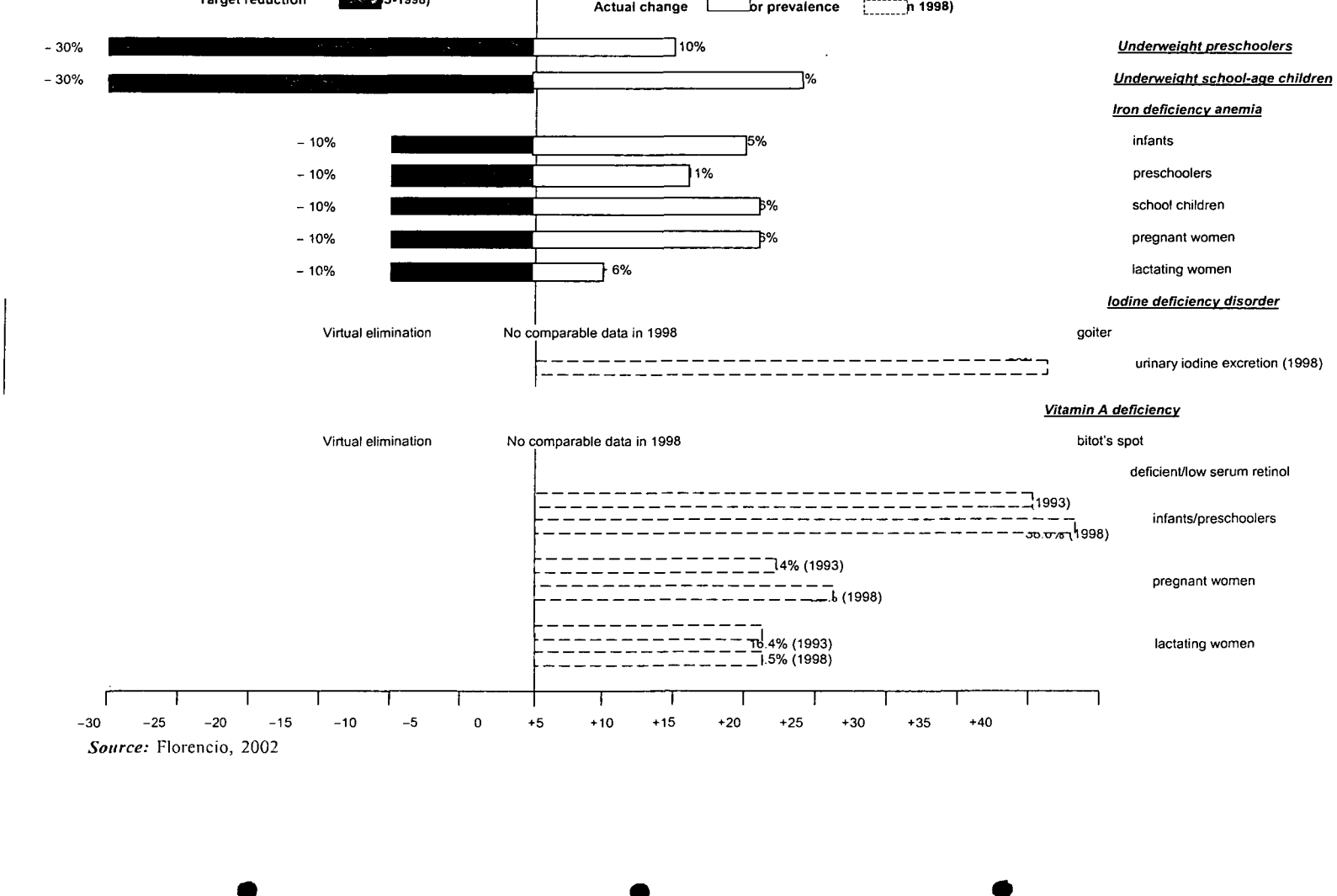
Results of the last two national nutrition surveys of the Food and Nutrition Research Institute (FNRI), one in 1993 and another in 1998, do not support the government's claim. Not only were the nutrition objectives not met, the nutrition situation became worse (Figure 1). Undernutrition in young children is an example. At the end of five years, instead of a 30% reduction in underweight as planned, there were 10% more underweight infants/preschool children and 19% more underweight young schoolchildren.

TABLE 1. Reported outreach of impact programs in 1993-1998.

Programs	Number reached	% of target
1. Home and community food production		
Kitchen gardens established		
Home	1,646,234	106.2
Community	95,239	226.8
School	35,701	130.9
Small animal dispersal		
Families reached	688,862	73.2
2. Micronutrient supplementation		
Vitamin A supplementation		
Preschoolers (12-59 months)	37,483,516	93.2
Schoolchildren	4,008,400	70.3
Iodine supplementation		
Women of child-bearing age	29,676,821	74.6
Preschoolers	592,672	6.3
Schoolchildren	592,275	5.6
Iron supplementation		
Infants and preschoolers	2,741,168	33.5
Schoolchildren	1,129,560	30.8
Pregnant women	3,999,550	43.0
3. Credit assistance for livelihood		
Nutritionally-at-risk households provided credit assistance	473,081	126.1
4. Nutrition education		
Schools adopting TCP approach	9,740	61.4
Development/airing of radio and television plugs	39	48.7
Development/placement of print ads	102	85.0
Growth monitoring charts distributed	4,137,992	61.2
5. Supplementary feeding		
Preschoolers	3,359,562	82.8
Schoolchildren	2,811,787	97.8
Pregnant women	939,462	38.8

Source: Florencio, 2002

Figure 1.
Target reductions and actual changes or prevalence rates of undernutrition among Filipinos, 1993-1998.



Source: Florencio, 2002

When the present national nutrition program was planned, three of 10 preschoolers and 3-4 of 10 young schoolchildren (estimated to be about six million children) and three of 10 adolescents were underweight and stunted, conditions indicative of general and long-standing undernutrition. It bears noting that for every 100 infants and children one to 10 years of age, around 30 were underweight for their age and only one was overweight. The situation of adults is different, with 13 of every 100 being underweight (chronically energy deficient) and 20, overweight or obese. At the end of the 1993-1998 national nutrition program, one of two infants, one of two pregnant/lactating women and 4-5 of 10 elderly persons were anemic. Moreover, six of 10 schoolchildren were iodine deficient and four of 10 infants and young children were deficient in vitamin A.

The Philippines adopted the United Nations Millennium Development Goals to reduce poverty and the worst forms of human deprivation. Poverty was defined as the sustained inability of a household to meet its minimal set of capabilities for human, physical, intellectual and psychological functioning.

One of the goals is to halve the 1990 proportion of underweight children (under five years) by 2015. This requires a trebling of the average annual rate of reduction of underweight experienced in the last decade.[1] If it is "business as usual," the goal may be reached only in 2040.

If we set the same goal for underweight young schoolchildren (6-10 years of age), the annual reduction rate will have to be 10 times the average for the last decade. If the usual rate continues, it may take more than 100 years for the goal to be met.

Malnutrition does not only tell us about the present condition of those affected, it also indicates their past and signals their future. Malnutrition does not only show individuals with impaired functions; it also bears witness to society's failure to provide an environment thatenables its people to attain their full genetic potential.

Were our government officials, particularly members of the NNC, affected by the serious deterioration in the nutritional quality of life of our people? Did they think of themselves somehow accountable for the unacceptable situation and, consequently, re-assessed their policies and programs to determine how best to address the affliction, collectively and decisively?

1 The prevalence of underweight children, 0-5 years of age, decreased only from 34.5% in 1989-90 to 30.6% in 2001. The reduction for 6-10 year-old children was even less during the same period, from 34.2% to 32.9%.

Nothing like this happened. Our planners moved on to make yet another national nutrition plan akin to the previous plan despite their own call for nutrition policy reforms and 17 strategic, programmatic and policy recommendations for nutrition. In a society where the standard of performance has become "pwede na" such a response is "OK lang."

Given the dismal picture of nutrition in the country, why wasn't there an outcry from the government, civil society, media, academe or any other sector of society? Or, if this is too much for a people given to smiling or laughing away its woes ¾ at least an exposé, given media's strong sense of smell for bad news, or, a summit, given our political leaders penchant for holding such a pretentious activity?

Was it effrontery? Fecklessness? Apathy? Or, the common, convenient and consoling getaways. "Para naman wala tayong ginagawa." "Hindi naman tayo lamang ang may problema." "It could have been worse." "Look at the glass as being half full instead of half empty."

Our government consistently declares nutrition as vital to the country's development and a critical factor in an individual's capacity to function in society but increasingly treats it with tokenism. Studies have identified a balanced and sustained strategy of income growth and adequate investment in direct nutrition intervention programs as necessary to accelerate reductions in malnutrition.

The high prevalence of malnutrition coupled with high population growth is a deadly combination requiring thoughtful analysis followed by bold and resolute action ¾ both of which have yet to be the hallmark of governance in this country.

NUTRITION INTEGRATION?

Many factors influence nutrition; thus, the need for its integration in various development sectors. The government recognized this need and took important steps to meet it. A key initiative was the inclusion of several government agencies and non-government organizations in the NNC[2] and in the formulation and implementation of national nutrition plans. After a quarter of a century of experience using the same set-up, it is time to re-examine interconnections and, where appropriate,

2 The NNC is composed of representatives from the private sector and the following departments of government: Agriculture, Health, Social Welfare and Development, Education, Interior and Local Government, Labor and Employment, Trade and Industry, Science and Technology, Budget and Management, and the National Economic and Development Authority.

sharpen or modify points of contact between nutrition and other related development policies and programs of the government.

Nutrition and Food

Food comes first whenever nutrition is mentioned. But of the more than two dozen specific objectives of the present national nutrition plan not a single one is about food and nutrient intake[3] an exclusion inconsistent with a food-based approach to malnutrition and a progressive decline in our food consumption.

The last two national food consumption surveys reported a progressive decrease in mean daily per capita total food intake by 5% from 1982-87 and an additional 8% from 1987-1993. The biggest change during the decade was a 21% reduction in body-regulating foods, such as fruits and vegetables; followed by 11% decrease in energy-giving foods, such as rice and tubers; and 2% decrease in body-building foods, such as fish. From 1987 to 1993, actual food intake (in kcal) decreased by 4% while available food supply (in kcal) increased by 5%.

The Nutrition Act of the Philippines assigns the formulation of the Philippine Food and Nutrition Program to the NNC, but the Council appears to have little say in the country's national food security program. And, although all of Chapter 7 of the Medium-Term Philippine Development Plan for 2001-2004 (MTPDP) is about modernizing agriculture and fisheries nowhere is increasing the food and nutrient intake of Filipinos in the policy framework and targets.

According to the government, the daily per capita food supply in the country continued to exhibit "tempered growth" from 1998-2000, averaging at 2.5% per annum. The growth rate was 2.9% in 1998-1999 and 2.1% in 1999-2000.

Does the country have enough food for its people? The government's latest Food Balance Sheets (FBS) reports that per capita food supply in 2000 was more than adequate to satisfy daily per capita consumption based on the 1993 national nutrition survey of the FNRI. The per capita daily energy supply was 2445 kcal while per capita energy consumption was 1684 kcal, giving a supply to consumption adequacy level of 145%. However, since the 1993 energy intake met only 88% of the energy requirement, a comparison between food supply and food requirement is in order.

3 It is the National Health Plan for 1995-2020 that has a specific food-related objective. The Plan calls for an increase in per capita energy intake from 1913 Calories in 1995 to 2000 Calories in 2000.

The same FBS indicates a 109% supply to requirement adequacy level, with per capita daily food supply of 1127 g and food requirement of 1031 g. (Table 2).

Based on both sets of data it appears that there is adequate food supply at the national level. But according to the Philippines' Progress Report on the Millennium Development Goals many do not have enough money to buy the food they need, although food is readily available.

TABLE 2. Per capita daily food supply, consumption and requirement in 2000

• Per capita per day energy supply (kcal)	2445
Per capita energy consumption (kcal)[1]	1684
Supply to consumption (%)	145
• Per capita per day food supply (g)	1127
Per capita per day recommended food intake (g)	1031
Supply to recommended amount (%)	109

[1] Based on FNRI 1993 National Nutrition Survey and assumed to be the same in 2000.

Source: NSCB, 2002

The Report identified poverty as a major cause of food inadequacy, particularly in the rural areas.

Dr. Eduardo Roberto and his group conducted a survey of urban consumers' purchasing behavior. The top ten regularly consumed surrogate *ulam* of class D and E households in Metro Manila were: soy sauce, coffee, pork oil, salt, brown sugar, bagoong, condensed milk, powdered milk, soft drinks and powdered chocolate drinks. Except for condensed milk, urban families in Cebu and Davao had the same list of substitute *ulam*.

Nutrition and Population

Both nutrition and population are included in Chapter 11 (Enhancing Health Care) of the MTPDP. According to this plan, "nutrition will be integrated in development policies and programs at all levels" and "population variables will be integrated into

development policies, plans and programs at all levels." Unfortunately, an opportunity to link nutrition and population was not taken, both in this overall national development plan and sectoral plans. The two development sectors are "nasa isang bubong ngunit di-lubusang magkasambahay."

The MTPPAN cites population in the chapter on Causes of Malnutrition and uses population projections to estimate yearly prevalence of malnourished people. However, it does not explicitly consider population in the Nutrition Agenda and presentation of specific programs. The same is true for the NNC's Guidelines for Planning Food and Nutrition Programs at local levels. On the other hand, the Directional Plan for the Philippine Population Management Program for 2001-2004 (PPMP) cites nutrition in its Situationer and includes maternal and child health and nutrition as one of 10 elements of Reproductive Health/Family Planning but nothing explicit about nutrition is written thereafter.

Nutrition and population are linked in several ways. Good nutrition slows population growth by improving child survival and reducing the demand for more children. Breast-feeding, in particular, does not only promote maternal and child health. It also serves as a family planning method, especially when exclusive for about six months after birth, by suppressing the hormone necessary for fertility.

Breast-feeding promotion integrates population, nutrition and health. Yet, a specific objective to promote exclusive breast-feeding was removed from the MTPPAN while the PPMP does not mention it.

The very large geographical variations in health and nutrition deserve serious attention. Life expectancy is 20 years shorter in Maguindanao, Sulu and Tawi-Tawi compared to Cebu, Pampanga and Batangas. Anemia in lactating women in Western Mindanao (72%) is more than double the prevalence rate in Central and Northern Mindanao (31%). In the National Capital Region itself, vitamin A deficiency in infants and preschoolers ranges from 14% in Pasay City to 50% in Taguig/Muntinlupa/Pateros.

Nutrition and Gender

The MTPPAN considered gender and a life-cycle approach to nutrition by setting separate nutrition objectives for males and females and for each age group, from infancy to old age. In this regard an across-the-board 20% target reduction rate was used in almost all nutrition indicators (Table 3). This approach ignored notable differences in nature and consequences of nutrition problems (undernutrition, specific

nutrient deficiencies and overweight); nutrient requirements among age, gender and physiological groupings; baseline magnitude of the problems; availability of evidence-based large scale interventions; and state of scientific knowledge.

With a one-size-fits-all formulation we may end up with 280,000 more anemic adolescent girls than boys and 740,000 more chronically energy deficient adult females than males if the present program achieves its "gender-sensitive" objectives.

Is undernutrition more of a problem among girls than boys? For 0-5 year old children, there is little difference in prevalence of underweight and underheight between the two groups. However, for the older group (6-10 years), the prevalence rates of both conditions are higher for the boys by 30%.

The present national nutrition plan has a large number of nutrition objectives but weak scientific underpinnings and poor coherence. Upgrading the capabilities in nutrition of government, research and academic institutions is necessary if we are to break away from locked-in approaches to defining problems; setting agenda; undertaking research; and implementing and evaluating nutrition programs.

Some of us in the university and alumni association may be interested in elevating the level of discourse on nutrition in the country; venturing into the presentation of alternative reports on the state of nutrition of our people and the nutrition program; and infusing our national nutrition plan and program with sound and adequate scientific basis, a good understanding of lessons from the past, judicious estimate of what it takes to carry out the program and sensitivity to the larger environment where the program is to find its place. There is much meaningful work, for us and for others, to do ¾ in a mindful way, in a thoughtful way.

A 25-minute presentation can cover only so much about a concern as important as nutrition. I close with a take-off from the title of a book written by a group of eminent colleagues in the university. If we're so smart, why aren't we well nourished?

TABLE 3. Prevalence of malnutrition: 1998 baseline, targets for 2004 and % reduction.

Impact indicator	Prevalence rate (%) 1998	2004	% reduction
Low birthweight	12.6	10.0	20
Underweight-for-age			
Preschool children, 0-5 y old			20
Mildly underweight	28.1	22.5	
Moderately/severely underweight	9.2	7.4	
Boys	8.4	6.7	
Girls	10.0	8.0	
Schoolchildren, 6-10 y old			20
Mildly underweight	23.1	18.5	
Moderately/severely underweight	8.3	6.6	
Boys	7.6	6.1	
Girls	9.0	7.2	
Chronic energy deficiency			20
Adult male 11.1	8.9		
Adult female	15.4	12.3	
Elderly	25.4	20.4	
Iron deficiency anemia			20
Infants, 6 mo to <1y old	56.6	45.5	
Preschoolers, 1-5y old	29.6	23.7	
Schoolchildren, 6-12y old	35.7	28.5	
Adolescents, 13-19y old			
Male	26.2	21.0	
Female	33.2	26.6	
Older persons, >60y old			
Male	49.1	39.3	
Female	39.2	31.4	
Pregnant women	50.7	40.2	
Lactating women	45.7	36.6	
Vitamin A deficiency			
Children, 6 mo-5y old			
Low serum retinol	29.8	15.0	50
Deficient serum retinol	8.2	5.0	39
Pregnant women			
Low serum retinol	15.1	12.1	20
Deficient serum retinol	7.1	5.0	30
Iodine deficiency			
Median urinary excretion level	71 ug/L	100 ug/L	
Prevalence in 6-12y old schoolchildren	35.8	20.0	44
Overweight			20
Preschoolers, 6-71 mo old	4.7	3.8	
Schoolchildren	7.3	5.8	
Adults, ³20y old			
Male	17.0	13.6	
Female	23.3	18.6	

Source: NCC, (n.d.)

REFERENCES

Alano, C.M. (2003). How are consumers coping with the hard times? The Philippine Star. (July 23, 2003).

Cerdena, C. et al. (2001). Updating of nutritional status of Filipino children at the regional level. http://www.fnri.dost.gov.ph (accessed on 29 April 2003).

Commission on Population. (n.d.) Directional Plan for the Philippine Population Management Program, 2001-2004. Mandaluyong City: Population Commission.

Florencio, C.A. (2002). From Here to There: Looking Back, Looking Ahead. An Analysis of the Medium-Term Philippine Plan of Action for Nutrition, 1999-2004. A Report Submitted to the National Nutrition Council.

Florencio, C.A. (1989). Food and Freedom. Nutrition – A Springboard to Biosocial Uplift, A Test of a Nation's Resolve. Quezon City: U.P. Press.

Human Development Network. (2002). Philippine Human Development Report 2002. Human Development Network and the United Nations Development Programme.

National Economic and Development Authority. (2001). The Medium-Term Philippine Development Plan, 2001-2004. Manila: NEDA.

National Nutrition Council. (1995). Philippine Plan of Action for Nutrition (1993-1998): Makati: National Nutrition Council.

National Nutrition Council. (1999). Philippine Plan of Action. For Nutrition, 1993-1998 Accomplishments.

National Nutrition Council. (n.d.) Medium-term Philippine Plan of Action for Nutrition, 1999-2004.

National Statistical Coordination Board. (2002). 1998-2000 Food Balance Sheets of the Philippines. Makati City.

Philippines Progress Report on the Millennium Development Goals. (2003). Manila: NEDA.

Reports of the Fifth National Nutrition Survey 1998.(2001). Food and Nutrition Research Institute, Department of Science and Technology. Phil J Nutr 48 (1-2 and 3-4).