PROMOTION OF COMMUNITY INITIATIVES TO COMBAT MALNUTRITION AND PROVIDE INCOME GENERATION IN THE BACKWARD REGIONS OF INDIA

INTRODUCTION

India has one of the highest incidences of malnutrition in the developing world today, caused by a combination of lack of information and awareness, poverty as well as absence of an adequate and balanced diet. This results in malnutrition and under nutrition, which retards physical and cognitive development of infants and children, reduces the work capacity and productivity among adults and enhances mortality and morbidity rates among children, women and men. Such reduced productivity translates into reduced earning capacity, leading to further poverty and the vicious cycle is perpetuated.

HEALTH AND NUTRITIONAL STATUS IN INDIA

The health and nutritional status of the population of a nation is an important indicator of the development of the country. Mortality rates, micronutrient deficiencies and malnutrition status are some of the important indicators that can be used to assess the health status of a country.

Under nutrition

Under nutrition is an important factor responsible for high infant and maternal mortality rates and low birth weight in children. According to NFHS 2 data, 40.6% of the Indian rural women are underweight. This clubbed with early and frequent child bearing becomes an important factor towards maternal mortality and low birth weight children.

Anaemia is prevalent among 53.9% of the rural women (NFHS 2), out of which 2% suffer from severe anaemia whereas 36.1% suffer from mild anaemia. Almost 49.7 % of the total Indian pregnant women are anaemic with 2.5% suffering from severe form of anaemia. Anaemia has detrimental effect on the health of the women and children and is an important cause for maternal and perinatal mortality. Anaemia also results in an increased risk of premature delivery and low birth weights (Sheshadri, 1997). **One of the direct consequences of anaemia is low economic productivity.**

Maternal Mortality Rates

Worldwide about 500000 women die every year from pregnancy and childbirth related causes and most of these deaths occur in developing countries (WHO 1999). The average maternal mortality ratio at the national level for two-year preceding NFHS 2 is 540 deaths per 100000 live births. The rural MMR (619) is much more higher as compared to the urban MMR (267). **The reason for this is attributed to under nutrition, lack of access to health care facilities as well as lack of awareness regarding healthy**

nutritional practices and immunization. According to NFHS 2 data, 39.8% of the rural women do not receive any antenatal check ups during pregnancy. Thus, contributing towards increased MMR and IMR.

Low birth weight

22.7% of the total infants born are low birth weight. They are at a far higher risk of dying in early infancy. Even if they survive they are less likely to catch up for the lost growth and are prone to a number of development deficits**.** Further non-feeding of colostrum increases the risk of neonate to catch up infections. According to NFHS 2 Data only 64% of the rural women and 58.8% of the urban women squeeze the first milk from the breast.
The problem is further aggravated as the complementary feeding is delayed; often well past the first year.

Infant and Child Mortality Rates

Infant and child mortality rates reflect a country's level of socio economic development and quality of life and are used for monitoring and evaluating population and health programmes and policies (NFHS2). Neonatal mortality rates, infant mortality rate, child mortality rate, under five mortality rates can be used to estimate the infant and child mortality. India has an infant mortality rate of 67.6 per 1000 live births. The infant mortality rate for rural areas is 73.3 compared to 47.0 for urban areas. **Children in the rural areas of India experience a 70% higher probability of dying before the fifth birthday as compared to urban children, clearly indicating the need for strengthening rural health, nutritional and anti poverty programmes.** Though over the years there has been an overall decline in the infant and child mortality rates but despite the overall decline, the infant and child mortality rates are higher in India compared to other countries. For instance, infant mortality in the US is 6.9 per 1000 live births (Centre for Disease Control, 2000). Even Mexico and China- comparable countries- have much lower, 25 and 27 respectively, infant mortality rates.

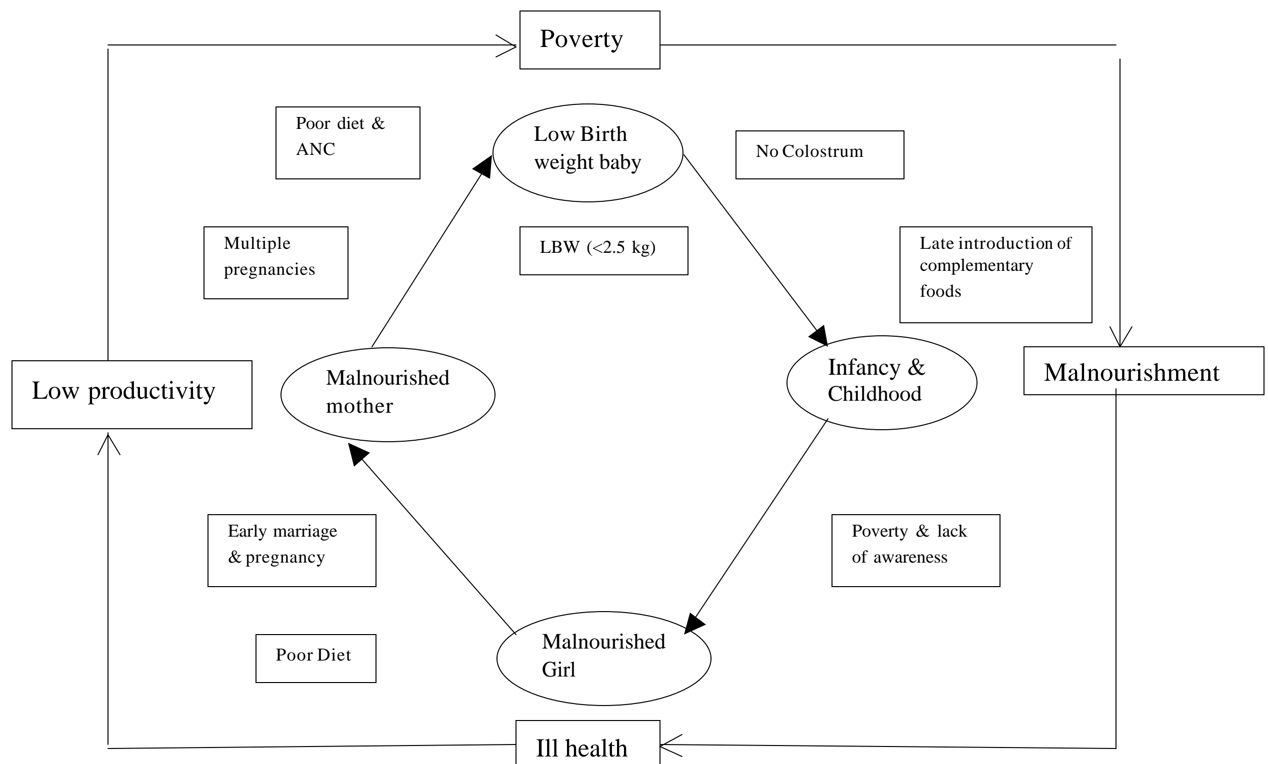
All these aspects are related to malnutrition and under nutrition and are passed from one generation to another resulting in a vicious cycle of malnutrition and ill health.

INTERGENERATIONAL CYCLE OF MALNUTRITION & ILL HEALTH

The problem of malnutrition is all the more critical as it is invisible and is passed on from one generation to other. A girl child born in a rural family is more likely to be born with low birth weight (less than 2.5 kg). She is at a far higher risk of dying in early infancy. Even if she survives she is less likely to catch up for the lost growth and will be prone to a number of development deficits**.**

Further, non-feeding of colostrum increases the risk of neonate to catch up infections. The problem is further aggravated as the complementary feeding is delayed; often well past the first year.

The Intergenerational Cycle of Malnutrition & Ill Health



In addition to the proper time of weaning, the quantity and quality of feed is equally important. On account of poverty and ignorance the child is fed inadequate quantities of feeds, which are also likely to be dilute and are not sufficient to meet the increasing nutritional needs of the child. Further if the feed is not prepared hygienically in clean utensils it makes the child prone to more infections.

The problem is further aggravated in the case of a girl child who is more likely to be meted inferior treatment vis a vis boy. By the time the girl grows up to be an adolescent she is much more likely to be malnourished and anaemic with irreversible cognitive and physical damage. Often she is married off quite early which results in early child bearing and multiple pregnancies. Since the mother is malnourished and anaemic it has an unfavorable affect on the foetus, which again suffers from Intrauterine Growth Retardation, which results in low birth weight.

VICIOUS CYCLE OF MALNUTRITION AND ILL HEALTH

An undernourished person is more prone to infections. Infections increase the energy demand of the body; which if not fulfilled results in further malnutrition. Malnutrition further lowers the immunity and makes the child more susceptible to infection. Lack of safe drinking water, poor personal and domestic hygiene continue to be major causes of intestinal diseases and infections and worsen the condition of malnutrition.

STRATEGY FOR DEVELOPMENT: DUAL APPROACH

Thus to tackle the problem of malnutrition a piecemeal approach would not work. In the face of continuing poverty and malnutrition a strategy of development comprising a frontal attack on poverty, unemployment and malnutrition should become a priority. **Therefore CAPART proposes to introduce the project to combat malnutrition in backward areas, which would serve a dual purpose of combating malnutrition as well as starting an income generating activity**. The objective of the scheme is not only to generate awareness and improve the nutritional status of the community but also to provide skills for income generation to improve the quality of life of the people.

GOAL:

Combating malnutrition and poverty

OBJECTIVES:

Increased awareness on nutritional and health issues

Increase in income levels

Improvement in nutritional and health status of community

ACTIVITIES:

Setting up of production units in SHGs or other rural community organizations

Rural marketing and distribution

Training and capacity building of volunteers

Awareness generation in the rural community

Baseline surveys

Objectives

- To determine the malnutrition status of the area and establish the major factors leading to malnutrition
- To identify and train volunteers from the communities in various aspects of malnutrition and its management
- To build awareness in the communities about nutrition issues and the intergenerational life cycle approach and to facilitate behavioral changes
- To start an income generation activity by setting up units for production of high quality nutritional energy foods for distribution to the vulnerable groups
- To strengthen the women SHGs and People's Organizations of local communities to address these issues and to ensure the sustainability of project initiatives

METHODOLOGY

Baseline surveys

During the initiation of the project baseline surveys would be carried out in the target villages. These surveys would include:

- Rapport building
- Estimation of prevalence of protein energy malnutrition as well as anaemia in children aged 0-6 years, adolescent girls and women.
- Understanding nutritional and child feeding practices of the community
- Mapping the various resources available in area

Identification and training of volunteers

The key to implement the project would be the volunteers, who will be selected from the respective community. These volunteers could be traditional birth attendants, village health guides, and teachers of schools etc. They can be trained in various aspects of malnutrition, behavioral communication change and marketing and distribution of products. They can act as resource persons for the village and can play a crucial role in creating awareness in the field of nutrition.

The SHGs would be the nuclei for implementing the project. They can serve as ideal platforms for the promotion of nutritional messages as well as in the distribution and marketing of the nutritional supplements. Apart from SHGs other POs in the areas like Mahila Mandal, Youth Clubs, VDCs and PRIs could also be involved**.**

Awareness generation

Awareness would be generated in the project areas about nutrition issues, the intergenerational life cycle approach and subsequently about proper nutritional intake. This can be done through suitable IEC materials in the form of posters, flip charts, kits etc. Other events like camps, puppet shows, folk theatre, and celebration of World Health Day or Nutrition Week could be organized to improve community

participation. These events can be conducted in collaboration with Government Departments, PRIs as well as other NGOs and hence foster linkages essential for the sustainability of the project.

Setting up of units of production and marketing and distribution of products

Units of production will be set up for manufacturing energy rich foods based on inexpensive and indigenous raw material such as wheat, jawar, ragi, jaggery, peanuts etc. Specific compositions will be prepared to meet the specific requirements of the 3 critical groups namely, infants and children, adolescent girls and women and men. These units will provide a source of income generation for the SHG's and would supplement their family income. Increased income would help in improving the nutritional status as well as the quality of life of the rural community. Some proportion of the produce will be utilized for consumption whereas the rest of the produce will be marketed in rural areas.

Encouraging consumption

In order to improve the nutritional status of the targeted community, emphasis should be given on encouraging self-consumption of the product. This is important for breaking the intergenerational cycle of malnutrition and ill health. Improving the nutritional status of the target village should be the most important area of priority. If the entire produce is marketed there will be no change in the consumption pattern of the community. Special emphasis should be given to encourage the consumption of energy foods especially by children, adolescent girls and pregnant and lactating women.

Rural Marketing

Providing energy foods to the target population is the major component of the project. This includes setting up of well equipped units for production as well as marketing and distribution of energy foods in rural areas to meet the nutritional requirements the community especially infants, adolescent girls and women. For this purpose training will be given to volunteers and SHGs members who would take a lead in distribution and marketing of the energy foods so as to provide income generation.

The units will be managed by the NGO only for the first I year and after which the SHGs can decide the ownership.

Monitoring and evaluation

Monitoring and evaluation systems would be put in place to ensure that the project be routinely monitored. There will be concurrent monitoring of the project. Each stakeholder of the scheme should understand the required parameters of effective implementation of the projects. The NGOs would fill the formats available to them in order to monitor the progress in physical and financial terms.

The evaluation of the project would be done by a reputed external agency so that fair assessment may be ensured in real terms.

Expected outcomes of the project

- Combating malnutrition in the communities
- Improved awareness in the communities about intergenerational lifecycle of malnutrition and ill health and its control
- Demonstrable behavioral changes in nutrition/diet in the communities
- Strengthening of local people's organizations, especially the SHGs
- Demonstrable action by the community in addressing malnutrition and related issues
- Functional units of nutritional supplements for manufacturing and distribution/marketing
- Contribution to income generation of the families
- Creation of a cadre of village volunteers for sustainability as well as replicability of the programme to other areas
- Strengthened linkages with various Government departments as well as local NGOs/CBOs

Suggested Time line for activities

ACTIVITIES	QUARTER I MONTHS			QUARTER II MONTHS			QUARTER III MONTHS			QUARTER IV MONTHS		
	1	2	3	4	5	6	7	8	9	10	11	12
Baseline survey	*	*	*									
Awareness generation		*	*	*	*	*						
Capacity building and training		*	*	*								
Production unit establishment			*	*	*	*						
Running production unit			*	*	*	*	*	*	*	*	*	*
Marketing campaigns and activities		*	*	*	*	*	*	*	*	*	*	*

SUGGESTED COSTING OF THE PROJECT

BUDGET	
Community Organization	
Baseline Survey @ Rs. 5,000 per village for 15 villages	Rs. 75000
Awareness Generation @ Rs. 2000 per village for 50 villages	Rs. 100000
Capacity Building & Training	
Capacity Building & Training To The 300 Representatives of the SHGs from 50 villages	Rs. 200000
Technical Consultant Support for processing units	Rs. 20000
Nutrition & Income Generation Activities	
Establishment of food processing unit at 10 centers @ Rs 100000 per center (Milling, Mixing Machine, Drier and allied equipments like sealing machine, Gas Stove, Weighing Machines, Utensils, Furniture & Fixture and Installation)	Rs. 1000000
Marketing campaigns	Rs. 50000
Service support @ Rs 1000 per village	Rs. 50000
Technical Consultant Support for SHGs federation	Rs. 20000
Facilitation cum evaluation	Rs. 50000
Sub Total	**Rs. 1565000**
Administrative Cost (10% of programme cost)	Rs. 156500
Travel and maintenance of tempo	Rs. 25000
Procuring of 5 bicycles for Field Workers @ Rs. 1,500 per bicycle	Rs. 7500
Tempo for distributing and procuring raw material and marketing of end products	Rs. 150000
Grand Total	**Rs. 1904000**

BREAK UP OF CAPCITY BUILDING AND TRAINING

BREAK UP OF CAPACITY BUILDING AND TRAINING	
Raw material	Rs 75000
Training material and stationary @ Rs 16 for 300 women	Rs 4800
Stipend given to 300 women @ Rs 50 per day for 3 days	Rs 45000
Trainers Fee @ Rs 3000 per center	Rs 30000
Food for the women @ Rs 30 per women for 3 days at 10 centers	Rs 27000
Travel Allowance @ Rs 20 per women for 300 women for 3 days	Rs 18000
TOTAL	**Rs 199800**