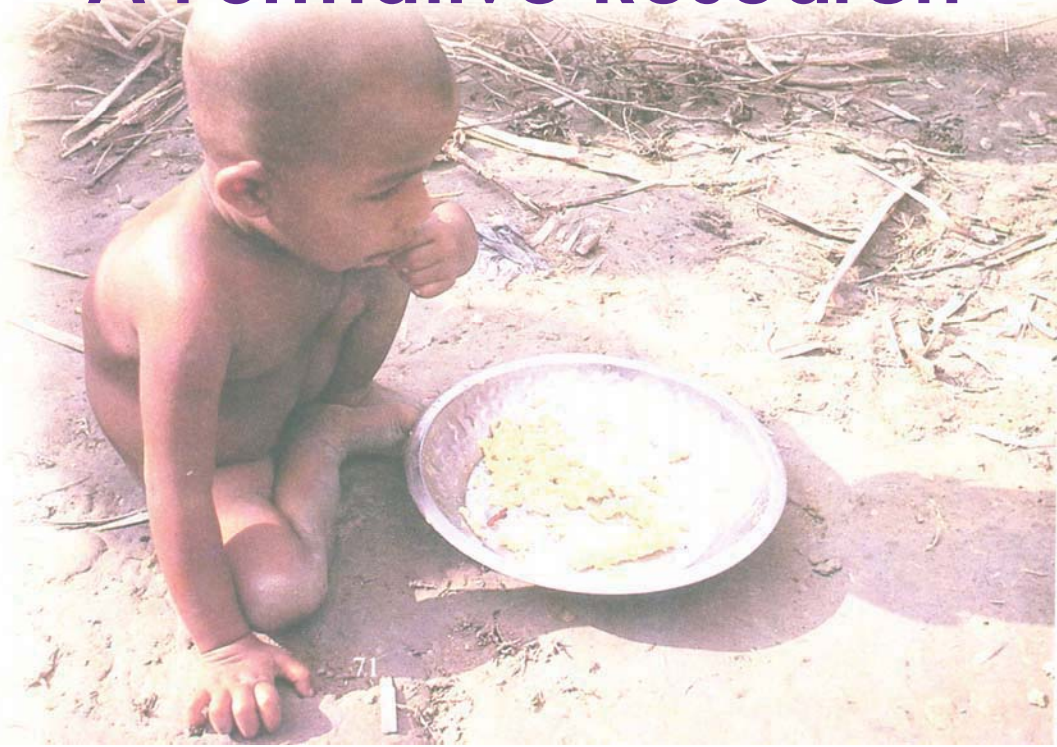


# National Nutrition Project – Behavior Change Communication: A Formative Research



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**STUDY CONDUCTED FOR UNICEF, BANGLADESH**



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**PREPARED FOR NATIONAL NUTRITION PROGRAM**



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# Executive Summary

## Introduction and Objective

The goal of National Nutrition Project (NNP) is to improve nutritional status particularly among women, adolescents and children to the extent that malnutrition will no longer be a public health problem. The Formative Research for National Nutrition Project, Behavior Change Communication has been conducted by Human Development Research Center (HDRC) in response to an *Invitation* by the *UNICEF, Bangladesh*

The **Formative Research** proceeded with certain **objective** hereinafter following, namely:

1. To understand the perceptions of various important groups such as mothers, fathers, adolescents, elderly people, policy makers, community leaders, influencers regarding different implicit and explicit issues about nutrition;
2. To understand the barriers to change, social obstacles and different myths and misconceptions prevailing at the community level regarding food and nutrition.
3. To determine the best means of reaching different groups to ensure that the BCC messages reach them properly and adequately, and ensure sustainability;
4. To identify issues regarding food and nutrition of pregnant and lactating mothers and of children under two years, which should be addressed by the BCC and advocacy strategy.

## Methodology and Implementation

Six methods for the collection of qualitative information were followed in the study. These include FGDs, Appreciative Inquiry, In-depth Interview, Transact Walk/Participatory Observation, Process documentation, and Triangulation. Twenty field teams with Facilitators, Documentation Assistant, and Local illustrator were deployed.

*The key variables included were* Perception about nutrition and malnutrition; Food and nutritional practices/malpractices for different special groups; Sources of information/advice/care; other Issues related to malnutrition and perception about role of different stakeholders.

*The sources of information were* Adolescent girls, Community Leaders, Fathers of Children under 2 yr., Mothers of Children under 2 yr, Pregnant Women, Lactating Women, and Service Providers.

The **study areas** were Dhaka Sadar, Khulna Sadar, Habigonj Sadar, Boalkhali (Chittagong), Morrelgonj (Bagerhat), Borolekha (Moulvibazar), Anowara (Chittagong), Roumari (Kurigram), Sathia(Pabna), and Mollarhat (Bagerhat). The later fives are NNP areas.

## Key Findings

### Background characteristics of sample respondents

There was a total of 526 participants in which the ratio of male: female was 45:55. The average age of the FGD participants was 38 years, ranging between 10 and 40 years. The average years of schooling of the FGD participants was 5.8 years.

## **Perception and attitude on nutrition and malnutrition**

**Mother:** To most of the mothers of children under 2 years a healthy person is happy. However, a happy family is a small family with two children, which can afford the nutritious food and arrange education for them. Only a few have mentioned the necessity of recreation. FGD reveals that the mothers have partial idea about nutritious foods. According to them, children need more nutrition than others, because they are in a growing stage. For their healthy growth they need food that contains vitamin, iron and iodine. They also have mentioned the need of more nutritious food for pregnant and lactating women, old people and hard-working men.

According to them husbands go to the market, the mothers-in-law takes decision on preparation of food and wives cook it. Male head of the house takes food at first and the women at last. Most of the pregnant women have mentioned that vegetables are generally washed after cutting them into pieces except some special ones.

Some participants have opined that low birth weight (LBW) of newborn baby occurs because of malnutrition of the mother. If the children under 6 months or under 2 years does not get breast milk, they suffer from malnutrition. Complementary food, i.e., mixed rice, vegetables, fishes, should be given to these malnourished babies. Food should be prepared with edible oil. Mothers' negligence leads to malnutrition of child. They are willing to give nutritious food to the children but due to poverty they can't. It is normal that pregnant women will suffer from malnutrition for deprivation of food. They do not bother about Growth Monitoring Card. If the baby is happy, takes food on a regular basis, walks and plays normally, it stands within the prospect of their credibility that the baby has normal development.

**Father:** To most of the fathers a healthy life with wife and children is the real happy life. To provide nutritious food and education to the children is the source of happiness. According to fathers Panta Vat (watery rice), beef and foods which we can't digest cause malnutrition. To all of them LBW occurs mostly due to malnutrition of mother. Premature delivery is another reason for LBW. The malnourished children under 2 years should be kept neat and clean, given complementary food with breast milk i.e., fish, milk, egg, leafy vegetables and mixed rice to improve their nutrition. Malnutrition in adolescents originates from lack of proper food i.e., chickens, vegetables, fruits, lack of proper rest and recreation. Most of the fathers know that the pregnant and lactating women should take nutritious foods, should not do heavy work, and go for regular medical check-up. They cannot afford sufficient nutritious foods due to poverty.

**Pregnant Women:** The pregnant women were informed of taking nutritious foods during pregnancy and lactation, of regular rest and of doing light work only. Majority of the pregnant women have mentioned that their husbands co-operate with them. However, some have no remarkable role and they can't visit doctor. Most of the mothers-in-law do not discourage them to do hard work. Some have stated that, mothers-in-law are too rough in their behavior. They do not allow them to take more food.

Most pregnant mothers have expressed their willingness to provide their babies with colostrums and breast milk. However, giving honey or sugar water followed by colostrums is the practice. They do not have any idea about proper breastfeeding and supplementary foods.

**Lactating Women:** Although lactating women know colostrums as a good food for baby, the first food they provide to baby is honey or sugar-water. Some of them removes the colostrums and threw it in pond. According to most of them breast milk is the best food for the baby and nutritious food helps the secretion of milk from breasts. Most of them have stated that additional food like a hotch-potch of rice, flour, potato, banana and so on is given to the baby from five months. Most of the respondents, lactating mothers don't have the complete idea of growth monitoring card. They only visit CNC and use it. According to them, mothers require more nutrition during pregnancy or lactating stage. The nutritious foods suggested by them are only the costly ones having protein. Comparatively better food is left out for the husband since he is the income earner of the family. When nutritious food cannot be purchased for want of money for women during pregnancy and lactation, they suffer from malnutrition they added.

**Mothers-in-Law:** FGD reveals that most of the mothers-in-law define family with a small number of children, taking nutritious food, maintaining cleanliness, economic stability, anxiety less and disease-free life as happy life. Mother-in-laws have partial idea about nutritious foods. According to them, children, pregnant and lactating mother need more nutrition than others. But they have admitted that the pregnant women do not take food in tune with their requirement because the baby will grow bigger, leading to complicated pregnancy. They stated that, taking less food, or the act of being deprived of nutritious food, inadequate rest, early marriage, continuous pregnancy without adequate space, sick mother and the baby becoming sick in the womb are main causes of low-birth-weight baby.

Few mothers-in-law informed that Growth Monitoring card is a weight-card. They think that, the person, who will take weight, will tell whether the weight has increased or decreased.

According to them, father-in-law/husband along with the children takes food at first. Mother-in-law has said that as the men do hard work and become involved in manual labor, they need more food. Daughters will go to father-in-law's house and there is no certainty of getting good food there. So, it is better to feed them well in parents' home. In most of the cases, the husbands go to the market but in the slum areas of Khulna and Dhaka the women also go to the market.

**Adolescent Boys:** According to majority of the adolescent boys, the people who are well off economically, possess good health, have few family members, and disease-free are happy. Although most of the boys are in favor of equal food intake by both boys and girls, some of them have admitted that girls and the pregnant and lactating mother need more food. They only know the costly and protein containing foods as the nutritious foods.

Most of the adolescent boys have mentioned that, when the adolescents do not have nutritious food regularly, they become malnourished and exhibit feverish attitude. Poverty and overwork are the reasons for the pregnant and lactating women to be malnourished.

**Adolescent Girls:** According to the adolescent girls, the malnourished baby cannot walk and always suffers from different types of diseases. Their legs and hand are narrow. According to them only proper breast feeding and weaning food can help the baby to get rid of malnutrition. The malnourished adolescents show the symptoms like lethargy and weakness. Their overall body growth suffers hindrance and they have no appetite for food. Insufficient food intake also plays a vital role in creating malnutrition. The girls have better

perception on nutrition. They have many opportunities to interact with their mother, aunt, sister-in-law, mother-in-law or other female ones. So, girls know many things more than the boys.

**Community Leaders:** Information on nutrition and malnutrition was collected through in-depth interview from the community leaders like Imam, Teachers, UP chairman, Male and female UP members and non-elected leaders. In most of the study areas rice, lever, green vegetables, spinach, colocasia, all kinds of fruits, fish, meat, egg and milk were stated as nutritious foods. They opined that, the males require more nutrition, as they perform manual job and do more hard work. They also have stated that females give birth to weak and underweight baby if they are not given nutritious food. Others think that as human beings both males and females need equal amount of food and nutrition. Regarding food and nutritional practices in the family they informed that males are given better foods.

Diverse causes like ignorance, lack of awareness, the economic insolvency, illiteracy, lack of proper cooking practices and early marriage were identified by them as causes of malnutrition. According to them the children, pregnant women and adolescent girls mostly suffer from malnutrition. They also have no knowledge that vegetables should only be washed before cutting them into pieces.

The community leaders have given suggestions about providing low interest loan to the poor through the Samity, motivating them to use hygienic latrine, organizing loan from the NGOs, establishing clubs to facilitating sports for the boys, providing advice to adopt health care facilities, distributing government sanitary latrine, proper distribution of government facilities- like VGF, VGD, old age pension, providing help to family planning and nutrition worker and founding schools for the expansion of education.

**Traditional Birth Attendants:** Regarding understanding about the comprehensive well-being including good health and good nutrition most of the TBAs have mentioned-economic solvency, lack of any deficiency, less frequent diseases, regular availability of food, recreation and rest as the basic indicators. Most TBAs have added that taking good food such as grapes, vegetables, cat fish, carp fish, and other seasonal fruits is required to increase and enhance the strength of the body. The TBAs in general have opined that, there is no difference in the need, and the same type of food is required for both the boys and girls. The general learning from the doctors is that the females require more nutritious food during pregnancy to carry baby in her womb and also during post-partum period. They have opined that, because of the loss of calorie during menstruation the girls shall be given nutritious food. The elderly people also need nutritious food. Most of the TBAs have opined that low birth weight is the result of very poor food intake, insufficient vitamin and nutrition intake, less quantity of requisite and required food given to the mother during pregnancy stage, and insufficient rest by mother.

The TBAs, in general, have opined that they are not aware of the growth-monitoring card and none has the opportunity to see the same. However, the TBAs were aware of colostrums feeding, breast-feeding and supplementary feeding from 6<sup>th</sup> month. They have given suggestions about providing a hatch-potch of rice and vegetables to the children. For increasing the production of breast milk mothers were suggested to eat nutritious food repeatedly and sufficiently. Nutrition workers give information to the mother that the baby's weight will increase @ 0.75-1 kg. every month. They have stated that, if the baby seems

reduced than earlier, then they take the baby to the doctor and feed it more nutritious food. They have added that, illiterate people don't understand how to see the GMC.

Regarding decision-making in the family the TBAs have opined that, males take decision about shopping. Regarding food intake at first, they have opined that the males take food followed by the females.

**Quack:** Most of the quacks have expressed that, the comprehensive well-being constitutes six basic areas, such as food, clothing, housing, education, health, and recreation. As source of ideal nutrition they mentioned- egg, milk, fishes, meat, sweet, any fruit or vegetables where all these are essential for good health. They are in favor of using a lid on vegetable while cooking.

Most of the quacks have stated that pregnant women experience loss of much calorie. Before that, during menstruation every month iron is lost with bleeding. The females need folic acid, calcium, iron, protein more than the males. Some other respondents also stated that, the lactating mothers also require additional food. Others informed that, because of growth period between 12 and 18 years, the adolescent boys need absolutely more food than the adolescent girls to develop their proper physical growth.

According to Quacks most of the pregnant mothers are not well aware of proper care of children. Regarding growth monitoring they have informed that, poor and illiterate people don't know that there is a system to check the baby's growth. They feel that rice, vegetable, fish, egg, meat are enough for the growth of the baby. Due to poverty and ignorance they don't go to the service provider. They don't go to measure weight. When the lower abdomen gets bigger, they understand that the baby is growing. Many people don't give extra food to the pregnant mother, because the baby will be bigger and the delivery might be complicated. Even the quacks don't have any idea about growth monitoring card.

According to the quacks, some of the mothers think that colostrums is harmful for the baby. They give honey to the newborn baby. Most of the husbands don't take care of their wives due to their business, ignorance and poverty. Some husbands are caring. They take their wives to the doctor.

Some mothers know that during lactating period they need extra nutritious food, but due to poverty they cannot afford it. On the other hand, other members of the family don't bother regarding this. Some mothers have to eat rice only with red chilly after delivery. They take rest for very few days. Some people allow their wives to take rest for 40 days.

They have informed that, due to moral obligation women serve better food and more food to the men. Sometimes it happens due to love. Literate people eat iodized salt but poor people eat open salt. In every areas people eat potato mostly, than other seasonal vegetables.

**Service Providers (Institutional) CNOs and CNPs:** According to the CNOs and CNPs, the pregnant women, children under 2 years, adolescent girls and old men in the family badly suffer from malnutrition. The CNO and CNPs have mentioned that, during pregnancy the pregnant mothers do not have adequate foods as they require. Mothers with early marriage especially the women who during pregnancy period do not take care of their

health, do not take nutritious food, do not take supplemental food and do not take proper rest, give birth to underweight babies.

According to the CNOs and CNPs, when the weight of the baby comes below 60 gomage, it indicates that the child is malnourished. The illiterate parents do not understand the Growth Monitoring Card. Until they understand it fully, the CNPs help them.

Malnourished mothers are advised to provide their babies with nutritious food like egg, vegetables and fruits in home. When the baby is highly malnourished, parents are advised to bring their babies to nutrition center for feeding them nutrition packet.

**ATFPOs:** The perception of upazila managers (Assistant Thana Family Planning Officers-ATFPOs) of government sponsored national nutrition program (NNP) on some malnutrition related issues was explored in the formative research.

The ATFPOs informed that the poor, children, pregnant mothers, lactating mother, adolescent boys and girls, old men and women were mostly the sufferers of malnutrition. About the low birth weight (LBW) among the babies the reasons shared are-- insufficient food intake, inadequate rest, and early marriage.

The ATFPOs of the NNP areas have informed that the Community Nutrition Centers of the NGOs provide education to raise awareness about nutrition to children, pregnant mother, lactating mother, adolescent boys and adolescent girls suffering from malnutrition, and also supply nutrition supplementation packets to the severely malnourished mothers and children. The family planning workers also raise the awareness of the community people about nutrition. It was informed that in NNP areas the CNPs primarily perform the function of growth monitoring. Almost all the ATFPOs have informed that the parents learn virtually nothing about the growth monitoring. Besides, the children's growth the growth of adolescent girls (group members) is also being regularly monitored in CNCs, informed the upazila managers.

The nutrition promotion activities in non-program/project areas is made by the family planning workers during home visits, and also during the counseling done in different GOB and NGO service delivery facilities.

### **Food and nutritional practice of different special need groups**

The special need groups considered in this study are pregnant women, lactating mothers, mothers having children under 2 years, and adolescent girls and boys. In response to the inquiry about the care of pregnant and lactating mother as well as growth of the fetus and children under 2, the food and nutrition practice of most of the educated mothers at different project areas were found fair and sensitive enough in favor of taking supplemental food and nutrition depending on their affordability. But, in most of the places the practice is interrupted by poverty. On the other hand, among the mothers, having no education, i.e. illiterate group, majorities are unaware of any need of supplemental food during pregnancy and lactation period. The role of the mother-in-laws towards the food and nutrition practice of pregnant and lactating mothers were quite contradictory. Although breast-feeding was popular in all the areas, honey and sugar water practice were very popular as the first food after birth (in place of colostrums) although many of them knew the benefit of colostrums, given under the influence of elders, mother in-laws, mother and TBAs. Most mothers are aware of Exclusive

Breast Feeding, but reluctant to follow the practice strictly. A notable proportion of mothers are not aware of proper "Weaning of Food" for their babies except in some nutrition project areas.

According to the CNOs and CNPs, pregnant women are advised to take adequate food during their pregnancy period. When BMI comes down under 18.5, they are advised to take nutritious food like yellow and green vegetables, meat, fish, cow's milk, and four nutrition packets daily. But these packets..are not supplied from the nutrition center. Mothers-in-law are in many occasions responsible for the malnutrition of pregnant and lactating women.

The TBAs have opined in general that, lactating mothers must take nutritious food timely and have adequate sleep. For care of low birth weight baby most of the TBAs have stated that, mother should be provided with better nutritious food. And they should take the advice of the physician and nurse the baby properly for survival of the child. According to CNO and CNPs, the weight of the baby is taken three times in between two months. Some of the mothers have informed about their familiarity with the Growth Monitoring Card but were not confident enough to read the card independently. In most of the families of the survey areas the daily consumable food items are commonly bought by the husband or any other male member of the family, primarily as per instruction of the house-wife or in some cases by the mother-in-law. For preparation of cooking, almost all participants in all the areas have opined that the task of washing vegetables after cutting them into pieces is a hygienic practice.

### **Gap between perception and practice**

One of the most interesting part of this formative research is, in-spite of having a more or less appreciable knowledge on many of the indicators, the practice level was very low. They have partial knowledge about nutrition. But in practice they cannot follow those due to poverty, myths, false beliefs and obstacle from the mother-in-law, husband and other elderly people.

The common and relevant false beliefs and myths found are-If the pregnant mother takes much food, the baby will be bigger and it will create difficulty during delivery; they should not sleep more and take less rest in order to avoid obesity during pregnancy; colostrums should not be given to the newborn baby because it looks like pus; breast milk should be stopped if there is diarrhea of the baby; if the lactating mother takes sour, leafy vegetables or pineapple and there will be diarrhea of the baby, and adolescent girls should take only milk and banana for seven days at the time of menstruation.

It is not possible to change these age-old myths and false beliefs abruptly within a short time span. Therefore, it would be only appropriate to launch scientifically designed BCC activities through which knowledge of all stakeholders including the gatekeepers (husband, mother-inlaws etc) will be improved to accelerate the scientific practice of nutrition and related behavior of the mass people.

### **Gender discrimination in food and nutrition**

The study reveals that high level of gender discrimination prevails in the community in terms of food distribution to women, and taking rest in their father-in-law's house is highly corelated with malnutrition of pregnant mother. Lactating mothers also do not get the



requisite share of food and the post-partum care of mothers is highly unsatisfactory. Women take food at last and least. It is the mother who always serves the food. Women's productive work is under estimated. People consider the domestic work of women to be light work since it doesn't relate to the income generating activity.

### **Hygiene and sanitation practice**

It has been observed from the discussion that in most of the survey areas, a considerable segment of the participants possess latrine at their household. Among the latrines, used by the participants, many don't hold the hygienic-sanitary standards.

### **Myths and misconceptions on food and nutrition**

The myths and false beliefs in connection with food and nutrition during pregnancy, delivery and adolescence (for girls) are rooted in the community. The tendency to become vulnerable to such fictitious things gushes out of the womb of abysmal ignorance and patriarchy. The people's character that is, in all likelihood, identical with an outmoded, prejudiced approach to pregnancy, lactation and menarche and the disease and sickness of children is so real and natural as opposed to what is unreal and unnatural that they can avoid such practices under no circumstances.

Some of the existing erroneous beliefs and myths, detected in the project and non-project areas are described below:

**Myths and misconceptions of pregnancy:** *"A pregnant mother should not take sufficient food because her belly will expand, leading to the complicated problems of delivery".*

**Myths and misconceptions of delivery:** *"If the expectant mother leaps out of the delivery room, she will have to throw water on all sides of the room, otherwise there will be influence of evil spirit on her low birth".*

**Myths and misconceptions about new born baby and lactation:** *"Newborn babies should be given the blood of umbilical cord/honey/grapes-juice/sugar solution/juice of zinger/rice water in their mouths so that their saliva and bellies will be clean, and their lips will be reddish. They will speak sweet words. And they will be physically strong".*

**Myths and misconceptions of adolescent girl:** *"Young girl should not go outside during menarche otherwise evil spirit will do harm to them". "They should not eat small fishes with the onset of menstruation. If they do not follow it, their body will give out a distorted, bad smell".*

The aforementioned myths and erroneous beliefs come to be transmitted to the young generation under pressure and persuasion of elderly persons, belonging to the culture and tradition of the antediluvian period. Therefore, it would be only appropriate to launch well designed BCC programs through which knowledge of all stakeholders including the gatekeepers (husband, mothers-in-law etc) will be utilized to accelerate the scientific practice of nutrition-related behavior of the masses at full steam.

## Role of different stakeholders on the issue of nutrition

The interaction with the male participants has revealed that a good majority of the fathers are interested to participate in the dissemination activities of CNC. But, the majority of the women participants reported that, the husbands are generally less interested and enthusiastic about changing the nutritional practice in their families.

## Sources of information, advice and care

Most participants prefer both institutional and non-institutional media for receiving the nutrition-information. Most female respondents prefer group-meetings both at nutrition centers and at their *para (s)/uthdn(s)* (courtyard) facilitated by the health workers and NGO workers (*Pusti Apa*) as the major institutional source. Both the female and male participants observed the important role of home-visits by NGO-health and family planning workers. It also would be appropriate to utilize the services of Union Agriculture Block Supervisors since they regularly interact with the male farmers in the locality, school. The other channels as stated by a large majority are Imams, UP Members, Chairman, etc. The participants also mentioned television, radio, cinemas as commonly accessible mass media for them. A noticeable part of the respondents mentioned billboards, signboards and posters containing various nutrition issues. A large number of participants think that the use of local folk media like *Jatra, Jari, Lalongiti, Palagan*, etc. with nutritional themes would be of high utility.

## Recommendations

Based on the in-depth analysis of the perception and attitude of all the relevant stakeholders, the following suggestions and recommendations are forwarded:

- Awareness should be created among the Community leaders, especially the UP Chairman, Members, Imams and Teachers first;
- The mothers-in-law, mothers, husbands and elderly people need to be informed;
- Both adolescent girls and boys should be included in the programme;
- The prime message for the BCC campaign should be - "*Only a healthy mother and a healthy child can give a healthy family and a future bright nation*";
- The Growth Monitoring Card (GMC) should be made simpler (if possible);
- GMC should be used more widely and people should be oriented towards its interpretation for successful prevention of malnutrition;
- The food like hotchpotch, prepared using the ingredients like rice, pulses, edible oil and iodized salt should be popularized as weaning food in place of costly food like meat and fish;
- TV and Radio should be utilized vigorously for disseminating message on nutrition through various programmes. These programmes should stress more not only on disseminating correct messages, but also on translating the knowledge into actual practice;
- The number of Community Nutrition Centers should increase in the project areas to make it successful within a short period of time. The physical distance and number of households- both should be considered in this respect;

- The people of Arsenic prone area like Morrelgonj asked for supply of Arsenic-free drinking water. These types of nutritional problems should also be dealt with by the nutrition committee of the area as well as by the central authority;
- Both GOB, NGO and Local Government machinery (Chairman, Member) should be utilized in monitoring and supervising the programme. GOB should have a lead role in monitoring and supervision.
- A recommendation priority setting workshop should be organized (in which the key findings should be disseminated) with full participation of all the relevant stakeholders. This should be treated as the most useful route towards the next step in the whole design of BCC for the NNP.