



NUTRITIONAL ROLE ON POVERTY AND MALNUTRITION

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ABSTRACT

Among various definitions, one explains absolute poverty as a condition where man fails to receive sufficient calories and nutrients which are required to proper functioning of individuals. This definition clearly underlines importance of nutrition in economic development. Famous Nobel Laureate Amartya Sen has also accepted primary education and nutritional status as yard stick of development. Recent study has some disheartening declaration that during last decade intake of carbohydrate and protein has decreased by 22% and 18% respectively. Obviously most affected section of society are children and women. This report provides clear evidence on the proper utilization of nutrition programmes, and information to promote the concept of balanced diet and positive lifestyles right from Infancy to Old age. Increasing health is seen as a dimension of poverty in its own right and child health is known to have important long-term effects on productivity during adulthood. As children are the future of every country, their situation is always of concern to policy makers, their parents and the general public. Although poverty is an important factor in the poor nutrition situation, nutritional deficiencies are widespread. Inadequate feeding practices for children make it difficult to achieve the needed improvements in children's nutritional status, and nutrition programmes have been unable to make much headway in dealing with these serious nutritional problems. Studies show that the relationship between child nutritional status and poverty is strong at the lower end of the income range. Low socio-economic status creates a problem in accessing enough food or enough healthy food, which then leads to poor nutrition. Thus, ensuring children's health is a universally supported goal of development. The common man should be educated to meet his needs through the judicious use of locally available, low-cost nutritious foods and informs about the deleterious effects of poor health.

INTRODUCTION

India has the largest number of undernourished people in the world, and one of the highest levels of child malnutrition. Increasing health is seen as a dimension of poverty in its own right and child health is known to have important long-term effects on productivity during adulthood. Although poverty is an important factor in the poor nutrition situation, nutritional deficiencies are widespread even in households that are economically well off. Inadequate feeding practices for children make it difficult to achieve the needed improvements in children's nutritional status, and nutrition programmes have been unable to make much headway in dealing with these serious nutritional problems.

India has the largest number of hungry people in the world. There are three inter-linked dimensions of hunger –

- Inadequate food consumption,
- child under weight (under five),
- child mortality (under five)

-measured to assess and compute Global Hunger Index (GHI).

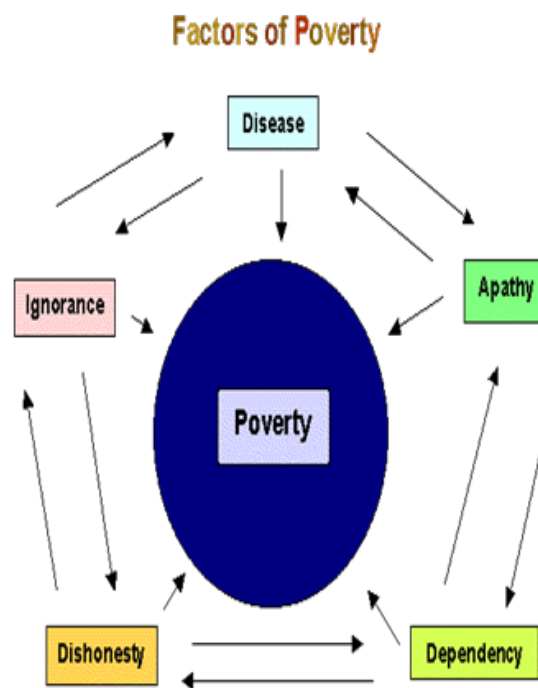
It was also found that nutrition programmes in India were not effectively delivering and achieving the set objectives, although strides had been made on the public health front to ensure sustained reduction in child mortality. But it was observed that improvement in child nutrition and nutrition situation in the country were not satisfactory.

Ensuring children's health is a universally supported goal of development because children are the future of every country; their situation is always of concern to policy makers, their parents and the general public.

Poverty

Poverty is defined as the lack of the minimum food and shelter necessary for maintaining life. More specifically, this condition is known as absolute poverty.

Poverty is the state of human beings who are poor. That is, they have little or no material means of surviving—little or no food, shelter, clothes, healthcare, education, and other physical means of living and improving one's life.



Let us look briefly at each of the big five in turn

Ignorance: Ignorance means having a lack of information, or lack of knowledge. "Knowledge is power," it would be more useful to know which kind of seed would survive in the local soil, and which would not. The information included here is aimed at strengthening capacity, not for general enlightenment.

Disease: When a community has a high disease rate, absenteeism is high, productivity is

low, and less wealth is created. Apart from the misery, discomfort and death that results from disease, it is also a major factor in poverty in a community. Being well (well-being) not only helps the individuals who are healthy, it contributes to the eradication of poverty in the community.

Apathy: Apathy is when people do not care, or when they feel so powerless that they do not try to change things, to right a wrong, to fix a mistake, or to improve conditions. We were created with many abilities: to choose, to cooperate, to organize in improving the quality of our lives

Dishonesty: When resources that are intended to be used for community services or facilities, are diverted into the private pockets of someone in a position of power, there is more than morality at stake here. Dishonesty among persons of trust and power.

Dependency: Dependency results from being on the receiving end of charity. In the short run, as after a disaster, that charity may be essential for survival. In the long run, that charity can contribute to the possible demise of the recipient, and certainly too ongoing poverty.

The solution to the social problem of poverty is the social solution of removing the factors of poverty.

The Effects of Poverty

The effects of poverty are serious. Children who grow up in poverty suffer more persistent, frequent, and severe health problems than do children who grow up under better financial circumstances.

- Many infants born into poverty have a low birth weight, which is associated with many preventable mental and physical disabilities. Not only are these poor infants more likely to be irritable or sickly, they are also more likely to die before their first birthday.
- Children raised in poverty tend to miss school more often because of illness. These children also have a much higher rate of accidents than do other children, and they are twice as likely to have impaired vision and hearing, iron deficiency anemia, and higher than normal levels of lead in the blood, which can impair brain function.

Malnutrition

The World Health Organization defines malnutrition as "the cellular imbalance between supply of nutrients and energy and the body's demand for them to ensure growth, maintenance, and specific functions. "Women and young children are the most adversely affected groups; one quarter to one half of women of child-bearing age in Africa and south Asia are underweight, which contributes to the number of low birth weight infants born annually.

Malnutrition is globally the most important risk factor for illness and death, contributing to more than half of deaths in children worldwide. When a person is not getting enough food or not getting the right sort of food, malnutrition is just around the corner. Disease is often a factor, either as a result or contributing cause. Even if people get enough to eat,

they will become malnourished if the food they eat does not provide the proper amounts of micronutrients - vitamins and minerals - to meet daily nutritional requirements. Malnutrition is the largest single contributor to disease, according to the UN's Standing Committee on Nutrition (SCN).

The effect of changing environmental conditions in increasing malnutrition is multifactorial. Poor environmental conditions may increase insect and protozoal infections and also contribute to environmental deficiencies in micronutrients. Overpopulation, more commonly seen in developing countries, can reduce food production, leading to inadequate food intake or intake of foods of poor nutritional quality. Conversely, the effects of malnutrition on individuals can create and maintain poverty, which can further hamper economic and social development.

The causes of malnutrition can arbitrarily be classified into six categories, namely:

1. Socio-economic causes;
2. Political causes (related to government policies);
3. Agricultural causes;
4. Health and environmental causes;
5. Educational causes (includes cultural determinants);
6. Administrative, managerial and infrastructural causes.

The ordering of the above causes in the sequence shown probably reflects their order of magnitude in perpetuating the problem. A deliberate effort to identify these causes should be made to put the problem of malnutrition, and the chances of doing something about it, in the proper perspective for each particular country. This exercise will also help to better design appropriate nutrition/health interventions with special reference to Primary Health Care.

Types Of Malnutrition

Each form of malnutrition depends on what nutrients are missing in the diet, for how long and at what age.

The most basic kind is called Protein Energy Malnutrition [PEM]. It results from a diet lacking in energy and protein because of a deficit in all major macronutrients, such as carbohydrates, fats and proteins.

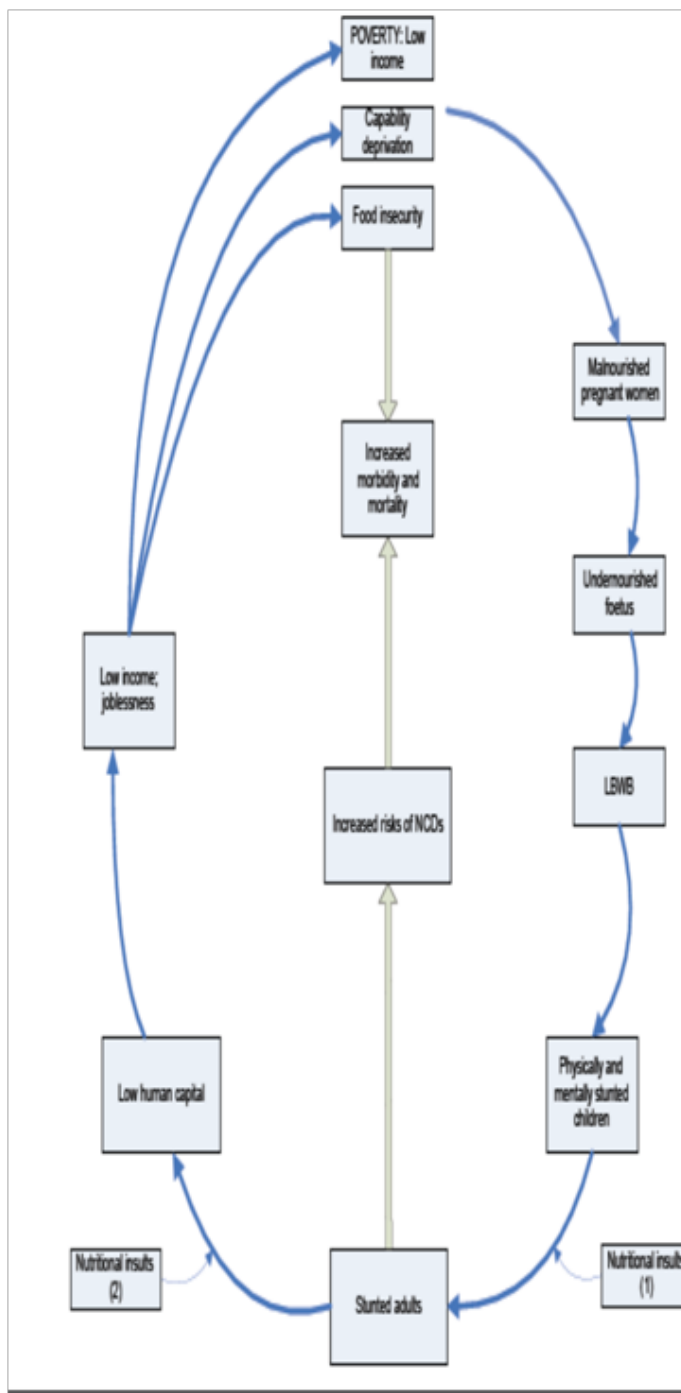
Kwashiorkor and Marasmus are 2 forms of PEM that have been described. The distinction between the 2 forms of PEM is based on the presence of edema (kwashiorkor) or absence of edema (marasmus).

- Marasmus involves inadequate intake of protein and calories, whereas
- a child with Kwashiorkor has fair-to-normal calorie intake with inadequate protein intake.

Although significant clinical differences between kwashiorkor and marasmus are noted, some studies suggest that:

- Marasmus represents an adaptation to starvation whereas
- Kwashiorkor represents a dysadaptation to starvation.

Relationship Between Poverty & Malnutrition:



In addition to PEM, children may be affected by micronutrient deficiencies, which also have a detrimental effect on growth and development. The most common and clinically significant micronutrient deficiencies in children and childbearing women throughout the world include deficiencies of iron, iodine, zinc, and vitamin A and are estimated to affect as many as two billion people. Other forms of malnutrition are less visible - but no less deadly. They are usually the result of vitamin and mineral deficiencies (micronutrients), which can lead to anemia, scurvy, pellagra, beriberi and xerophthalmia and, ultimately, death.

Deficiencies of iron, vitamin A and zinc are ranked among the World Health Organization's (WHO) top 10 leading causes of death through disease in developing countries:

- Iron deficiency is the most prevalent form of malnutrition worldwide, affecting millions of people. Iron forms the molecules that carry oxygen in the blood, so symptoms of a deficiency include tiredness and lethargy. Lack of iron in large segments of the population severely damages a country's productivity. Iron deficiency also impedes cognitive development, affecting 40-60 percent of children aged 6-24 months in developing countries (source: Vitamin & Mineral Deficiency, a global damage assessment report, UNICEF).
- Vitamin A deficiency weakens the immune systems of a large proportion of under-fives in poor countries, increasing their vulnerability to disease. A deficiency in vitamin A, for example, increases the risk of dying from diarrhea, measles and malaria by 20-24 percent. Affecting 140 million preschool children in 118 countries and more than seven million pregnant women, it is also a leading cause of child blindness across developing countries (source: UN Standing Committee on Nutrition's 5th Report on the World Nutrition Situation, 2005).
- Iodine deficiency affects 780 million people worldwide. The clearest symptom is a swelling of the thyroid gland called a goiter. But the most serious impact is on the brain, which cannot develop properly without iodine. According to UN research, some 20 million children (source: Vitamin & Mineral Deficiency, a global damage assessment report, UNICEF) are born mentally impaired because their mothers did not consume enough iodine. The worst-hit suffer cretinism, associated with severe mental retardation and physical stunting.
- Zinc deficiency contributes to growth failure and weakened immunity in young children. It is linked to a higher risk of diarrhea and pneumonia, resulting in nearly 800,000 deaths per year.

Malnutrition at an early age leads to reduced physical and mental development during childhood. Stunting, for example, affects more than 147 million pre-schoolers in developing countries, according to SCN's World Nutrition Situation 5th report. Iodine deficiency, the same report shows, is the world's greatest single cause of mental retardation and brain damage. Under nutrition affects school performance and studies have shown it often leads to a lower income as an adult. It also causes women to give birth to low birth-weight babies

A malnourished person finds that their body has difficulty doing normal things such as

growing and resisting disease. Physical work becomes problematic and even learning abilities can be diminished. For women, pregnancy becomes risky and they cannot be sure of producing nourishing breast milk.

Role Of Nutrition

The cost of a minimum cost diet for an average family of five or six members is often above the minimum wages of most unskilled workers in urban centers. Calorie deficiencies and malnutrition should come as no surprise under such circumstances.

The overall purchasing power of the population (mostly poor) will improve only very slowly, causing the effective demand for food to grow only very slowly as well. The demand for food is not equal for the different socio-economic groups and for the different types of food (especially those of animal origin).

Finally, mother factor hampering well-being that needs to be tackled is the negative impact of the environment and infectious and parasitic diseases on the nutritional status of the low income groups. Environmental sanitation, potable water, immunizations, as well as overall preventive medical services and child spacing will become increasingly important in combating malnutrition in vulnerable groups as defined earlier.

Overall Strategy

The capacity of the system to alleviate hunger and malnutrition in the long-run depends on the concerted efforts the government is making to tackle the root causes of malnutrition. This is in turn related to whether the government is really committed to this task. Equity oriented policies are at the center of this commitment since adequate food consumption due to poverty is the main underlying problem.

Commitment in this respect might be reflected, among other, by labor-intensive agricultural production, by high priority placed on production of crops for domestic consumption, by a reasonable equitable food distribution system and by a broad-based participatory system of health services. Based on past experience, the above capacity of the system to do something significant about malnutrition should be judged as poor unless a significant number of some of the actions are foreseen and carried out.

- i. measures to slow down urban migration by increasing rural employment opportunities, making agriculture more profitable and providing a minimum of infrastructural services in rural communities. This entails a change in investment priorities towards overall rural development;
- ii. measures to curb urban unemployment;
- iii. major staples in the country must be made profitable to producers;
- iv. incorporation of women into the development process explicitly, i.e. making them eligible for bank loans and credit;
- v. government marketing boards to pay fair market prices to producers of cash crops in the traditional sector;

- vi. agricultural banks to strike a fairer balance between cash-crop and food-crop credit allocation: favoring the latter;
- vii. minimum wage policies to be based on minimum cost diet studies;
- viii. higher import duties to be levied on luxury items, especially luxury foods and beverages;
- ix. the volume of subsidies for selected durable inputs (i.e. tools and small machines) for small farmers to be increased;
- x. installation or expansion of rural cooperative systems;
- xi. subsidization of fertilizers and pesticides imports and proper balance to be stricken between the proportion of these inputs going to food production as opposed to cash-crop production;
- xii. logistical support for agricultural extension workers and community development workers;
- xiii. priority to home and school gardening programs and small dry-season irrigation projects;
- xiv. measures to improve farm-level food storage practices to significantly decrease food losses;
- xv. primary school enrolment as percentage of eligible school-age children to be increased. Includes the opening of more schools and the progressive teaching of more work-related skills in the same (especially in agriculture);
- xvi. adult literacy campaign with emphasis on women to be intensified;
- xvii. strong drive for community development and organization to foster citizens participation in development activities at all levels;
- xviii. organization of a network of daycare centers and nurseries in the country.

This list of interventions is by no means complete, but probably reflects most of the more equity-oriented actions committed governments would embark on. The collection of some of the data related to the causes of malnutrition as depicted in the proceeding pages should help to objectivize the degree of commitment a given government has.

Although improving the nutritional status of vulnerable groups in the population remains closely related to the alleviation of poverty, it also requires specific intervention from many sectors.

Special Role of the Health Sector in the Battle Against Malnutrition

It is now quite universally accepted that PRIMARY HEALTH CARE (PHC) is the most viable, logical and best possible approach to eventually reach the goal of health for all by the year 2000. Whenever PHC gets a commitment beyond lip service in the allocation of resources in a country it actually has the potential, because of, among others, its appropriateness in design and choice of technology pointing towards higher degrees of

self-sufficiency and its need for active community participation and involvement. As such, PHC both addresses the host of local health problems as felt by the beneficiaries and has the added potential to go beyond traditional health care concerns in organizing the people around some activities that eventually have an added potential to address some of the root causes of malnutrition and poverty. In short, PHC carries in it the seed for an important mobilization of the rural communities to change some of the determinants of their condition.

As can be suspected, a genuine PHC emphasis requires some painful re-shifting of priorities in health, often away from urban-biased, big-hospital and doctor-centered traditional approaches.

In general, the range of health interventions that point towards PHC goals (although not always strictly PHC activities) would be among the following:

- i. construction, staffing, equipping and opening to use of more primary health clinics. Includes training of necessary paramedical personnel, village health workers and traditional birth attendants;
- ii. a higher percentage of the national health budget to be shifted to preventive services;
- iii. expansion of national vaccination programs;
- iv. expansion and extension of coverage of overall maternal-child health services including child-spacing and family planning services;
- v. emphasis to be given to preventive and curative approaches to intestinal parasites, malaria and diarrheal diseases Including Oral re-hydration therapy (ORT);
- vi. promotion activities to Increase the number of deliveries properly attended by trained personnel and expansion of the pre-natal control of mothers (includes monitoring maternal nutrition during pregnancy and lactation and provision of iron and folate supplements plus tetanus vaccination and malaria prevention during pregnancy);
- vii. promotion and expansion of latrine construction programs through self-help;
- viii. the number of households with access to safe and sufficient drinking water to be increased through self-help projects;
- ix. introduction and use of growth charts in all clinics including the training of the personnel to use them properly and periodic reporting of growth retardation trends found;
- x. retraining of field health personnel with emphasis on nutrition and preventive health activities;
- xi. development of nutrition protocols for the treatment of malnourished children to standardize the therapeutic approach at the national level;
- xii. mechanisms to record and periodically report birth weight data to be set up;

- xiii. review and improvement of the nutrition curriculum in all university health related schools;
- xiv. introduction of health and nutrition education through the radio;
- xv. introduction of health and nutrition modules in the science curricula of primary, secondary and technical schools;
- xvi. import controls of baby formulas and, baby weaning foods assuring reasonable margins of profit for wholesalers and retailers; promotion of these products through the media to be stopped.

Specific Contributions of FAO Activities in Nutrition to the MDGs [Millennium Development Goals]

Nutritional status is a key indicator of poverty, hunger, poor health, and inadequate education and social conditions. Good nutrition is crucial to reach the health, education and economic goals contained in the MDGs since good health, cognitive development and productivity cannot be achieved without good nutrition. Nutrition improvement programmes have a unique, essential role to play in efforts to reach the MDGs. Good nutrition makes an essential contribution to the fight against poverty.

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