Impact Assessment of Britannia Nutrition Foundation's CSR Programs

Impact Assessment Report

Idobro Impact Solutions
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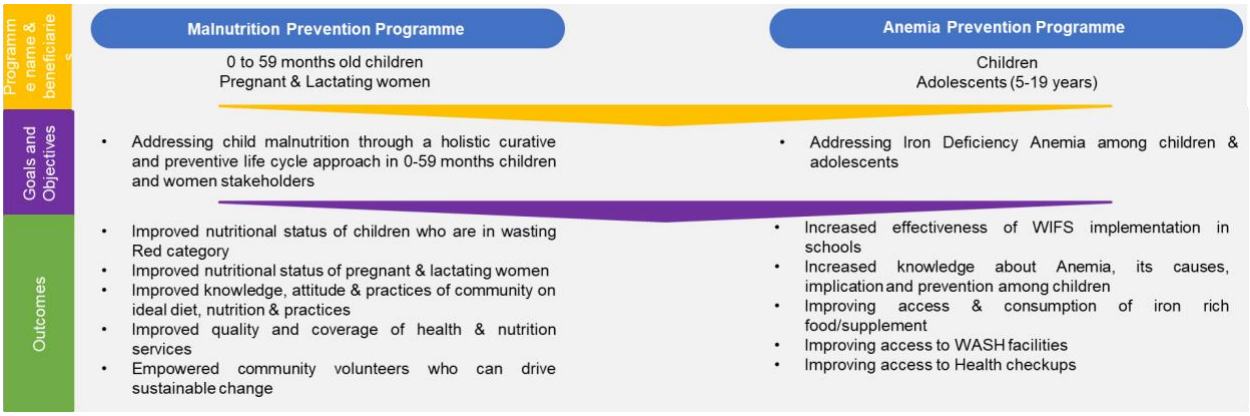
Executive Summary

With the prime purpose of "malnutrition and anemia prevention", Britannia Industries through its philanthropy arm Britannia Nutrition Foundation (BNF) continues its passionate journey of social change with support of various NGO partners, government agencies and private stakeholders. The foundation works with various credible institutions, NGOs, government agencies and domain experts to enhance the outreach of its programmes. As mandated by the statutory provisions, BNF is obligated to assess the impact of its Corporate Social Responsibility (CSR) programmes that were implemented during the period of 2019-2023.

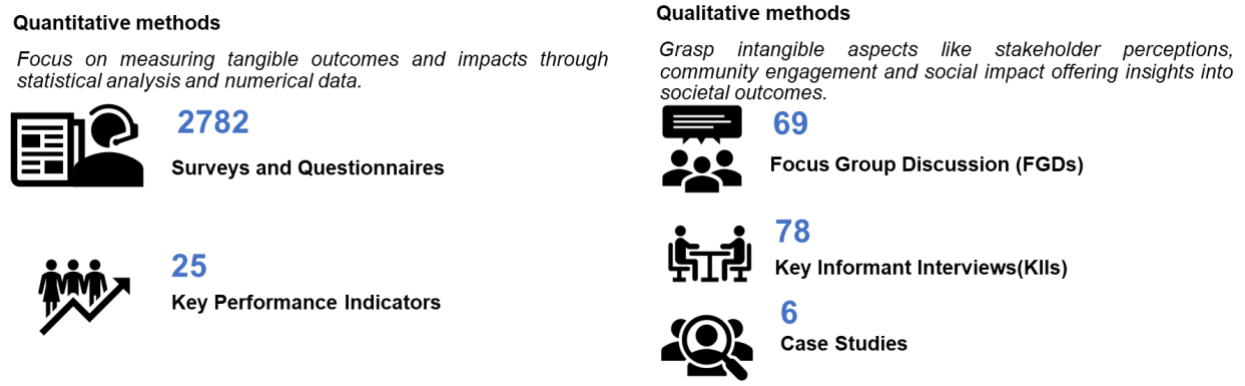
For the purpose of the impact study, OECD-DAC evaluation criteria was used for assessing the impact of the programmes. The framework has defined six evaluation criteria's that is Relevance, Coherence, Effectiveness, Efficiency, Impact, and Sustainability.

The programmes considered for the study are highlighted below:

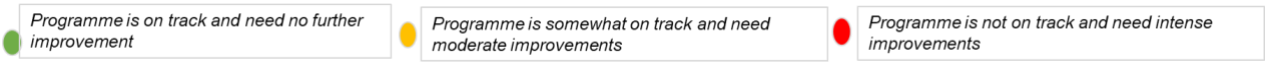


With an intent to contribute to the society, and empower communities to access and utilize government support services for improved health metrics, Britannia Nutrition Foundation **focus on nourishing children, adolescents and women towards building healthier communities** and **envision for a malnutrition free India**. The foundation recognizes the importance of building long term, sustainable, replicable programmes pursuing programme innovation and research to address the core and allied cause of malnutrition, thereby working to contribute to every child's right to nutrition and growth and assuming responsibility for the nourishment and vitality of the community, thereby creating societal change and creating an impact.

Study was summative in nature and adopted mixed methods to collect primary and secondary data using quantitative and qualitative tools. Approach to the impact assessment study:



Impact assessment overview on OECD-DAC Evaluation Criteria



Relevance: Has the programme done the right thing?	
	Programme is relevant in terms of key interventions, locations and outreach to beneficiary Children and adolescents as beneficiary had low awareness about malnutrition and anemia before intervention of the programme One-to-one counselling of malnourished children and anemic families are relevant, significant appreciated for improved access and utilization of government support health services Access to government services is there but utility of same need to be reemphasized.
Coherence: How well does the programme fit?	
	Programme is somewhat coherent to only two out of four key sectoral gaps – Malnutrition and micro deficiency. Programmes scope and intervention can be expanded to support outcome some of the other's national missions such as Suposhan mission, Mid-day meal, complementary and alternative feeding for toddlers etc.
Effectiveness: Has the programme achieved its objectives?	
	Programme is effective in terms of awareness building but depth of concepts – how, why and what need to be strengthened Inter-linkage of various interventions towards programme goal/outcome needs to be ensured. Utilization of ICDS service need to be re-instated with change in attitude and practice of mothers, family and community as a whole. Volunteer programme through transformation of local community members into change agents such as suposhan sakhi and nutrition champion need to be strengthened.
Efficiency: How well the programme delivers or is likely to deliver in a timely manner?	
	Budget utilization especially for first four years of assessment study period was less than 60% Programme's focus is more on outreach to outcome achieved Personnel to beneficiary population ratio is very high Capacity building of personnel is key requirement Systemic strengthening of programme especially with respect to technical content planned budget utilization for social behaviour change and infrastructure support need to be emphasized Adoption of MEAL framework for improved utilization of MIS Budget for some key components need to be increased
Impact: What difference did the programme make?	
	Programme impact on beneficiaries with regard to awareness, attitude change and practice is evident but need strengthening for long-term results Access to ICDS service is already available, impact related to usability of these services need to be strengthened Long-terms impacts on quality of life due to symptoms control, avoidance of hospitalization and prevention care could not be established
Sustainability: Will the benefits last?	
	Programme interventions are considered as reliable by beneficiaries but not enough systems and structures ensured to hand hold and ensure progress Collaborative partnerships are not formalized and catalyzed to for programme's success Exit strategy and proper handholding of programme is missing.

Programme Activity Assessment – Impact Snapshot

The Impact Assessment Exercise at BNF for the Malnutrition and Anemia Reduction programme aims to evaluate the effectiveness of the current implementation by assessing how well the problem statement is understood and framed, and how effectively interventions are designed to address the issue. This is done by analyzing the inputs, resulting outcomes, and overall impact created in reducing the prevalence of malnutrition and anemia among the target beneficiary group, particularly at the village level.

In summary, the assessment highlights both successes and areas for improvement. It identifies where intended impacts have been achieved through consistent, structured efforts over time, as well as where the desired outcomes have not been reached. These gaps may result from design weaknesses or external factors within the broader ecosystem. The assessment also outlines critical areas for improvement to enhance the programme's ability to tackle malnutrition and anemia more effectively and sustainably. In addition to evaluating the programme's effectiveness, the exercise also assesses the value generated from the CSR funds invested.

I Assessment of Problem Statement through BNF Interventions

Identification of the Problem: At the programme level, BNF approaches the issues of malnutrition and anemia from a comprehensive perspective. The basic premise of the programme is based on the understanding that in India, malnutrition and anemia are problems of great magnitude which are impacting the healthy growth potential of nearly one-fifth of children aged 0-5 years and almost half of the adolescent and reproductive-age women (15-49 years). This has created a vicious cycle of inter-generational malnutrition, beginning in infancy and continuing through adolescence and into the reproductive years.
Further, BNF identifies 'Wasting (height-for-weight nutritional status)' as the most acute form of Malnutrition. While assessing the causes of malnutrition and anemia the programme looks beyond food availability; factors that are multifaceted and rooted at the eco-system level; stemming from issues such as a lack of awareness about childcare and feeding practices, limited knowledge about nutrition, behavioural issues, inadequate access to treatment for local diseases, and poor water and hygiene management practices at the community levels, among other challenges.

i. Assessment Matrix for the Problem Statement:

Issue Identified	Assessment Findings	Evaluation
1. Target Intervention with the specific Population Group (0-5 years, Adolescent and Pregnant and Lactating Women)	BNF programme follows a clear approach and understanding of the issues and effects Malnutrition and Anemia have at different life cycles. The programme and its components are designed and implemented well per the requirements of various life stages. The assessment specifically highlights the consideration of working only with the 'wasting' category i.e. SAM/MAM children who are most at risk of life-threatening forms of malnutrition. Which is an optimum approach to identifying and working with the most at-risk population. Positive impact of the programme is seen in treatment of SAM/MAM cases, where the treatment success rate is over 90% in the project locations. In the case of re-lapses in one year time frame, it is only 15 % thereby, meaning about 85% of the cases remain in the healthy status and there is no deviation to SAM/MAM category.	Achieved
2. Addressing Malnutrition beyond Food availability and	BNF programmes are designed holistically, where the focus is not only on providing supplementary nutrition to 0–5-year SAM/MAM children. There is an adequate focus provided on working with the mothers of Malnourished children on breast-feeding and childcare	Mostly Achieved

through a holistic approach	practices, pre-post pregnancy care, behavior change practices through knowledge and awareness building. Though the rationale of looking beyond food availability is built into the BNF design model, however at the implementation level the quality of delivery of these services needs further enhancement through better content and training capabilities in the field implementors. More effective IEC materials need to be planned which will help to facilitate communication and knowledge sharing in the beneficiaries and community.	
3. Adoption of Eco-system approach	BNF's intervention model recognizes the root causes and persistence of malnutrition as a complex interplay of factors at the family, community, and broader ecosystem levels. It acknowledges how various actors influence and respond to the issue, shaping both its effects and counter-effects. There is significant potential to expand beyond the current scope of interventions towards a stage where all stakeholders in the ecosystem align and actively contribute to BNF's mission of reducing malnutrition in a holistic manner. This means that nutrition-related behavioral changes introduced at the family level through BNF's efforts become ingrained as community norms and are collectively practiced at the village level. For instance, decisions regarding the timely treatment of SAM/MAM children are often influenced by family elders, whose perspectives are shaped by traditional social and cultural beliefs. In many cases, malnourished children are perceived to be afflicted by bad omens, leading families to seek faith healers instead of medical treatment. This can result in misdiagnosis and, in severe cases, child mortality. To eradicate such harmful practices, BNF must focus on educating elders and panchayat members, bringing all the components of eco-system to collectively use the correct knowledge to address malnutrition.	Partially Achieved

II. **Assessment matrix for Input- Output-Impact Creation through BNF intervention**

Activity / Input	**Outcome Intended / Achieved**	**Impact Realised**	**Evaluation**
1. Growth Monitoring of the WHO parameters	Currently, twice at the start and middle of the programme, all enrolled children are measured for their height and weight under the wasting parameter of WHO. Basis this assessment, children are identified under the SAM/MAM category and accordingly services are provided to them. However, every SAM/MAM child is closely monitored monthly for their height and weight. Monthly monitoring of the SAM/MAM children ensures	Growth Monitoring as a prime activity is closely followed across all project locations and diligently practiced by the field staff. The twice-yearly baseline (Month 1) and mid-line (Month 7) assessment ensures that no child is left in the catchment area for any malnutrition-related morbidity. However, to intensify the deeper reach of the programme and ensure that no child is left	Achieved

	that children are followed for any variable deviances and accordingly services offered are intensified.	behind, all children enrolled in the project should be monitored monthly for height and weight parameters, on similar lines to the ICDS programme. The focus of the programme should be on building inclusivity over exclusivity.	
2. Nutritional Supplement for SAM/MAM Children	At the BNF programme, currently, all SAM/MAM children are provided with locally sourced nutritional supplements from the identification to the prevention phase and for a month buffer to safeguard against relapse. This ensures a progressive systematic weight gain in the child by addressing the calorie and protein deficiencies. As per programme norm, a SAM/MAM child is provided with up to 5 months of Nutritional Supplement	The current programme is very efficient in identifying the SAM/MAM cases in the catchment area and providing an adequate supply of Nutritional Supplements till the child's recovery. The project does efficient implementation, by raising awareness among the mother of the child on the importance of the supplement, frequency of usage and its rightful storage.	Achieved
3. Setting of Nutritional Garden at Household level and Anganwadi level	BNF recognizes the sustainable health of the child can only be maintained when his/her daily food habits are enhanced through the inclusion of locally available nutritious food sources. There are 30,000+ Nutrition Garden set up across the project. BNF supports the sowing of vegetable seeds especially citrus and leafy ones to address the vitamin C and iron availability for daily dietary needs and diversity at Anganwadi and household levels.	Nutrition Gardens are sustainable and the most cost-effective measure to enhance dietary diversity and nutrition. At BNF, this activity is one of the major intervention activities. Though the setting up of the Nutrition Garden is adequately done, its substance over one harvest cycle should be ensured. The community participation element also has the scope of enhancement for the areas of joint management and maintenance of the existing facilities and its continued usage.	Achieved

4. Vector-borne disease prevention through hygiene and water kit and mosquito net distribution	At the individual level, the scope of hygiene and water kit distribution is to ensure healthy sanitation practices for personal health and hygiene are maintained for the child, additionally, to protect against Malaria and other parasitical diseases, mosquito nets are provided and are ensured for daily usage.	In the current situation, the distribution of hygiene, water and mosquito kits is ensured for each SAM/MAM child. Even at the family level the provided provisions are well in use. However, for future sustained practice families shall be motivated to invest in such resources as they safeguard the child's overall health.	Achieved
5. Installation of RO water filters at Anganwadi	Currently, RO facility is provided at the Anganwadi and school level to ensure safe drinking water for the children.	Currently, ensuring the availability of clean drinking water is resulting in low occurrence of waterborne disease amongst the target beneficiaries. In the long run, this initiative shall be run in joint management with the community and the local gram panchayat, and as part of joint participation, the equal cost shall be borne by both parties. This will build ownership in the community.	Achieved
6. Iron-fortified biscuit distribution	Currently, Iron-fortified biscuits are provided to children over the age of 3 years and up to 6 years in Aaganwadi. The duration for the distribution is over 5 months in a year. Iron-fortified biscuits are one of the highly demanded services from the government and acceptance of the product is high in children. In the field, there are several anecdotal experiences shared by government officials including teachers and Anganwadi workers highlighting how iron-enriched biscuits are helping enhance iron intake in children easily and enjoyably.	In almost all the interactions across the project, various stakeholders have highlighted that iron biscuits have a proven benefit for their nutritional properties. In other ways, the availability of biscuits ensures that children come to school regularly and as an indirect outcome of the consumption children's overall learning and class participation also have shown improvement. Considering the proven benefits and high demand of iron-fortified biscuits across all age groups, the distribution and supply of remain a bit irregular across all project locations Adequate study should also be undertaken to understand the impact of its consumption for a longer duration over five months.	Mostly Achieved

7. Awareness and capacity building of mothers on Breastfeeding, weaning and child-rearing practices	BNF recognizes the effectiveness and long-term sustenance of the SAM/MAM management can only be ensured when mothers are aware and have the right knowledge to practice age-appropriate childcare breastfeeding and weaning practices. Additionally, knowledge of supplementary food is also enhanced with the locally available resources. The awareness imparted through the project is well aligned with the current intervention.	Awareness and Capacity building session in its current practice is delivered across the project locations by the field staff targeting mothers and adolescents. However, the delivery of the messages needs improvement in areas of content, model and tools of delivery. The session should be engaging, which invokes idea relating to problem and solution to the Malnutrition through the means of existing community resources. Widespread usage of various IEC material also needs to explore and adapted.	Mostly Achieved
8. Community Volunteers – Suposhan Sakhis and Nutrition Champion	At BNF intervention, Suposhan Sakhis and Nutrition Champion form the backbone of the programmme. They play an active role in the transfer of knowledge to beneficiary and community. For the long-term substance of the project, their involvement is crucial to the project	About 6,000 community volunteers are recruited and trained in the project. For the long-term engagement of Suposhan Sakhis activities should be designed to promote economic opportunities. This will help them keep invested in the programme. Also, Knowledge building sessions need to be enhanced from its current scope.	Mostly Achieved
9. Livelihood Intervention	To promote Income opportunities for malnourished children family and reverse migration by creating opportunities for income enhancement for the malnourished family.	Livelihood promotion activities is only implemented across two locations – Ranjangaon and Gwalior. Short-term and long –term impact of the activities needs to be studied in detail. Need to expand the activities to other BNF project locations	Partially Achieved

II Recommended Focus Areas:

I. Expansion of projects in high-burden hotspots for malnutrition in the existing district
II. Investment in easing the burden of existing field resources
III. Systematic adopting Exit-Village strategy
IV. Scale-up of the Iron fortified biscuit coverage
V. Meaningful rewarding opportunities for the Suposhan Sakhis for their continuous sustenance
VI. Improvement in Assessment metrics for enhancing data-based decision-making process
VII. Improving the technical quality of messaging and knowledge-building
VIII. Actively participating in supporting the local Government Institution
IX. Looking at providing knowledge to the community through non-traditional methods
X. Building visibility for the BNF program

Conclusion

The holistic support provided by BNF as part of Malnutrition Prevention and Anemia Prevention Programmes with collaboration with NGO Partner and facilitated by government agencies such as ICDS, Education Department, RBSKs etc. have led to improved health status of SAM/MAM children and anemia prevention and related healthcare indices and metrics. The programme is very well structured and relevant for the key challenges as faced by country and nutritional sector. The programme and its interventions have led to overall improvement in knowledge or understanding of the key concepts like malnutrition and anemia among the beneficiaries, change in attitude and preventive practices adopted by beneficiaries for improved quality of life, and enhanced access and utilization of government support services such as Anganwadi centers, NRCs, government hospitals etc. BNF's Social Behavioural Change model and support activities are dictated somewhat by needs of the community, scientific evidence and the call of the government.

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Introduction to BNF's CSR programs

Overview of the programs

Britannia Nutrition Foundation (BNF) is the social arm of Britannia Industries setup in 2010 with the vision to help address malnutrition. Since its inception, Britannia Nutrition Foundation has focused on improving the health and nutritional well-being of children and their communities. BNF's mission is to contribute to every child's right to nutrition and growth by:

- implementing sustainable and replicable programmes,
- pursuing product innovation and research,
- addressing core and allied cause for malnutrition and
- assuming responsibility for the nourishment and vitality of the community

The foundation runs two main programmes under its umbrella to reach its mission and vision; viz:

- Malnutrition Prevention Porgramme
- Anemia Prevention Programme

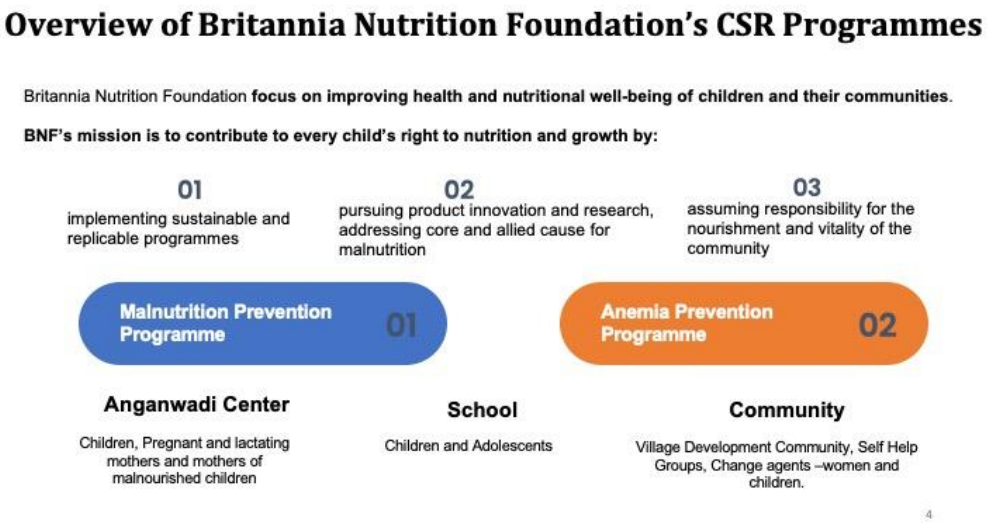
The programmes are implemented in collaboration with the Integrated Child Development Services (ICDS) of the Department of Women & Child Development, Health & Education Department and other partners to work towards its vision of "a malnutrition free India."

The programs are implemented through a multi-pronged approach that works at three levels:

(i) At the **Anganwadi** Centre level, the Foundation provides capacity building support to the Anganwadi workers, helpers and ASHA workers thereby enabling them to deliver quality nutrition and health services for children, expectant/new mothers, and adolescent girls.

(ii) At the **Community** level, to foster community's participation & ownership and through a behavior change-led intervention, the Foundation facilitates improvements in mothers' and caregivers' knowledge and practice of health, WASH and nutrition. Women are identified and trained to become community change agents and work as Suposhan Sakhis.

(iii) At the **School** level, by developing positive attitude and knowledge towards health, hygiene and nutrition practices, identifying and training adolescents to be Nutrition Champions.



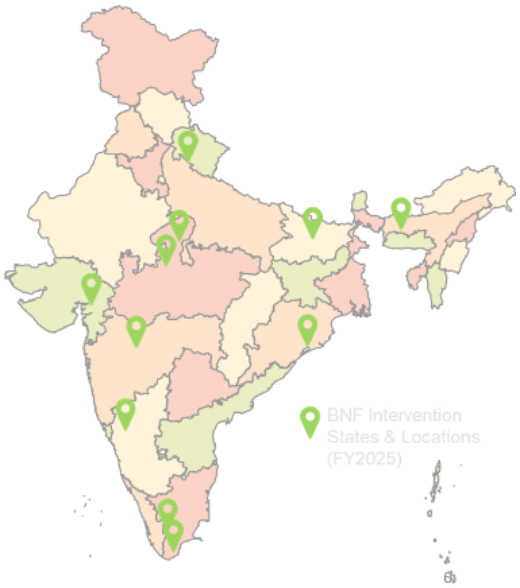
Programme outreach and footprint

BNF's current programme outreach is in 8 states across India covering more than 400 villages and slums.

Britannia Nutrition Foundation (BNF) – Programme Outreach (2024)						
Sl No	Locations	State	Population Reached	Villages & Slums	Anganwadi	Schools
1	Gwalior	MP	26,300	104	128	150
2	Hajipur	Bihar	21,000	72	98	62
3	Jhagadia	Gujarat	21,000	100	145	75
4	Kamrup	Assam	15,500	60	45	65
5	Khordha	Odisha	3,500	25		28
6	Madurai	Tamil Nadu	15,200	60	116	56
7	Perundurai	Tamil Nadu	3,800	9	9	25
8	Ranjangaon	Maharashtra	32,700	47	192	84
9	Rudrapur	Uttarakhand	22,500	40	93	37
10	Shivpuri	MP	45,000	65	126	80
11	Uttar Kannada	Karnataka	26,000	38	326	50
	Total		2,32,500	620	1,278	712

Figure 1: BNF's Programme outreach and footprint

Source: Secondary data as provided by BNF for 2019 to 2021



Programme Logframe

The programme logframe as provided by the BNF's team provide following information:

Malnutrition Prevention Programme: The programme is designed in three phases:

- Phase 1: Focused on assessing the burden of malnutrition & treating the malnourished (saving lives)
- Phase 2: Focused more on prevention of malnutrition and promotion of good practices (nourishing)
- Phase 3: Focused on building/creating an ecosystem, that can sustain the positive changes that Phase 1 & Phase 2 has brought (Sustaining nourishment & well-being)

Programme start date: 01.04.2023
Programme duration: 3 years
Programme target beneficiaries: 0 to 59 months old children, Pregnant & Lactating women

Table 1: BNF's Malnutrition Prevention Programme Goal and Outcomes

Description	Indicator	Assumption
Goal		
Addressing child malnutrition through a holistic curative and preventive life cycle approach	Reduction in the prevalence of child malnutrition (wasting) among 0 to 59 months old children	Causes of malnutrition assumed to be dietary only
Outcomes		
Improved nutritional status of children who are in wasting Red category	% of children (0 to 59 months) in wasting category coming to normal status	Target population is participating in the interventions
Improved nutritional status of pregnant & lactating women	% of children born with normal weight % of children being optimally breastfed and for whom timely initiation of complementary feeding ensured	Target population is willing and keen to get counseling and participates in awareness generation sessions
Improved knowledge, attitude & practices of community on ideal diet, nutrition & practices	% improvement in knowledge, attitude and practices of community	
Improved quality and coverage of health & nutrition services	% of population having access to nutrition & healthcare (percentage of the population that has access to essential health & nutrition services, such as 'Take home ration', antenatal care, immunizations, and treatment for common illnesses) % of frontline health services providers trained % of AWCs having required infra/equipment/logistics % of resources leveraged from Government department for deeper and longterm effect	Government structures/functionaries are favorable and willing to contribute
Empowered community volunteers who can drive sustainable change	% of community volunteers actively driving the positive change	

Anemia Prevention Programme: The programme details are as below:

Programme start date: 01.04.2023
Programme duration: 1 year
Programme target beneficiaries: 5 to 19 years old children & adolescents

Table 2: BNF's Anemia Prevention Programme Goals and Outcomes

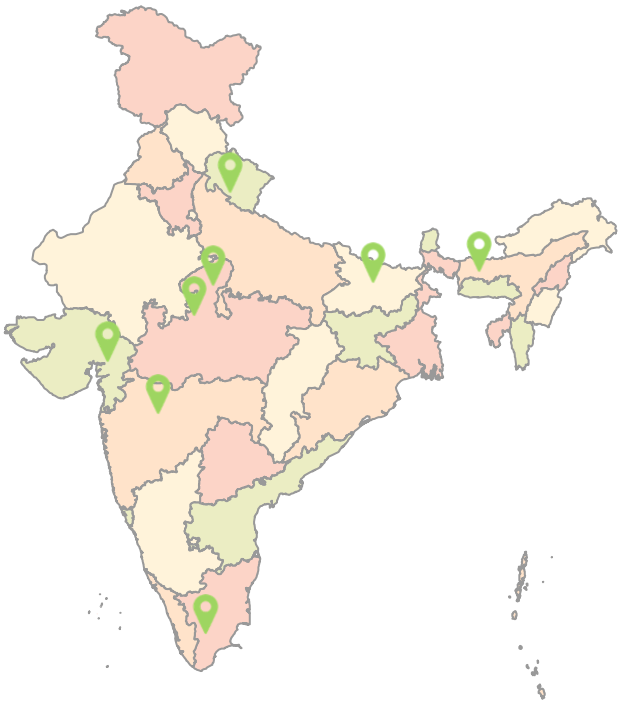
Description	Indicator	Assumption
Goal		
Addressing Iron deficiency anemia among children & adolescents	% reduction in prevalence of anemia among sample 5-19 year old children & adolescents	Beneficiaries participate in interventions
Outcomes		
Increased effectiveness of WIFS implementation in schools	% of schools where WIFS programe has been regularized	Assuming there is no shortage in of IFA stock
Increased knowledge about Anemia, its causes, implication and prevention among children	% improvement in knowledge attitude and practices	
Improving access & consumption of iron rich food/supplement	% of schools where yield of nutrition garden is being used in MDM % of schools where iron biscuits being distributed regularly	
Improving access to WASH facilities	% of schools having WASH facility	
Improving access to Health checkups	% of schools ensuring bi-annual health checkup & deworming by RBSK	

Impact assessment study design

The present impact assessment of BNF's programme is undertaken to assess the intervention's outcomes, and its impact on health and nutritional status of children, women and adolescents in the year 2019-2023. The overall aim of the impact assessment study was:

- *To assess the impact of the BNF's CSR programs*
- *To identify the intended and unintended impact created and*
- *To share learnings from the program intervention for replication and/or scaling up*

Sample locations	Sample States
Gwalior and Shivpuri	Madhya Pradesh
Kamrup	Assam
Hajipur	Bihar
Jhagadia	Gujarat
Perundurai and Madurai	Tamil Nadu
Rudrapur	Uttrakhand
Ranjangaon	Maharashtra



Approach

The OECD DAC framework was used for the assessment of the CSR programmes.

Figure 2: Approach to impact assessment

Source: OECD DAC Network on Development Evaluation (EvalNet)

The OECD DAC Network on Development Evaluation (EvalNet) has defined six evaluation criteria – relevance, coherence, effectiveness, efficiency, impact and sustainability – and two principles for their use. These criteria are intended to guide evaluations. They were refined in 2019 to improve the quality and usefulness of evaluation and strengthen the contribution of evaluation to sustainable development.

The Idobro team used the following approach:

- Conducted a desk review of proposal, reports and other documentation submitted
- Reviewed the flip books and other materials used for training, awareness and counselling
- Developed the required tools
- Visited 9 locations selected for the study and covered programme beneficiaries, randomly selected by the team and the stakeholders engaged in the programme implementation
- Interacted with the beneficiaries like children, adolescents, and women (pregnant, lactating, newlywed and mothers of malnourished children) using quantitative tools and interacted with other stakeholders through key informant interviews
- Conducted focus group discussions with pregnant and lactating mothers, mothers of malnourished children, Ssuposhan sakhis and Nutrition champions

Methodology

The assessment was summative in nature and looked into the relevance, efficiency, effectiveness and sustainability of the individual programs. It also assessed the tangible impacts, the programmes have contributed. The assessment was participatory in nature and involved project staff and key stakeholders and their views and opinions on the progress, achievements and learnings.

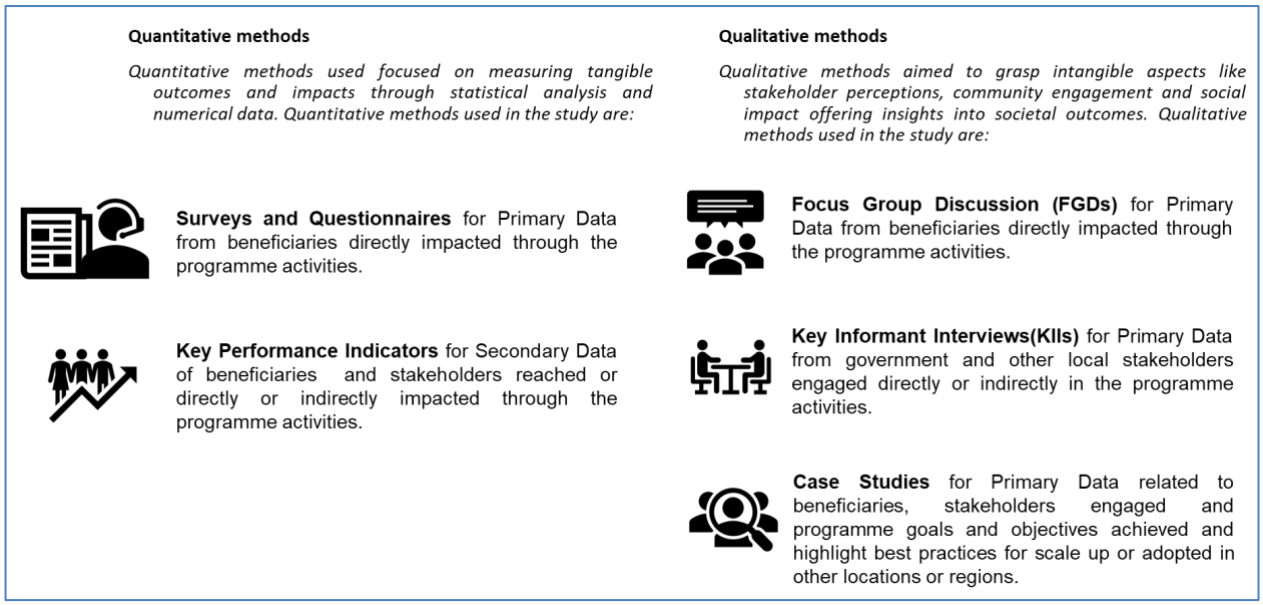
The study adopted a mixed methodology approach to collect primary and secondary data, as detailed in the annexures and figure 3 below, using qualitative and quantitative methods. Primary data was collected through in-person, individual surveys with the children and interactions with secondary stakeholders of the programme. The tools developed and employed for primary data collection have been included in the annexure of the report. Secondary data on programme-related aspects were gathered through existing programme data Management Information System (MIS) on relevant domain areas using BNF's team support. The secondary data required for assessment purpose has been enlisted in the report annexure.

The assessment study also reviewed national level data and reports, that provide current scenario and update of various beneficiaries and some of the key challenges that programme currently addresses or should aim to address. It is important that the results of the social impact assessment should be relevant and coherent and feed into the management decisions and are used effectively in scaling of the programme's impact.

Study Tools

The study used the following research tools to reach a sample of key stakeholders of the program.

Figure 3: Type of study tools used for data collection and corroboration



Data Samples

The impact assessment study was conducted across 9 locations in 7 states.

- The beneficiaries and stakeholders selected for the sample study were covered from a mix of exit[1] and active villages[2] for intervention period of 2019-2023. As an exception to this, the locations like Perundurai and Madurai, and Assam were also assessed but the intervention period and the beneficiaries selected for this location are from the 2023-2024.
- The villages for the study were selected using a conditional process where only those villages were selected who:
  - For each location, one-three exit and three-six active villages were selected based on number of beneficiaries to be covered
  - The villages within distance range of 5-30 kilometer were selected
  - The villages with interventions period 2019-2023 were selected
  - The villages having all required sample beneficiaries were selected
- The team used random sampling technique to select the beneficiaries to be surveyed and interviewed as part of assessment study. The beneficiaries- children, adolescents, and women (pregnant, lactating, newlywed and mothers of malnourished) for the primary study were selected on the basis of programme intervention and universe list as shared by BNF.

The list of villages and sample of beneficiaries assessed are shared in the table under annexure.

Table 3: Quantitative Sample for Impact Assessment Study

Stakeholder	Ranjagaon	Rudrapur	Jhagadia	Perendurai	Madurai	Kamrup	Gwalior	Shivpuri	Hajipur	Total
Children (6-9years)	47	40	80	41	43	42	40	40	81	454
Adolescent Girls (9-19 years)	75	79	110	55	85	80	105	109	123	821
Adolescent Boys (9-19 years)	76	79	110	55	86	79	104	109	124	822
Pregnant/Lactating & Newlywed Women	39	40	76	0	0	41	41	40	88	365
Mothers of malnourished children	46	40	84	6	0	25	40	40	39	320
Total	**283**	**278**	**460**	**157**	**214**	**267**	**330**	**338**	**455**	**2782**

Table 4: Qualitative Sample for Impact Assessment Study

Stakeholder	Maharashtra	Uttarakhand	Gujarat	Perendurai	Madurai	Assam	Gwalior	Shivpuri	Hajipur	Total
Focus Group Discussions (FGDs)										
Pregnant/ Lactating & Newlywed Women	2	2	2	0	0	2	1	1	2	12
Mothers of malnourished children	4	4	4	2	0	2	2	2	2	22
Suposhan Sakhis	2	2	2	1	1	2	2	2	2	16
Nutrition Champions	3	2	2	2	2	2	2	2	2	19
Total FGDs	**11**	**10**	**10**	**5**	**3**	**8**	**7**	**7**	**8**	**69**
Key Informant Interview (KII) with Government Stakeholders										
ICDS	1	1	1	1	0	0	1	1	1	7
NRCs/PHCs/GHs/RBSKs	1	1	1	0	0	1	1	1	1	7

[1] Exist village is a village or locality where the BNF intervened earlier but is no more active with programme interventions.

[2] Active village is a village where BNF is active with its programme intervention.

Education department			0	0	0	1	1	0	0	1
Anganwadi Worker and Helper	2	2	2	2	0	2	2	2	2	16
Asha Worker	2	2	2	0	0	1	2	2	2	13
School Teacher/ Principal	2	2	2	2	3	2	2	2	2	19
Total	**8**	**8**	**8**	**5**	**3**	**7**	**9**	**8**	**8**	**64**
Key Informant Interview (KII) with Other Stakeholders										
Local NGO Partner							**1**			**1**
VDCs	**1**						**1**			**2**
SHGs										**0**
Krishi Vigyan Kendra								**1**		**1**
Dept of Forest			**1**							**1**
BNF Management – Region	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**9**
BNF Management – Sr.										**0**
Total	**2**	**1**	**2**	**1**	**1**	**1**	**3**	**2**	**1**	**14**

Data Collection & Technology

The tools for the survey were developed by Idobro and approved by BNF. The tools designed were specific to assess interventions under each programme. The Idobro research team in coordination with the field coordinators and local resource personnel were involved in the process of primary data collection. Technology was used in the process of data collection to reduce human error caused by data entry. A mobile application was used to collect data on the field. All resource personnel were trained location wise by Idobro on the study objectives as well as the process of data collection through the application.

The data collected through the application was uploaded to a server on a daily basis and was reviewed to ensure quality and ensure timely delivery. All data collected was documented and shared as required along with the assessment report.

Data Scrubbing & Analysis

All data collected through the study was further scrubbed before being analyzed. This analyzed data was used for reporting and getting insights into the program outcomes.

Study Limitations

- **School holidays –** Several schools were closed due to summer vacations and therefore availability of stakeholders and beneficiaries was an issue. BNF tried directly to connect field team with all through the community.
- **Migratory stakeholder families –** The intervention cohort also included families who migrate often for work. The time of study was challenging especially, to identify required beneficiaries' sample as the migratory families covered as part of the interventions were not available at the time of study.
- **Election –** Government officials as well as school teachers were on election duty and hence the data collections time line were changed and there were delays in data collection, documentation process. The stakeholders were not easily available pre-election time nor willing to formally engage during that period.
- **Heat wave –** School and government offices were asked to be closed due to heat waves especially in Bihar and Madhya Pradesh, which again proved extremely challenging from a data collection perspective.
- **Monsoon –** The monsoon season had started in the states of Assam, Tamil Nadu & Uttarakhand leading to challenges again for the data collection.
- **Data Availability –** Data was provided by the BNF teams location wise after continuous follow ups and back and forth to assure that the right samples across the right intervention timeline were selected. Due to this time lag between receiving verified data, a comprehensive sampling design could not be undertaken and in few states and locations, the intervention period was required to be adjusted for the beneficiary data and other stakeholder data.
- **Change in Scope –** Addition of two more locations (Assam and TN), removal of one (Karnataka), addition of exited villages, addition of Programme elements eg. WASH, etc, addition of Stakeholders – KVK, etc further added to the complexity of data collection and scheduling of the interviews, etc.
- **Coverage of locations:** The villages or locations selected for the study were far away from each other. We had used a standard of covering locations within 5–30-kilometer radius from the city point to cover enough sample size across diverse locations. However this was not possible in some locations as the distance between villages was wide and dispersed.
- **Travel plans –** The original budgeting in the project proposal was based on a sufficient advance booking notice and also combination of travel locations so as to be more economical. However, with the changed timelines, multiple teams were required to travel based on priority and availability of stakeholders. Hence the travel plans became ad hoc with immediate bookings leading to escalation of costs and increase in budgets.

Findings

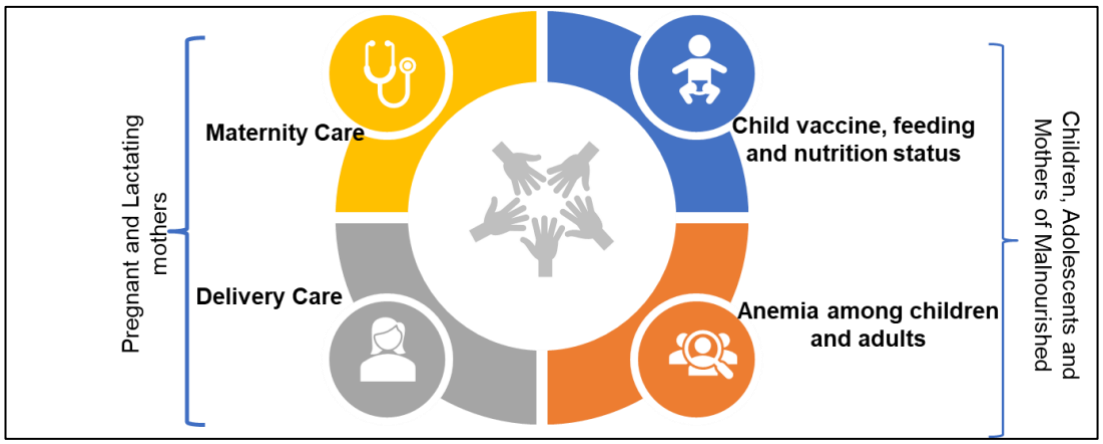
As mentioned earlier in the report, the OECD DAC framework was used for the assessment of the programmes. The assessment details of each of the OECD parameters are described below:

Relevance

Several states in India are even today performing below the national average on various flagship programmes related to malnutrition, undernutrition and micro-nutrient deficiencies. Hence this makes the relevance of BNF's programmes across India very high as the improvement in performance of these programmes is crucial to achieve the vision of India's National Family Health Policy.

The programme interventions were very relevant as they helped to address some of the key national policy and sectoral gaps in the National Family Health Policy landscape to achieve the following desired results:

Figure 4: Relevance of BNF's programmes and its interventions with key national health and nutrition priorities



- **Maternity care:** In India[3], although 95.9% women register their pregnancy for MCP card, the utilization of other services such as anti-natal care (ANC) visit during Ist trimester or mandatory 4 ANC visits to healthcare professionals along with the required consumption of IFA tablets for 100 days or 180 days is less than 60%. The survey indicated that only 70% pregnant women undertook the anti-natal care visit to healthcare professionals in their Ist trimester and only 58.1% pregnant mothers undertook the 4 ANC mandatory visits. Also, the intake of supplements such as Iron Folic Acid (IFA) tablets for 100 days and 180 days was only 44.1% and 26% respectively. Hence, there is a huge scope of improvement in utilization of government support services or healthcare services such as 4 ANC mandatory visits and consumption of supplements to improve overall and subsequent health parameters of pregnant women.

  BNF's programme on malnutrition prevention intervenes with pregnant mothers and focus on improving access to Anganwadi centers, ASHA workers and other health professionals for mandatory 4 ANC visits and consumption of IFA tablets during their pregnancy. The programme interventions focus on improved utilization of these services at local level by beneficiaries.

- **Delivery care:** The Fifth National Family Health Survey report indicates that delivery care has improved in last decade with 88.6% pregnant women and their family opting for institutional births, with 61.9% pregnant women opting for institutional birth in public/government healthcare facilities. About 3.2% pregnant women still undertake homebirths as option for delivery purpose.

[3] National Family Health Survey Report 2019-2021

- BNF's programme intervention with pregnant women builds awareness on the practices a pregnant mother should adopt during pregnancy, delivery and post-delivery such as opting for institutional births, taking required supplements, registering themselves and the child at Anganwadi centers etc.

- **Child vaccine, feeding and nutrition status:** The Fifth National Family Health Survey report indicates that vaccination/immunization drive promoted by Health Ministry is able to reach all the infants and children. It was indicated that 76.4% children were fully vaccinated. It was noted that under age of 5 years, 35.5% children were found stunted, 19.3% children were wasted, 7.7% children were severely wasted and 32.1% children were underweight. The survey also indicates the depreciating practice of exclusive breastfeeding of children under 6 months and 3 years of age group. The survey highlights that only 63.7% children under 6 months and 41.8% children till 3 years are breastfeed.

  BNF Malnutrition Prevention Programme and its interventions with lactating mothers and mothers of malnourished children works exclusively on awareness generation and utilization of vaccination drives at Anganwadi centers. The programme on malnutrition exclusively focuses on child nutrition from early age, from screening and monitoring growth to detecting and referring severe cases for treatment. The team also works on preventive measures by building awareness, one-on-one counselling sessions and building change agents among community members in the form of nutrition champions and suposhan sakhis.

- **Anemia among children and adults:** The Fifth National Family Health Survey report indicates that 67.1% children in the age group of 6-59 months are anemic. About 57.2% non-pregnant women in the age group of 15-49 years and 52.2% pregnant women are anemic. The report indicates that 59.9% women in age group of 15-19 years are anemic followed by 31.1% men that are found anemic.

  BNF with its malnutrition prevention and anemia prevention programme targets all the stakeholders – children, adolescent boys and girls, pregnant and lactating mothers as part of their interventions.

The

primary data also indicates that BNF's interventions have led to:

- **Awareness generation intervention at Anganwadi and school are relevant for children (5-9 years):** Low awareness on nutrition was noted amongst the children across all locations. Children depended completely on their mothers for nutritious food and related habits. It was evident that at all locations, except Shivpuri, children who knew about balanced diet were below average (< 50% children). Awareness among children across Gujarat and Perundurai was noted at < 20%.

- **Awareness generation intervention at school relevant for adolescents (9 -19 years):** More than 50% adolescents were aware about anemia, balanced diet etc. across locations. However, the re-enforcement of knowledge and understanding into practice such as how and why of these concepts is critical and weak. The highest awareness (> 85%) among adolescents was noted in Assam and was above average (> 50%) across other locations. Awareness among adolescents noted below average (< 50%) was in Gujarat and Uttarakhand.

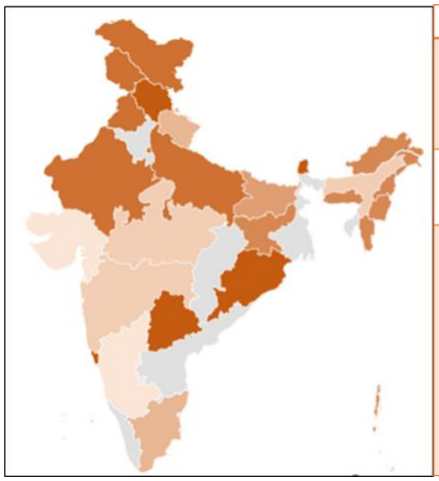
- **Awareness generation among mothers through one-to-one counselling is relevant** and critical for the beneficiary to utilize the support services available for healthy and improved quality of life. One-to-one counselling of mothers of malnourished children as well as pregnant and lactating mothers is one of the relevant interventions to ensure utilization of available public health services. Families were reluctant to take referral cases of SAM/MAM children to Nutrition Rehabilitation Centers (NRCs) or medical facilities and favored home remedies treatment.
  - ❖ More than 90% pregnant and lactating mothers and mothers of malnourished children were aware of nutritious food habits, but the re-enforcement of pregnant women and mothers to follow healthy and nutritious practices is critical. Primary data suggested that more than 90% pregnant and lactating mothers were aware about nutritious food habits, but only 51% mothers could identify all the practices to be followed during this phase.
  - ❖ More than 50% mothers had low awareness about ICDS services across three out of seven locations.
  - ❖ 28% pregnant and lactating mothers had expectations to gain knowledge about pregnancy and lactation from BNF members and volunteers.
  - ❖ Shivpuri, Gwalior and Uttarakhand (> 50% pregnant and lactating mothers) had low awareness of ICDS support services. Awareness among mothers was the highest (> 80% of mothers of malnourished children) in all locations except Shivpuri and Gwalior.

FGD with mothers of malnourished children

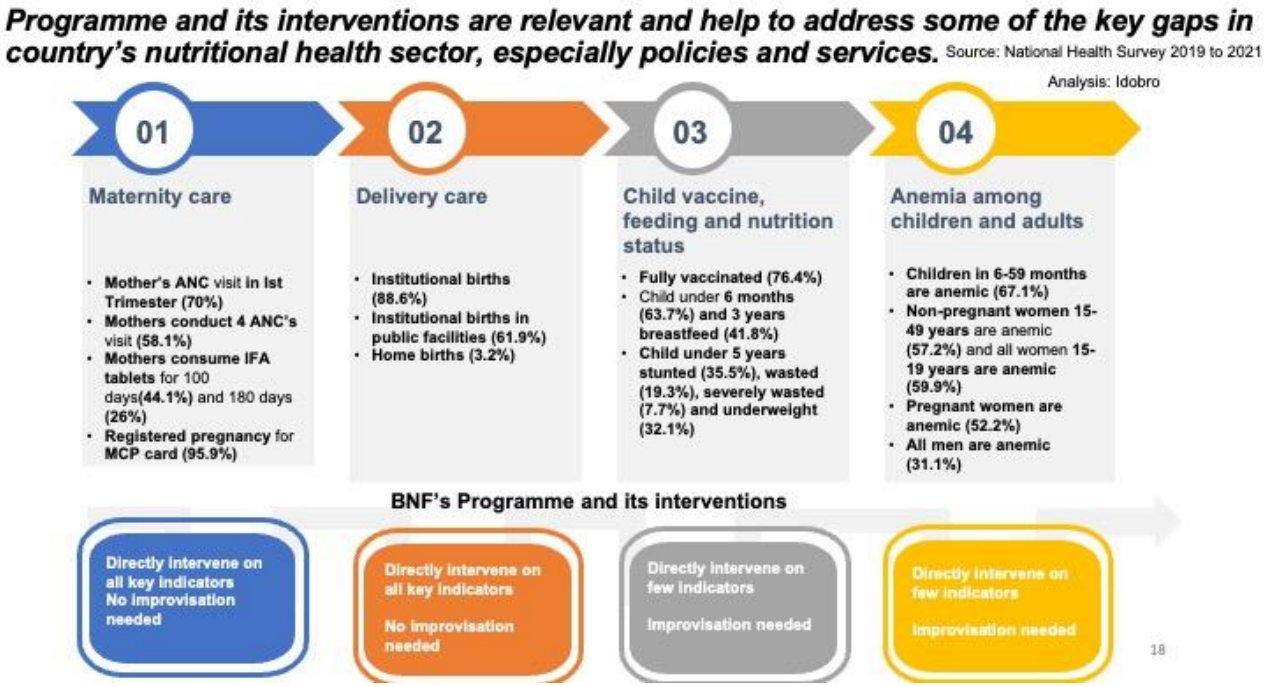
Data Survey for children

Programme and its interventions were relevant in terms of current locations selected: Programme and its interventions were relevant in terms of current states selected due to the following reasons:

Figure 5: Relevance of BNF's programmes and its interventions in current locations



Relevance	BNF Intervention states				Additional Intervention states		
Performance on national average	Above	Below	Below	Below	Below	Below	Below
Key focus areas	Malnutrition and Anemia Prevention	Malnutrition Prevention	Anemia Prevention	Malnutrition and Anemia Prevention	Malnutrition and Anemia Prevention	Malnutrition Prevention	Anemia Prevention
States	Gujarat	Madhya Pradesh, Maharashtra Assam	Uttarakhand Tamil Nadu	Bihar	Eastern states, Jharkhand Chattisgarh	Punjab, Delhi, Rajasthan, Uttar Pradesh, Jammu and Kashmir and Ladakh	Sikkim, Goa, Kerela, A&N Islands, Mizoram Lakshwadeep, Telangana, Odisha, Himachal Pradesh



Some of our key insights on location selection methodology are shared below:

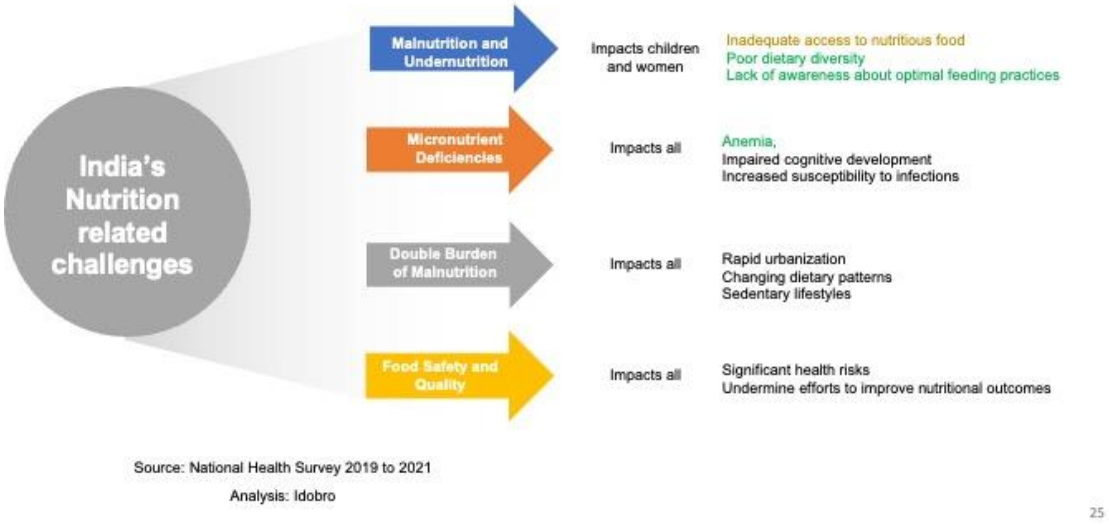
- Six out of 7 sample states selected by BNF are performing below the national average health indicators for malnutrition and anemia. Gujarat was the only state out of the sample states performing above the national average on malnutrition and anemia indicators. Hence, states selected for intervention are relevant and more or less in purview of demand of the services provided by BNF.
- Madhya Pradesh, Maharashtra and Assam are performing below average on malnutrition health indicators, while the other states like Uttarakhand and Tamil Nadu have fallen behind on anemia related health indicators. In this scenario malnutrition prevention and anemia prevention programme are relevant in Madhya Pradesh, Maharashtra and Assam and Uttarakhand and Tamil Nadu respectively.
- Bihar is the only state that is performing below on both malnutrition and anemia related health indicators and hence the only state where combination of BNF's Malnutrition prevention and anemia prevention programme is more applicable.
- Primary observations and discussion with local stakeholders indicate BNF should revisit its location selection methodology for interventions. At present the blocks and villages near to Britannia's factory are selected for interventions. They are not assessed based on need or demand for services available as part of BNF's Malnutrition Prevention or Anemia Prevention programme. In locations like Kamrup in Assam and Ranjagaon in Maharashtra no case of malnutrition was observed yet if we look it from states perspective the two states are performing below national average.

Coherence

The BNF programme and its interventions are somewhat coherent with India's National Health Policy, schemes and sectoral gaps. The programme does not intervene across all key gaps and address only two – malnutrition and micronutrient deficiency. As part of these two challenges,

- the programme impacts:
  - children,
  - women and
  - almost all beneficiaries.
- the programme intervenes and address challenges such as:
  - inadequate access to nutritious food
  - poor dietary diversity
  - lack of awareness about optimal feeding practices
  - anemia

Programme goals and objectives are somewhat coherent with India's National Health Policy, schemes and sectoral gaps. Programme does not intervene across all key gaps.

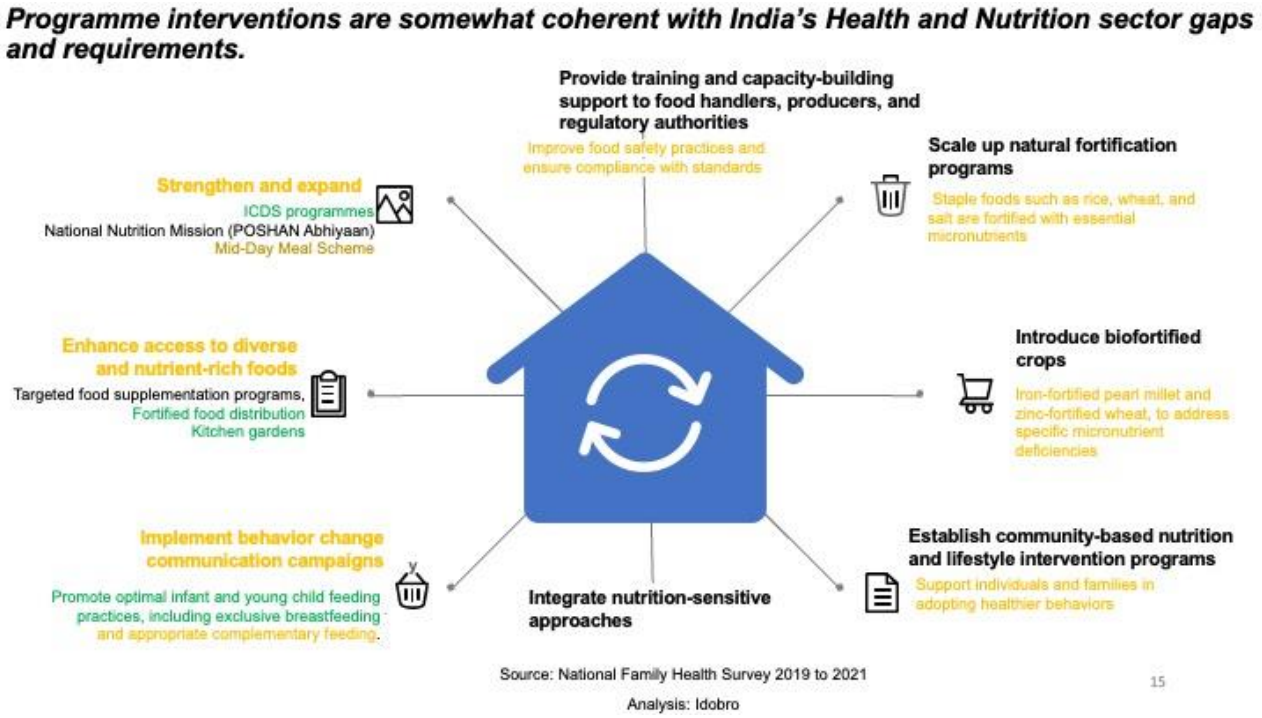


The programme somewhat addresses these challenges by:

- **Strengthening ICDS services and providing sustainable support to nutritious food sources through mid-day meal schemes** and fortified iron biscuits distribution. The biscuit distribution is subject to intervention by BNF in respective schools in their intervention locations.

- **Enhancing access to diverse food and nutrient rich foods by fortified iron biscuit distribution and kitchen gardens concepts**. The team provide awareness, guidance and sapling support in locations for kitchen gardens but no continuous monitoring or support to maintain the same.

- **Implementing behaviour change communication campaigns by promoting optimal infant and young child feeding practices including breastfeeding and complementary practices**. While the team build awareness among pregnant and lactating mothers about the feeding practices among infants, toddlers and children, the component related to exclusive breastfeeding and complementary feeding need to be further emphasized.



Area of improvement

BNF programme and its interventions are somewhat coherent in purview of National's Family Health Policy and its key gaps. We would like to suggest few improvements to strengthen and build programmes coherence for future.

Programme interventions:

- **Exclusive intervention designed for pregnant women with regard to ANCs visit and consumption of pregnancy related supplements.** BNF's programme on malnutrition prevention intervenes with pregnant mothers and focusses on improving access to Anganwadi centers, ASHA workers and other health professionals. It was observed that while access to these services was available at local level, the utilization of these services in most of the states is below national's average. The team should focus on improved utilization of these services at local level by beneficiaries and counsel pregnant mothers and families to go for mandatory ANC visits and consume supplements as required during pregnancy phase.

- **Exclusive breastfeeding of children for longer period of time with focus on alternative feeding and complementary feeding practices.** BNF programme works with pregnant and lactating mothers to build awareness towards exclusive breastfeeding practices, and complementary feeding practices. While most of the beneficiaries in primary sample study shared that they breastfed their child for at least six months and started complementary feeding post that, NRCs in the sample locations on the contrary shared formulae feeding or alternate feeding practices as the main reason for child malnutrition. The team should build an exclusive component on feeding practices and also share alternative pathways in case of specific medical challenges. This will build technically holistic and scientific feeding practices for new mothers and current lactating mothers. Team should also build in awareness component among mothers on breastfeeding practices post six months and continue the same for at least one to two years with complementary feeding.

- **Exclusive and not mass intervention to combat anemia in girls, women and pregnant women**. Anemia is one of the key challenges especially for female cohort in the community. The team should build awareness sessions exclusive for girls/women, and mothers on anemia detection, symptoms,

causes, purpose of early detection, and prevention measures. This solution should undertake a cyclic approach for awareness generation and build understanding, influence attitude and ensure practice required at all phases of female life cycle such as children (5-10 years), adolescents (11 -18 years), married women (19 – 35 years), pregnant and lactating women and women (35 years and above).

- **Training and capacity building of ICDS workers with regard to ANC visits, pregnancy supplement consumption and feeding practices**. The team should build in e-modules or flipbooks with sections exclusively focusing on concepts like – ANC visits, pregnancy supplements especially iron and folate tablets, and feeding practices – infant to toddler to children both breastfeeding and complementary feeding practices.

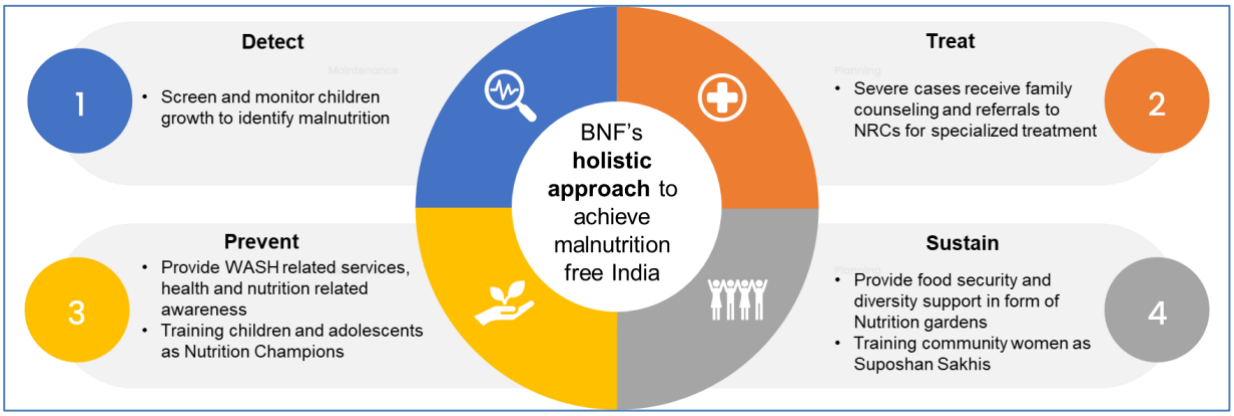
Programme location selection approach:

- **Rational approach for state/district/block and village selection:** Team should focus on building a comprehensive methodology for locations such as districts, blocks and villages selected for interventions. Instead of looking at locations from purview of factory location, team should choose locations based on two key factors:
  - **beneficiary specific needs** – incidence of SAM/MAM cases or anemia deficiency cases in the locality
  - **accessibility to government health and support service** – awareness generation about government health and family welfare initiatives and access to the same. Building cohesive relationship among beneficiaries and government service centers such as Anganwadi etc.

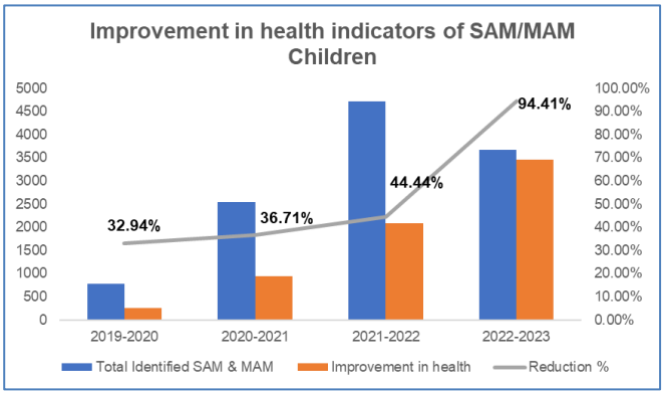
Effectiveness

BNF programme and its interventions are somewhat effective in achieving its desired outcome and need further support and improvement measures for envisaged objectives. The primary focus of the programme is identifying, treating through referrals and adopting preventive measures to cure malnutrition among children.

Figure 6: BNF programme's holistic approach towards malnutrition



The programme has in total identified 11,687 SAM/MAM children between 2019-2020 to 2022-2023 and out of these 6,739 children has shown improvement in their health; i.e 58% children have shown improvement in their health status. With malnutrition, programme also works on anemia prevention among children and adolescents in school through its anemia prevention programme.



The key indicators that demonstrated the effectiveness of the BNF programme and its interventions are described below:

Programme effectiveness - Mothers of malnourished children

<u>Awareness among mothers of malnourished:</u>

- Awareness about malnutrition was noted as high among mothers of malnourished children, except at Ranjangaon (Maharashtra), Hajipur (Bihar) and Rudrapur (Uttarakhand). Awareness among mothers at these locations was noted at less than 50%. In-depth understanding about related concepts such as purpose, symptoms etc. need to be improved.
- Awareness about Mother and Child Protection (MCP) Card and Take-Home Rations (THR) Programme noted high awareness across all locations with more than 90% mothers sharing that they know and are aware about same. Awareness about these programmes in hilly terrain and tribal belts need to be improved such as Tamil Nadu, Assam and Uttarakhand.

Attitude of mothers towards treatment of malnutrition:

- Mothers of malnourished children prefered to take their SAM/MAM child to Nutrition Rehabilitation centers (NRCs) followed by mothers who prefered home remedy treatment and then private doctor. Majority of mothers (75%) prefer to take their children to NRCs. 15% mothers still prefer to treat their children through home remedies.
- Attitude of mothers showed improvement through one-to-one counselling and the same should be continued and strengthened further for utilization of NRCs and others health services as provided by government for treatment of malnutrition. Awareness among mothers in state of Maharashtra need to be improved through one-on-one counselling of mothers to access and utilize government supported health services and institutions such as NRCs.

Practices adopted by mothers in case the child is malnourished

- 76% mothers of malnourished children confirmed that they take their children to Anganwadi centers monthly across all locations.

Time taken for a SAM/MAM child to recover

- The BNF team identified SAM/MAM children and referred the severe cases to NRCs or hospitals for treatment. Initially families of SAM/MAM children were reluctant to take their child to NRCs or hospitals, however with one-to-one counselling and continuous monitoring by BNF members, the families are using NRCs and government hospital facilities for nutrition related treatment. In case of several other diseases, the team is helping families utilize health support services and access treatment through referral system.
- Secondary data indicates improved health and nutrition status among SAM/MAM children post COVID. Higher improvements are noticed between the period 2021-2023.
- Primary data indicate SAM/MAM children take at least 2-3 months to recover and feel healthy. Team should ensure continuous support for at least a period of three months per location.

BNF programme's effectiveness

- 89% mothers confirmed that they received nutrition supplements for their SAM/MAM children and out of these 91% of mothers confirmed that their child consumed the supplements.
- Nutrition gardens was considered as a sustainable initiative by mothers to cure malnutrition. Majority of mothers (88%) are aware of the nutrition garden concept, out of which 83% mothers had known how to grow and manage a nutrition garden. About 68% mothers confirmed to have nutrition garden. The nutrition garden concept needs to be modified and implemented with technical improvisation in hilly terrains. More than 50% mothers could enlist support provided by BNF with respect to nutrition garden where 36% mothers confirmed to grow vegetables.
- WASH related awareness and practice: Almost all mothers are aware about WASH concept. However, not all mothers could enlist all the WASH related practices. Less than 50% mothers could enlist all the WASH practices they followed at home. Team needs to strengthen inter-linkage of WASH concept and practices with malnutrition and anemia.

NRC services

- As part of programme's holistic approach, BNF team identified and referred severe cases of SAM/MAM children for treatment.
  - Team made efforts to ensure that referred families had access to required treatment at NRCs or Hospitals with the help of Rashtriya Bal Swasthya Karyakram (RBSK).
  - Through one-to-one counselling of families of malnourished children, team has improved access and utilization of health services provided through government institutions.

- ❖ Team also ensures continuous monitoring and follow up on referred cases during treatment and post treatment/discharge of child for improved health status. This is done with the help of Anganwadi workers as well as Suposhan sakhis.

- ➢ Access to health and nutrition support services are available across all locations but the optimal utilization of these services provided by government institutions such as Anganwadi centers, NRCs, etc. was missing. Only 46% mothers were able to enlist all the measures-preventive as well as curative in case of SAM/MAM child. Team needs to ensure proper utilization of measures available in the locality especially in case where SAM/MAM child need treatment at NRCs/ hospitals. 21% mothers confirmed that they take all required measures but actually did not take their malnourished child to NRCs or Anganwadi centers.

Effectiveness of Suposhan Sakhis for this beneficiary cohort

- ➢ The programme has transformed 2,766 local women into 'Suposhan Sakhis', as part of a voluntary support initiative. As part of this initiative, local women are selected to support BNF team field coordinators as well as the local Anganwadi center in programme related activities such as in identifying SAM/MAM cases in their locality and monitoring their health post treatment.
- ➢ The presence of suposhan sakhi in the village or intervention area was appreciated by the community.
- ➢ Programme provides special status to suposhan sakhis by providing them a uniform (pink saree) and occasionally appreciating their work through reward for their volunteering work towards malnutrition and anemia prevention.
- ➢ Suposhan sakhi is change agent within the programme intervention and their volunteer contribution needs to customized and standardized for effective outcomes. Its is extremely important that the current volunteer social cause programme is shifted to a Village Entrepreneurship Model for more effective outcome. Team should also define the role clarity of suposhan sakhis, their overall accountability within the programme social behavioural change model and their key performance indicators (KPIs). Team should ensure there is proper documentation of their work from time to time and their work is also monitored across their KPIs.

Awareness about BNF interventions

- Awareness about BNF and its intervention among mothers is very high. More than 90% mothers could name Britannia as the corporate entity running the malnutrition and anemia prevention programmes.
- Mothers could not enlist all the BNF interventions that are conducted. Only 32% could enlist all the interventions that are conducted by BNF. Team needs to strengthen its outcome vis-à-vis outreach while focusing on counselling, preventive and sustenance measures to be adopted at each location.

Sustenance related aspects

- Nutrition gardens were considered as the sustainable initiative to prevent malnutrition.
  - 98% mothers felt that nutrition garden is a reliable initiative that can help prevent malnutrition and anemia.
  - 62% mothers confirmed that they will maintain a nutrition garden even post BNF interventions.
- The team needs to ensure the building of a relevant budget to assure dedicated support to Nutrition Garden across locations.

Programme effectiveness – Pregnant and Lactating Mothers

Awareness among pregnant & lactating women

- The awareness about anemia among pregnant & lactating women was high as more than 70% mothers across all locations confirmed that they consumed the Iron Folic Acid tablets (IFA).
- Awareness among mothers about age of marriage and age to have first child was high as most of the mothers (63%) believed that girls can get married at 18 years of age followed by 36% where mothers felt that a girl should get married at 21 years of age. Most of the mothers (81%) confirmed that newly-wed girls should have their first child on or after 21 years of age.
- Pregnant & lactating women opted for institutional deliveries. Most of the mothers (91%) preferred institutional facilities like PHC or hospitals. Team should strengthen the concept of accessing and improving utilization of government health facilities for birth.
- Awareness about Ante-natal care (ANC) visits need to be improved. Most of the mothers (>90%) consider 4 ANC visits necessary. But it was observed that less than average (48% mothers) felt that a visit to doctor twice or thrice during pregnancy should be enough, followed by 13% mothers who felt that mother should not visit doctors unless required. Only 37% confirmed that a pregnant mother should take all the 4 mandatory ANC visit. Awareness about this component is required to be built across all locations, except Gujarat where it was quite high.
- Awareness about the MCP card is high. Majority of mothers (96%) are aware about MCP card. 77% mothers associate awareness provided about MCP card to ASHA worker and Anganwadi worker followed by 13% mothers who shared that they are aware of MCP card as BNF told them about it.
- Awareness about diet during pregnancy and post pregnancy is high. Majority of mothers (90%) were aware about balanced nutritious diet rich in protein, iron and calcium to be taken during pregnancy. Team should work towards building awareness among mothers post-delivery to improve their health indicators. Only 33% mothers knew about balanced diet, supplements and milk to be taken on daily basis. Mothers should be made aware about the necessary supplements for the time period to be taken post pregnancy.
- Awareness about breastfeeding and complementary feeding is high. Mothers (56%) are aware that they should breastfeed for at least first 6 months followed by 90% mothers who are aware that complementary feeding should start only after 6 months. Qualitative discussion with NRCs suggests that mothers are opting for formulae milk and not breastfeeding which is one of the reasons for malnutrition. Team should do necessary investigation and re-enforce breastfeeding attitude and practice among mothers exclusively for six months followed by breastfeeding plus complementary feeding for next one to two years. In case of medical challenges, team should develop enough awareness among mothers on alternative feeding methods and necessary practices to be followed to ensure proper nutrition to child.

Attitude towards healthy weight gain and breastfeeding

- Attitude of pregnant and lactating mothers towards a healthy weight gain and breastfeeding practices need to be improved. Awareness among mothers on healthy weight gain during pregnancy need to be improved as 49% mothers think that 3-5 kilograms weight gain is enough during pregnancy. The team should share optimal weight gain required for healthy baby post-delivery among mothers.
- While majority of mothers (> 90%) confirms that they should breastfeed their child in first six months, they do not find it optimal to breastfeed child for another one to two years. Team should emphasize healthy benefits of continuing breastfeeding with complementary feeding for good health of infant.

Vaccination of children

- Majority of pregnant and lactating mothers were aware about various vaccination drives undertaken for infants as well as vaccines to be taken by infants from time to time. As part of practice majority

of mothers followed on time vaccination of their child. 95% mothers confirmed that they provided the necessary vaccines to their children.

Practices adopted by mothers during pregnancy and lactation

- Majority of pregnant and lactating mothers are aware of practices related to breastfeeding and complementary feeding. Primary data suggest that team need to re-instate the concept of exclusive breastfeeding in first six months followed by breastfeeding plus complementary feeding for next one to two years. Primary data indicated that 34% mothers exclusively breastfed their children, followed by 28% mothers, who breastfed as well as provided cow or buffaloes milk. The rest of the 21% mothers shared that they breastfed, plus provided additional milk as well as homemade supplements to infants. While majority of the mothers confirmed to start complementary feeding only after six months, breastfeeding practice for a longer duration was followed by many mothers. The programme should also investigate and innovate solutions for mothers who do not have luxury of breastfeeding infants in first few months due to medical conditions and should provide a rational and safe pathway for alternative feeding.

- Majority of mothers confirmed to have availed health care support services during pregnancy, but did not have access to post delivery care and support services. Mothers (99%) are aware and registered themselves as well as their infants at Anganwadi centers. Mothers confirmed that the Anganwadi workers and ASHA workers visited them especially during pregnancy (51%) followed by 41% mothers who shared that worker met them during pregnancy as well as lactation period. Team should work towards strengthening workers support and presence during lactation and post-delivery period to ensure better health of mothers and their infants.

BNF program's effectiveness

- Majority of mothers cherished the concept of food baskets and nutrient rich food sources provided through food baskets. Food baskets were received by majority of mothers and were considered as a sustainable initiative. More than 80% mothers were aware about BNF's food basket concept and had received the same. Out of these 84% mothers confirmed that food products were consumed by all the family members. 69% mothers mentioned that products from the food baskets were not shared with family and were consumed exclusively by them. 49% mothers shared that they received the food baskets for 3 months only. The team should try to ensure that the baskets are provided for at least 3 -9 months in case of pregnant mothers.
- Majority of mothers found the nutrition garden as a useful practice that should be followed by all households. 70% mothers confirmed that they had a nutrition garden with 36% confirming that they grew vegetables in their garden. This concept need to be modified and implemented with additional support in locations where people lack the space to maintain a garden like Rudrapur (Uttarakhand) through the implementation of hydroponic gardens etc.
- WASH related awareness was found to be high among mothers. However, the inter-linkage of WASH practices with malnutrition and anemia needs to be strengthened. 100% mothers follow WASH related practices, however, when asked to enlist all WASH related practices, not more than 40% mothers could mention all activities. Team needs to strengthen significance of WASH related practices and its inter-linkage with malnutrition and anemia.

Awareness about BNF interventions

- The awareness about BNF and its interventions among mothers need to be improved. Only 38% mothers could enlist all three activities; viz: nutrition gardens, food baskets and health screening camps. 24% mothers knew only about nutrition gardens and food baskets.
- Team should strengthen outreach vis-à-vis outcome by focusing on counselling, preventive and sustenance measures to be adopted at each location. Primary data suggest that even though more than

70% mothers have received food baskets and support related to nutrition gardens and had visited screening camps, less than average could enlist all the 3 interventions.

Sustenance related aspects

- Majority of mothers felt that the nutrition garden is a reliable initiative that can help prevent malnutrition and anemia.
- Food baskets was also considered as a sustainable initiative to prevent malnutrition. BNF should ensure that relevant budgets are available to assure dedicated support of food baskets to mothers for 3-9 months across locations. More than 80% mothers felt that variety and quantity of food products in the baskets was enough.

Mothers of Malnourished children

Programme effectiveness – Children (6-9 years)

Awareness among children:

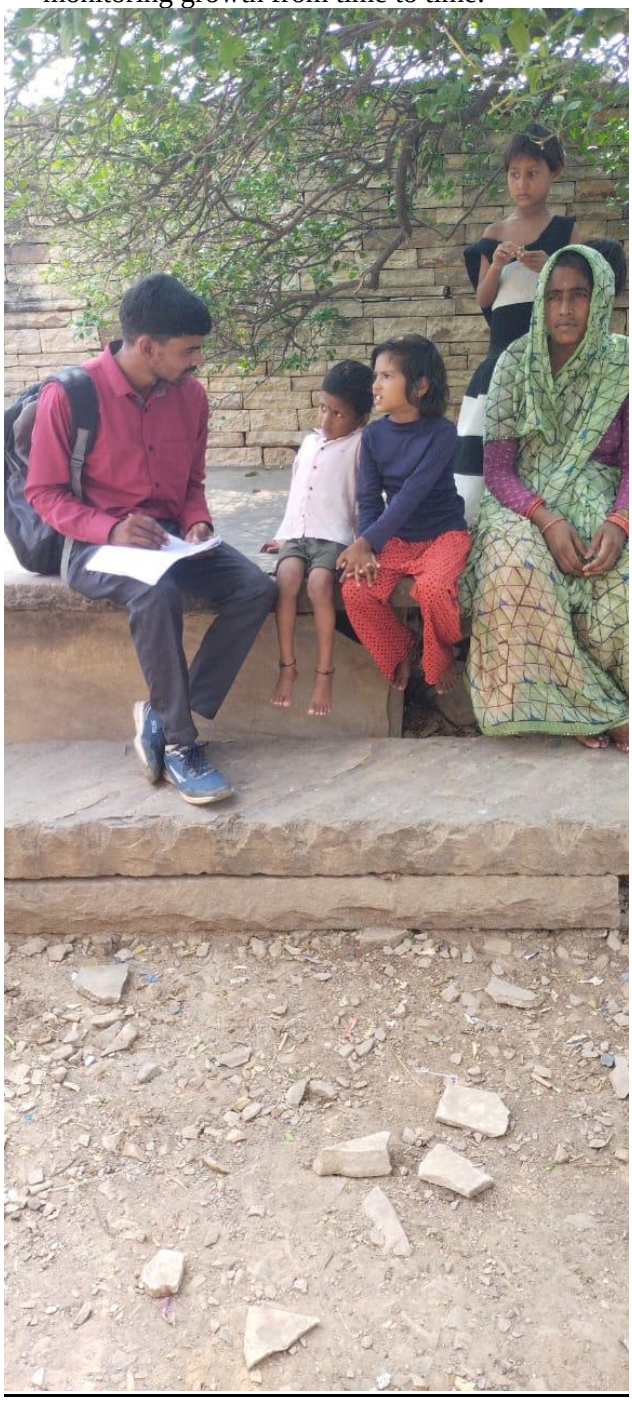
- Awareness about anemia is high. Majority of children could identify a healthy boy during PAT survey. Majority of children aware about malnutrition and anemia related concepts. In-depth understanding of concepts shall be emphasized such as symptoms of anemic or purpose of identifying an anemic or a malnourished child. Only 27% children could enlist all the symptoms.
- Awareness about balanced diet, good and bad diet high. Most of the children aware about good nutritious food habits but concepts like "My Plate My Nutrition" need to be reinstated among children. 54% children could share My Plate My Nutrition concept but 43% children were not able to corelate with same. Team shall emphasize strengthening this concept through e-modules and awareness sessions.
- Awareness about iron rich food sources is high. Almost all children identified the iron rich food sources that are also locally available.
- Awareness about WASH practices need to be improved. Majority of children (63%) could identify WASH concept but less than average identified all practices to be followed at home and outside. Awareness about WASH related practices can be re-instated with defined inter linkage and establishing cohesive understanding between WASH and its impact on health.
- Awareness about BMI need to be improved. Children awareness about the healthy range of BMI accepted as normal need to be improved. Except Gujarat, Gwalior and Shivpuri, more than 50 % children not aware of their BMI status and how it is measured across locations –Perundurai, Madurai, Rudrapur (Uttarakhand), Kamrup (Assam), Ranjangaon (Maharashtra) and Hajipur (Bihar).

Attitude of children towards nutritious food habits

- Majority of children prefer to follow healthy food habits such as balanced diet comprising of fruits, green vegetables, nuts and dairy products. More than 80% children across all locations confirmed the same.

Practices adopted by children

- Majority of children (43%) identified balanced diet as a practice followed by them and their family. Only 28% children opted balanced diet, regular check ups and intake of supplements as key requirements for improved health. Team need to re-emphasize that only balanced diet might not be useful and emphasize on utilization of available government health support and services for monitoring growth from time to time.



Effectiveness of Nutrition Champions

- The programme has identified 5,209 children or adolescents enrolled in schools as **Nutrition Champions** as part of a voluntary support initiative. As part of this initiative, students are selected to support BNF team field coordinators as well as teachers in programme related activities such campaigning for malnutrition and anemia prevention, distribution of fortified iron biscuits and generating awareness with My Plate My Nutrition concept in their families and communities.
- The presence of nutrition champions in intervention schools was appreciated by the community.
- The programme team appreciated the work of the nutrition Champions through providing a special status in the schools by providing them caps. They were also provided the opportunity to represent their schools in various competitions.
- Qualitative data indicates that nutrition champions were usually selected by teachers on random basis and no customized format was considered to value child's contribution to become Nutrition Champion. However, some nutrition champions exhibited a lack of recall regarding their designated roles and responsibilities.
- Nutrition champions should be considered as change agents within the programme intervention and their volunteer contribution should be customized and standardized for effective outcomes. It is extremely important that the current volunteer social cause programme is standardized by BNF team in consultation with teachers/schools for more effective outcome. Team should also define on role clarity of nutrition champions, their overall accountability within the programme, social behavioural change model and their key performance indicators (KPIs).

Effectiveness of BNF services

- Few children could identify the biscuits provided in classroom as BNF's intervention and shared mixed inputs on support provided by BNF.
- Majority of children found the nutrition gardens as a useful practice that should be followed. 90% children know about nutrition garden and about 80% children were motivated and interested to have a nutrition garden. The effectiveness of this initiative can be improved and strengthened by providing continuous guided and monitored support to have nutrition garden at school. Team should allocate budgets for developing nutrition garden in schools which can then contribute to mid-day meal preparation, with help of children.

Programme effectiveness – Adolescents (10-19 years)

Awareness among adolescents

- Awareness about anemia is high. Most of the adolescents were aware about the key concepts, but when deep dived, it was found that the concepts related to symptoms, purpose of identifying symptoms etc., were required to be re-instated as less than 20% adolescents could enlist all the symptoms of anemia and less than 25% adolescents could enlist consequences of iron deficiency
- Awareness about iron sources was found to be high. All adolescents could identify the iron rich food sources that were locally available and all of them agreed that that iron and folic acid could be obtained through dietary sources.
- Awareness about IFA and deworming was high. More than 90% adolescents confirmed that they consumed the IFA tablets and deworming tablets regularly.
- The adolescents' awareness about the healthy range of BMI accepted as normal and how BMI is measured needs to be improved. Team needs to strengthen concepts related to BMI and how it is measured among adolescents' group. More than 50 % adolescents were not aware of their BMI status and how it is measured across locations –Perundurai, Madurai, Rudrapur (Uttarakhand) and Shivpuri. Only 31% adolescents knew how BMI is measured.
- Awareness about WASH practices was high but can be strengthened more. All adolescents believed that WASH practices were essential and need to be followed regularly. 66% adolescents could enlist all the WASH related practices followed by them when asked. Team can re-enforce inter linkage of WASH and anemia and strengthen WASH related good habits.

Attitude of adolescents towards iron and folic acid requirement

- The adolescents evidenced positive attitude change towards Iron and Folic acid requirements and its significance to the body. More than 90% adolescents agreed that iron and folic acid rich food sources can be used to prepare tasty meals.

Practices followed by adolescents

- Adolescents followed good hygiene practices such as WASH
- Adolescents confirmed the use of iron vessels in family to prepare meals and support iron rich meals. 50% adolescents confirmed that their family used iron vessels often to cook meals.
- Adolescents confirm to consume Iron and Folic Acid tablets and deworming tablets provided at schools.

Effectiveness of BNF services

- Iron fortified biscuits was agreed to be a good initiative and the distribution of the same across all schools for 12 months of the year to growing age children especially girls, needs to be ensured. 96% adolescents confirmed that they consumed iron fortified biscuits regularly. More than 90% adolescents liked the taste, sight, smell and after taste of the biscuits. The team should liaison with education department to include fortified iron biscuits as part of mid-day meal in all schools.
- 56% adolescents were aware of the nutrition garden at school and 80% adolescents knew that iron and folate rich food sources could be grown in the nutrition garden. 95% adolescents felt that the nutrition garden was a good initiative and they could grow iron rich food sources in their nutrition garden.
- More than 90% adolescents believed that iron fortified biscuit distribution was a good initiative across all locations except Hajipur (Bihar) and Rudrapur (Uttarakhand). The team should build in the relevant budget and execution strategy to make iron fortified biscuits as part of mid-day meal scheme across all schools and ensure the distribution during the school vacations also.
- Food kits were cherished among adolescents as nutrient rich food sources provided for improved health status.

Programme effectiveness - Service improvement

Nutrition Garden in schools

- 55% of adolescents confirmed that their school used the vegetables from nutrition garden to prepare mid-day meal. 92% adolescents confirmed that they liked the taste of food prepared using iron rich food sources from nutrition garden.
- This makes the building of the relevant budgets to assure dedicated support to nutrition garden across schools with the required fencing and protection measures very essential and one way of sustaining good nutrition practices.

Anganwadi Centre & School service improvement

- It was found that more than the access, utilization of the government support services was a challenge. Hence team BNF should focus on supporting Integrated Child Development Services (ICDS) and Health department by enhancing the usability of facilities available at beneficiary's door step. More than 90% pregnant and lactating mothers shared that, they have access to Anganwadi centers and ASHA workers. 53% pregnant and lactating mothers also confirmed that the Anganwadi worker or ASHA worker visited them monthly followed by 23% mothers confirming that worker visited on bi-weekly basis and 18% mothers confirmed that workers visited on a weekly basis.

Improvement in health and sanitation infra

- Most of the infrastructure support was provided to Anganwadi centers across sample locations for the study timelines followed by infrastructure support to schools in last two years from 2022-2023.
- Inter-linkage of key components of programme interventions such as health, malnutrition, anemia and WASH need to be established for improving effectiveness of the programme, its objectives and key outcomes.
- Infra support provided to Village Development Communities (VDCs) and Self-Help Groups (SHGs) is required to be customized and linked to programme goal and objectives and outcomes that are envisaged through them. The two initiatives are at very nascent stage and need to be documented to assess its desired impact and effectiveness.

Liasoning and collaboration with Government departments and other stakeholders

- ICDS has requested for continued support from BNF for the prevention of malnutrition and anemia across locations and beneficiary groups. They have shared their interest to work jointly to prepare a system framework for monitoring health indicators on a monthly basis and evaluating the progress of the indicators on quarterly basis to ensure required solution at right time.
- The Education department has also appreciated BNF's efforts and interventions. They have shared that most of the Corporate Social Responsibility (CSR) organizations focus only on infrastructure development in schools, while BNF was the only organization that focused on addressing the

nutritional challenges in school going children through social behaviour change model as well as supporting infrastructure related requirements directly impacting nutrition indicators such as clean water, sanitation and hygiene. Education department has requested BNF to consider adopting all schools in the district under a mid-day meal programme.

- BNF should work with NGO partners to leverage and scale up the growth and use of fortified food products like rice. This should be executed in other locations as well and across PDS, MDM and other Poshan Ahar Abhiyan schemes.
- The team should explore academic and research partnerships for their preventive initiatives such as Nutrition Gardens with institutions like Krishi Vigyan Kendras (KVK). Other academic research partnerships with respect to evidence-based research and knowledge products will also be commendable to support the nutrition and anemia related health sector gaps/challenges and the national progress on Sustainable Development Goal 2: Zero Hunger.

With the Rudrapur CDPO

Area of improvement:

BNF programme and its interventions are effective to a certain degree only as compared with its envisaged goal and objective and the desired outcomes. Some suggestions for improvements to strengthen and build programme's effectiveness for future would be:

- **Strengthening the technical content in awareness and capacity building sessions:**
  - Programme should strengthen its content especially in terms of building awareness and knowledge about various concepts such breastfeeding benefits, alternative methods in case of medical limitations, and its processes and complementary feeding,
  - Awareness about post-delivery care for new mothers and practice manual for following desired steps post-delivery both for mother's good health as well as the infant's health.
  - Capacity building of doctors and health support staff in hospitals and NRCs to support maternity care, delivery care and treatment care for children, especially without judging mother and her practices.
  - Programme should strengthen its content especially in terms of building awareness and knowledge about various concepts such as what is malnutrition, benefits and purpose of identifying malnutrition, symptoms to look for and what preventive measures to take to avoid the same. This will ensure desired and long-term positive impact among beneficiaries and their quality of life.
- **Emphasize utilization of ICDS services by beneficiaries rather than access:** At present programme focus is more on access to ICDS services. However, looking at National Family Health Statistics (NFHS) and the primary data, beneficiaries are aware about ICDS and its services, however they do not use these services due to lack of trust. Programme should build approach to create trust and symbiotic relationship among ICDS and community.

- **Ensure inter-linkages of various sub-components of programme interventions:** Programme interventions such as WASH, infrastructure support – WASH facility, menstrual hygiene etc. should be integrated with health and nutritional indicators rather delivering it in sole formats.

- **Nutrition Garden and access to nutrition supplements and food baskets:**
  - Nutrition gardens need to be strengthened in the programme, as they are considered one of the reliable initiatives to sustain positive impact such as attitudinal and practice-based change among mothers. Innovative concepts like vertical gardens, hydroponics-based garden, terrain garden

etc. should be explored in case of hilly or small areas. Fencing and other preventive measures should be packaged with existing services in case of the nutrition gardens.

- ❖ Team should build manuals and guides for nutrition gardens that can be shared with all schools, community centers and interested families for effective garden growth and maintenance related practices. It should include customized garden concepts especially covering challenges related to demography such as terrain in case of Tamil Nadu, Uttarakhand and Assam.
- ❖ All beneficiaries and the BNF field staff believe that food baskets should be increased to cover at least the entire pregnancy cycle or at least 3-9 months. They also felt that it should be provided to all pregnant and lactating beneficiaries instead of just those for malnourished or anemic.

- ➢ **Improved health seeking behavior of the community:** More awareness and trust building activities should be conducted to build trust among community members, NRCs, and hospitals so that the community can utilize these services better. The utilization of ICDS services by beneficiaries rather than access should be emphasized. This can happen by ensuring that Anganwadi and ASHA workers make sure that the pregnant mothers do conduct mandatory 4 ANC visits and take Iron Folic Acid daily. The availability of post-delivery supplements should also be ensured to strengthen the trust.

- ➢ **Scale up natural fortification programmes and introduce bio-fortified crops through nutrition gardens:** The team should leverage its current partnership with the NGO in Madhya Pradesh and scale up programme intervention by customizing, standardizing and scaling fortification product knowledge, its practices and results and usage in daily life through Public Distribution System (PDS) and Poshan Abhiyan.

- ➢ **Liasioning partnership with government agencies:** BNF should liaison central partnership with government agencies such as ICDS and Education department to scale overall outreach and outcome of the programme. The team should share innovative solutions and build capacity of government systems and programme for prevention of malnutrition and anemia. Team should foresee to expand its partnership to all schools across the nation through Ministry of Human Resource Development by introducing its iron fortified biscuits as part of mid-day meal.

- ➢ **Contributing to national research through known academic partners:** Team should explore academic partnership for its preventive initiatives such as Nutrition Garden with institutions like Krishi Vigyan Kendra (KVK). Other academic research partnerships with respect to evidence-based research and knowledge products should also be explored.

- ➢ **Customized programme and intervention based on state/location performance on health indicators:** Malnutrition prevention and anemia prevention programme together are not applicable in all locations. Madhya Pradesh, Maharashtra and Assam are performing below on malnutrition

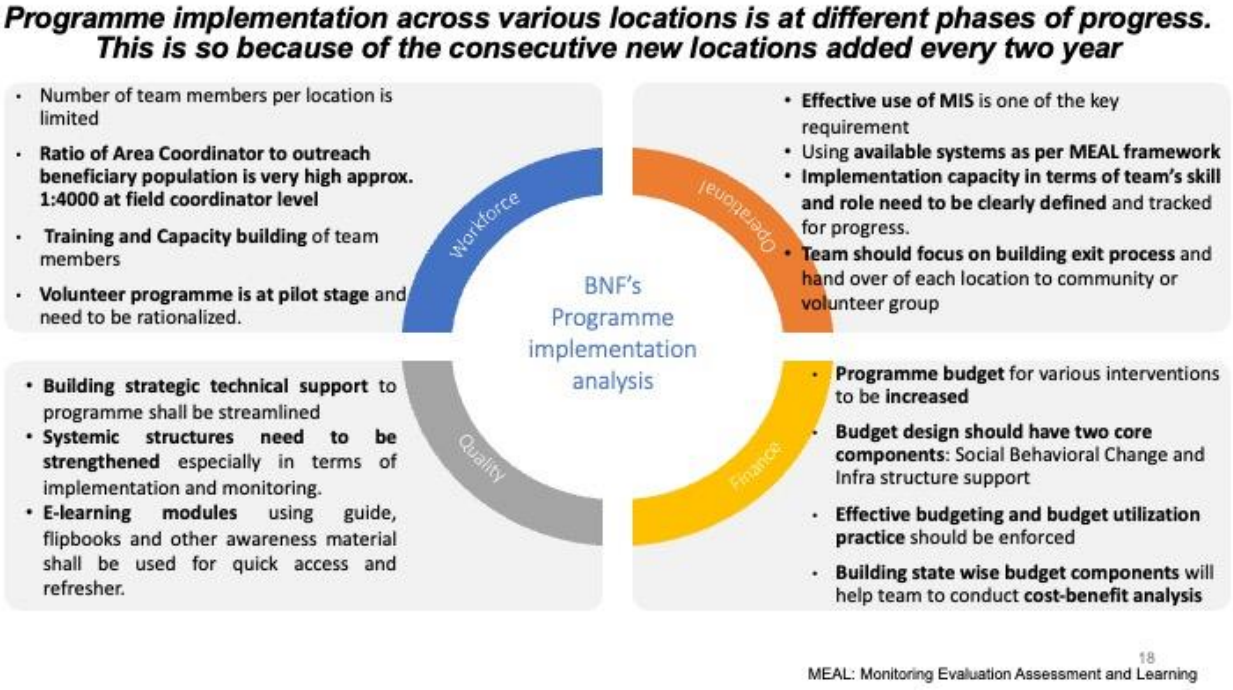
health indicators, while the other states like Uttarakhand and Tamil Nadu have fallen behind on anemia related health indicators. In this scenario malnutrition prevention programme is more applicable in Madhya Pradesh, Maharashtra and Assam and Anemia Prevention programme is more applicable in Uttarakhand and Tamil Nadu. Hence these programs should be customized as per need and run accordingly.

Efficiency

The programme efficiency was assessed across four key indicators:

(a) Workforce or Human Resources
(b) Quality of interventions and support provided (Programme Strategy)
(c) Operations
(d) Finance.

It was observed that programme has progressed over a period of time and has added new locations every two years. The programme has delivered to a certain extent on its key objectives and outcomes, but needs continuous support and improvements in order to likely deliver in a timely manner in the near future.



The key indicators that demonstrated the efficiency of the BNF programme and its interventions are described below:

Programme Log frame efficiency

Programme Logframe is well designed, comprehensive and cover all key inputs, outputs and outcomes aspired to be achieved within the two key programmes.

Malnutrition Prevention Programme

- **Goal and Objective:** Overall objective of the programme is clear. Goal of the programme testament is about curative and preventive life cycle approach. However, evidence about the life cycle approach adopted by the programme can be strengthened.
- **Outcomes:** The five key outcomes as identified by programme are clear and in progress.
- **Outputs:** Outputs and inputs are mixed. Outputs emphasizing inter-linkage among nutrition and health services and contributing to outcome 4 are missing.
- **Inputs:** List of inputs/activities is exhaustive. Activities related to inter-linkage among nutrition and health services and contributing to outcome number 4 as per Logframe can be identified and included – WASH, Infra/utility, VDCs SHGs etc.

Anemia Prevention Programme

- **Goal and Objective:** Goal of the programme and the overall objective of the programme is clear and well written.
- **Outcomes:** The five key outcomes as identified by programme are clear and in progress. Programme can add one key outcome related to Institutional collaboration and Partnership.
- **Outputs:** Outputs and inputs are mixed. Outputs emphasizing inter-linkage among nutrition and health services and contributing to outcome number 2 and 4 are missing.
- **Inputs:** List of inputs/activities is exhaustive. Activities related to inter-linkage among nutrition and health services and contributing to outcome 4 can be identified and included – WASH, Infra/utility, etc.

Workforce or Human Resource efficiency

The BNF central team consists of five team members with the Head of the team supported by two Assistant Managers, a Finance Manager and a Management Information (MIS) officer. The central team is supported by its field office teams at each location. The field office team consists of a State Programme Officer supported by District Programme Officer, who is in turn supported by a Cluster Programme Officer, a Field Coordinator and a MIS cum Finance Assistant. The Field Coordinator is also supported through Volunteer Programme Support staff such as Suposhan Sakhis and Nutrition Champions. Usually in each location each Cluster Programme Officer implements and oversees activities at cluster of villages per block with the help of field coordinator who look after day-to-day implementation of interventions and its activities in villages, schools or slum areas. Each field coordinator on an average caters to the 3000-4000 population in the said cluster.

Overall at all 13 locations,[4] where BNF programme is active, the programme has one State Programme Officer for Gwalior supported by one District Programme Officer across all locations except Gwalior and a Cluster Programme Officer in Gwalior, Ranjangaon, Rudrapur and two officers at Shivpuri. In total programme engages 12 District Programme Officer to manage 13 locations and 5 Cluster Programme Officers. The programme has in total 71 Field Coordinators. One field Coordinator manages a population of approximately 3000-4000 community members. As part of Volunteer Programme, at least one Suposhan Sakhi is engaged per Anganwadi center and two Nutrition Champions per school.

[4] Out of 13 locations, two locations are due to launch in 2025

Figure 7: Executive Office – Central Team

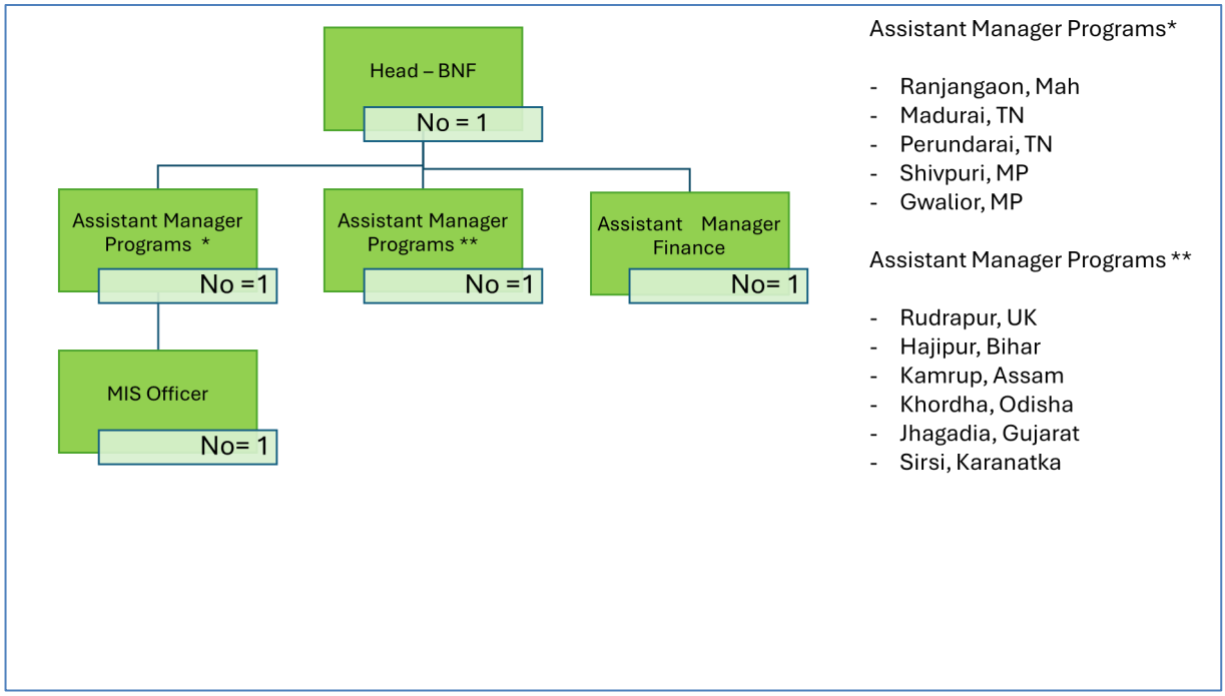
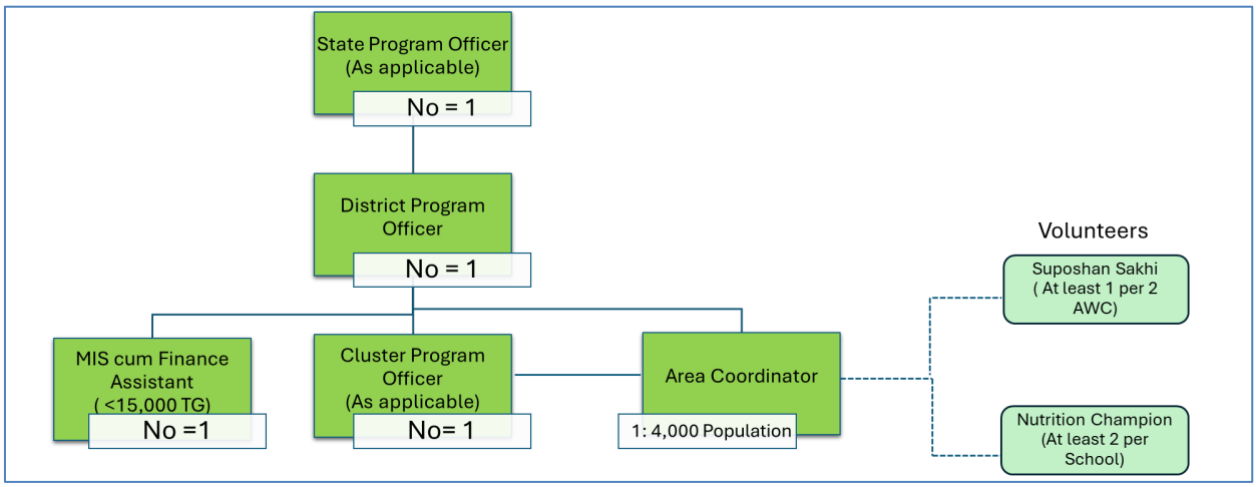


Figure 8: Field office team



AWC = Aaganwadi I TG = Target Population

The workforce or human resource efficiency should be looked into and improved further to achieve the desired programme efficiency. Some of the key insights are shared below:

- **Number of team members per location is limited:** Number of team members per location is limited, when compared with the outreach number, demographic challenges and attrition rate at all locations. Almost all the state field teams are stretched to maximum capacity and need support at field level to efficiently implement all programme interventions.
- **Ratio of Area Coordinator to outreach beneficiary population is very high approx. 1:4000 at field Coordinator level:** The ratio of field coordinator to beneficiary population is very high. The onus of intervention work largely depends on field coordinators and it is necessary that team should

rationalize the number of beneficiaries each field coordinator should cater to. Field Coordinators are star performers of the programme especially at local level as beneficiaries and community know them directly and on first name basis. Hence its essential that field coordinator be able to provide efficient services and support in timely manner. The ratio reference with regard to Anganwadi center should also be changed and a more realistic ratio should be established.

- **Training and Capacity building of team members:** Field team shared the desire of continuous training and capacity building programs to ensure technical and systemic efficiency of the programme and available infrastructure. It was desired by team members to keep continuous annual capacity building programme for field team on technical aspects of the programme, training aspects of the beneficiaries and stakeholders, ensuring update techniques and understanding for moderation and engagement of stakeholders as part of programme key objectives and goals. This will ensure not only upskill of the programme team from time to time but also motivate the team to engage in programmes outputs and outcomes in more engaged format.
- **Volunteer programme is at pilot stage and need to be rationalized:** The volunteer programme such as Suposhan Sakhis and Nutrition Champions engagement is considered at very pilot stage. The team should document the performance of suposhan sakhis across locations and replicate best practices or successful practices across other locations. Team should also work towards rationalizing and standardizing volunteer programme from the aspect of:
  - role and responsibility of suposhan sakhi and nutrition champion
  - accountability and key performance indicators of suposhan sakhis and nutrition champions
  - selection process and eligibility criteria to become suposhan sakhi and nutrition champion
  - identification process of suposhan sakhi (pink uniform) and nutrition champion (champion badge)
  - daily work and accountability through key performance indicators on monthly, quarterly and annual basis
  - appreciation and rewards to be provided to suposhan sakhi (monetary reward or best sakhi reward in location or star sakhi on monthly basis) and nutrition champions (certificate for contribution to facilitate social cause)
  - change social service model to village entrepreneurship model for suposhan sakhi, where with social cause contribution is rewarded with monetary benefits or economic benefits for the sakhis. This can act as motivation factor.
  - ensure simplified procedure for documentation of work conducted by suposhan sakhi or nutrition champion (may be using “To do Accounting Book”)

Quality of strategic interventions

The quality of strategic interventions such as awareness and capacity building material, systemic structures for continued soft technical and hard-core infrastructure support per locations should be rationalized and streamlined by central programme team in discussion with the field teams. It was observed that the Information Education Communication (IEC) material, one-to-one counselling guide and training guides in form of flip books are limited and not enough to support field team members. Also, the material carries similar formats and information as available at Anganwadis. The documentation of work done in terms of any best practices or innovative models of engagement is also missing or not available at present.

The efficiency of strategic intervention can be improved further to achieve desired programme efficiency. Some of the key insights are shared below:

- **Building strategic technical support** to **programme should be streamlined:** The programme team should build in required strategic support from time to time in with regards to the challenges foreseen by government agencies such as ICDS, NRCs, RBSKs etc. Some of the areas, where the team can improve technical support to malnutrition and anemia prevention are shared below:
  - Technical knowledge and understanding guides for Anganwadi centres and ASHA workers on ANCs, post-delivery care, feeding practices – exclusive breastfeeding, alternative feeding and breastfeeding/alternative feeding cum complementary feeding
  - Technical knowledge and understanding guides for School Principals and teachers on malnutrition prevention and anemia prevention, guides for selection of nutrition champions with detailed work and responsibilities and rewards provided
  - Capacity building module for supsoshan sakhis, guide for their role, responsibilities, key performance indicators, selection process and eligibility criteria and entrepreneurship training
  - MIS framework for ICDS to track baseline vis-à-vis health indicators monitoring of children on nutrition and health parameters. Supporting guide to track and monitor progress made in health indicators of children, identification of key cases at central MIS and supportive framework for referral programme for further treatment and preventive care.
  - Technical guide for nutrition gardens including all details about understanding of garden concept, its requirements in terms of demography, innovative model for limited space etc.
- **Systemic structures need to be strengthened especially in terms of implementation, documentation and monitoring:**
  - Implementation capacity in terms of team's skill and role needs to be clearly defined and tracked for progress, performance and reward assessment from time to time.
  - Documentation of progress, performance and impact of programme's interventions and activities need to be done from time to time.
  - Monitoring in terms of key performance indicators such soft KPIs and hard infra related KPI need to be designed and tracked for progressive growth and achievement of desired outcomes.
- **E-learning modules using guide, flipbooks and other awareness material should be used for quick access and refresher:** The team uses traditional knowledge tools such as flip books instead of animated or gamified formats of learning modules, which may have larger impact on the understanding, attitude and practice of stakeholders and beneficiaries. The current IEC materials and tools also lack the assessment frameworks that can be used to assess stakeholders understanding post training or capacity building sessions. Team should invest on developing e-learning modules that can be easily accessed by stakeholders from time to time and continuous training and assessment.

Operational efficiency

The operational efficiency of the programme can be improved further to achieve desired programme efficiency. Some of the key insights are shared below:

- **Effective use of MIS is one of the key requirements:** Effective use of MIS is one of the key requirements especially in terms of tracking progressive improvements in nutritional and anemia status of beneficiaries and improvement vis-à-vis baseline collected by team during start of programme for each location.
- **Using available systems as per Monitoring Evaluation Assessment and Learning (MEAL) framework:** Team has defined goals, outcomes, outputs and inputs with Key Performance Indicators. Team should define Key Performance Indicators as per MEAL framework and track continuous progress of programmes and its intervention from time to time. This will help programme to document programme learnings, its innovative practices and techniques and achievements and failures from time to time.
- **Implementation capacity in terms of team's skill and role need to be clearly defined and tracked for progress:** The operational efficiency of programme should be improved by upskilling both central and field team team's capacity from time to time. BNF should ensure team members

should upskill themselves on various trainings and capacity building aspects, that would be helpful for the programme's efficiency. This will also assure motivation among team members to achieve overall goal. To start BNF can look at various upskill applications such as Coursera, LinkedIn Learning, Upgrad to enhance team's capacities and continuous learning journeys.

- **Team should focus on building exit process and hand over of each location to community or volunteer group:** Having an exit strategy is crucial especially in development programmes that work on behaviour change model and infrastructure support model. An exit strategy should have a comprehensive road map that addresses all of the programme related interventions. It should also identify personal, who will own and lead various aspects of the programme goals to sustain their desired outcomes. The financial needs and obligations should also be addressed along with creation of legal and regulatory standards awareness regarding the key interventions and activities etc. Team should ensure that exit strategy includes the following:
  - **Participatory:** Establish the exit strategy in joint discussion with key stakeholders, in this case with ICDS, Education department, Anganwadi Workers, School Personnel, NRCs and Hospitals, RBSKs, NGO partners, if applicable and key community representatives- Suposhan sakhis, Nutrition Champions, VDCs members and SHGs members wherever applicable. The strategy has to be "owned" by the local partners (example government, community and NGO partners) who will support the changes brought by the BNF.
  - **Flexible and iterative:** Regard the BNF exit strategy as a "living document" meant to evolve as the context and circumstances of the local partners change. Not all eventualities can be anticipated; it is the spirit and general mechanisms that matter most. Agree on the profile of a facilitator if needed for future moderations and changes.
  - **Staggered:** In the case of a handover of the BNF, a gradual exit will allow gauging stakeholders' ability and commitment to meet their obligations and provide a chance to assess the success of the strategy.
  - **Communication wise:** Foster frank and transparent communications. Ensure that achievements are recorded and celebrated, and that due credit is given. Agree on a strategy to communicate about the exit (i.e., partner responsibility, targeted audience, content, channels, etc.). Consider substituting other terms for "exit strategy" (e.g., transition, move on), as it can hold negative connotations.

Financial Efficiency

The budget analysis indicates that the programme budget year wise is increasing, but the budget utilization for first two year was less than 50%. The budget analysis indicates that:

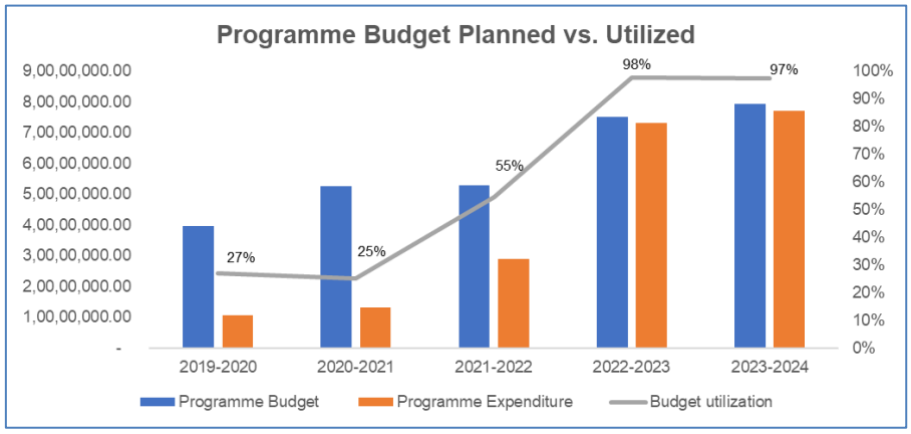
- Programme budget year wise is increasing,
- Budget utilization was noted as < 30% in first two years, 55% in the third year and 54% additional budget was required in the fourth year

Analyzing overall budget planned vis-à-vis utilized over the years indicates that:

- Programme budget year wise is increasing for BNF as well as NGO Partner
  - Overall budget for BNF increased by 7% in second year and almost by more than 50% in third and fourth year.
  - Overall budget for NGO partner increased by more than 40% in second, third and fourth year.
- Budget utilization noted < 30% in first two years, 55% in the third year and above 95% in the fourth and fifth year
- Strengthen budget planning especially key components- social behavioral change model and infrastructure
- Need assigned budget for continued and time bound support on- Nutrition Garden, Food baskets, and supplementary nutrition – Biscuits

- Budget related to awareness material, IEC and training material need to be increased for next two years to ensure:
  - e-modules for Anganwadi workers, Teachers and Voluntary Programme Participants
  - Training of Anganwadi Workers, Teachers and Susposhan Sakhis
  - Training and capacity building budget for Internal BNF team
- Budget for Monitoring Evaluation and Learning shall be ensured – 3% to 5% of overall budget for year.

Figure 9: Analysis of budget planned vis-à-vis utilized

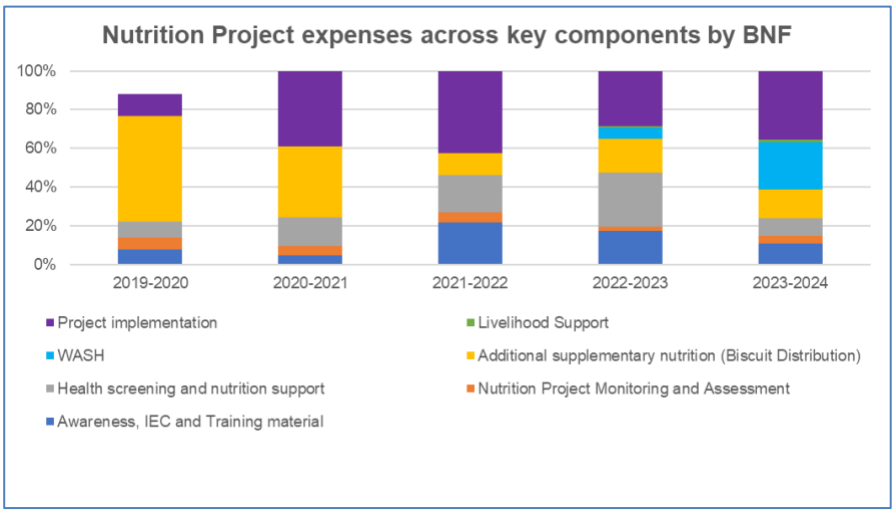


- The key components where budget is spent are:
  - Project implementation
  - Livelihood support
  - WASH activities
  - Additional supplementary nutrition (Iron fortified biscuit distribution)
  - Health screening and nutrition support
  - Nutrition project monitoring and assessment
  - NGO partner budget

Analysing budget component indicate that over the years:

- The major expenditure for BNF lead projects is project implementation cost. On average basis, BNF spend 31% of its total budget on project implementation across various sites.
- 27% of budget on an average basis is spend on additional nutritional supplements like biscuit distribution in schools.
- On average 16% of project budget is spend on health screening and nutritional supplement support to community members especially SAM/MAM children, support to Pregnant and Lactation mothers, etc.
- On an average only 12% of total budget is spent on Awareness, IEC, and Training Material, followed by 6% budget for WASH related interventions and 4% budget on nutrition project monitoring and assessment related activities.
- Livelihood support activities started in 2022-2023 and team is spending 1%-2% budget on the livelihood support interventions.

Figure 10: Analysis of individual budget components for expenditure



The financial efficiency of the programme can be improved further to achieve desired programme efficiency. Some of the key insights are shared below:

- **Programme budget** for various interventions to be **increased:** Team should increase programme budget for the following components:
  - Nutrition gardens**:** Developing a nutrition garden guide and manual, nutrition garden package distribution to schools and community members and for setting up of community nutrition gardens
  - Food baskets and nutrition supplements: Budget for distribution of food baskets and nutrition supplements should be increased considering suggestions for the time period they should be provided. Team should enhance budget for this component considering food baskets will be provided for all pregnant women for period of 3-9 months and nutrition supplements in case of SAM/MAM child will be provided for at least 3 months.
  - Iron fortified biscuit distribution through Mid-day Meal programme: Budget should be allocated for continuous distribution of iron fortified biscuits in schools for children and adolescents through Mid-day Meal Programme. Team should not restrict itself on specific intervention schools, but rather adopt all schools Pan-India and distribute iron fortified biscuits through meal programme. This can be rolled out in phase wise manner.
  - IEC and Training material: Separate budget should be allocated for developing IEC and training material per location. The budget for e-modules for various training, awareness and counselling content should be developed and distributed across locations
  - Infrastructure budget: Separate budget for infrastructure support should be planned and provided per locations to enhance the Anganwadi infrastructure and school infrastructure for facilities that have direct or indirect impact on nutrition and health indicators
- **Budget design should have four key core components**: Social Behavioral Change, Infrastructure support, NGO Partner Support and Miscellaneous: The team should plan and design budget better for effective utilization as well as overall effectiveness and efficiency of programme. It was observed that most of the interventions conducted by team that required financial support could be categorized under two components:
  - **Social Behaviour Change Model:** This component contains activities or budget heads such as IEC/ Communication material development, project implementation, Additional supplementary nutrition – iron fortified biscuits, garden saplings, food baskets/ nutrition supplements, health screening and nutrition support and nutrition project monitoring and assessment.
  - **Infrastructure Support Model:** The infrastructure support model includes WASH related infra support and activities, Anganwadi center related infra support provided, school infra support provided, community related infra support provided etc. This component should be rationalized

and clearly defined with the kind of infrastructure support that programme was willing to invest on location specific needs.

- **NGO Partner support:** BNF team partners with a NGO for outreach and various other support services to achieve programme goals. The budget for one NGO partner was analyzed and was seen as progressively increasing. The budget utilization and key components for which budget is allocated to NGO partner needs to be defined and clearly mentioned in audited statements. This will ensure financial accountability and enhance overall transparency of NGO's contribution to programme's objectives.
- **Miscellaneous:** BNF team sometimes support beneficiary families going out of the way and spend on the activities as per locations demand. These activities, which, BNF will and can support should be clearly defined and mentioned as part of financial statements and capped at certain amount to ensure budget planned vis-à-vis utilization is not impacted in varied way.

- **Effective budgeting and budget utilization practice** should be enforced: The above financial practice of categorization key budget components, defining their budget sub-components and role and their overall impact on programme outcomes will help team rationalize their budgets and help them plan better financially and strategically. Capping of budget component year-wise is essential to ensure progressive and thoughtful spend on key requirements across locations.
- **Building state wise budget components** will help team to conduct **cost-benefit analysis:** Team should definitely invest in cost-benefit analysis study for the programme as benefits achieved or provided to beneficiary per rupees spent by the foundation will help team develop standards and proof of concept for social behavious change model. The team should also do state-wise budget planning to ensure all key requirements are highlighted, planned and executed from time to time in planned budget for the year. This will improve efficiency of programme as well as field team drastically.

Additional: NGO Partner engaged in Shivpuri

The BNF team engages NGO partners across 4 locations out of 13[5] locations. At present assessment has been done for one NGO Partner engaged in Shivpuri as part of the programme. Due to limited information and insights, assessment team will not be able to comment on overall efficiency of the NGO partner in the programme but have tried to assess and analyze partner's contribution in existing model:

NGO is operational across 8 districts and 40 blocks of Shivpuri district of Madhya Pradesh. The three key interventions conducted by NGO partner in Shivpuri are:

- **Awareness and monitoring** about fortified food products such as rice. Monitoring fortified food product process on ground with support from Gram Sachiv and other local authorities from manufacturing to distribution.
- **Standardizing fortification process:** NGO ensures quality maintenance and checking of fortified commodities through FSSAI parameters and laboratory testing.
- **Provide fortified food commodities through distribution channels** in joint initiative with government such as Public Distribution System (PDS), mid-day meal (MDM), Anganwadi ahar, tribal hospital food and Nutritional Rehabilitation Centers (NRCs).

Activities conducted by NGO in joint initiative with BNF were:

- Awareness creation programme on fortified food products example rice.
- Nutrition garden or poshan vatika competition across schools.
- School rally on nutrition and health topics
- Awareness through slogan creation about healthy food habits and IFA

[5] Out of 13 locations, two locations are planned to launch in 2025 with support from NGO Partners

Some of the key insights were:

- NGO budget analysis: Budget components for NGO partner, budget vis-à-vis activities is not available for detailed analysis. Budget for NGO partner is increasing almost by 5% every year and was 15% of total budget in 2022-2023.
- NGO Partner role: NGO partner role in current programme is a decentralized approach, which helps BNF in reaching out to a large number of beneficiaries across locations with established social capital.
- NGO partner key interest and motivation: NGO partner key interest and motivation is fortification of agricultural crops and products for enhanced nutritional value and health status of beneficiaries consuming the same. While the goals of BNF and NGO partner submerge by working towards nutrition and health status their approach to end goal is different.
- NGO Partner's strength: NGO partner's strength is in fortification of crops and should be leveraged by BNF as an expert programme partner for fortification of crops using nutrition garden concepts, partner's PDS, MDM and Poshan abhiyan channels.

The partner engagement and efficiency can be improved further to achieve desired programme efficiency. Some of the key insights are shared below:

- Scale up outreach vis-à-vis outcome of programme interventions
- Leverage social capital among community members and support effective mobilization and outreach to beneficiaries and stakeholders.
- Support awareness and monitoring of fortified food products, not only biscuits but raw products like rice through nutrition gardens and food baskets across schools and community
- Scale intervention by providing fortified food commodities through distribution channels in joint initiative with government such as Public Distribution System (PDS), mid-day meal (MDM), Anganwadi ahar, tribal hospital food and Nutritional Rehabilitation Centers (NRCs) food.
- Scale up mass awareness generation among schools, blocks and districts through nutrition garden or poshan vatika competition across schools, school rally on nutrition and health topics and slogan creation about healthy food habits and IFA
- Using decentralized approach to outreach and scale of programme with NGO partner
- Increase financial accountability and transparency through agreed Key Performance Indicators (KPIs)

Area of improvement:

BNF programme and its interventions are efficient to a certain degree as compared with its envisaged goal and objective and its desired outcome. Suggestions for a few improvements to strengthen and build programme's efficiency for future are as below:

- **Outcome over outreach:** Team should value outcome over outreach. Programme at present focuses on quantity; i.e number of beneficiaries reached by programme through various activities but is not able to ensure quality to those reached and the desired impact for the long run. The long term vision or impact intended by programme is also missing.
- **Expand Nutritional Programs:** Continue and expand the distribution of iron-fortified biscuits and ensure regular consumption of iron tablets, and the advocacy to bring a morning breakfast scheme by the state government to all schools.
- **Enhance Student and Community Engagement:** Programme should consider strengthening the incentivisation of nutrition champions and suposhan sakhis. They should provide them some skill-based training to promote nutrition and health related education and alternative livelihood opportunities.
- **Strengthen Infrastructure:** The nutrition gardens should be secured with proper fencing and simple bottle drip irrigation should be implemented to ensure its sustainability and year-round productivity.

The completion of wash stations reconstruction should be expedited to enhance hygiene practices among students. The construction of a compound wall to improve overall school security and cleanliness should also be advocated.

- **Strengthen support systems:** The teachers and the headmasters should also be trained on a quarterly basis on technical aspects like nutrition, health, and hygiene, Anemia prevention along with the nutrition champions so that they act as a backbone to provide sound technical knowledge or resolve queries in absence of NCs and also are aware about the capacity building initiatives by BNF.
- **Technical guidance and delivery module:** More technical guidance delivery modules can be created to focus on balanced diet, my plate my nutrition concept that are more pictorial in nature. Cooking demonstrations of high protein, and energy dense meals using ration kits from Anganwadi, and BNF food baskets would help the mothers understand the concept of improving nutrient density in the meals.
- **Capacity Building and Partnerships:** The number of field coordinators should be increased to maintain the quality of work. The Nutrition champions, Suposhan Sakhis, teachers and Anganwadi workers should be provided periodic training on nutrition aspects. The partnerships with local NGOs, healthcare providers and educational institutions should be expanded and leveraged for additional resources and support to the field coordinators as well as DPOs for a comprehensive program. The mental health and well-being programs for field staff should also be taken up by the administration team to prevent burn down of the staff.
- **Facilitate Experiential Learning:** Experiential learning should be facilitated through field visits for students and Suposhan sakhis to farms, food processing units, or nutrition research centers to enhance their practical understanding of nutrition and agriculture. More hands-on activities such as cooking demonstrations, gardening workshops, and hygiene training sessions should be encouraged.
- **Educational and Leadership Development:** Clear Nomination and Training Guidelines for Nutrition Champion and Suposhan sakhis should be ensured. Provide clear criteria for selecting Nutrition Champions and offer ongoing training to equip them with the knowledge and skills to effectively promote nutrition and hygiene within their peer groups.

Impact

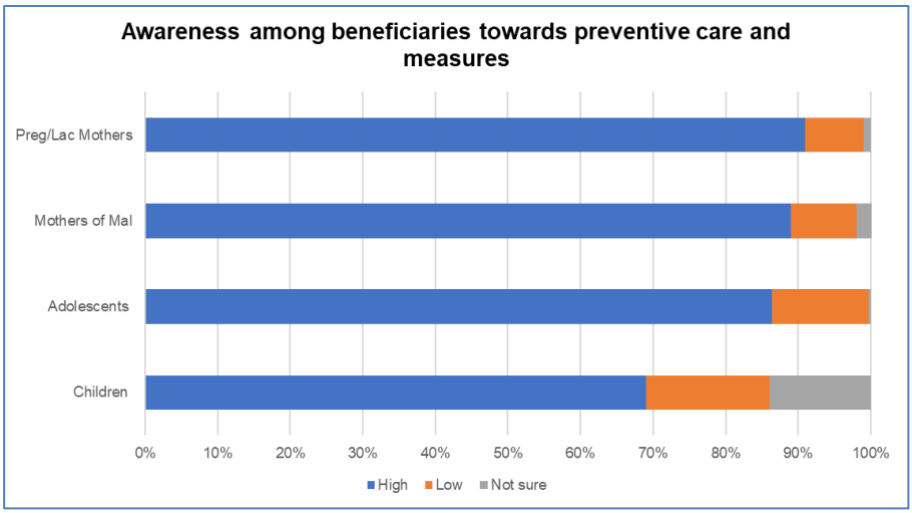
Many corporates run malnutrition and anemia prevention programs or work with Anganwadi Centers through ICDS, either in full capacity of adopting them and renovating entire center and its strategy, capacity building of workers etc. Some corporates work with schools only on infrastructure development. Very few corporates work on soft skill aspects such as awareness generation among beneficiaries of all ages and gender, families, communities and government agencies (Anganwadi workers and ASHA workers) together with infrastructure support to prevent malnutrition and anemia. BNF works directly with beneficiaries and stakeholders to improve the overall understanding and knowledge about malnutrition and anemia prevention. They also work to build access to suitable government support services that can be accessed and utilized for improved health and nutritional vitals. Their programme acts as a catalyst in the development of social behaviour change model for malnutrition and anemia prevention practices.

The key impacts seen of the BNF programme and its interventions are:

Awareness among beneficiaries towards preventive care and measures

- **Children:** Awareness among children about preventive care and measures for healthy nutritious habits is high. However, the team should re-enforce concept of 'My Plate My Nutrition' so that more and more children could share that in their home.
- **Adolescents:** Awareness among adolescents about anemia, its likelihood among peer groups, and iron rich nutritious food habits is high. Team should re-enforce inter-linkage of WASH and other sanitary practices and its impact on anemia among adolescent groups.
- **Pregnant and Lactating mothers:** Awareness about nutritious food habits and impact of maternal nutritional status on health of children noted high among pregnant and lactating mothers.
- **Mothers of malnourished:** Awareness about nutritious food habits is noted high among mothers of malnourished children. Team should emphasize building, understanding and strengthening the practice of nutritious food habits among mothers. Except for Bihar, more than 90% mothers noted high awareness about ill effects of malnutrition on child's future life.

Figure 11: Awareness among beneficiaries towards preventive care and curative measures for malnutrition and anemia



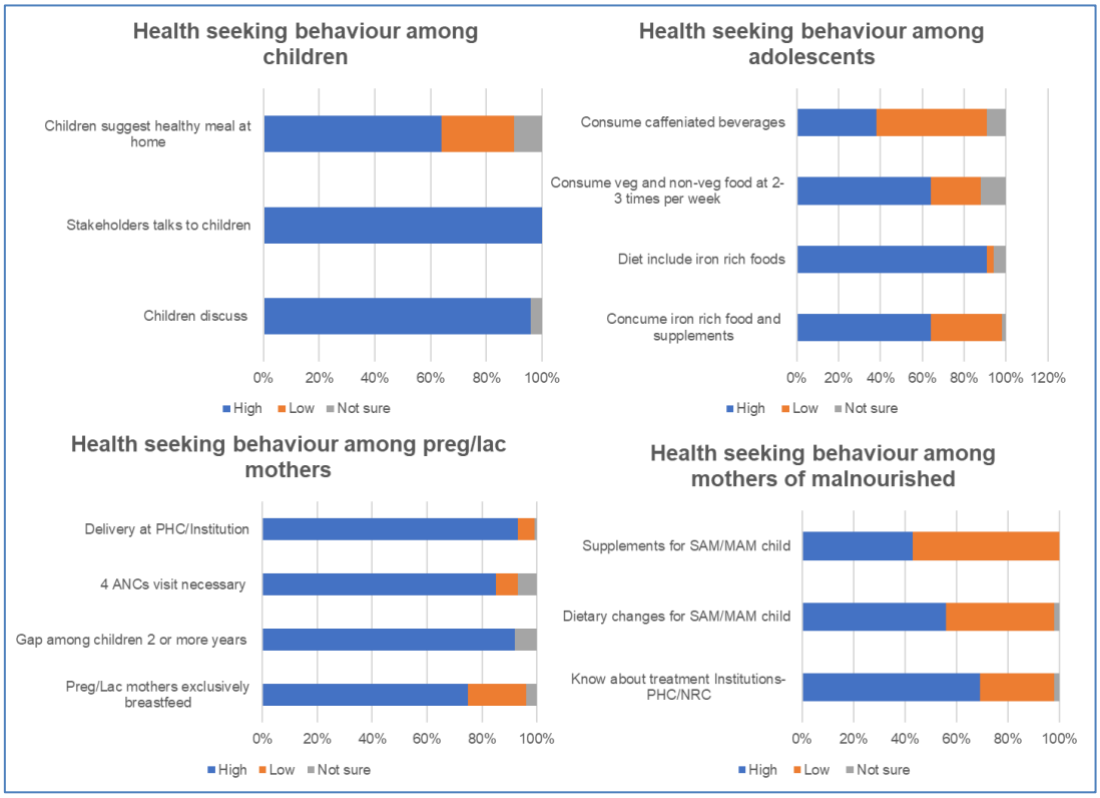
Increase in nutrition and health seeking behavior among beneficiaries

- **Children:** Majority of children evidenced an increase in nutrition and health seeking behavior. More than 90% children discussed about healthy nutritious food habits within family, peers and community. 64% children shared that they like to suggest to their mothers to cook nutritious meal. It was also noted that it was mostly teachers, mothers and others (BNF volunteers/AWW worker)

who talk about healthy nutritious food habits with the children. Hence the team should emphasize building teacher's capacity as well.

- **Adolescents:** Majority of adolescents confirmed consumption of iron rich food sources as well as Vitamin C rich food as part of their meals with minimum consumption of caffeinated beverages.
- **Pregnant and Lactating mothers:** Mothers consider 4 ANC visits and institutional birth practice as necessary. Majority mothers considered breastfeeding as an essential practice to ensure their newborn's good health. Majority of mothers thought that a 2-3 years gap among children is ideal for all.
- **Mothers of malnourished children:** Majority of mothers knew, where to take their malnourished child for treatment. Mothers also knew and practiced relevant dietary changes such as adding more protein rich foods, energy dense snacks and fruits to the diet of child in case he/she was diagnosed as SAM/MAM. Less than average mothers believed in supplements such as Iron, Calcium, Vitamin D and B complex and preferred to give them to their children.

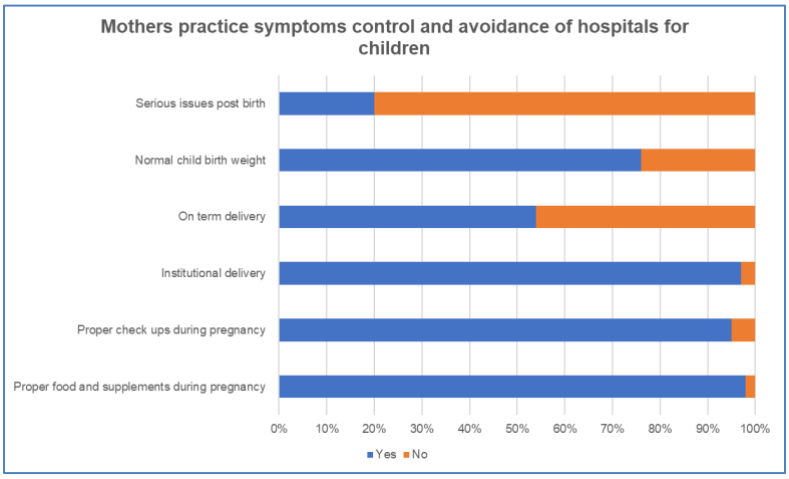
Figure 12: Healtth seeking behaviour among beneficiaries



Symptoms control and avoidance of hospitalization

One of the major objectives of preventive care is the effective relief of symptoms related to malnutrition and anemia on time. The institutionalization of preventive and curative care has improved access to scheduled screening, identification, referral of severe cases and monitoring of SAM/MAM or severely anemic beneficiaries for managing symptoms. Majority of mothers shared that they opted for health seeking behavior during pregnancy such as: institutional delivery, proper food and supplements during pregnancy and ANC checkups and follow ups. More than 50% mothers shared they had on term deliveries with the baby having normal weight. About 38% mothers had pre-term delivery with 21% of low baby's birth weight. Mothers did all relevant practices to be followed for symptoms control during pregnancy yet child was malnourished. Reasons for same should be investigated and researched for effective solutions and impact.

Figure 13: Pregnant mothers practice symptoms control for future avoidance of hospitalization of infants and children

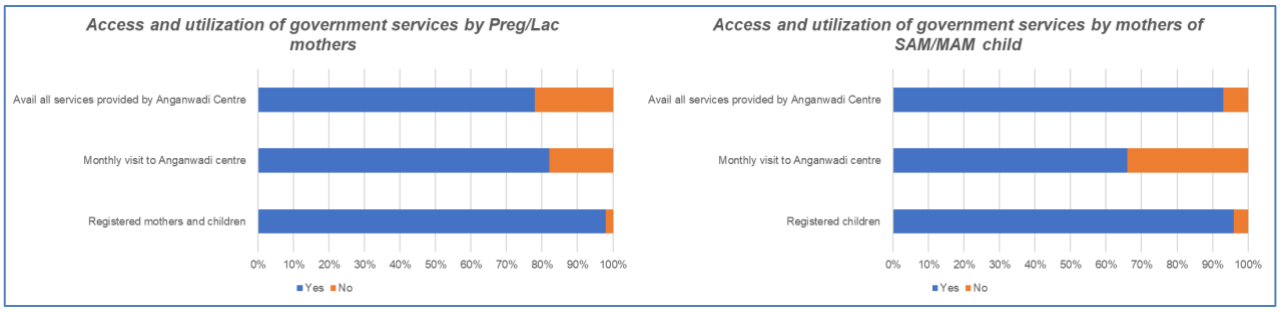


Improved access to government services and support system by beneficiaries

Specialized ICDS workers and RBSKs professionals together with BNF provide counselling regarding the nature of the disease, prognosis, potential outcomes, challenges, etc., to caregivers and families. Continuous counselling support is extended throughout the treatment phase, remission phase through home care, and monitoring for improved health vitals post treatment. The continuous support through one-to-one counselling have improved access to government support services and systems such as NRCs, Hospitals available for treatment at a lower cost.

Majority of pregnant/lactating mothers and mothers of malnourished confirmed that they and their children were registered at Anganwadi centers and the Anganwadi worker and ASHA workers updated them about registration process, support services available and other necessary practices to be followed. Majority of mothers confirmed that they took their children for monthly follow ups and checkups at the center. More than 50% mothers attributed the improved support and services of Anganwadi center to BNF and its interventions.

Figure 14: Access and utilization of government services by beneficiaries

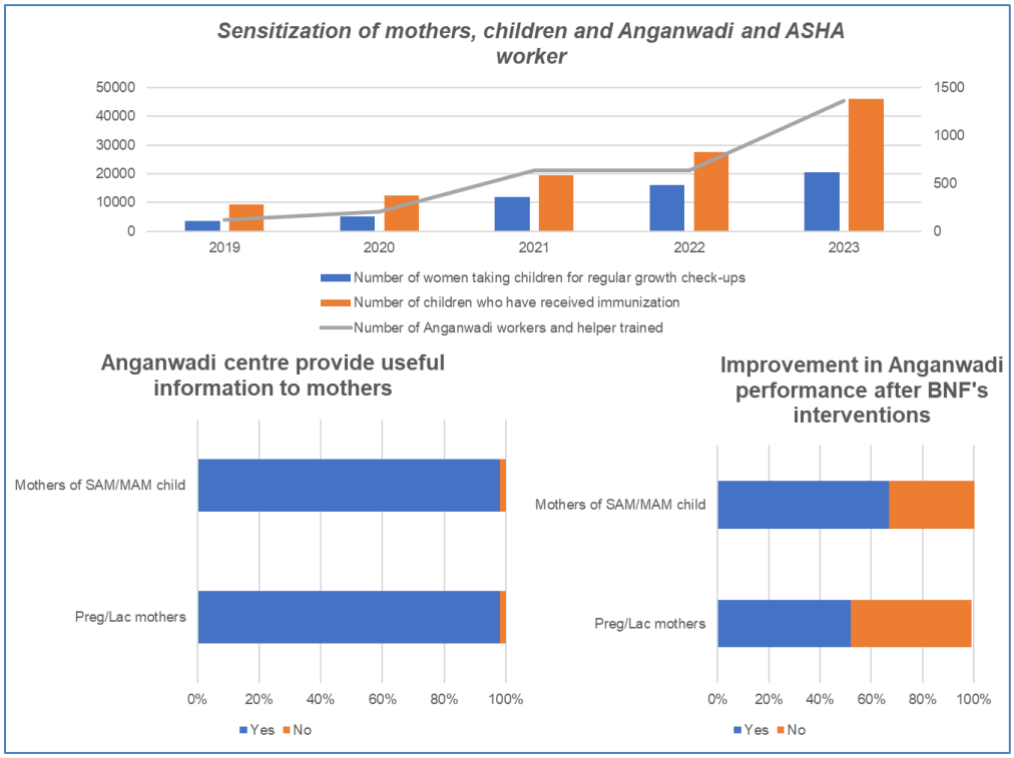


Sensitization of Anganwadi and ASHA worker professionals towards nutritional related health challenges

Secondary data from BNF as well as NFHS indicate that access to ICDS service is available in most of the locations but utilization of government support services is missing.

BNF's intervention should largely focus on usability to the services and support systems available. This can be ensured through continuous capacity building of ICDS workers, infrastructure support to Anganwadi centers and collaborative engagement with NRCs and Hospitals. Team needs to establish more coherent and collaborative partnership with ICDS and Government departments at institutional level to help the programme smoothen, scale and ensure BNF's interventions outcomes.

Figure 15: Sensitization of mothers, children and Anganwadi and ASHA worker



Sustainability

There is a significant high need of programmes for malnutrition prevention and anemia prevention across India with many states still performing below the country's average. The scalability and sustainability of the interventions implemented under both the BNF's programmes are hence crucial to:

- extend the benefits of the programme to the larger group,
- ensure evolved preventive care landscape as developed by BNF and team through expansion of Anganwadi centers and their services, voluntary change agents and other support workers,
- develop home based models such as nutrition gardens and
- leverage exiting healthcare infrastructure such as Anganwadi centers, schools and NRCs.

Co-founding opportunities with other corporate foundations, partnership with the governmental and non-governmental healthcare providers and strong community based voluntary engagement programmes are some of the possible measures that will successfully scale up and strengthen sustainability of the two programmes currently run by BNF.

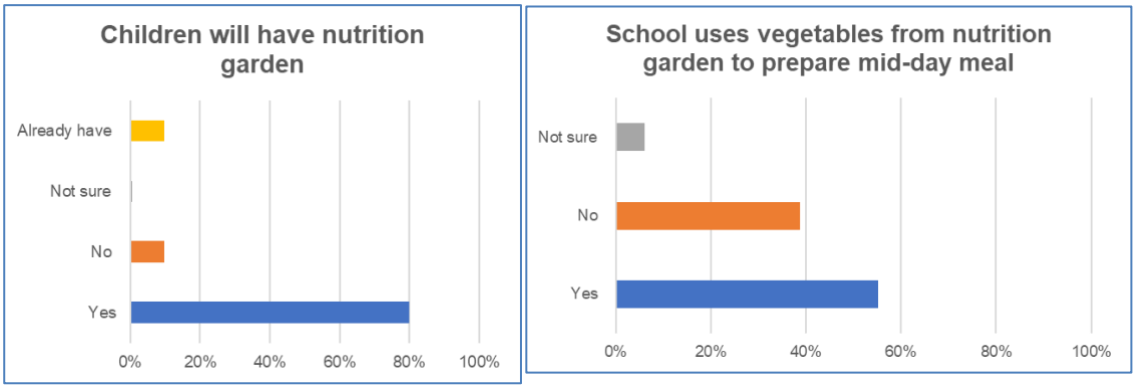
The key sustenance factors that will improve the sustainability of the programme and its interventions are for longer term are shared below:

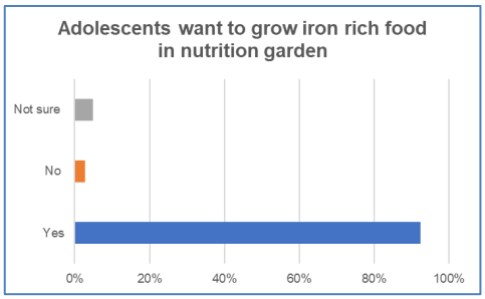
Sustaining, strengthening and sensitizing community about BNF's approach towards nutritious food habits is happening and team needs to strengthen the same further

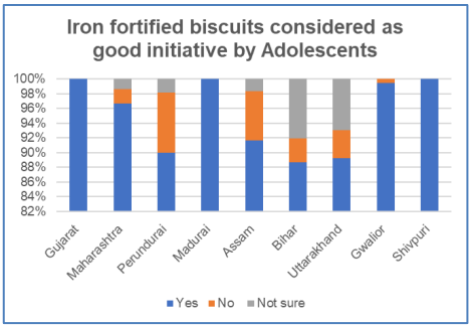
It is important that BNF team strategy should focus towards sustaining, and strengthening some of its most reliable initiatives with beneficiaries like nutrition gardens and iron fortified biscuits. Although the maintenance of the nutrition gardens can be assured by community members, but the availability of iron fortified biscuits to be distributed on a daily basis to children and adolescents in school need to be embedded within the programme implementation model. It was observed that:

- 80% children (6-9 years) shared during primary survey that they would like to have a nutrition garden in their home to support supply of food sources to prepare nutritious meals.
- 55% adolescents (9-19 years) shared that their school used the vegetables from nutrition garden to prepare mid-day meals.
- 92% adolescents (9-19 years) were interested to grow iron rich food sources in their nutrition garden
- 95% adolescents (9-19 years) consider that iron fortified biscuits provided by BNF in schools is a good initiative and will help address anemia and malnutrition related challenges. Adolescents from states like Gujarat, Gwalior, Assam and Shivpuri totally supported the fortified biscuit distribution.

Figure 16: Sustaining children and adolescents' beliefs, attitude and practice through nutritious food habits

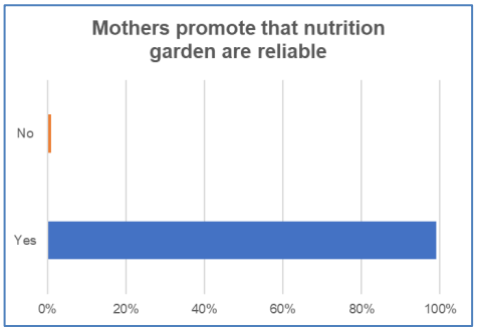


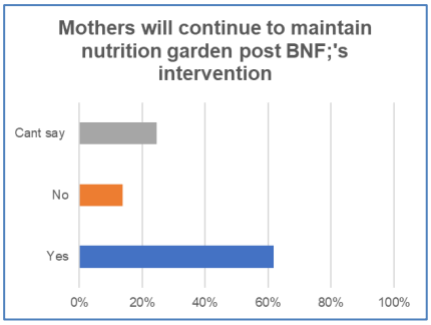




- 98% mothers of malnourished children found that nutrition garden was a reliable concept to ensure a sustainable cure from malnourishment and other deficiencies.
- More than 60% mothers of malnourished children mentioned that they will continue to maintain their nutrition garden even if the BNF's intervention ceases.

Figure 17: Sustaining mothers of malnourished children's beliefs, attitude and practice through nutritious food habits

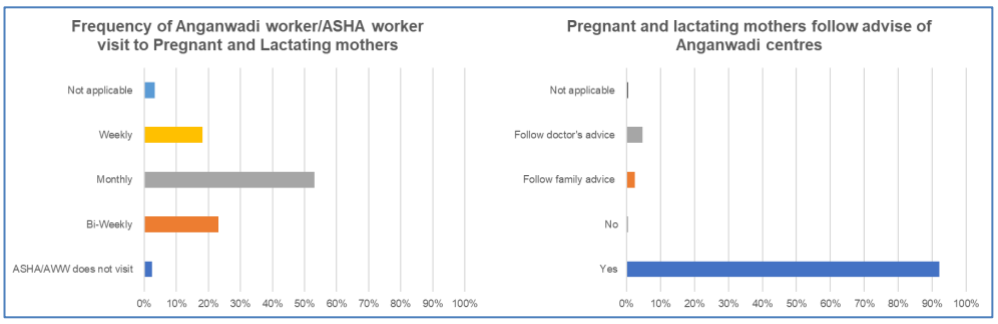




Sustaining access to government services and support systems at local level need to be maintained in order to make sure that more community members are using ICDS support services available at doorstep

It is essential that the team focused on sustaining and strengthening access as well as utilization of ICDS and other government health and nutrition support service. During the primary data collection, it was observed that 52% pregnant and lactating mothers confirmed that Anganwadi worker or ASHA workers visited them on monthly basis and 98% pregnant and lactating mothers confirmed that they followed the advice of government workers as shared with them from time to time.

Figure 18: Sustaining access and ensuring utilization of ICDS support services by Pregnant and lactating mothers



Liaisoning with similar interest partners for effective strategy and sustained growth

In the discussions with government support service agency such as ICDS, education department and academic institutions such as Krishi Vigyan Kendra, and Department of Forest it was observed that

- BNF's approach was holistic and addressed multiple aspects of nutrition related challenges
- Improvement was observed in nutritional and health status of the children and positive feedback was received from mothers and community members
- Improvement was also observed in Hb levels among some students after consuming fortified biscuits but anemia had not been fully resolved

The stakeholders requested for the following to ensure sustained impact and effect of the programme:

- ICDS request for BNF's continued support and commitment through their programme
- BNF should work with ICDS to prepare a system framework for monitoring health indicators on monthly basis and evaluating progress on quarterly basis
- BNF should consider adopting all schools in the district instead of just sample of schools so that more beneficiaries benefit from their programme.
- Most of the CSR organizations focus only on infrastructure development in schools, however this is the only organization that focused on addressing the nutritional challenges in school going children.

BNF team should work towards co-founding opportunities with other corporate partners, academic partnership and development fund institutions working on health and nutrition related agendas such as:

- Research innovative models of engagements, what kind of support service is required, awareness, and counselling sessions material, natural fortified sources of food, and other relevant research to various key challenges related to nutrition and its preventive care
- Scale up natural fortified food sources and other biofortified crops through nutrition garden model to ensure iron and folate rich food sources to beneficiaries
- Ensure exit strategy through proper hand hold, sensitization of Anganwadi workers, ASHA workers, teachers, suposhan sakhis, nutrition champions etc for long-term positive impact and utilization of support services.

Areas of improvement

BNF programme and its interventions are not sustainable with respect to its envisaged goal and objective and its desired outcome. We would like to suggest few improvements to strengthen and build programme's sustenance for future.

- **Sustainable Activities:** Plan and implement sustainable nutrition-related activities, such as cooking competitions, drawing contests, and awareness campaigns, to maintain student engagement and reinforce learning over time.
- **Build exit strategy from locations:** While moving from one location to other BNF should properly and swiftly hand over programme related interventions and forward outcomes expected to ICDS centers, community members/groups, school, Suposhan sakhis and Nutrition champions.

Best Practices

BNF's programme team is using various customized approaches as per the need of locations for effective implementation and execution of the programme. Some of the key best practices as highlighted during team visits are shared below:

Effective Referral and Treatment: Screening, counseling and referral of malnourished children to Nutrition Rehabilitation Centers (NRCs), followed by post-treatment follow-up visits, and supportive care has resulted

Case Study: Effective referral and treatment approach

One child (name not known), **born to mother Suman Kumari and Father Sanjit Kumar Rai,** was referred to the NRC in view of constant growth faltering. BNF field coordinator Subhash, Mr. Abhishek from Zilla, ASHA worker and Anganwadi helper all took the child to the NRC for admission. Child was admitted for a period of 21 days.

It was **observed that the child had not gained weight from the age of 3 years and since then the child's weight was only 5 kgs**. Child had **no appetite, and did not gain weight.**

It was later known that **child had an underlying heart condition requiring a surgical intervention**. Child is still awaiting to travel to Ahmedabad for the surgery sponsored by Government of Bihar.

The **follow up of the child's health and nutrition indicators are continuously done by Anganwadi worker, and BNF team**. Due to constant **follow up and regular check-up the child has improved fairly on nutrition related indicators and is more active**. Due to the timely screening, monitoring and referral, the child's condition could be diagnosed, and the child could get appropriate treatment.

Case Study: Transformation of Dharshika

Dharshika, 5 years old child from Kallanai village, often felt sick and went to hospital due to sickness, where she found that her hemoglobin (Hgb) count was less than 8 g/dl

Her parents didn't do adequate monitoring of her child's food habits and intake of iron rich foods. She was not regularly taking the IFA tablets also. Later she was found as underweight during the baseline assessment done by BNF Team.

After regular interventions with her parents, Dharshika's parents started focusing on Iron rich foods in their daily meals. Also she started eating the Iron biscuits and IFA regularly. Now we found Dharshika's Hgb count was 11 g/dl. Her parents were also very happy to see this transformation in her Hgb.

Growth Monitoring and Referrals: Monthly growth monitoring with the help of Suposhan Sakhi and Anganwadi workers resulted in regular tracking and timely referrals of undernourished children, leading to improved health outcomes.

Case Study: Kangaroo Mother Care Approach

A lactating mother, **Nishu Kumari Rupesh** had a **child with low birth weight**. She couldn't remember the birth weight of the child. However, she did mention that field coordinator Juhi had guided her on **Kangaroo Mother Care (KMC)**, that had the following positive effects:

- Stimulated the growth in low-birth-weight and preterm infants and has an important role in protecting infants from infection and hypothermia as well as encourages breastfeeding.
- helps in stabilising the heart rate and breathing pattern in infants, which eventually promotes good weight gain.

The mother was also guided on what nutritious food that can be consumed by her to make sure she gets adequate breast milk supply, and she was also guided on breast feeding techniques. All of these initiatives helped improve her infant's weight who is now healthy and free from malnutrition. This particular best practice and its impact on child's health has increased the awareness on these topics, and people are in a better position to make an informed decision to correct their lifestyle and use alternative approach to improve their family health and nutrition related indicators.

Awareness of WASH, and Menstrual hygiene education, and provision of sanitary kits: The awareness programme around WASH and menstrual hygiene followed by provision of sanitary kits to girls' students have supported the overall health education objective among adolescents. No health education can only stop at nutrition education, unless all the other underlying causes are not tackled.

Case Study: Improved Hygiene Level

Kondayampatti Hr.Sec.School in Alanganallur block has 222 adolescent boys and 215 adolescent girls. The major problem amongst the adolescents was open defecation and adolescent girls had to travel to their house for toilet usage and ease themselves. Though they had toilets, for many years the toilets were not functional.

Due to sewage problem, Water pipeline problem, toilets were not functional in the school. BNF took the initiative and fully renovated the girl's toilet with sewage tank and water pipelines along with awareness wall paintings.

Case Study: Inter-linking WASH and menstrual health with nutrition health

A **female adolescent student in one of the schools had a tendency of heavy bleeding** during her menstrual cycle. There was **no known cause of the heavy menstrual bleeding**. On regular checkup, it **was observed that she had a poor nutritional status with low weight.**

After **consumption of fortified biscuits provided by BNF and the food basket rich in iron and folate food sources and Vitamin C rich food sources helped her to improve her weight and health indicators** significantly. She also **reported to have lower occurrences of heavy menstrual bleeds**.

The **anemia status was not known earlier among students and with awareness and counselling among adolescents group on iron related deficiencies** has helped them become more aware and active.

Case Study: Inclusive approach

Chathiram Middle School is the only school in Sholavandhan panchayat, Vadipatti block enrolled with Special Children in their school. The only toilet in the school for the special children was not functioning.

Due to this the Special Children were not coming to the school. Students were taken care by the parents in their home itself. BNF took the initiative and renovated the special children toilet fully along with all the plumbing and electrical work.

Now the attendance rate of the special children has increased and the parents were also very happy about it. BNF has thus not only focused on the regular children but they are working also for the special needs in the schools.

Voluntary engagement programme: Bihar selected two types of Nutrition Champions, one for schools and the other for Anganwadi centers. School dropouts were selected to support the nearby Anganwadi and children in school were selected to support school-based nutrition activities. This reduced the burden on suposhan sakhis, who are only selected to be associated with anganwadis, and gave them enhanced support.

Case Study: Role of Suposhan sakhi

In **Diggi Khurd**, both parents of a child named Juhi were mentally unstable. The **girl child Juhi was found underweight and appeared to be in a red category of Wasting.**

Suposhan sakhi informed this to the BNF field coordinator and they referred the girl child to the NRC with the help of RBSK. After PHC doctor examination, **Juhi was admitted to the NRC Mahua which is 70 KMS from Hajipur for a period of 21 days**.

Juhi **recovered after the treatment with proper observation, medication and support of BNF, ASHA, and doctors**. Now the child is in normal category. It took her **almost 1 to 2 months constant observation**, regular checkups and frequent follow ups. **Suposhan sakhi made sure she conducts daily home visits for the follow-up after her discharge.**

BNF also supported this family for so many other things like kit distribution, the household essential items including warm cloths, utensils, lights etc. to adjust the household to a descent requirement of living standard.

Recognition of Suposhan Sakhi and Nutrition Champions: Acknowledging support of suposhan sakhis and nutrition champions in yearly events, and providing suposhan sakhi with a pink saree as a uniform, and providing Nutrition Champions with a cap and badge has built recognition of change agents among community members.

Enhanced Nutritional Awareness: The BNF's ongoing intervention has significantly raised nutritional awareness among students. Nutrition Champions play a crucial role in disseminating knowledge about hygiene, iron deficiency, vitamins, and iron-rich foods to their classmates and the broader community. The involvement of students in nutrition-related activities and competitions has reinforced their understanding and commitment to healthy eating practices.

Hands on engagement and good rapport with all beneficiaries and stakeholders: Most of the beneficiaries could name the BNF FCs in their locality and the support that was provided to them. They had a good communication mechanism to discuss issues, and challenges with the relevant stakeholders as well.

Technology-Enabled Data Collection and Management: The use of mobile applications and technologies enhanced efficiency and accuracy in program implementation and monitoring of data to be documented and used from time to time.

Challenges

Several common challenges were identified as part of the visits to the various program locations. These need to be addressed at programme design and implementation level to assure effective implementation, impactful outreach and long-term impact of the programme on lives of beneficiaries and other stakeholders

Some of the challenges highlighted are as shared below:

Socio-demographic challenges: Illiteracy among beneficiaries, socio-economic classification of beneficiaries, prevalence of early marriages concept and suboptimal WASH infrastructure at the household/community/school level at locations were some of the challenges identified. These challenges cannot be overseen during programme design and have to be customized, while working on the implementation plans. These sub-plans have to be interlinked and integrative ways have to be established during programme implementation to achieve the overall goals and objectives.

Health-related Challenges: Several cases of mothers neglecting children's health and following improper feeding practices, leading to readmission to NRC were seen. Hence inadequate follow-up and monitoring of beneficiaries after NRC treatment was another key challenge highlighted as one of the main reasons for sub-optimal nutrition standards among children and adolescents. Hence the programme intervention related to alternative feeding in case of no breastmilk production and complementary feeding should be re-emphasized as part of intervention to overcome this challenge. Counselling of new mothers and pregnant mothers on these concepts also is very essential.

Food baskets: Food baskets provided to the malnourished and anemic pregnant and lactating mothers is a good initiative however, the contents of the basket were not enough to last even one month. All beneficiaries and the BNF field staff believed that it should be increased to cover at least the entire pregnancy or at least 1 year after child birth. They also felt that it should be provided to all pregnant and lactating beneficiaries instead of just those or malnourished or anemic.

Poor health seeking behavior of the community: Unless the child is really unwell, its was observed that the parents did not take the child to a doctor. This is followed by their firm beliefs that government facilities are inferior, and private health facilities are superior. This has led to under-utilization of ICDS support services available near to them at minimal or no cost. Hence the programme interventions should focus on bridging the trust between community and ICDS so that there is better utilization of these services.

Parental Awareness and Involvement: While students are actively engaged as Nutrition Champions, sustaining parental support and involvement in nutritional practices at home remains a challenge for children. Awareness and counseling of parents and family as a unit on the health and nutrition subject is essential.

Student and community engagement voluntary programme: The voluntary programme started by BNF to support programme sustainability and effectiveness has limitation both in terms of design and implementation. It is highlighted that the process of nominating Nutrition Champions by teachers vary in effectiveness, necessitating need for clear guidelines and ongoing training to ensure consistent leadership and knowledge dissemination. The results are similar to active involvement of susposhan sakhis. In case of suposhan sakhis the transfer of programme from social service to entrepreneurial sustainability is essential for its successful results.

Infrastructure and Logistics Challenges: Limited network connectivity in some villages and inadequate storage facilities for nutrition biscuits in Anganwadi/ schools.

Technical nutritional knowledge Challenges: Training and awareness content depth is missing among the beneficiaries. Most of them could not correctly explain the dietary changes that need to made during pregnancy and lactation. Not many could elaborate on the food sources of dietary iron. Many of the participants did not know about the benefits of breastfeeding for mother and child. Some also thought it was

okay to give water in addition to breast milk to children under 6 months of age. Knowledge on why the biscuits were provided to the school students, and the why they were fortified seemed to be lacking among students as well as school teachers.

Program Implementation Challenges: Inability to monitor nutrition biscuits in schools due to summer holidays and insufficient infrastructure in Anganwadi centers (e.g., water supply, purifiers, tanks, electricity)

Human Resource Challenges: Small staff managing a large number of beneficiaries, compromising program quality, high workload of surveys, documentation and app tracking for ASHA and Anganwadi workers, and limited techno-savviness among anganwadi and ASHA workers regarding mobile apps

Training and Capacity building of field staff: No proper training for the team members on technical aspects of nutrition, health and hygiene while onboarding new staff.

Poor visibility of BNF's concepts among government and other related institutional bodies: Poor visibility of concepts like Suposhan sakhi and Nutrition champions among government stakeholders like ICDS and Education Department due to informal collaborative work nature.

Sustainability of Initiatives: Maintaining the momentum of nutrition-related activities, competitions, and awareness programmes over time requires strategic planning and resource allocation. Limited resource at field level pose a big challenge in effective parallel execution of program activities.

Recommendations

The report concludes by providing specific recommendations that BNF could consider for design and planning and implementation in the future in order to redress the challenges faced. These recommendations here reiterate the key ones and elaborate on the ones sprinkled throughout the Findings section, under various headings, as below:

Recommendations for Malnutrition Prevention Programme

Strengthening technical content of awareness and capacity building sessions: Programme should strengthen its content especially in terms of building awareness and knowledge about various concepts such as what is malnutrition, benefits and purpose of identifying malnutrition, symptoms to look for and what preventive measures to take to avoid the same. This will ensure desired and long-term positive impact among beneficiaries and their quality of life.

Emphasize utilization of ICDS services by beneficiaries rather than access: Right now programme focus more on access to ICDS service however looking at National Health Statistics (NHS) and primary data, beneficiaries are aware about ICDS and its services however they do not use these services due to lack of trust. Programme should build approach to create trust and symbiotic relationship among ICDS and community.

Ensure inter-linkages of various sub-components of programme interventions: Programme interventions such as WASH, infrastructure support – WASH facility, menstrual hygiene etc. should be integrated with health and nutritional indicators rather than delivering it in sole formats.

Building exclusive component on breastfeeding, complementary feeding and alternative feeding for Pregnant/Lactating mothers: NRCs and ICDS stakeholders as well as NHS and primary data suggest that most of the health and nutrition related challenges starts with poor or no breastfeeding practices during early 6 months of infant's life. Also beneficiaries have myths about using other complementary and alternative practices for ensuring feeding to infants.

Contributing to national research through known academic partners: With growing nature food and nutrition business, challenges are complex and need more grounded and empirical evidence to support right approach and practices. BNF should focus on collaborating with academic institutions to develop guided and evidence based research.

Expanding scope of programme intervention: Expanding programme's intervention with mid-day meal programme, National Poshan Abhiyan and food supplementation through formal collaborative approach with government.

Customizing programme as per location requirement: Curating location based malnutrition prevention programs based on the post-secondary and primary research of the location on various health and nutrition indicators as per National Family Health Survey . The health camps held by BNF should not be just for HB testing. They should include pediatricians to do a complete health checkup for the children.

Recommendations for Anemia Prevention Programme

Strengthening technical content of awareness and capacity building sessions: Programme should strengthen its content especially in terms of building awareness and knowledge about various concepts such as what is Iron Deficiency Anemia (IDA), benefits and purpose of identifying IDA, symptoms to look for and what preventive measures to take to avoid the same. This will ensure desired and long-term positive impact among beneficiaries and their quality of life.

Emphasize utilization of government health department and its services by beneficiaries rather than access: Right now programme focuses more on access to services such as getting iron folic acid tablets, deworming tablets etc. however looking at National Health Statistics (NHS) and primary data, it is evident beneficiaries are aware about these services. However, they do not prefer to use these services due to lack of trust or unless it is very much required. Programme should build approach to create trust and symbiotic relationship among government support services and community.

Ensure inter-linkages of various sub-components of programme interventions: Programme interventions such as WASH, infrastructure support – WASH facility, menstrual hygiene etc. should be integrated with health indicators rather delivering it in sole formats.

Contributing to national research through known academic partners: With growing nature nutritional deficiencies among stakeholders, business, challenges are complex and need more grounded and empirical evidence to support right approach and practices. BNF should focus on collaborating with academic institutions to develop guided and evidence based research.

Scale up natural fortification programmes and introduce bio-fortified crops through nutrition gardens: Liasoning with like-minded partners or private sector players or government entities, BNF should support natural fortification programmes and bio-fortified crops through their nutrition gardens. Iron fortified biscuits should be made available in different flavours and not be the same every month. They can also be made available as plain biscuits, cream biscuits, etc

Customizing programme as per location requirement: Curating location based anemia prevention programme based on the post-secondary and primary research of the location on various health indicators as per National Family Health Survey .

Recommendations for improving overall programme design and planning

Outcome over outreach: Team should value outcome over outreach. Programme at present focuses on quantity that is number of beneficiaries reached by programme through various activities but is not able to ensure quality of those to the reached for the desired impact for long run. The long term vision or impact intended by programme is also missing.

Expand Nutritional Programs: Continue and expand the distribution of iron-fortified biscuits and ensure regular consumption of iron tablets, and advocate to bring a morning breakfast scheme by the state government to all schools.

Enhance Student and Community Engagement: Programme should consider to strengthening incentivization of nutrtion champions and suposhan sakhis. They should provide them some skill-based training to promote nutrition and health related education and alternative livelihood opportunities.

Suposhan sakhis are currently not accountable or responsible for any activity and do the work as social service to the community. So they should be made more accountable through formal training and refresher trainings, providing financial compensation for their time (this was asked by many sakhis in many states), providing books on nutrition, links to nutrition topics on the Internet, etc to keep them engaged. They should also be recognized as community social workers on public forums in their villages through the Gram Panchayat, etc. Slightly older women should be selected as suposhan sakhis so that they can use their own child bearing and rearing experience into use.

The motivation of **Nutrition Champions** should be maintained by regularly recognizing their efforts with badges and other incentives. More community-oriented activities and awareness programs should be organized to extend the impact of nutritional education beyond the school. Nutrition Champions should be selected based on some competition in the school and not by the BNF FCs or the school teachers.

Parental Awareness and Involvement: Parents of malnourished children should be invited to the monthly meetings with the Anganwadi Sevikas in order to understand the progress their child is making nutritionally, and also use this opportunity to imbibe knowledge on good nutritional and dietary practices.

Strengthen Infrastructure: Secure the nutrition garden with proper fencing and implement simple bottle drip irrigation to ensure its sustainability and year-round productivity, expedite the completion of wash station reconstruction to enhance hygiene practices among students and advocate for the construction of a compound wall to improve overall school security and cleanliness.

Strengthen support systems: The teachers and the headmasters can also be trained on a quarterly basis on technical aspects like nutrition, health, and hygiene, Anemia prevention along with the nutrition champions so that they act as a backbone to provide sound technical knowledge or resolve queries in absence of NCs and also are aware about the capacity building initiatives by BNF.

Recommendations for improving overall programme implementation and monitoring

Technical guidance and delivery module: More technical guidance delivery modules can be created to focus on balanced diet, my plate my nutrition concept that are more pictorial in nature. Cooking demonstration of high protein, and energy dense meals using ration kits from Anganwadi, and BNF food baskets would help the mothers understand the concept of improving nutrient density in the meals.

Capacity Building and Partnerships: Increase the number of Field Coordinators to maintain quality of work, provide training on nutrition aspects to Nutrition champions, suposhan sakhis, teachers and Anganwadi workers, expand partnerships with local NGOs, healthcare providers and educational institutions, leverage additional resources and support to the field coordinators as well as DPOs for a comprehensive program and the mental health and well-being program for field staff can be also be taken up by the administration team.

Symbiotic relationship with NRCs: BNF can look into providing capacity building sessions once in a month or quarter to the patients admitted in the NRC on Infant and Young Child Feeding practices to strengthen the bond between NRC and BNF, this can also promote visibility for BNF. BNF can support the NRC in conducting various sessions for the admitted patients like skits, games, or prepare targeted IEC modules to help achieve the objectives of the NRC.

Facilitate Experiential Learning: Arrange field visits for students and Suposhan sakhis to farms, food processing units, or nutrition research centers to enhance their practical understanding of nutrition and agriculture. Encourage more hands-on activities such as cooking demonstrations, gardening workshops, and hygiene training sessions.

Educational and Leadership Development: Clear Nomination and Training Guidelines for Nutrition Champion and Suposhan sakhis should be ensured. Provide clear criteria for selecting Nutrition Champions and offer ongoing training to equip them with the knowledge and skills to effectively promote nutrition and hygiene within their peer groups.

Sustainable Activities: Plan and implement sustainable nutrition-related activities, such as cooking competitions, drawing contests, and awareness campaigns, to maintain student engagement and reinforce learning over time.

Build exit strategy from locations: While moving from one location to other BNF should properly and swiftly hand over programme related interventions and forward outcomes expected to ICDS centers, community members/groups, school, Suposhan sakhis and Nutrition champions.

Recommendations for improving programme implementation across locations

Maharashtra (Ranjangaon): Decrease the number of villages covered as they are very far apart and the FCs cannot visit all the villages regularly.

Gujarat (Jhagadia): Alcoholism is a very big problem here and affects the children's nutrition. BNF should tie up with some other NGOs to resolve this issue. Sickle cell anemia is a hereditary problem in the tribes of this region. When 2 people with sickle cell anemia get married and have children, it gets passed on to the child also. This directly affects the nutrition status. Hence BNF should include testing for sickle cell anemia as part of the awareness programs for adolescents in schools to break this cycle.

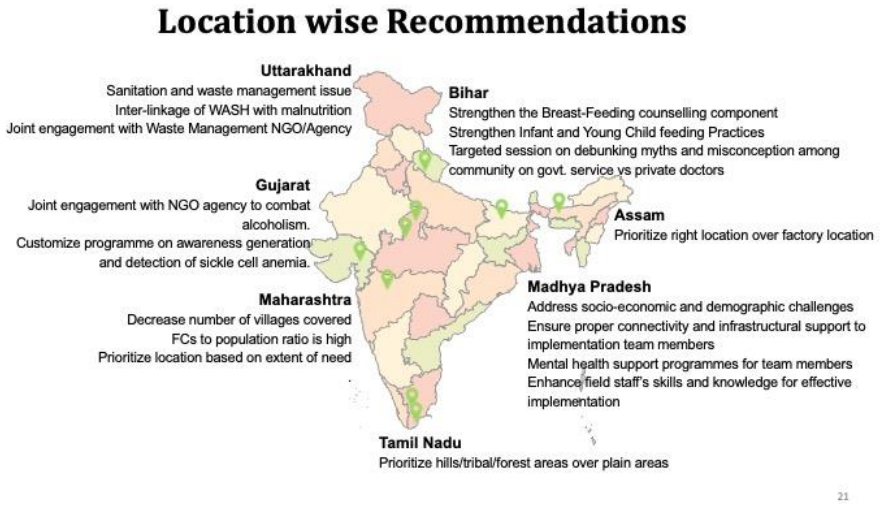
Uttarakhand (Rudrapur): Most of the interventions are in slum pockets, which have sanitation issues and directly affects nutritional aspects among children. Hence BNF should tie up or work with NGOs on waste management issues.

Perenduria: The intervention is not required in the plains as there are very few cases of malnourishment seen. The intervention is required in the hills and forest areas, which has a severe need for the program. Hence BNF should select the blocks to work in accordingly.

Assam (Kamrup): The selection of blocks for the intervention needs to be looked at as the current blocks do not have many malnutrition cases.

Bihar (Hajipur): Programme should strengthen the exclusive breast-feeding and breastfeeding plus complementary feeding for at least two years counselling component within their programme intervention with pregnant and lactation mothers. This will help programme strengthen Infant and Young Child feeding practices, which in turn will impact overall health and nutritional status of children in the long term. Team should also plan targeted awareness sessions on debunking myths and misconception among community on government service vis-a-vis private doctors.

Madhya Pradesh (Gwalior and Shivpuri): The programme should address socio-economic and demographic challenges of locations and design programme interventions based on same. Programme should ensure proper connectivity and infrastructural support to implementation team members for smooth, effective and efficient work progress. BNF should invest in employment engagement and support programme for continuous mental health support training. Capacity building and referral services for team members. BNF should invest on continuous learning and development of its central and field staff's especially on their skills and knowledge for effective implementation and leadership development for progressive career growth.



Conclusion

The holistic support provided by BNF as part of Malnutrition Prevention and Anemia Prevention Programmes with collaboration with NGO Partner and facilitated by government agencies such as ICDS, Education Department, RBSKs etc. have led to improved health status of SAM/MAM children and anemia prevention and related healthcare indices and metrics. The programme is very well structured and relevant for the key challenges as faced by country and nutritional sector.

The programme and its interventions have led to overall improvement in knowledge or understanding of the key concepts like malnutrition and anemia among the beneficiaries, change in attitude and preventive practices adopted by beneficiaries for improved quality of life, and enhanced access and utilization of government support services such as Anganwadi centers, NRCs, government hospitals etc.

BNF's Social Behavioural Change model and support activities are dictated somewhat by needs of the community, scientific evidence and the call of the government. The initiative also paved way for future readiness, symptoms control and avoidance of hospitalization of infants and children for malnutrition or anemia.

All interventions of BNF's programmes under the thrust areas of Angnwadi Center and School help strengthen key systemic structures such as basic infrastructure facilities required and help to clearly deliver the intended impact. The programme is able to deliver to a certain degree its intended objectives and benefits across the cohort of beneficiaries. The programme has helped in enhancing professional and vocational skills of its key stakeholders with defined training and capacity building manuals with an aim to empower beneficiaries with right information as well stakeholders to deliver the same. The programme has also led to improved knowledge, change in attitude and preventive practices adopted by community members and inclusivity of local members as key volunteers of change such as Suposhan Sakhis and Nutrition Champions.

Provision of suposhan sakhi and nutrition champion is one of the vital aspects of the programme that provide opportunity of co-ownership of programme intervention, its outputs and activities by community for longer period of time and long-lasting impact. An increase in financial budget especially for some of the key components like IEC, Communication, nutrition garden, food basket and nutrition supplements, e-modules with assessments frameworks for volunteers and stakeholders, and infra support requirements will result in improved efficiency of the programme. The shift of social service to entrepreneurship model for suposhan sakhis and reward programme for nutrition champions can strengthen the overall programme outcomes and act as a key catalyst in the lives of the community and beneficiaries. The programme should ensure key liasioning and partnerships with government and private stakeholders for sustenance. These partnerships will help programme achieve its outcomes post exit as well. Programme should define key exit strategy in consultation with location staff and stakeholders for effective realization of programme's objectives.