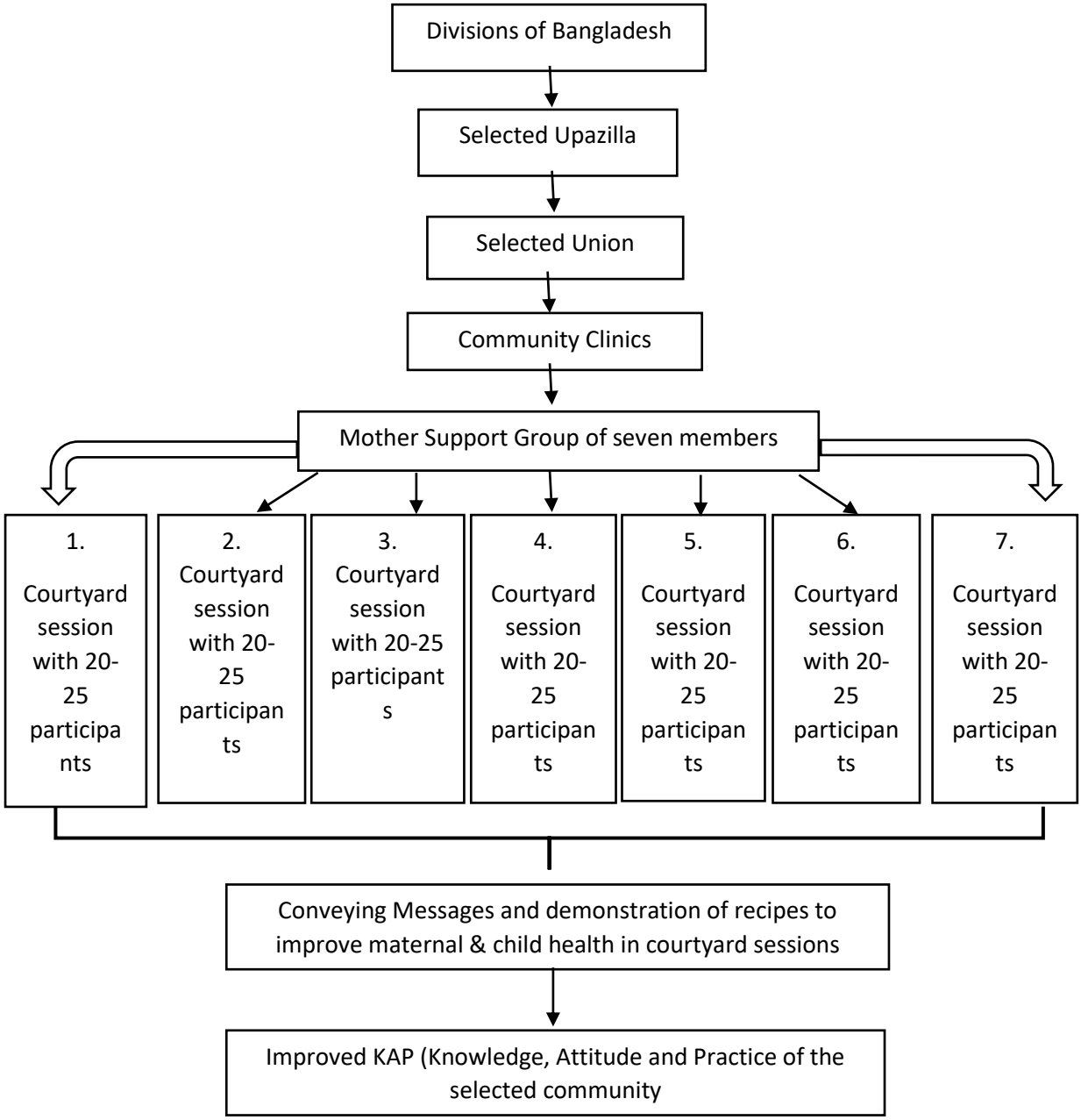
Mother Support Group (MSG) to reduce stunting:

Bangladesh Breastfeeding Foundation (BBF) drives on better nutrition for children specially improving IYCF practices for better health of children. BBF has been playing a major role in establishing mother support groups (MSG) under National Nutrition Program (NNP) since 2003. BBF has formed a number of Mother Support Group (MSG) at the community level and numerous activities are regularly being conducted in coordination with MSG.

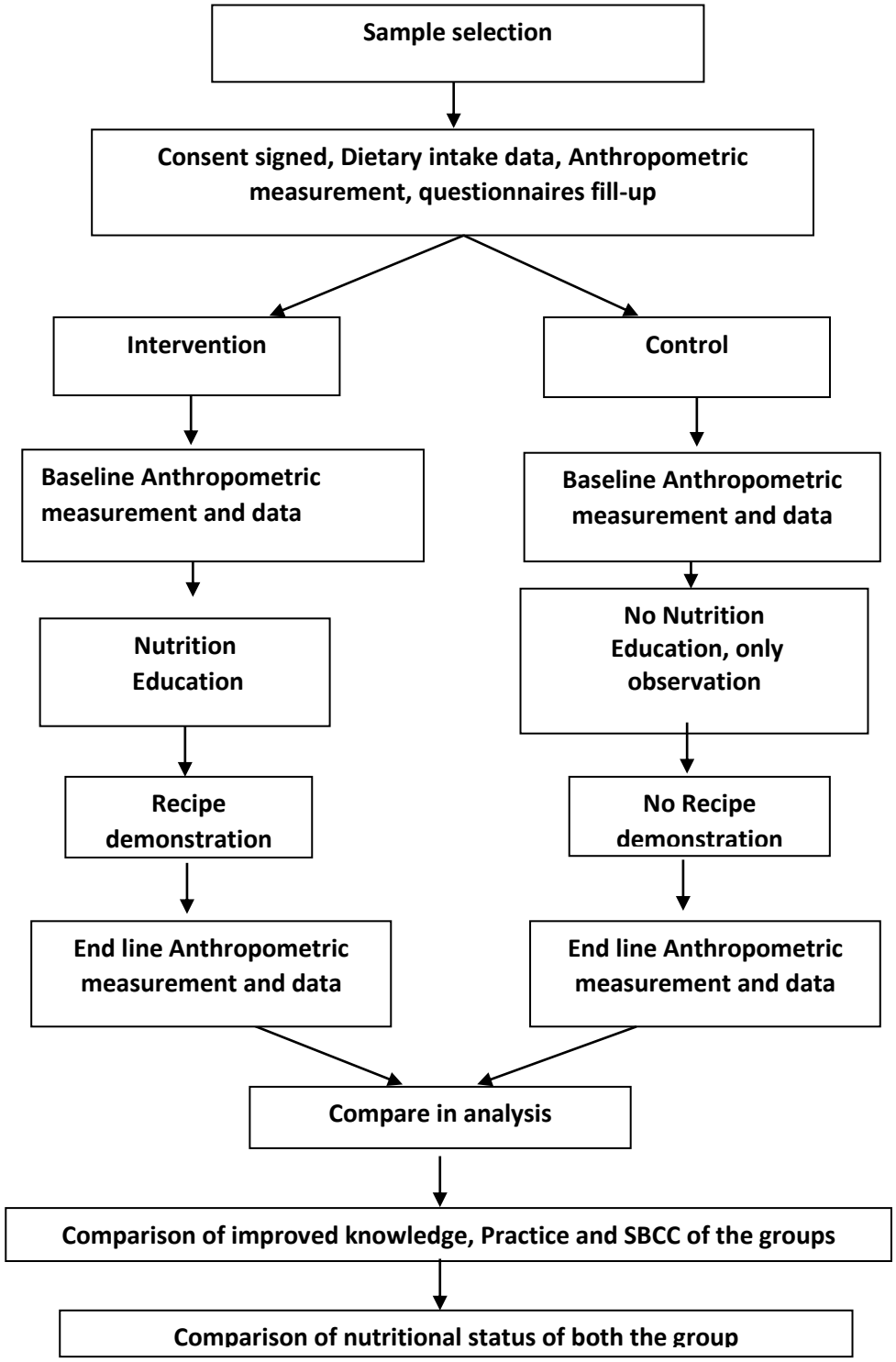
A Mother Support Group (MSG) were formed at the community level by following steps-

- The number and detail of pregnant & lactating mother, mother having children less than 5 years, adolescents had been listed out. The BBF gave drive to sort out 15-20 community leaders based on cumulative credits in training programs (assessing their perception on subject, presentations, smartness, leadership quality, etc.)
- Mothers were selected from each extended communities under direct supervision of respective CC
- Thus, meetings were held with 15-20 mothers following lectures, demos &/or FGD discussions incorporated with Q & A session, group brain storming sessions/conducting quiz, etc.
- 7 best mothers had been trained further to grow leadership quality/empower to lead respective MSG
- Resource persons, trainees, participants were remunerated to compensate their time & effort.
- Moreover, adolescents attended the meeting/trainings were also highly appreciated for their presence.

Figure- Activity Frame work of MSG



Flow chart of methodology:



Community mobilization for improved nutrition of 6-24 months children through MSG-

As human beings are by nature social creatures whose behaviors, attitudes and beliefs are profoundly affected by the norms of the communities in which they live. It is the process named community mobilization that engages the communities to change the norms within their own communities.

Community mobilization will be divided into 2 components:

A. **Providing Intervention and nutrition education**
B. **Community sensitization**

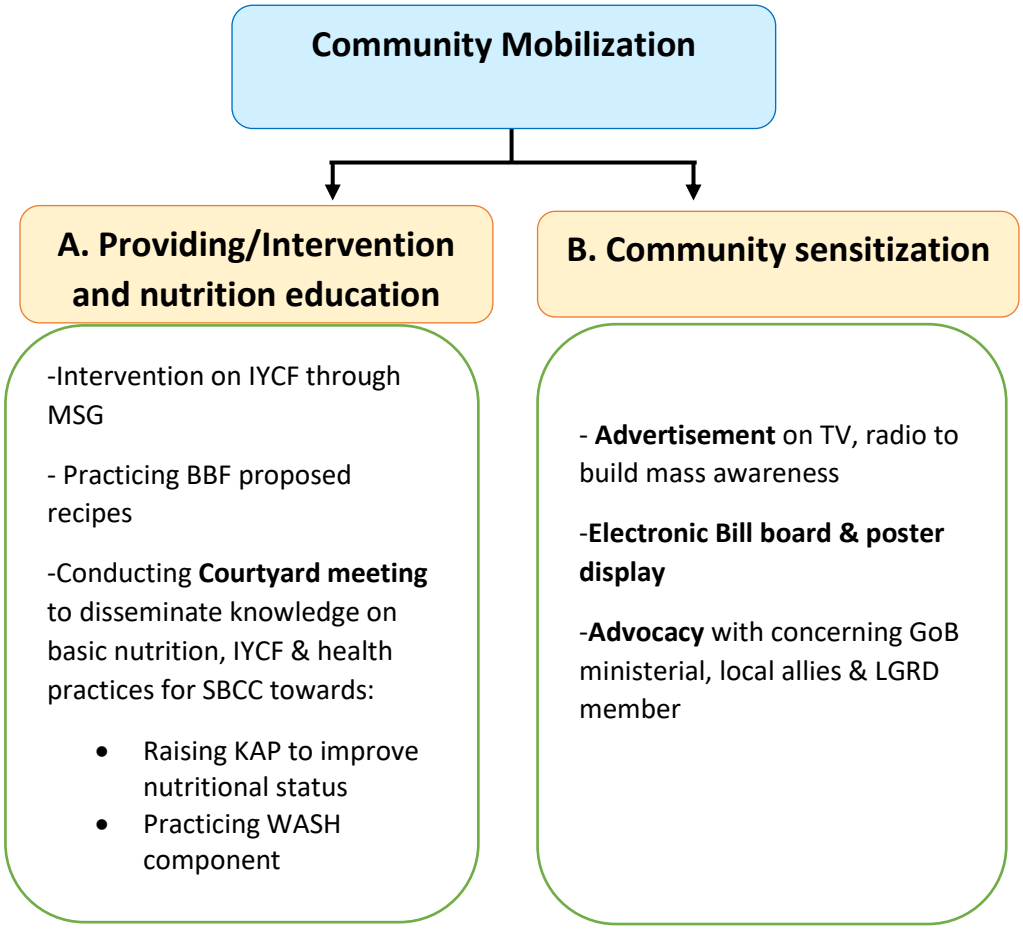


Figure: Components of community mobilization

A. Intervention and Nutrition education Procedure:

During the courtyard session of MSG at the respected community mothers of 6-24 month old children will be given intervention on appropriate IYCF practice for children. Demonstration for BBF proposed recipes will be given at practical hand. Acceptability of those recipes will be perceived. Food diversity following dietary guideline and the use of locally available seasonal nutrient rich food sources will be highly encouraged for children as a balance diet. Appropriate age specific consistency and frequency of complementary food for children will be emphasized duly. Continued breast feeding will be specially accentuated.

BBF will provide technical support and training to the MSG volunteers at the upazilla level and government front line workers from Community Clinic to strengthen their capacity on Infant and Young Child Feeding (IYCF), women's nutrition, health and hygiene practices. Cooking demonstrations will also be carried out using some established nutritional recipes to train Mother Support Groups and to help family decision makers to understand the importance of nutrition, especially for the young children and pregnant and lactating women focusing early 1000 days of life. They will also be trained on how to process, cook, and store, considering food safety issues.

A.1. Recipe trials and Food Demonstration

Based on the findings from the FGDs, in-depth interviews and observational data, BBF has formulated recipes. The foods, recipe options, guidelines and nutrition education messages are based on FGDs, in-depth interviews and observational data, and food consumption data.

For recipe trials, sensory evaluation, food cooking sessions and acceptability trials will be conducted with mothers. The recipes will be tested for appropriateness and acceptability by young children and their mothers/caretakers. The research assistant or MSG volunteer will facilitate the cooking session and will elicit comments and suggestions made by the mothers. When the food is ready, each mother will taste and serve the foods to her child. An acceptability score card will be used to evaluate the overall acceptability of the complementary food by the child and mother. The facilitator will also discuss serving and feeding methods, availability of ingredients and materials and feasibility issues.

Demonstrations of the preparation of selected homemade food recipes will be emphasized through group education and intervention. Both the quantitative and the qualitative aspects of complementary foods and each micronutrient will be explained to the caregivers/mothers. Pregnant women and adolescents will also be counseled during the courtyard session of MSG.

A.2 Delivery of Intervention through Trial of Improved Practices (TIPs)

The TIPs (The Manoff Group, 1997; USAID and IYCN, 2011) is a relatively new and innovative methodology. The standard approach to TIPs implementation involves three visits. For present study, TIPs will include a series of courtyard meetings.

(1) The purpose of the first courtyard meeting is to learn about current household feeding practices.

(2) The next meetings (weekly) will be "interventional meetings", which will include the negotiating of a new practice with the mother or caregiver for her to try.

(3) The end line meetings will be a follow-up meeting to check on the mother's experience in implementing the recommended/negotiated new practice. This "negotiation TIPs" is mainly used in maternal and infant feeding, and identifies the best choices among a number of different actions that could yield nutrition benefits.

By the TIPs method, mothers/primary caregivers will have a choice of recommendations to act on, questions about their reasons for that choice, and follow up for improving and taking action on the feeding recommendations.

Features of Intervention and Nutrition education process:

The nutrition education through intervention during the courtyard session aims to improve the IYCF practices to improve nutritional status of children, health-seeking behavior, and caring practices, nutritional knowledge of the community people specially mothers and caregivers. To achieve this-

1. Behavioral change and communication materials, such as flip charts and video will be prepared with key messages in easily understandable language with color photographs based on this formative information.
2. The messages will be prioritized for food security, age specific food frequency, food diversity, food taboos, psychosocial stimulation, and care and health-seeking behavior and will be built on the preliminary exploration and focus group discussions.

3. Electronic bill board, PVC banner and poster in imperative community gatherings will be displayed to create awareness.
4. The messages delivered will be simple, standardized, and age-appropriate that food, health, and care are equally important for the prevention of malnutrition will be explained carefully to the mothers.
5. Members will be discouraged to follow traditional healing process or village quacks. Rather they will be inspired to go to nearest community clinic and primary health care center.

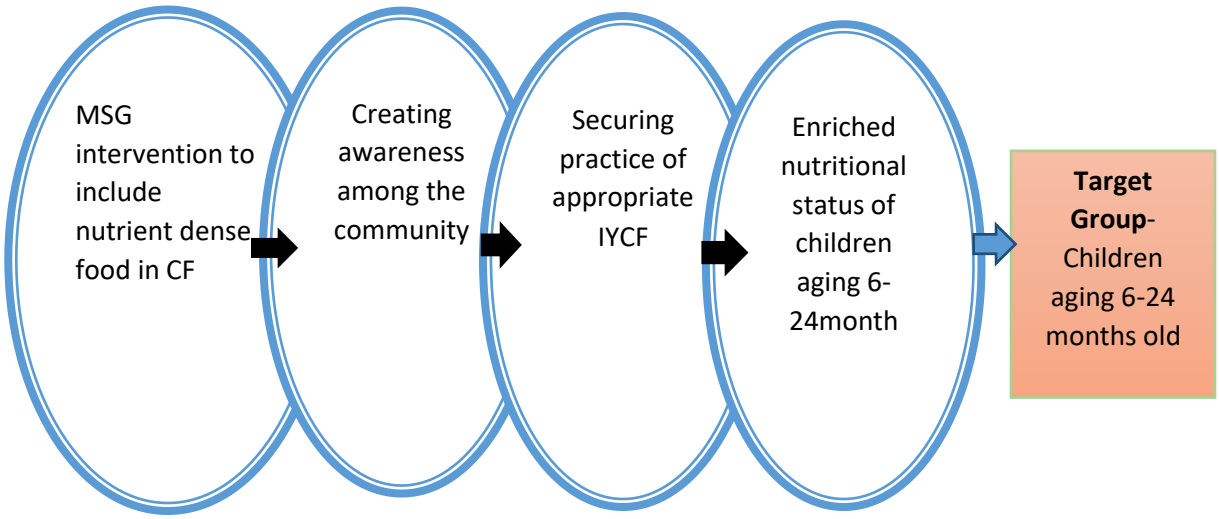
A.3 Social and Behavior Change Communication (SBCC)

Key Social Behavior Change Communication (SBCC) activities will be conducted for advocacy, social marketing and integrated awareness-raising campaigns about nutrition, food based diversity approaches following dietary guideline.

Households will be encouraged to include nutrient dense vegetables and fruits in diets to create demand and secure that produced vegetables and fruits are indeed enriching the diet of local households particularly for complementary feeding of children under two (with special attention to the first 1000 days). Special focus will be paid to improve complementary feeding among children 6- 23 months, and promoting the importance of a balance diet for all, including breastfeeding for infants and young children.

Awareness-raising campaigns will go together with practical cooking classes/demonstrations in the village using recipes developed, teaching villagers how to best use produced vegetables and fruits including newly introduced indigenous foods in their dishes especially in infant and young child feeding.

Figure: Flow diagram of SBCC approach



SBCC topics:

The following topics will be focused in the SBCC intervention:

1. Appropriate Infant and Young Child Feeding practices with emphasis on optimal breastfeeding and complementary feeding practices
2. Healthy food choices using food-based dietary guidelines for a balanced and diversified diet and food basket planning
3. Strengthening/scaling up the cultivation and consumption of local nutrient dense foods
4. Healthy food preparation and cooking demonstrations of nutritious recipes (especially for complementary feeding)
5. Strategies to increase and diversify family food supply and consumption patterns
6. Dissemination of nutrition and related laws like BMS Act, National Food Safety Law and the need for enforced compliance

B. Community sensitization:

1. **Television & radio advertisement:** Television & radio advertisements and video clippings will be telecasted. Advertisement will be telecasted from local cable connection station to ensure reaching to beneficiary level. One minute advertisements on aspects like nutritional requirements during different stages of life, practicing IYCF, Instructions during pregnancy and lactation, hygiene, sanitation and other targeted aspects will be telecasted frequently that BBF have already developed. Television advertisements will be shared with all the project staff and will be presented in all the courtyard sessions, meetings with LGRD members and discussions in different project groups.

   Television telecasts are strong means of communication. Television networks in Bangladesh have a potential coverage of about 97 percent of the country's population. Besides education and entertainment, its mandate is to ensure the equitable dissemination of information to the mass people. Therefore, TV spots in different TV channels can act as a strong influential tool in rapidly reaching mothers, household members, community influential and health workers, doctors, nurses, health professionals, stakeholders, NGO's and government policy planners. This television spot will help to create awareness to mass people.

2. **Displaying Electronic bill board Poster & distributing leaflets:** Electronic bill board, poster containing health messages, picture of complementary food for children, pictures of healthy life, and small notes of healthy practice will be prepared, displayed and distributed among the participants.

The display boards/poster/leaflets as a medium of communication serves to transmit a message by means of a graphical synthesis. It elicits attention by its originality, contrast, and focus on the center of interest. The poster will be effective as the images and slogans can be identified easily. Those will be visually attractive. The understanding of the message is the function of the cultural characteristics of the public with symbols, metaphors, gestures, and detailed description. The appeal of the message will allow the public to accept it on sensorial, emotional, social, intellectual, and economical levels. Positive appeal and motivation will be ensured through poster and leaflets for mass communication.

3. **Formation of Technical Advisory committee (TAC):** Technical Advisory Committee (TACs) will be formed by relevant personnel from different sector through transparent procedure for time being. The committee will export controls applicable to dual-use commodities and technology and on the administration of those controls. The TAC will be formed by relevant personnel from different sector through transparent procedure. The committee will supervise and monitor the overall activity of the project. Advices and supervision from the committee will be implemented through-out the project period to earn optimum improvement in nutritional status of children aging from 6-24 month.

4. **Group Discussion with local allies and meetings with LGRD members:** Group discussion with local allies and meetings with LGRD members will be performed routinely to ensure their involvement in the program. As LGRD plans the rural development projects this group discussion will assist to find out the rural needs and inclusion of those priorities in development works. That will ensure the sustainability as well. Rural development implementation in coordination engaging the local community people will ensure ownership and involvement of them. Local allies and LGRD member will motivate and can have influential effect in the community.

Methods of Data Collection

Quantitative Survey Method will be used.

Quantitative Study:

A structured pretested questionnaire will be administered during the initial courtyard sessions for the following variables:

1. **Methods for age determination:** The age will be verified from the records like birth registration, immunization cards or previous survey records. In case of availability,

the trained Field Research Assistant (FRA) will ascertaining correct age if the date of birth is not available.

2. **Socioeconomic Status:** A structured questionnaire will be used to collect data on socioeconomic status. Before using, questionnaire should be pre tested. Respondents will be the household heads, mothers/caregivers of respective children.

3. **Morbidity:** Association of disease, frequency and duration of disease will be assessed by structured questionnaire. Health centre visiting card will also observe for this purpose. Duration of the disease will also be assessed.

4. **Anthropometry (weight, height/length, MUAC, oedema):** Anthropometric measurements of children (weight, height/length, MUAC) will be measured by the trained Field Research Assistants (FRA) to be occupied from BBF. Baseline data will be collected at the initial time period of the study and after completion of the intervention procedure end line anthropometric data will be taken at the last of the study.
5. **Methods of weight measurements:** Weight of the mothers and children will be measured using standard electronic weighing scale.
6. **Height /length measurement:** For the children younger than 2 years, length will be measured using locally made length board (Shorr Board). Length will be measured within a precision of 1mm. The mean of the 3 consecutive measurements' will be considered as the observed value and recorded in the questionnaire.

7. **MUAC Measurements:** MUAC of the children, pregnant and lactating mothers will be determined using TALC (Teaching Aid at Low Cost, St Albans, UK) tape with a precision of 1 mm. MUAC of the children will be measured at the midpoint between the shoulder and elbow on the bare left arm using the insertion TALC tape to the nearest cm. Three consecutive readings will be taken to get the accurate value on an average (MUAC and Length).

8. **Dietary intake and diversity:** To estimate the daily dietary intake of subject, 24 hour recall method and standard food group table will be followed.

9. **KAP study to assess the behavioural changes:** KAP surveys are very useful for assessing distribution of community knowledge in large-scale projects. They permit rapid assessments, yielding quantitative data, and are therefore a cheap way to gain quick insights into main knowledge data. The data will be collected about mother's/care giver's Nutrition Knowledge and Practices on breastfeeding and complementary feeding.

Approaches towards sustainability of the project-

Community Clinic (CC) acts as a multipurpose center. It is the most prioritized tool through which the present government wants to bring health, nutrition and family welfare services to the doorstep of the village people. Health workers of these clinics are intended to improve the overall health situation of the country by ensuring comprehensive primary health care service for three-fourth of the total population of Bangladesh living in the rural area.

Community Health Care Provider (CHCP), Family Welfare Assistant (FWA) and Medical Assistant (MA) from Community Clinic (CC) are the local level Government agents who are directly communicating and supporting the community at household and individual level. They are directly hired from the community by the government and given training to train them on maternal and child health nutrition. For sustainability purposes, staff members' capacities can be strengthened through the project involvement through the role of change maker at community level.

The trained Community Health Care Provider (CHCP) is kept at the core of Mother Support Group (MSG) to support and monitor their activity which makes it more effective and sustainable. Through this support mothers of MSGs are able to strengthen their own monitoring capabilities.

The project will be conducted by following a need based demand driven approach. People of the catchment population will be encouraged to intake locally available foods including various rich-protein sources, seasonal fruits and vegetables with adequate diversity especially for home based complementary feeding approach. Appropriate IYCF will be encouraged to improve the nutritional status of children. Demonstration for preparing complementary feeding will be given to develop skill among mothers. Hygiene and sanitation practices will be encouraged. Intervention and nutrition education will be given to improve practices towards healthy living. Through mass media, advertisements and advocacies community mobilization and sensitization will be done. Thus the sustainability of the project throughout the time duration will be earned.

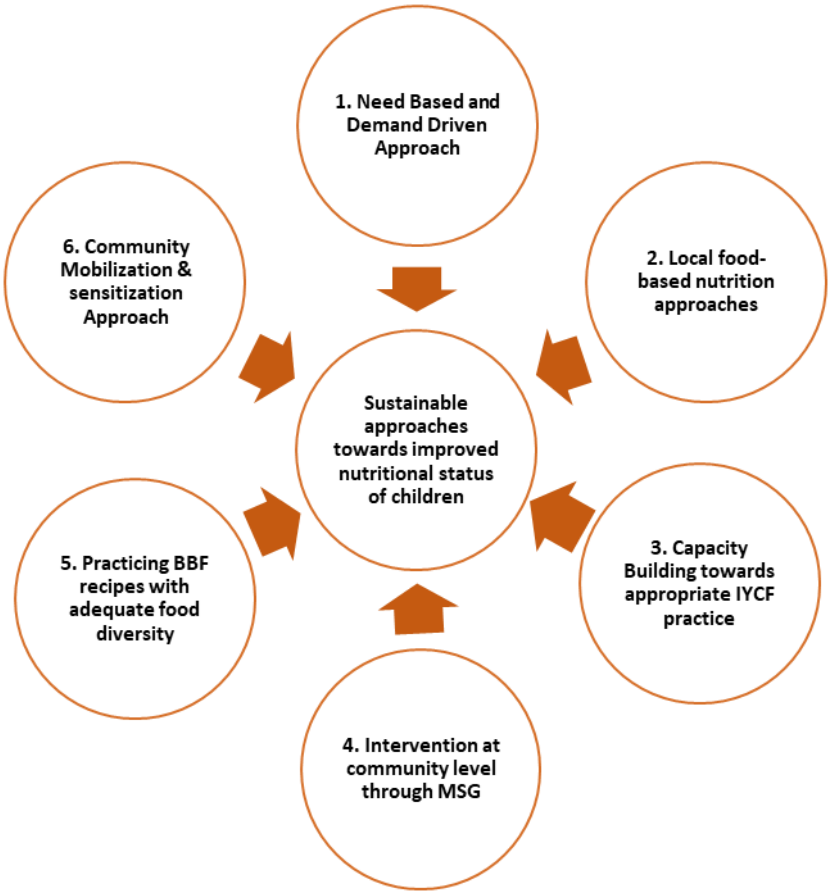


Figure- Sustainable approaches towards the project

Monitoring and Evaluation:

Monitoring and evaluation can help to extract relevant information from past and ongoing activities that can be used as the basis for programmatic fine-tuning, reorientation and future planning.

Monitoring is the systematic and routine collection of information from projects and programs for four main purposes:

- To learn from experiences to improve practices and activities in the future;
- To have internal and external accountability of the resources used and the results obtained;
- To take informed decisions on the future of the initiative;
- To promote empowerment of beneficiaries of the initiative.

Evaluation is assessing, as systematically and objectively as possible, a completed project or program (or a phase of an ongoing project or program that has been completed). Evaluations appraise data and information that inform strategic decisions, thus improving the project or

program in the future.

Evaluations should help to draw conclusions about five main aspects of the intervention:

- relevance
- effectiveness
- efficiency
- impact
- sustainability

To attain maximum quality of the project finest monitoring and evaluation process will be optimized. BBF will lead the training by orienting the field staffs on the questionnaire administration, interviewing technique anthropometry. Full time monitoring officers will be deployed to observe the interviews anthropometry, conducting repeat interviews and doing on-spot check of the data forms. They will provide necessary guidance and supportive supervision to the field teams. In another level, investigators of the study from central level will provide frequent visits to the field to oversee the activities.

Monitoring and supervision by community clinics will enhance the accessibility of the information and support to pregnant women and lactating mothers about appropriate complementary feeding and as well as breast feeding.

Table: The impact measuring variables

Target beneficiaries	Impact level variables
Study Group **Children 6-24 months**	Stunting Wasting Underweight Continued Breastfeeding Minimum acceptable Diet (MAD) at 6-24 months of age Dietary Intake (CDDS), Food Frequency (Food consumption score, FCS) Dietary diversity Caring practice Morbidity history Practice of WASH **Utilization of health services:** Immunization GMP Services

	IMCI services SAM Unit where necessary Deworming Vit A Supplementation

External validation will take place within the commencement of the assessment. The Independent Quality Control Team (IQCT), comprising representatives of BBF & CARES, will visit the Study area to re-interview and re-examine 10-15% of respondents interviewed over the preceding in the previous groups.
Discrepancies found in external validation will be taken up with the agency for corrective measures and standardization of Study methods. A quality control team will retain the research team, if necessary.

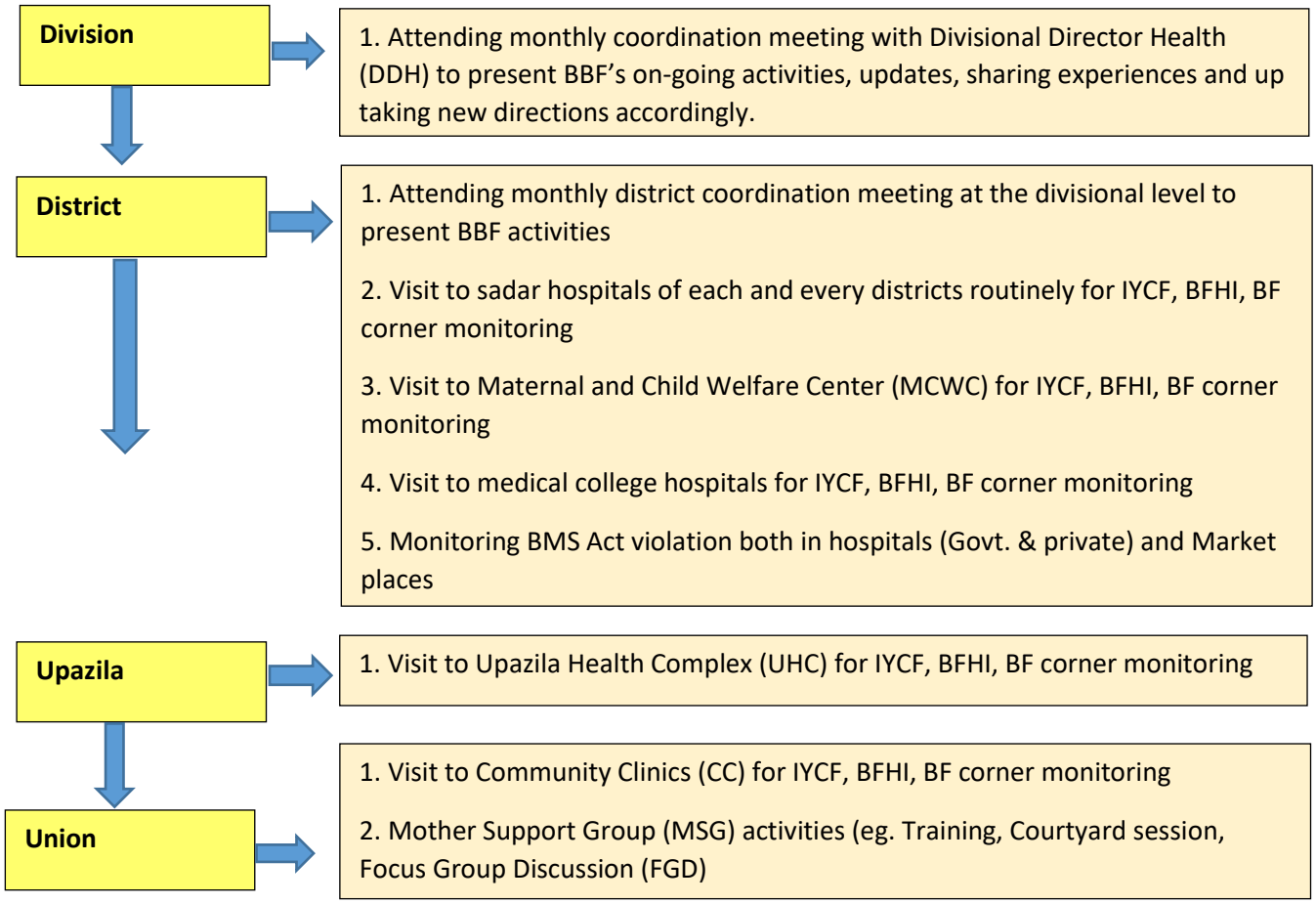
BBF's strength in light of multidimensional activities:

BBF is the pioneer in organizing and conducting IYCF, MN and, adolescent nutrition in Bangladesh since its inception in 1989. Community based nutrition training, creating awareness and capacity building remains one of core expertise of BBF. We have our own public health-nutrition expertise with an excellent track record on surveillance, training, research on nutrition activities claiming effective awareness among a diversified population of targeted communities.

At divisional level BBF have a divisional office set up at the Divisional Director Health (DDH) office that works in coordination with the govt. workers of Bangladesh covering upazila and union level. Divisional Officers (DO) does the routinely coordination meetings with the respected govt. personnel and as well does the monitoring of IYCF, BFHI, BMS act and Breast Feeding (BF) corner at hospitals, medical colleges, Maternal and Child Welfare Center (MCWC), Upazila Health Complex (UHC) Community Clinics and even home visits at the beneficiary level. All the activities are supervised, monitored, evaluated and guided from the central office BBF, Dhaka.

The activities conducted at divisional level can be depicted from the flow diagram below-

Figure – BBF's multidimensional activities at different levels



BBF is working meticulously in formation of mother support groups (MSG) under National Nutrition Program (NNP) since 2003, thus raising the EBF to 80%. While, BBF trained NNP upazila manager to initiate MSG in 8 Upazilas In 2004 for piloting basis, in 2005 it trained 80 Upazila managers & supervisors of 40 Upazilas. Since then gradual development in child's nutrition status in the country are being noticed since Dec, 2007; and in 2009, colostrum feeding raised up to 99-100% & CF up to 98-100% in those BBF-working areas.

Strategies adopted by BBF remains as-

1. Work alongside the Government of Bangladesh for effective national, sub-national and international impact to improve IYCF and MN;
2. Integration of IYCF and MN for protection, promotion and support improving health care infrastructure and professional excellence;
3. Effective communication strategies and community participation to reach all segments of population;
4. Legal framework: BMS Act implementation to protect infant and child health;
5. Development of IYCF through research and development in Bangladesh & Internationally;
6. To abide global IYCF strategies in partnership with WABA, IBFAN, One Asia, SAIFARN, ILLCI, Well Start etc.

The Govt. of Bangladesh is progressing fast to reduce child under-nutrition mainstreaming essential nutrition interventions using GOB's existing health care infrastructure/facilities. Hence, IYCF & MCH-nutrition remains the current priority interventions policy of HPNSDP and/or NNS towards implementing these nutrition programs utilizing existing CC. These activities (regular growth monitoring, nutrition education for pregnancy, lactation, IYCF & peer counseling remain the main. All these activities can being carried out in an effective and easy manner by Mother Support Group (MSG).

As BBF is working immensely in formation of MSG at the community level and organizing court yard sessions weekly over the country on a regular basis this can be very effective in implementing demonstration of complementary feeding preparations in front of mothers.

Figure- Courtyard session of MSG at Khulna division is going on

Figure- Preparation of home based complementary food

Figure- Participants from the courtyard session practicing hand wash

Figure- Distribution of home based complementary food

It can be predicted that demonstration of complementary feeding preparations following BBF proposed recipes can be highly influential among the mothers having children aged 6-24 months. This initiative in the long run can improve the complementary feeding practices in particular at the grass root level even.

Tentative work plan:

Sl. No	Activities	Year- 2019-2021											
		Month											
		1 (3mon.)	2 (3mon.)	3 (3mon.)	4 (3mon.)	5 (3mon.)	6 (3mon.)	7 (3mon.)	8 (3mon.)	9 (3mon.)	10 (3mon.)	11 (3mon.)	12 (3mon.)
1.	Initial setup and Staff recruitment												
2.	Training for project staff												
3.	Selection of population												
4.	Baseline data collections, Measured nutritional status												
5.	Intervention												
6.	Recipe trials												
7.	Awareness activities												
8.	End line data collections, Measured nutritional status												
9.	Data Analysis												
10.	Monitoring & supervision all activities												
11.	Dissemination												
12.	Report												

Bangladesh Breastfeeding Foundation

Improved Recipes For Complementary Feeding Of Children Aged 6-23 Months

With the support of

NFPCSP

National Food Policy Capacity Strengthening Programme

USAID FROM THE AMERICAN PEOPLE

BUDGET									
Sl. No.	Particulars	Quantity	Unit Cost (BDT/ Month)	Frequency	#Days/ Mon/Unit	Unit Cost (BDT/ 1 Year)	% FTE	Total cost (BDT) for 1 Yrs	Total cost (USD) for 1 Yrs
A.	**Remuneration for Key Staff**								
	Project Investigator (PI)	1	1,16,000	1	12	13,92,000	20%	2,78,400	3,200
	Co-Project Investigator (Co-PI)	1	40,600	1	12	4,87,200	30%	1,46,160	1,680
	Program Officer (PO)	4	14,500	1	12	6,96,000	100%	6,96,000	8,000
	Finace Offcier (FO)	1	14,500	1	12	1,74,000	100%	1,74,000	2,000
	Sub Total		**1,85,600**			**27,49,200**		**12,94,560**	14,880
B.	**Fringe Benefits for Key Staff**								
	Project Investigator (PI)	1	84,000	1	12	10,08,000	20%	2,01,600	2,317
	Co-Project Investigator (Co-PI)	1	29,400	1	12	3,52,800	30%	1,05,840	1,217
	Program Officer (PO)	4	10,500	1	12	5,04,000	100%	5,04,000	5,793
	Finace Offcier (FO)	1	10,500	1	12	1,26,000	100%	1,26,000	1,448
	Sub Total		**1,34,400**			**19,90,800**		**9,37,440**	10,775
	Sub Total Personnel cost (A + B)		**3,20,000**			**47,40,000**		**22,32,000**	25,655
C.	**Intervention/ Nutrition Education:**								
	Refreshment	15	45	200	1	1,35,000	100%	1,35,000	1,552
	Supporting staff	1	150	200	1	30,000	100%	30,000	345
	Banner (5'x8')	1	1500	200	1	3,00,000	100%	3,00,000	3,448
	Court Yeard Session	1	1000	200	1	2,00,000	100%	2,00,000	2,299
	Postal Cost (Logistics items)	1	800	200	1	1,60,000	100%	1,60,000	1,839
	Sub total of Intervention/ Nutrition Education							**8,25,000**	9,483
D.	**Logistic**								
	Flip Chart	23	235	200	1	10,81,000	100%	10,81,000	12,425
	Reciepe Book	23	275	200	1	12,65,000	100%	12,65,000	14,540
	Folder	23	25	200	1	1,15,000	100%	1,15,000	1,322
	Height Scale and Length Board	1	3,200	8	1	25,600	100%	25,600	294
	Weight Machine	1	2,200	8	1	17,600	100%	17,600	202
	Nutrition Cycle	1	1,500	8	1	12,000	100%	12,000	138
	PVC Festoon (Appropriate Complementary Feeding and Benefit of Breastfeeding)	2	1,200	200	1	4,80,000	100%	4,80,000	5,517
	Postal Cost of Logistics	1	7,000	8	1	56,000	200%	1,12,000	1,287
	Sub Total of Logistics							**29,96,200**	34,439
E.	**Monitoring**								
	DSA for resource person/facilitator (Non local class-1)	2	1,000	10	2	40,000	100%	40,000	460
	TA for resource person/facilitator (gross) (Non local class-1)	2	2,500	10	1	50,000	100%	50,000	575
	Sub Total of Montoring							**90,000**	1,034
F.	**Result sharing seminar (central level)**								
	Venue rent	1	6000	1	1	6,000	100%	6,000	69
	Banner	1	1500	1	1	1,500	100%	1,500	17
	Stationeries	200	100	1	1	20,000	100%	20,000	230
	Refreshments	200	280	1	1	56,000	100%	56,000	644
	Supporting staff (Secretarial)	1	200	1	1	200	100%	200	2
	Supporting staff (MLSS)	1	150	1	1	150	100%	150	2
	Miscellaneous					1,000	100%	1,000	11
	Report writing					2,000	100%	2,000	23
	Sub Total of Result Sharing							**86,850**	998
	SUMMARY BUDGET								
1	Sub Total Personnel cost (A + B)							22,32,000	25,655
2	Sub total of Intervention/ Nutrition Education							8,25,000	9,483
3	Sub Total of Logistics							29,96,200	34,439
4	Sub Total of Montoring							90,000	1,034
5	Sub Total of Result Sharing							86,850	998
	Total Cost							**62,30,050**	**71,610**