Nutrition – The Way and the Destination

Steps to Destination

Technical Resource Guide

Freedom from Hunger India Trust

Pradan

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CONTENTS

Section No.	Section	Page No.
i	Acknowledgements	4
ii	Abbreviations	5
iii	Preface	7
iv	Executive summary	8
1	Introduction	9
2	Building the Blocks for Multi Sector Interventions	14
3	Key Strategic Interventions under the RNP	43
4	Key Tools used in the RNP	52
	Annexure	66

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Most of the sections added here are based on the hands-on experiences we had through our Implementing Partners PRADAN & Vaagdhara, and the Resource Partner, CHETNA.

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ABBREVIATIONS

ANM	Auxiliary Nurse Midwife
ASHA	Accredited Social Health Activist
CNA	Community Nutrition Advocates
CSC	Community Scorecard
FAO	Food and Agricultural Organization
FFHIT	Freedom from Hunger India Trust
FGD	Focus Group Discussion
ICDS	Integrated Child Development Scheme
M&E	Monitoring and Evaluation
MAM	Moderate Acute Malnutrition
NSA	Nutri Sensitive Agriculture
PEM	Protein Energy Malnutrition
PLA	Participatory Learning and Action
PLC	Pictorial Learning Conversation
PRA	Participatory Rural Appraisal
RNP	Rajasthan Nutrition Project
SAM	Severe Acute Malnutrition
SBCC	Social and Behavioral Change Centered
SC	Scheduled Caste
SHG	Self Help Group
TOC	Theory of Change
WASH	Water, Sanitation and Hygiene
WHO	World Health Organization

FOREWORD

A.R. Nanda,
Board Chair - Freedom From Hunger India Trust,
Former Secretary, Ministry of Health & Ministry of Finance, Government of India.

Nutrition has been a hot topic in the world over, with many finding it difficult to meet the minimum intake of food for survival; some others have found the quality and quantity of food taken in being hazardous and equally unhealthy. It is my pleasure to present here the experiences of the Rajasthan Nutrition Project (RNP), a flagship multi-sector nutrition program, by Freedom from Hunger India Trust, which has shown one of the best ways of addressing malnutrition among the poor and marginalized, especially women and children, with the active participation of the empowered community.

After bringing out a policy brief on the method of working with the people in tribes and other such marginalized communities, to bring about sustainable solutions—addressing their nutritional needs, livelihood requirements, and health, the RNP with professional support has developed this Technical Resource Guide. This Guide would help one to experiment the RNP model with confidence.

Best wishes to the authors and the entire team who have produced this Guide for making it a practical resource for health and development agencies.

PREFACE

One of Freedom from Hunger India Trust's strengths is in creating and delivering innovations that support the self-help efforts of the poor, especially women, by integrating Microfinance, Education, and Health Protection. We partner with a range of local financial service providers and non-governmental organizations, and seek ways to leverage our integrated services and behavior change communication interventions in health and governance sectors, which has a direct bearing on livelihood and gender equity. We support partners in conducting evidence-based evaluations, making informed policy outcomes and impact, as well as to replicate and scale up.

Bearing testimony to our model was The Rajasthan Nutrition Project which has brought about encouraging changes in the lives of the women in the remote rural areas of Rajasthan in terms of improving their nutritional status, and thus gives a boost to the entire families that they manage. The two-year project with a multi-sector intervention leveraged the competencies of local organizations and volunteers and reached out to more than 8000 women to impact the lives of nearly 30,000 persons in the project locations towards a nutritionally balanced life. The major achievements of the intervention could be briefed as empowered women, empowered local partners and the ease of monitoring and managing.

While the results of this project and the experiences are brought out by us as a Policy Brief, this document would serve as a Guide to implement the 'model'. This Technical Resource Guide outlines about ten steps that could be considered for implementing multi-sector interventions on nutrition, by providing an overview, a rationale, critical actions, best practices, resources, and tools.

We welcome your feedback, comments, and concerted action to take the Nutrition Agenda forward.

Saraswathi Gopala Rao
Chief Executive Officer
Freedom from Hunger India Trust

May 2017

EXECUTIVE SUMMARY

As succinctly highlighted by the World Nutrition Report 2016, addressing malnutrition is a formidable challenge. While the term malnutrition is an omnibus term for both over and under nutrition, for this document, it refers only to under-nutrition. There is recognition that the social and economic inequities are the basis for widespread hunger and malnutrition and that it is important to address malnutrition through integrated and multi-sector approaches. Given the various determinants of malnutrition, for a sustainable solution a multisector intervention is required.

This Technical Resource Guide outlines the approach for a multi-sector intervention for nutrition based on the experience from a project implemented by the Freedom from Hunger India Trust (FFHIT) in association with field partners PRADAN and Vaagdhara, and the Resource partner, CHETNA. The project worked with the Self-Help Groups of women on social and behavioral change, nutri-sensitive food based approaches, financial literacy, and linkages with government services and governance institutions, to bring a difference in the lives of about 8000 persons directly, and about 30,000 persons through them. Underlying the entire strategic intervention was the focus on empowering women.

The Guide introduces about ten steps that could be considered for implementing multi-sector interventions on nutrition. The focus is only on preventive interventions in rural areas. The guide book is meant for a development context and not an emergency context. Based on the intervention of the RNP, the guide outlines four key strategic interventions viz,nutri-sensitive food based intervention; access to financial services and health savings for emergencies and linkages: advocacy; and, policy interventions across sectors. The strategies proposed for the interventions are underpinned by two non-negotiable aspects. They are: community mobilization and empowerment of women.

The guide also outlines the key strategies and interventions that were undertaken in the RNP and a section on tool box outlines the key tools that were used in the RNP.

The purpose of this technical resource guide is to enable knowledge on how to plan, implement, and evaluate multi-sector interventions to improve nutritional outcomes, and to be available in the public domain. It does this by providing an overview, a rationale, critical actions, best practices, resources, and tools for multi-sector interventions on nutrition.

"Sharing and enjoying the burden of feeding"

INDIVIDUALS AND COMMUNITIES DO NOT LIVE THEIR LIFE BY SECTORS

Individuals and communities do not live their life by sectors. In their everyday living, all issues and concerns get merged and inter-mingled. Similarly, the determinants of many issues that they face, be it health or livelihood also cuts across sectors. For instance, malnutrition may be an outcome of food insecurity, or a result of a range of non-food factors, which has immediate, underlying, and basic causes. The immediate causes relateto food and nutrient intake, and to health. Underlying causes include impacts at household and community levels (such as household food insecurity), poor care for children and women, poor health and hygiene practices, and poverty. The basic causes of undernutrition are rooted in sociocultural, economic and political aspects.

if the intervention for addressing iron deficiency in a community is to only provide IFA tablets, without equipping the community with the knowledge to deal with the issue by using local resources or food, then, the process leads to dependency, and is disempowering

While the determinants are multi-dimensional or multi-sectoral, the interventions are usually sectoral. Nutrition is often seen as a health issue and the interventions are largely clinical in nature. When viewed in such a narrow sectoral manner, the interventions tend to be a quick fix and disempowering. For instance, if the intervention for addressing iron deficiency in a community is to only provide IFA tablets, without equipping the community with the knowledge to deal with the issue by using local resources or food, then, the process leads to dependency, and is disempowering.

To both empower the community and find a sustainable solution to the issues of malnutrition, the interventions must be based in social, political and economic contexts along with the clinical context. In other words, any intervention to address malnutrition must be integrated, multi-dimensional and multi-sectoral.

The need for multi-sectoral interventions is recognized: evident from the many interventions that are being undertaken across the world. However, implementing a cross-sectoral program is not easy. Many national governments face significant issues in implementing multi-sector interventions, given that the goals of each sector vary and sometimes they work at cross purposes.

While there are multi-sector interventions, very few resources are available on how to plan and implement an integrated intervention on nutrition. More so, when the resources – time, finances and capacity are limited. In other words, how do we implement an integrated intervention for addressing malnutrition in a low resource setting? This guide book seeks to do that based on an intervention undertaken in Rajasthan.

Malnutrition – an overview

Malnutrition is an umbrella term for poor nutrition. It denotes: the excess consumption of nutrients (over-nutrition) and the inadequate consumption or absorption of one or more nutrients (under-nutrition). Under-nutrition specifically refers to a deficiency. This guidebook focuses only on under-nutrition, even if the term malnutrition is used.

Malnutrition is a formidable challenge – a fact that the Global Nutrition Report 2016[1] has succinctly pointed out. The WHO considers poor nutrition as the single most important threat to world health[2]. An estimated 45 percent of deaths of children under the age of 5 are linked to malnutrition[3]. Malnutrition is one of the largest risk factors responsible for the global burden of disease. According to the Global Nutrition Report, 2016 "the economic consequences (of malnutrition) represent losses of gross domestic product (GDP), year in and year out, of 10 percent—far greater than the annual percentage loss in world GDP due to the global financial crisis of 2008–2010".

As mentioned above, there are immediate, underlying and basic causes that impact malnutrition or under-nutrition specifically. The risk of under-nutrition, though present in the entire lifecycle, impacts more at certain points: specifically, it impacts more during pregnancy, lactation and the first 24 months of a child. Also, as mentioned above, there are aspects of geography, socio-economic issues and gender inequity that impact under-nutrition. A large proportion of the undernourished children and women are concentrated in only a few countries of Africa and South Asia. In these locations, the status of women is low too. They are overburdened with work, lack education and consume less nutritive food than required but continue to give birth to many children. Thus, their status, their workload, and their food consumption practices all have an inter-generational impact. This cycle of inter-generational under-nutrition must be broken.

According to Ruel; et.al; (2013) "Nutrition-sensitive programs draw on complementary sectors such as agriculture, health, social protection, early child development, education, and water and sanitation, to affect the underlying determinants of nutrition, including poverty; food insecurity; scarcity of access to adequate care resources; and to health, water, and sanitation services. The key features that make programs in these sectors potentially nutrition-sensitive are: they address the crucial underlying determinants of nutrition; they are often implemented at large scale and can be effective at reaching poor populations which have high malnutrition rates; and they can be leveraged to serve as delivery platforms for nutrition-specific interventions. Nutrition-sensitive programs might therefore help to accelerate progress in improving nutrition by enhancing the household and community environment in which children develop and grow, and by increasing the effectiveness, coverage, and scale of nutrition-specific interventions."

[1] See http://www.globalnutritionreport.org/the-report/ (accessed on May 19, 2017).
[2] Turning the tide of malnutrition, Responding to the challenge of the 21St century World Health Organization, available at: http://www.who.int/mip2001/files/2232/NHDbrochure.pd
[3] The Lancet's Series on Maternal and Child Undernutrition, Executive Summary, available at: http://www.thelancet.com/series/maternal-and-child-nutrition

The Rajasthan Nutrition Project

The Rajasthan Nutrition Project (RNP) is an integrated intervention to address malnutrition in two blocks of Rajasthan, India. The intervention is supported by Freedom from Hunger IndiaTrust along with two field partners – Vaagdhara and Pradan – in the districts of Banswara and Sirohi respectively.

The RNP is a multi-sectoral project designed to reach at least 8,000 women SHG members and their households (an additional 30,000 family members) in Sirohi and Banswara. The Community Nutrition Advocates (CNAs) chosen from the SHGs played a significant role in enabling this change. Rural communities of these two districts suffer from high rates of stunting, wasting, infant mortality and maternal mortality, with an especially heavy burden among the disadvantaged tribal and Scheduled Castes (SCs).

The project built the capacity of Vaagdhara and Pradan to integrate vital health and nutrition knowledge, financial literacy and resource management nutrition into existing SHG activities. The project was implemented by field partners who worked with the SHGs and who were supported by several CNAs. In addition, it enabled support for improved gender awareness, linkages to nutrition-related services and advocacy for a better service delivery in the target communities. Along with the field partners, the FFHIT brought in CHETNA as a knowledge partner to develop the information and communication packages to build the capacity of the community.

Key goals that guided the Rajasthan Nutrition Project were:

- To improve knowledge, behaviors, and access to local services related to nutrition for women, adolescent girls, and young children.
- To facilitate dialogue that will lead to increased women's empowerment and more gender-equitable resource management and food distribution within the household.
- To improve women's financial literacy, resource management ability and skills related to planning for better household nutrition.

About the Technical Resource Guide

Based on the two-year experience of the intervention, this guide, seeks to lay out the pathway for implementing an integrated project linking nutrition, health, agriculture, and financial services with women's empowerment as a cross-cutting approach. The approach that is presented in the guide has the potential to ensure nutritional security. This document could serve as a technical support tool in improving household nutrition

with a special focus on women and the girl child – the more vulnerable groups in the families. It presents an approach that is feasible, cost-effective, scalable and one that could be implemented in low resource settings.

The use of this document

The guide represents the consolidation of key elements and approaches implemented in the RNP to accomplish the goal of achieving nutritional milestones through empowered women.

The guide can be used to:

- Design or integratenutritional components in the on-going interventions in low resource settings.
- Understand preventive interventions that address aspects of malnutrition, specifically in rural areas.
- Mobilize local community participation and ownership as part of the project design process. Community ownership and participation are critical to this process. It is important to incorporate the views of the community, the partners, and the local agencies in the design.
- Empower women for successful nutritional intervention, by improving their ability to take important decisions.
- Understandnutrition and health from a food utilization - consumption lens and suggest ways of selecting diet, diet quality, and feeding practices with an emphasis on social and behavior change.
- Enable communities to leverage their entitlements from the government to address availability and access to food.

However, this guide does not focus on developing a comprehensive food security program for rural communities. It is relevant for use in development contexts and not for emergency conditions.

This guide book complements various other resources available on this issue, some of which are mentioned in the subsequent sections.

Please note that the guidelines given are not prescriptive. The organizations or individuals should eventually decide what is best in the given context and initiate the process.

In implementing a multi-sector intervention on nutrition, it is useful to proceed carefully, by making the best use of evidence that is available, identifying the key gaps that need to be addressed, prioritizing the key interventions, given the specific needs and available resources to realize significant nutritional outcomes. The aim of this field guide is to enable that.

Structure of the Technical Resource Guide

Section 1: Introduction

Section 2: It outlines the building blocks that could be considered for developing a multi-sector intervention on nutrition. As mentioned above, this is a suggestive and not a prescriptive approach. Also, the guide provides an overview of the key aspects without delving into significant details of the methods.

Section 3: It details the key strategic interventions under the RNP. The interventions are detailed under four broad strategic interventions:

I. Strategic and behavior change and community mobilization,
II. Nutrition sensitive food based interventions,
III. Access to financial services and
IV. Linkages, advocacy, and policy interventions across sectors.

Section 4: It describes some of the key tools that were used in the RNP.

Annexure: It lists some of the key definitions.

In the guide, the key lessons and experiences from the RNP are highlighted in **blue** and the lessons from other contexts, and reports are highlighted in **green**.

Step 1: Deciding whether and where to work on Nutrition – Gathering and Synthesizing Information on the Nutrition Situation

Prior to initiating a multi-sector intervention on nutrition, it is useful to gather and synthesize data to

- ➔ Determine if the intervention is warranted in that setting, based on data that is available in the public domain, or through community consultations.
- ➔ Identify the reasons for under-nutrition, in that specific context
- ➔ Based on the reasons, list an initial set of key intervention areas from a prevention perspective.

As part of the decision making, it is also useful to map what currently exists in terms of

- Government policies and programs on nutrition
- Service availability, access and utilization
- Quality of services.

More details on how to undertake a formative research and baseline is provided below. These processes elaborate on how to gather evidence to decide upon intervention strategies. However, prior to reaching that, it is useful to first decide if the intervention is required; if yes, if it is feasible to do so.

Gathering, synthesizing, and mapping details help to inform the decision making on appropriate nutrition approaches.

Step 2: Identifying the right Partners

For any organization (support organization or an implementing agency), it is useful to assess if there are other organizations or community groups who are already involved. This helps to ensure that the intervention can leverage the existing strengths. It helps to complement any existing intervention and not duplicate any ongoing efforts. For instance, if there are any existing community groups or women's collectives, such as Self-Help Groups (SHGs), they could be partnered in the process.

Advantages of working with existing groups or partners

- Benefit of local/traditional knowledge
- Saves time
- An existing social capital that could be leveraged
- Ensures sustainability of the interventions

The RNP Approach in Identifying Partners

Having decided to implement the project in remote locations of Rajasthan, India, which has a significant population from the Tribal and SC communities, the RNP developed a format for the partners' appraisal. The key aspects considered were:

a) The existing outreach of the partners

b) Partners' involvement in community group formation, especially of women members

c) Partners' interventions in agriculture and agro-based livelihood interventions.

After a rigorous appraisal process, both PRADAN and Vaagdhara were identified as field partners for the intervention. The advantage of linking up with partners was also that the process would be sustainable beyond the project period, as the partners would probably continue the interventions.

Step 3: Articulating the Goals and Objectives of the Intervention

Nutrition as an issue has many aspects, ranging from clinical to social. For instance, a more clinically oriented program may seek to focus on addressing deficiencies, such as an iron deficiency, from a clinical point of view. A more socially oriented program would like to focus on,say, gender inequity in food distribution, supplementing the nutritious quotient of the agricultural produce, etc. It is important to undertake a visioning exercise as it also helps to focus and understand the scope of the proposed intervention. A project cannot address all aspects; more so, as financial resources are usually limited. Hence, it is important to recognize and narrow down to what the project can address, and what it cannot.

In other words, it is useful to articulate a goal of the proposed intervention. It helps to detail what the project seeks to achieve and the change it intends to bring in the lives of the people/community, for whom the intervention is intended. The goal that is articulated at the beginning of the intervention could always be refined/modified as a better understanding of the context and situation occurs. The goal helps to guide the interventions – inspirationally and practically. It is an end-state that is aspired for.

According to Ruel et al (2013), a nutrition sensitive intervention or program is one that addresses the underlying determinants of fetal and child nutrition, and development— that is, food security, adequate caregiving resources at the maternal, household and community levels, access to health services and a safe and hygienic environment—and incorporates specific nutrition goals and actions. Apart from the sectors that address the underlying determinants, the definition lays emphasis on the fact that the proposed intervention should have specific goals and actions. In other words, there is a need to be explicit about the nutritional outcomes or goals that are expected from the intervention[1].

The focus also helps to be clear on the strategies to be pursued. For instance, an intervention focusing on child malnutrition would frame different strategies and interventions, compared to one that focuses on improving the general health status of the household.

Interventions on nutrition have many dimensions. The specific context and community needs would inform the details of the intervention. Clear articulation of the outputs and outcomes of the intervention helps in designing the strategies.

Step 4: Developing a Theory of Change

A Theory of Change (ToC) outlines how the change that is proposed would be realized. ToC is the thinking behind how an intervention will bring about results. The process for developing a ToC usually starts with asking the question 'What is the long-term goal or outcome?' Based on the goal, the next step to consider is 'What (pre) conditions must be in placeto reach the goal?'. These necessary conditions are then the outcomes to realize the goal. The early preconditions of outcomes lead to intermediate outcomes finally leading to the long-term outcome or the goal. Thus, it also outlines the causal linkages in any intervention. Theories of Change are useful for understanding and assessing impact in complex programs and hard-to-measure areas such as governance, capacity strengthening, and institutional development.

The steps to create a ToC[2] are:

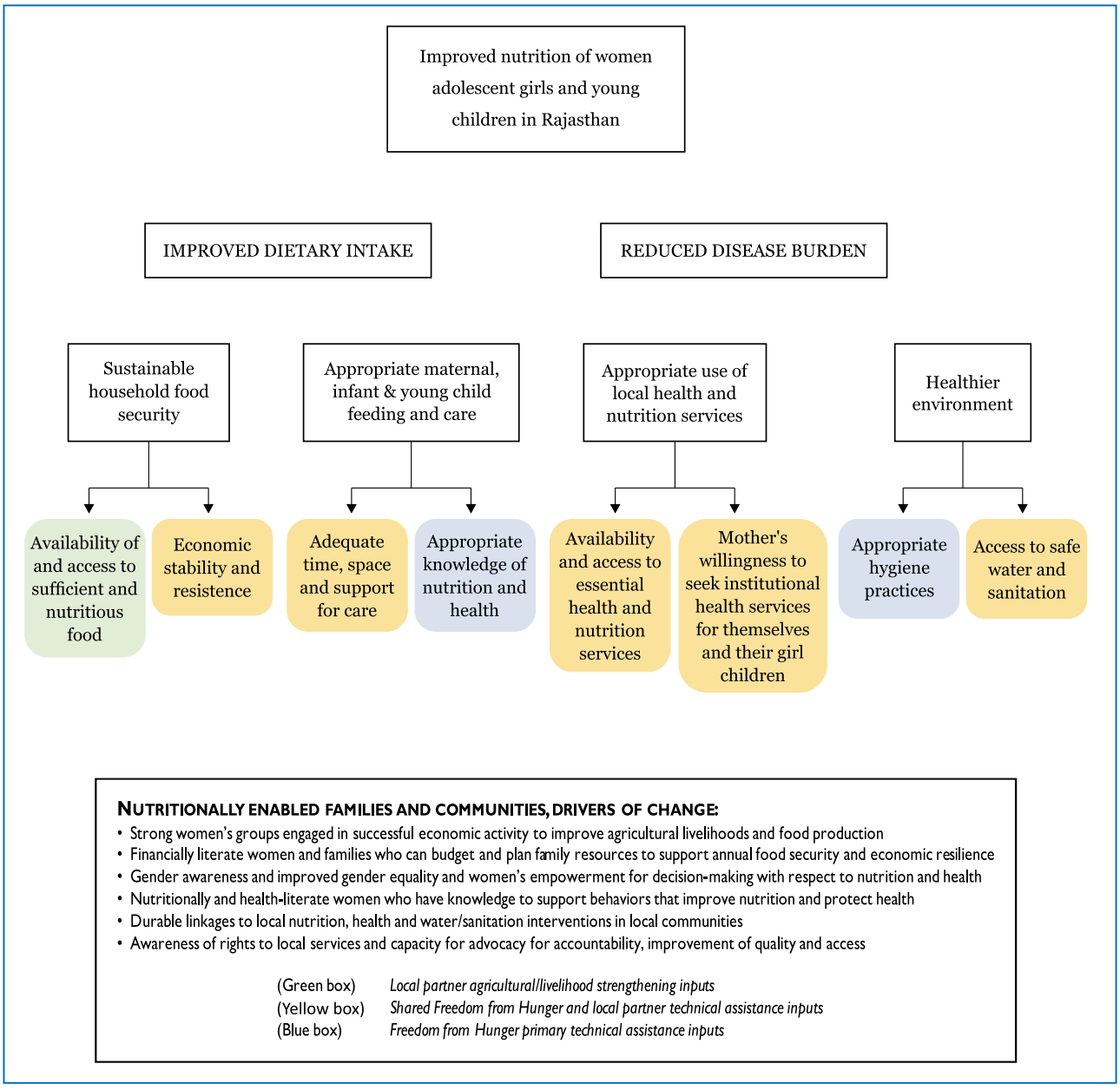
1) Identify a long-term goal.
2) Do backward mapping to identify preconditions necessary to achieve the goal.
3) Identify interventions to realize the preconditions (outcomes), or to develop an outcomes framework.
4) Develop indicators for each outcome to assess the performance of the project.
5) Prepare a narrative to summarize the key components of the ToC.

[1] Ruel, et.al (2013); op. cit.
[2] See https://www.annmurraybrown.com/single-post/2016/03/09/What-is-this-thing-called-Theory-of-Change

A ToC helps to put together the larger picture i.e., where the activities are leading up to. Developing the ToC helps the team to recognize each outcome, and the processes that are leading to it. In the absence of a ToC, the project is a mix of activities, which may create an impact, but will fall short of having an envisioned change, since the pathway that will lead one level to the next is missing. The ToC is best done when it is developed based oncommunity experiences - done in consultation with the implementing partners and the communities that you intend to work with.

For a targeted intervention, it is of fundamental importance to be able to state, "How will the change that you envision occur?"

Theory of Change: The Rajasthan Nutrition Project



Step 5: Evidence-Based Intervention - Getting to know the community better

Forcing ideas/interventions on a community because it worked elsewhere may not work in another context. Hence it is imperative that each nutrition intervention is context specific.

Knowledge alone has limited relevance when a person has no money to purchase food

It is critical to have evidence of what the community understands, values, resists, uses, practices, promotes, and terms as taboo. One of the starting principles of a nutrition based program is to gather evidence of nutritional practices and ideas that the community holds. In nutrition, it is important to understand the cultural practices with respect to food. It is also important to understand what food is locally available, it's seasonality, etc. This is the first step for an evidence based programming. It is critical to understand the community that the organization plans to work with. Research must be undertaken around the issues that the planned intervention prioritizes.

Evidence on the following aspects helps to inform the intervention.

- Food Consumption practices- availability of food and food diversity practiced by community
- Cultural beliefs and practices
- Community Profile
- Livelihood sources and patterns
- Agricultural practices
- Vulnerable groups in the community
- Availability of health and nutrition services
- Policies and programs of the government
- Any other external context that would have an impact on the intervention

Understanding food consumption practices– including its availability and diversity– is important, as even those who can afford food may be under-nourished due to food consumption practices. However, often, it is the lack of the availability of food, both, in quantity and in quality, which makes chronic hunger a concern, especially in under-privileged communities. The reason is often related to economic conditions, and the poverty levels of the families. Hence, while designing an intervention on nutrition, it is important that it addresses food insecurity. Knowledge alone has limited relevance, when a person has no money to purchase food. Thus, for a multi-sector intervention, it is important to have deeper insights to their economy, crop growing patterns, food availability and coping mechanism, when food is scarce.

Some of the methods for evidence/data collections are detailed below:

I. Formative Research

Research that is undertaken prior to the start of the project, i.e. at the conception and design stage, is referred to as formative research. It can also be conducted during an ongoing program, to change or to modify certain aspects, to fit the situation on the ground, better. Formative research plays an important part in designing messages/ interventions in a way that can positively impact the behavior of the communities.

Formative research helps in identifying problems, concerns and the status of situation, around which the interventions are being considered. It helps in providing a realistic picture of the community.It also helps to understand what will and will not work, and thus prioritize interventions based on community needs, and their status for desired outcomes.

Ideally, formative research should combine several methods[3], and use different sources of information,to gather different perspectives and cross-check the data obtained. Depending on the availability of resources, the feasibility of large-scale surveys, and participatory research methods[4] could be used to collect the information.

Formative research may also include a baseline study, i.e. an initial assessment of the situation the project aims to change.

Formative research is undertaken to help "form" or modify a program. Formative research should be an integral part of developing or adapting projects, and should be used to help refine, and improve them.

Formative research for the Rajasthan Nutrition Project

A formative research was undertaken as a part of the RNP. The following tools were used for the purpose:

1) FGDs with women, men and caretakers, to understand nutrition and the feeding practices of children in the community.
2) Key Informant interviews to know about the causes of occurrence of diseases, malnutrition, prevailing WASH practices, diarrhea management, breast-feeding practices, and women's nutrition in the community.
3) Seasonality Calendar to examine the impact of seasonality, related to household decision- making for nutrition.
4) Market walk to assess the availability of types of food items with the cost, to estimate the expenditure of families on purchase.

[3] See Leslie O. Strolla, Kim M. Gans, Patricia M. Risica; Using qualitative and quantitative formative research to develop tailored nutrition intervention materials for a diverse low-income audience. Health Educ Res 2006; 21 (4): 465-476. doi: 10.1093/her/cyh072

[4] See CARE 2013; Formative Research: A guide to support the collection and analysis of qualitative data for integrated maternal and child nutrition program planning. Cooperative for Assistance and Relief Everywhere, Inc. (CARE). 2013.

5) Participatory Rapid appraisalto determine decision-making during financial stress, and frequency of the period.
6) Household income generation analysis to assess the gender roles and decision-making behaviors, focusing on food and nutrition security.
7) Venn diagram to understand community linkages with institutions, and understand the closeness, contact and utilization of services from them.

Based on the details collected, the following themes were prioritized to undertake capacity building, behavior change and other field based interventions

- Gender, Principles of Nutrition, and food availability
- Infant and Young Child Nutrition
- Adolescent and Maternal Nutrition and Health
- Linkages with health and nutrition services
- Financial Management

II. Baseline surveys

As mentioned above, a baseline assessment could be a part of the formative research. Or, it could be done independently too. The baseline provides a critical reference point for assessing changes and impact, as it establishes a basis for comparing the situation before and after an intervention, and for making inferences as to the effectiveness of the project.

A baseline assessment is a crucial element in any Monitoring and Evaluation Framework. The data to be collected depends on the goals of the project, the theory of change that is underlying, the change indicators that are defined in the monitoring, and evaluation framework. Baseline information should be carried out in such a way, that the same type of data can be collected after the intervention, to compare the results and assess the extent of change, or lack thereof.

Sometimes, the data needed for a baseline may already be available. If yes, then, the data may be collected and updated, as required. Often, there will not be any existing data, it will be incomplete/ of poor quality, or it will need to be supplemented/ broken into categories that are relevant for the project being implemented.

When planning a baseline study, it is useful to determine both what change is to be assessed and how to compare the change(s). There are two common ways to measure change:

Baseline information should be carried out in such a way that the same type of data can be collected after the intervention, to compare the results and assess the extent of change, or lack thereof

- 'with and without' – this process mimics the use of an experimental control, and compares change in the location where the intervention has been done as against a location where it has not been implemented.
- 'before and after' – it measures change over time in the location where the intervention has been implemented.

The baseline should be linked with the monitoring plan of the intervention to ensure that data is collected for any subsequent reviews and evaluation. The data collected should help to assess the results.

As mentioned above, in addition to secondary and published sources of information and data, baseline data may be collected specifically for the project through surveys and other qualitative and participatory methods.

To measure the effect of the project there is a need to be able to compare the situation before the project started and the situation at the end of the process. The baseline information provides the basis against which to measure changes in practices, after the intervention is undertaken.

Baseline for the RNP

For the RNP, a baseline was conducted as a part of the formative research[5]. Key findings of the baseline are:

- Food diversity was very low.
- Coping strategies focused on less preferred foods, consuming next year's seed stock and by reducing portions.
- Almost the entire community defecated in the open, and only a small proportion of households treated water before consumption.
- Treatment seeking was usually delayed, due to the cost and the distance to health facilities; many followed practices which are not recommended for managing issues, like diarrhea.
- In the household, men usually decided on most issues.
- Many households saved. Grains and livestock were also a part of the savings that the households had.
- Exclusive breastfeeding was not practiced by all despite many having knowledge about it.
- Domestic violence appeared to be prevalent across most households.

[5] Dr. Arindam Das, IIHMR; Bobbi Gray, Freedom from Hunger

Getting back to the community

Always remember to get back to the community with the gathered findings. It is important for them to know what they have invested their time in. It is not only an exercise in values and ethics, but also an important preparatory phase for them, where they begin to understand their own set of practices, and the impacts that these practices are having on them. Prepare for the dissemination day and record the responses of the community.

Getting back to the community reduces their fear, makes them understand the need for change and reasons thereof. This further makes them participative members in their own development, rather than having them become apprehensive about planned interventions. It is important from the perspective of making the intervention sustainable after the project period, and to gain better results. Moreover, it is best to make the community as partners in the process, as the change must happen by and through them.

The Progress brought forward:

End line assessment – key findings of the RNP

- Significant increase in food security, mostly attributed to an improved knowledge of foods to eat and agricultural production
- Significant gains in dietary diversity, particularly with roots/tubers, milk, green leafy vegetables, and other vegetables
- Significant gains in the use of ICDS centre services, particularly supplementary food, health education, breastfeeding support, growth monitoring
- Increase in the use of flush/pour toilets & reduction of defecation in the open
- Increase in the knowledge and the use of ORS
- Fewer delayed treatments for herself or her children due to cost
- Increased joint decision-making across the board & increased mobility
- Savings increase in all indicators (health, food, grain), but livestock
- Increase in the knowledge regarding initiation, and the length of time one should breastfeed a child
- Reduction in being afraid of their husbands
- 68% report having a kitchen garden.

Step 6: Synthesize and Analyze Data

The process for data collection has been outlined above. This data needs to be synthesized and analyzed. The data would help to determine priorities.

Often, projects seek to achieve targets of, say, 60 percent or more of the target population practicing a recommended behavior. Any recommended behavior practiced below this cut-off could be a nutrition priority. When several behaviors are classified as nutrition priorities, and the resources are limited, prioritization must be undertaken. Prioritization may be based on considering which behavior change will have the largest impact, and which ones are the most feasible to change. The team could classify the changes required as low, medium, high or very high, based on the context and design of the intervention.

It is important to remember that there are no straight-forward decisions.However, it is useful to interpret the data well, to arrive at a final decision.

Step 7: Designing the Project

There are many cross-cutting approaches that could be considered for nutrition intervention. Many of these approaches have been implemented in many contexts, for improving nutrition outcomes. In this resource guide, four cross-cutting approaches are described:

I. Social and behavior change, and mobilization of communities;

II. Nutri-sensitive food based interventions focusing on household food security;

III. Access to financial services, & health savings for emergencies; and

IV. Linkages, advocacy, and policy interventions across sectors.

Women's empowerment as a cross-cutting intervention across all approaches

Women's Empowerment – a means and an end

Women's empowerment, a focus of many development interventions is both an end and a means to realize outcomes such as poverty reduction and human capital development. Studies indicate that there is a positive association between women's empowerment and improved nutrition outcomes. In the context of agriculture and nutrition, women's empowerment both as an end and as a means is championed. "Closing the gender gap" by enabling women to have access to land, resources, labor is believed to lead to significant gains and improved health and nutrition. Further, women as primary caretakers influence the health and nutrition outcomes of their children and family.

Empowerment has many interpretations. Empowerment, according to some, means having the agency or the ability to define one's goals and act upon them. Thus, it not only means decision making and having choices, but also means having the ability and the freedom to bargain, negotiate, reflect, and express. Agency is thus the defining criterion of empowerment. Agency thus, would be both individual (power to) and collective (power over). However, it is important to note that women's empowerment is context specific and multi-dimensional. Further, women are not a homogenous group.

In choosing strategies, it is useful to consider if the proposed intervention is empowering or disempowering the community. Some interventions could be disempowering because they only provide short-term relief and often have external persons dominating the decision making. On the other hand, interventions that are empowering help people to address their nutrition concerns both individually and collectively to build their nutritional self-reliance, and to reduce their need for support over time. To the extent feasible, all forms of malnutrition should be addressed in social, political and economic terms, and not only in clinical terms. For instance, merely providing micro-nutrients in the form of tablets or medicines for addressing the issue of iron or vitamin deficiency without equipping the community to deal with the issue by better use of local food could be disempowering.

Empowerment ... not only means decision making and having choices, but also means having the ability and the freedom to bargain, negotiate, reflect, and express.

The strategies proposed in the guide favor such empowering approaches that further illustrate the need for establishing organic linkages between the strategies. For instance, the social and behavior change strategies are required to shift communities and adopt food-based interventions for improved nutritional outcomes.

I. Social and behavior change and mobilization of communities

A Social and behavior change centered (SBCC) approach enables change in behaviors, including service utilization, by positively influencing knowledge, attitude and social norms. SBCC is a strategic, systematic and targeted approach that uses science and data to reach multiple levels of society – individual, community and institutional. It is systematic, evidence-based, participatory, and strengthens the stakeholders' capacities.

interventions that are empowering help people to address their nutrition concerns both individually and collectively to build their nutritional self-reliance, and to reduce their need for support over time

The SBCC approach focuses on:

- Changing or positively influencing social norms, in support of long-term, sustainable behavior change at the population level,
- Fostering long-term, normative shifts in behavior, in support of increasing the practice of healthy behaviors,
- Improving the services of provider-client interactions,
- Strengthening community responses to issues,
- Influencing decision-makers, and family and peer networks,
- Increasing the demand for services and products,
- Increasing the correct use of services and products,
- Influencing policy, and
- Encouraging an increased capacity for local planning and implementation of health improvement efforts.

SBCC efforts are more effective when they are matched with efforts to expand services, to increase access to commodities, and to train and equip providers to meet an increased demand for products and services.

To develop a comprehensive SBCC approach, four key issues must be discussed:

1) Whose behavior needs to change to bring about the desired nutritional outcomes? Who are the audience? (E.g. women and men in the household, health and nutrition workers, etc.)
2) What behavior or practices would the project like them to adopt?
3) Why are they not doing it now?

4) What strategies /interventions can be included in the project to address those factors?

The Table below provides an overview of the some of the possible approaches for SBCC, which are also linked to the other strategies outlined above.

SBCC Approaches	Access to Food & better nutrition	Linkages to other sectors/services	Financial services
Interpersonal/ individual/ household approach	• Encourage homestead/backyard cultivation of vegetables & fruits • Communicate on how to increase the shelf life of food by processing and increasing bio-availability through germination and fermentation	• Provide information and encourage women to access the health and nutrition services that are available, especially for maternal health and children	• Promote gender sensitivity among men to ensure that women manage the household finances, especially food procurement
Community approaches	• Develop a model farm or nutrition gardens to showcase dietary diversity at low costs using locally grown crops/vegetables • Identify community advocates to promote good feeding and nutritional care practices	• Encourage the community to monitor government services to get their entitlements. • Monitor school meal program, if any, to ensure that children access nutritive food	• Encourage the community to form SHGs or microfinance groups for increasing access to finance • Encourage the creation of common/ social fund that could be used for meeting out of pocket expenditure to access health services

SBCC Approaches	Access to Food & better nutrition	Linkages to other sectors/services	Financial services
Addressing structural aspects	• Encourage men to eat together with the family and to ensure that women get equal access to food	• Ensure that no girls get married before 18 years • Encourage children to go to schools • Advocacy for strengthening health systems, wash programs and interventions in other sectors	• Address the barriers that women face in accessing resources, especially finance and other productive resources, such as land

Community Mobilization: Providing tools in hands of the community

a) Community Nutrition Advocates of the RNP

The drivers of change in the project have been the Community Nutrition Advocates or the CNAs. The CNAs facilitated the project implementation. They are called Shakti Bais in Sirohi and Annapurnas in Banaswara. They have been the link between the project and the women in the community. They have also been the key women who have led the way, demonstrating the ideas that the RNP held.

The CNAs are women from the community and are a part of SHGs. They are persons who are usually actively engaged in the group. CNAs are not necessarily formally literate persons, but have demonstrated initiative, and had the natural elements of a leader. Many of them pursue what they consider right, despite the struggles in getting families and others to accept it. These CNAs were nominated by their own groups, and then formed a part of the community core group who got trained in the curriculum of the RNP. They underwent a series of trainings and interfaces with the local government, departments and service providers. The CNAs then, in turn, went and trained the women SHG members on the same, using certain IEC materials that was provided to them.

Criteria for Selection of CNAs in the RNP

- Should be a member of a SHG
- Maintain discipline and have good communication skills
- Have leadership quality
- Respected and well-known within her own community

- Ready to give some time every day
- Passion for development work on a voluntary basis
- No family restriction on mobility
- Eager to learn new things
- Program ownership to address development issues in her own community in a voluntary manner
- A fellow-feeling attitude to encourage collective action, to address community issues in a holistic manner
- Good listening ability in the group, and to act as an invisible facilitator, to promote collective action, community ownership, and participatory decision making

The CNAs were the key link between the new information that the RNP brought and the women of the SHGs. They, in a way, steered the implementation on the ground. They not only trained the women of the village, but also demonstrated many suggestions to increase the food cum nutrition security on the ground. So, the other women, who were neighbors to the CNAs, also 'saw' how things could be done, and what benefits could be reaped out of the same[6].

b) Community-led video to promote nutrition in Odisha

Innovation that focused on explaining the importance of nutrition to people via videos was piloted in 30 villages in Odisha. The results of this study show that the approach is highly promising and offers an excellent opportunity to respond to key human development needs in nutrition and in agriculture. The demand for videos is high, and the acceptability of the intervention by SHG members, their families and the frontline health workers is strong.

The videos were educative, and informative though made interesting movies. Although some of the practices shown in the video were different from the traditional practices, people were willing to accept the change. For instance, pregnant women who used to do all work earlier, now get their mother in laws' support to do most of the work and they stick to cooking.

The members also showed signs of retaining most of the knowledge, especially the importance of first 1000 days breastfeeding, and the importance of washing hands. Even though the project did not aim towards SBCC people did show signs of change which was another plus point. Keeping SHGs as the focus point the project has helped in spreading the information well among the members.

[6] Kadiyala, Suneetha, et.al.; 2014. Using a Community-Led Video Approach to Promote Maternal, Infant, and Young Child Nutrition in Odisha, India: Results from a Pilot and Feasibility Study. Arlington, VA: USAID/Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) Project.

c) Engaging with men in the RNP

The RNP further ensured that men were involved in the process. Men were encouraged to get involved in household chores and support their wives by sharing their responsibilities. The sense of mutual ownership in household responsibilities has been highlighted through training modules under the RNP. As a result, many men helped their wives and shared household chores particularly when their wives were pregnant. Many husbands have been found helping their wives in cooking, fetching drinking water from distant places and taking wives to health centers for regular check-ups during pregnancy. Male members have also been encouraged to participate actively in village-level campaigns to reinforce the message of male involvement under the project.

d) Community Monitoring of School Meal Program In the RNP

Community monitoring has been very effective in ensuring that the service providers are accountable. Women's groups went to schools to monitor mid-day meals, and check if they are being provided on time and by the menu. If not, they took up the issue with the school head, to ensure that the menu and time are followed. CNAs and women also decided to check not only mid-day meals, but also whether sanitary napkins are being distributed to the girls, as directed by government rules.

II Nutrition-sensitive food based interventions focusing on household food security

Nutrition-sensitive food-based strategies primarily include food production, dietary diversification, food fortification and food preservation. They focus on improving diets in both quantity and quality, to overcome food shortages and prevent malnutrition. Apart from the recognition of the intrinsic value of food for nutrition, it underscores its importance and social significance in reducing poverty and strengthening livelihoods. The strategies help to improve the health and wellbeing, income, and livelihood, and have an impact on the national wealth, too. Most importantly, food-based approaches are viable, affordable, sustainable; in the long term, they bring social, cultural, economical and environmental benefits. They are local and sovereign interventions.

The primary importance of food-based interventions for improving household food security and addressing malnutrition is clear. Agriculture is a livelihood for many. It is the major source of food. The poor, largely, are involved directly or indirectly in agricultural activities. If agriculture fails, it has a ripple effect on the economy. Agricultural failure impacts the poor very hard. Given their dependency, agriculture offers significant potential for achieving sustained improvement in the nutritional status of the rural poor.

According to the World Bank[7], there are five pathways for linking agriculture and nutrition. They are:

- Subsistence-oriented production for the household's own consumption, i.e., quantity and diversity of food produced for own consumption;
- Income-oriented production for sale in market, i.e., sale of surplus produce in the market to generate income;
- Reduction in real food prices associated with increased agricultural production;
- Empowerment of women as agents, instrumental to household food security and health outcomes;
- Maintenance of an indirect relationship between increasing agricultural productivity and nutrition outcomes through the agriculture sector's contribution to national income and macroeconomic growth; i.e., impact of agricultural growth on GDP, and its impact on poverty and food security.

There are multiple pathways through which food-based interventions could contribute to addressing the nutrition gap.

- Narrowing the gap between the current and the potential production of food crops could lead to increased production, availability and access to a variety of food.
- Narrowing the 'nutrition gap' between current food intake patterns and intake which are optimal in terms of macro- and micronutrient content. In other words, ensuring intake of the required healthy diet.
- Enabling Bio-availability (ability of body to absorb) of micronutrients.

a) Increased production, availability, and access to a variety of food

Some of the interventions under this could include:

- Enabling locally appropriate agricultural interventions to improve food security. These could include interventions to promote the home-based

[7] See World Bank, 2007; From Agriculture to Nutrition: Pathways, Synergies and outcomes; http://siteresources.worldbank.org/INTARD/825826-1111134598204/21608903/January2008Final.pdf (accessed on May 20. 2017)

cultivation of vegetables and fruits and/ or home-based ownership of livestock or poultry for meat.

- Increasing the shelf life of food products through preservation and drying, and ensuring their availability during lean/off season.
- Reviving any traditional/community knowledge on the cultivation of locally appropriate crops/vegetables, to enhance nutritional outcome.
- Enabling household access to foods, by linking communities to livelihood interventions or by enabling savings groups to provide a buffer during lean season.
- Access to food supplementation programs, such as the school meals program or the nutrition program for small children.

b) Ensuring intake of the required healthy diet:

This could involve social & behavior change, and nutrition education, to increase the demand for and consumption of nutrient rich food. This could further include strategies specific to each target group:

- Promoting exclusive breastfeeding for infants
- Appropriate diets for pregnant women
- Complementary foods for young children
- Community sharing of food, especially for those in need.

c) Enabling bio-availability of micro-nutrients:

- Home processing of food, such as germination and fermentation.
- Dietary combinations to enable better absorption/increased bio-availability of micronutrients, such as food fortification at home, by mixing flours or lentils and vegetables.
- Reduce consumption of dietary inhibiters (e.g. consumption of tea or coffee before or with a meal is believed to reduce absorption of dietary iron)
- Changes in the way of cooking, like covering food while cooking, or using the skin of some vegetables that are usually thrown away, or cutting vegetables into bigger pieces.

Use of iron pans to cook food – one way to address anemia in the RNP

A practical suggestion that emerged during capacity building trainings, was to use iron pans for cooking food. It was felt that this could be one of the cost-effective methods to address the significant prevalence of anemia among girls and women in the project area. Many accepted this suggestion and bought iron pots costing about Indian Rupees 150 to 200. This was a substantial investment for a poor family and many women used their own savings to buy these pots. This decision was also taken collectively as a group by the women.

According to Ruel; et.al.; (2013)[8] "nutritional effect is more likely when agriculture interventions target women and include women's empowerment activities, such as improvement in their knowledge and skills through behavior-change communications or promotion of their increased control over income from the sale of targeted commodities."

However, it must be kept in mind that food-based programs though sustainable methods take time to establish, and to show impact. Hence, it is useful to 'pick the low hanging fruits', especially the if the duration of the project is short. This could include interventions such as kitchen gardens, nutrition education in schools, etc.

III. Access to financial services and health savings for emergencies

Lack of access to resources and finances is one of the underlying causes of malnutrition. While families may be attuned to and aware of the nutritional needs, especially those with children, they may not have the cash to convert their intention to actual practice. There are a few options that could be considered for access to finances like:

- Conditional cash transfer
- Unconditional cash transfer
- Support from micro finance organizations or SHGs

a) School Feeding Programs – Conditional Transfer of Resources

According to Ruel., et.al., (2013) "school feeding programs are a type of conditional transfer, albeit in kind. Like other transfers, they are mainly a form of social assistance for consumption. The links to nutrition are less direct than transfers targeted to mothers and children during the first 1000 days, but school feeding can reduce hunger and stimulate learning.... Results from a meta-analysis show that school feeding programs have small effects on school-age children's anthropometry, particularly in low-income settings. Major effects on height are not expected in school-age children and weight gains can be either positive (in underweight populations) or negative (when risks of obesity are high)"

[8] Ruel, et.al (2013); op. cit.

Research indicates that when poor people get cash transfers, consumption goes up in proportion or at a higher rate. Hence, increasing the disposable income in the households could be an important strategy for addressing nutrition. Also, evidence suggests that when social transfer of money is targeted towards the women, the money is spent for the well-being of the family.

Further, microfinance and SHGs help families to tide over shocks, and to maintain their food consumption by availing loans. Moreover, the process of engaging with other members of the communities linked them into a social support system. This also enabled a system of social obligation to help others in difficult times, including bringing food at difficult times. There is evidence that SHGs promote social cohesion, facilitate collective action, and provide an informal safety net for their members, by providing funds to support families in dire times.

There is now substantial evidence to indicate that women are likely to use a larger share of the income or resources under their control for food, education, etc. However, many women in the developing countries do not have access to resources. They are often denied ownership of land or access to credit or resources. Women rarely are consulted when making decisions on household resources. To address these issues, there is a need for interventions on financial literacy for women, designing products that are suitable for them, and ensuring that women access financial institutions.

b) SHGs and Nutrition in the RNP

Access to finances through SHGs enabled women in the RNP to exercise agency and influence decisions in the family. The SHGs were linked to various livelihood options. The power of cohort, their ability to leverage finances from the SHGs, and exposure to institutions including officials from the local governance structure, ensured a sense of self-worth among the women. The process also built significant social capital. It has led to the recognition of the women as 'productive members' in many households. The process has also enabled many women to have agency and to decide on behalf of the households. This had an impact on the nutritional outcomes of the project.

IV. Linkages, advocacy and policy interventions across sectors

Given the focus on multi-sector interventions, linkages and advocacy across sectors become extremely relevant. More so, as government department, work in sectors, and there is a need to leverage government programs for a larger impact.

Putting together a compendium on schemes and programs

A practical way to enable linkages is to prepare a compendium of schemes and programs of various ministries and government departments. This compendium could be updated on a regular basis. The information could be collected through desk based research, combined with visits to ministries/departments.

It will also be useful to keep important application forms for various government programs that could be accessed by the community. The roles and responsibilities of various government officials could be documented for the benefit of the community.

Mapping of services and using scorecards to build linkages is also an approach that could be considered.

Health sector/services have significant links to addressing under-nutrition. This includes the access to services by pregnant women, newborn infants, and for other health needs such as diarrhea. Clean water, basic toilets and good hygiene practices are essential. The importance of nutrition- sensitive agriculture has been demonstrated in the RNP. In addition to these sectors, the other sectors that are relevant include:

Education: It has a significant impact on nutrition. The relevance of education, specifically girl child education, goes a long way in maintaining a nutritionally balanced family. Schools play a role in many countries, by providing meals/supplementary food during school hours; this has an impact on nutritional status. Further, schools can play an important role in educating students on various health and nutrition related issues. There are a lot of examples where schools play an active role in establishing a rooftop rainwater harvesting system, to provide clean drinking water to students. The harvested rainwater is also used to maintain a nutrition garden within the school premises, to cook mid-day meals, and to maintain clean toilets.

Nicaragua: integrating food security in primary education.

This process started with the setting up of a few school gardens and culminated after 3 years with the integration of nutrition education into the curriculum of primary schools. The use of the garden as a learning and social instrument, to create nutrition awareness and citizenship (given the different age of the pupils involved) is one demonstration of the feasibility and richness of an integrated approach to food and nutrition security. Now, over 10,000 schools participate actively in the implementation of national food and nutrition security.

Social protection: Many governments provide social safety nets for the community. This includes insurance, wage employment opportunities, and subsidized food f or the poor & vulnerable communities. In some countries, pregnant women are provided with cash to ensure that they do not work during pregnancy, and consume nutritive food.

In India, the government has a conditional cash transfer scheme under its Maternity Benefit Program.

Women's empowerment: Many countries have programs to address gender inequities and to enable the empowerment of women. There are examples of countries that frame laws to enable women to own land, enabling women to be part of the governance system by reserving seats. These interventions for women empowerment have a significant impact on nutritional outcomes.

Linkages in the RNP

The RNP built effective linkages with the Integrated Child Development Scheme (ICDS) for accessing nutrition, health facilities and healthy practices for expectant /lactating mothers, children and adolescent girls. To access the health services, the community was mobilized to use services for children and women, CNAs supported Village Health and Nutrition Days (VHNDs) by providing knowledge to mothers visiting with their children, about child care practices, and vaccination, and by enhancing good health practices for children. CNAs used VHND as an opportunity to provide education to young mothers coming to health centers, they also mobilized women to access health services

The Public Distribution System (PDS) is a source of partial food security for poor families. The community was provided details of the entitlements due from PDS and how they could access it. The process of community monitoring also ensured that PDS supplies became regular, thus enabling the households to be more food secure.

The Gram Panchayat Nutrition Security/Support Groups (GPNSG) were formed for Advocacy on Health, Nutrition and Livelihood. In such groups at the Panchayat (a governance institution at the village level), members collect issues from villages and through SHG meetings, and represent those issues at the Panchayat meetings.

Step 8: Capacity building of the partners

As mentioned above, leveraging the strength of the partners brings in significant dividend. However, not all partners can undertake multi-sector interventions on nutrition. Hence, their capacity needs to be built to implement the project. Their ability to see the linkages across sectors for nutrition must be built.

Capacity, most simply defined, is the ability to carry out stated objectives. In the context of multi- sector nutrition intervention, it relates to the ability at various levels (individual, group, organization, human resource, system, state, ecosystem) to perform effectively, efficiently and in a sustainable manner, to realize the nutritional outcomes.

To build the capacity of the partners, a structured capacity building process must be developed, and apart from an initial capacity building, there must be consistent field-based support to the partners to ensure that the outcomes are realized. The process

of capacity building could, however, vary, depending on the initial capacity of the partners.

Under the RNP, building capacities of CNAs was the key, as they were the `drivers of change', The project outcomes were directly related to their knowledge and their transferal of this knowledge to women in SHG groups. This fleet of volunteers was selected by the SHG group members themselves. As the CNAs largely belonged to the tribal community and were illiterate, a conscious effort was made to design Pictorial Learning Communication Sessions, keeping the learning from Formative Research as a base, to make it evidence based and contextual to exiting health knowledge, nutritional needs and required changes for achieving planned outcomes. To ensure that this key element of project design was implemented in spirit, a resource agency was engaged to undertake the complete task from designing contextual modules with relevant messages, inclusive of providing training and handholding support, to implementing partners.

The CNAs were intensively monitored and provided handholding support by partners, as part of their monitoring system, it was due to regular interactions and handholding that the CNAs felt confident to transfer this new learning meaningfully, which resulted in behavioral changes, even in a short span of two years of project period.

FFHIT has structured its capacity building initiative into stages. They are as follows:

1. Initial or beginning stage of the project:

- Orient partner on key interventions and responsibilities, through the partner's orientation workshop.
- Work with partner to design a baseline and formative research study tool.
- Orient partner to be familiar with formative research tool to use to collect field level data specifically on Attitude, behavior, current practices, available services etc. They were also encouraged to undertake service gap analysis
- Assist partner to develop skills in data compilation work using FFHIT's format.

2. Implementation stage:

- Consult partners on the modules to be developed based on the results emerged from the formative research
- Design modules & orient partner on pre-testing of identified education module to carry out pre-testing.
- Assist partner to compile data collected through pre-testing.
- Build capacity of partner in facilitation skill, through TOT.

- Provide field-based support to partner during the roll out of health education.
- Build capacity of partner in use of cost projection tool to assess project sustainability.
- Orient and support partner in using linkages tool to capture field data to identify potential areas of linkages.
- Assist partner in the documentation process.

3. Post implementation stage:

- Assist partner in collecting data using post-test survey tool for end line analysis.
- Support partner in data compilation work using FFHIT's tool.
- Provide field-based support to capture human interest stories and project completion report as an outcome of project intervention.
- Encourage and support partner to strengthen potential linkages with service provider for sustenance

Capacity building of CNAs in the RNP

The training modules developed in the RNP are:

Module 1 : Gender, Nutrition, and Food Availability.

Module 2 : Nutrition in life cycle – Maternal and Adolescent Nutrition Health.

Module 3 : Child Nutrition - Breast Feeding, Complementary Feeding and Diarrhoea Management.

Module 4 : Linkages with public health /nutrition services.

Module 5 : Financial literacy

CNAs were imparted training on various topics using PLC methodology as a part of the capacity building initiative and the facilitation skill using RUPA (Respect, Useful Content, Participation, Affirmation) principle of FFHIT.

- Trained in facilitation skills in health education at the SHG level.
- Provided with systematic health education using PLC (Pictorial Learning Conversation) methodology on various health topics, to address health and nutrition, linking agriculture and livelihood components.
- Trained on gender issues, specifically focusing on negotiating with the men in the household to seek their support and involvement.

- Refresher training provided to help CNAs reacquaint with their skills and knowledge. A check list of key messages was used as a tool review and recall key concepts,
- Exposure visit was organized to provide hands on experience.

Step 9: Costing the Project

Based on the proposed interventions, the costing for the project is to be done. In the case of the RNP, the major investment by way of costs has gone into building the capacities of the Community Nutrition Advocates (CNAs), and for the activities carried out by them. The essential items for costing the RNP can be summarized as:

- Identifying and training CNAs,
- Arranging kits,
- Facilitating exposure visits for the CNAs,
- Creating interface with government officials, especially at the district level,
- Preparing materials for mass campaigns, like brochures, placards, hand-outs, models, etc. and the costs for the campaigns,
- Organizing events to showcase and support CNAs, on a public platform.

In addition to this, we also incur costs in creating evidences of the intervention and its impact, by way of baseline and end-line studies, and other documents and research tools. However, it needs to be understood that the main investment, in terms of costing, is set around the CNAs, who are the drivers of change.

Step 10: Monitoring the Project

It is important to ensure that monitoring is integrated as a part of the intervention, ideally with the participation of the community including members of the SHG and the CNAs. To develop an M&E plan, the following steps may be considered:

- Design the monitoring strategy – develop the indicators for monitoring the outputs of the given project objectives and outcomes.
- Design the monitoring process – given indicators, how, when and what data to gather to assess, if outputs were to be realized; formats to be used for data collection.
- Develop the plan for monitoring – decide which indicators are to be monitored, at what frequency, and by whom.
- Review based on the monitoring – analyze data periodically to assess if the project is on course, and if there is for any mid-course correction, and for providing support to the field team.
- Establish mechanisms for sharing the results of the review with the team, with the community, and the development partners.

Some of the important M&E tools for primary data collection include:

- Interviews
- Questionnaires or surveys (including Knowledge, Attitude and Practice surveys)
- Focus group discussions
- Observation
- Participatory data collection and analysis tools
- Stories of the most significant change or oral testimonies.

Interviews, questionnaires, focus group discussions, and observation are all core M&E tools that can be used to gather a relevant baseline, and other data on the scope, quality, and outcomes of interventions.

The 'most significant change'[9] method involves collecting 'stories' about change from Stakeholders who have benefitted from the intervention. These stories are collected at regular intervals and interpreted in a participatory process, usually through group discussions. The MSC could be used by anyone as a Monitoring & Evaluation tool. The stories may reveal positive or negative outcomes. They can also help reflect on various aspects including challenges. Stories are a valuable M&E tool as they can encourage everyone, whatever their experience, to participate. They are also likely to be remembered, as they also reflect the lived experience of the people in the intervention.

However, it is useful to consider an M&E system that is simple and relevant for the project. Simpler systems also enable the involvement of the community.

[9] Ricky Davies and Jess Dart, 2005; The Most Significant Change (MSC) Technique – A Guide to its use. http://www.mande.co.uk/docs/MSCGuide.pdf

Monitoring in the RNP

The RNP has enabled the community volunteers, the CNAs, to lead the monitoring, and they have been the front-liners in the process. For concurrent monitoring processes, the project used simple tools and indicators that could be understood by CNAs. The CNAs have led the monitoring through regular home visits in the community. Home Visits have been an important mechanism of assessing the progress and resolve household specific problems. The CNAs have been able to address different household situations finding an answer from their own experiences thus also making the entire process self-sustained.

Examples of Key Monitoring Indicators that the CNAs use are listed below and these indicators are also mixed with important messages that need to be reiterated:

- Women having 4 different colors of food in their plate
- Grow at least one nutritious herb in their farm/courtyard
- Men and women at least have one meal sitting together
- SHG leaders in dialogue with the service providers
- Every member is linked with PDS getting food as per entitlement

The CNAs also used the following Pictorial Monitoring indicators to assess the progress in the behavior and practices of women members.

Name of Gram Panchayat:

Name of the village:

Name of SHG:.....

Name of CNAs: 1..... 2.....

3..... 4..... 5.....

Number of pregnant women who give birth to an infant during project period who reported breastfeeding to their child within 1 hour of birth

Number of pregnant women who give birth to an infant during project period who reported only breastfeeding till first 6months of birth.

Number of pregnant women who give birth to an infant during project period who reported breastfeeding along with other liquid during first 6 months of birth

Number of pregnant women who give birth to an infant during project period who reported complementary feeding for after 6 months, 9 months and 12 to 24 months.

Number of participating women, who reported in the prior month to having a child with diarrhea that was treated with ORS

Number of women and children in household who consumed fruit in the past week

Number of women started Sprouting of Moong/Chana and eat atleast twice a week

Number of women started to eat mixed cereal roti at least three four times a week

Number of women started to eat mixed pulses (dal) at least three four times a week

Number of women started to eat mixed vegetables on daily basis

Number of women started cooking food in iron vessel on daily basis

Number of SHG women developed Poshan Wadi

Number of women adopted Sukhmani method for having nutritious food over the year

Number of women adopted Animal Husbandry for having nutritious food over the year

Number of women started nutritious crop cultivation in their land

Number of SHG women family started to eat one meal together with thali be similar

Number of SHG women family in which, Men and Boys share housework /child feeding

Number of SHG women family in which, Men and boys support women pregnancy, breastfeeding, infant feeding.

Number of SHG women who are beneficiary regularly visit to Aanganwadi Center

Number of SHG women or mothers reporting a child less than 3 years participating in growth monitoring

The RNP had broadly adopted the four strategies. In this section, an attempt is made to detail some of the key interventions that were undertaken during the implementation of the RNP.

I. Social and behavior change, and mobilization of communities
II. Nutri sensitive food based interventions focusing on household food security
III. Access to financial services and health savings for emergencies
IV. Linkages, advocacy and policy interventions across sectors
V. Empowered Women – Key cross-cutting element of the Intervention.

I. Social and behavior change and mobilization of communities

a) Capacity building and mobilization of the community

The RNP invested significantly in building the capacity of the community. It built on the social capital of the SHGs and built capacity in aspects that the community was not aware of. To build the capacity of the community, it engaged CHETNA to support the efforts of FFHIT.

The lead for the capacity development emerged from formative research. The research also helped to develop communication materials that the community could relate to. Mostly pictorial materials were used to build the capacities of CNAs. This encouraged even those who hadn't been given a formal education to get involved in the capacity transfer processes. The messages were also kept simple and doable. In developing communication materials, they ensured that they built on the knowledge that the community already has, and developed it further.

Some examples of simple messaging in the RNP

- Cooking in an Iron pot
- Have 3 soaps in the house – for washroom, bathing and general hand washing
- Cover the food
- Mix lentils
- Mix flours
- Cut vegetables in big pieces
- Breast milk on the first day

These messages were kept simple and were communicated more as actionable points. Women remembered the key information due to these messages, also because many of these were done together with them, practically.

Context specific tailor-made information packages were developed as part of the training package. These were based on locally available foods, local practice, and local culture. The IEC materials based on these packages were designed, keeping in mind that the women were formally not literate. The training material had key messages in an actionable, and easy to remember form, which helped women to not only remember them but use them on the ground. The CNAs were trained first and they, in turn, trained the SHG members. There were 5 modules that women were trained on. The highlights of the capacity inputs were:

- **Staggered:** There were 5 modules that the CNAs were trained in. The training was designed in a staggered manner. Each input was followed by an implementation time. During this time, the CNAs, closely supported by the implementing partners focused on implementing what they had learnt at an individual level and with the other SHG members.
- **Simulation, demonstration and interface:** The capacity inputs utilized the methodologies of simulation, demonstration and interface for best results. Each practical suggestion of improving the nutritional content of the food was demonstrated to the CNAs – be it how to sprout lentils, how to mix available flours for maximizing nutrition, or sowing available seeds as a kitchen garden. The capacity building trainings were also used as an opportunity to link the CNAs with various government programs and services.
- **Cascade model:** The CNAs were trained in residential workshops and they, in turn, trained the SHG members in the community. The cascade model lead by the CNAs enabled them to become ambassadors of the nutritional change. They also internalized the messages they were imparting by adopting it in their house; thus, demonstrating practically the efficacy of the messages.
- Picture lead discussions were the key approach used in the capacity building trainings of the CNAs. The messaging combined with the power of visuals was used to share the message effectively. For instance, many women report to 'have 3 soaps' as one of the takeaways from their sessions with the CNAs – a practice that they are following (one soap for bathing, another for washing and yet another for toilet use; or to have at least 3 colors of food in our plate as an indication of a nutritionally well-balanced diet). The CNAs were given life-size BCC material for their use at the village level and this helped to retain the interest of women who participated. It also provided for an easy reference to the CNAs, so that they could recall what they had learnt in the capacity building trainings.

Communication booklet to reduce transmission loss

To mitigate the risk of key message loss at the field level a Flip book in pictorial form was shared with the CNAs, which they used for further transferring knowledge to women in SHG groups. This booklet summarized the key messages and helped to prevent transmission loss.

Community Nutrition Advocates (CNA) – the agents of change

The drivers of change in the project have been the Community Nutrition Advocates or the CNAs. The CNAs facilitated the project implementation. They are called *Shakti Bais* in Sirohi and *Annapurnas* in Banswara. They have been the link between the RNP and the rest of the women. They have also been the key women who have led the way, through demonstration – demonstrating the ideas that the RNP held.

The CNAs are women from the community and are a part of SHGs. They are the ones who are usually actively engaged in the group. CNAs are not necessarily formally literate people, but they demonstrated initiative and had the natural elements of a leader. Many of them pursued what they consider right, despite the struggles in getting families and others to accept it. These CNAs were nominated by their own groups and they then formed a part of the community core group, who got trained in the curriculum of the RNP. They underwent a series of trainings and interfaces with the local government, departments, and service providers. The CNAs then, in turn, went and trained the women SHG members on the same, using certain IEC materials that were provided to them.

The CNAs were the key link between the new information that the RNP brought and the women of the SHGs. The CNAs, in a way, steered the implementation to the ground. They not only trained the women in the village, but also demonstrated many suggestions to increase the food cum nutrition security on the ground. So, the other women, who were neighbors to the CNAs, also 'saw' how things could be done and what benefits, could be reaped out of the same.

The CNAs as the Drivers of Change

Identifying CNAs and building their capacity ensured that a core group of advocates was formed at the village level. This significantly facilitated work with the community. They led the processes on the ground. These were women nominated by their peers for the leadership capacities they displayed, despite personal difficulties. CNAs also supported each other's work. CNAs also acted as a cohort of support for each other

They were also the ones with whom the engagement and follow ups were regular. During the capacity building trainings, their interface with the departments and the

service providers built confidence that helped them. They had to go back and talk to the community on what they had learnt. Many of the CNAs reported that in the beginning, it was difficult, to speak in public. But gradually they gained confidence. They also gained confidence by practicing at home what they learnt. They could convince the other members better.

The support of the partners was significant in identifying and building capacity of the CNAs. For the CNAs too, the process has ensured a sense of meaning and agency.

II. Nutrition - sensitive food based interventions focusing on household food security

1. Nutritional Sensitive Agriculture (NSA):

a new-mother needs as much time and support from her family as the baby does

The NSA enables the community through knowledge inputs to help decide which crops to sow from a food security and nutrition point of view. This helps to maximize the opportunity from agriculture to address nutrition. As most of the women and their families engaged with the program were farmers, they were helped in identifying and selecting crops to support their own needs of nutritional intakes. By using simple analogies such as the various colors of food that they should have on their plate during the training, the aspect of balanced diet and nutrition was conveyed to them. During cultivation periods, they were assisted with sowing more crops which would also help their household nutritional security. Evidence shows that by putting more focus on nutrition outcomes, i.e. by including nutrition objectives at the outset, agricultural interventions can improve the capacity, productivity and prospects of agricultural workers and contribute to reducing under-nutrition.

2. Drying and storing food – Extending shelf life of food for nutrition:

Building on the community knowledge of drying and storing food, the program sought to expand the options. The number of crops that could be dried and stored was increased and this helped them to store crops that became expensive once their season was over. Building on the local repository of wisdom on food security, the project built upon it, expanding their options.

3. Ensuring proper care and feeding practices for infants and children:

Focusing on the children, the program equipped the community with the information on right health and care practices. These include correct breastfeeding and feeding practices for children beyond six months. This component laid stress on the fact that a new-mother needs as much time and support from her family as

the baby does. It also reiterated a key message about the importance of good nutrition during pregnancy and the first 1000 days, and how the lack of proper nutrition during this period could cause irreversible damage to individuals, including: diminished physical growth, fewer years spent in school, and diminished wages and productivity. This program component also focused on how to decrease the disease burden of the child due to lack of awareness and wrong practices followed by the caregivers. The community was made aware about home-based steps for diarrhea management using ORS, and a set of good practices during routine fever, cough and cold. This intervention enabled linkages with the Anganwadi, ASHA, ANMs, and health centers for healthcare. It also reduced expenses that families incur on taking the child to private hospitals. Focusing on practices like hand washing, it sought to make an impact on the health of children, especially in situations of diarrhea. It also focused attention on providing knowledge to women to ensure the nutritional status of infants and small children, especially till the age of 5 years.

4. Self Help: Growing your own nutritional garden – the Poshanwadi:

Nutritional Garden – the Poshanwadi in the RNP

The term 'Poshanwadi' means a place that is home (Wadi) for nutrition (Poshan). Kitchen garden practices were promoted and mainstreamed during the project. A key 'self-help' component of the RNP was to enable, educate, and mobilize families to grow locally available foods at their own places for consumption[1]. The Poshanwadis focused on green vegetables[2] and foods used as accompaniments, like green chili, which are rich in vitamins. The community started to grow many vegetables, like spinach, tomatoes, brinjals, Okra (*Bhindi*), gourds and many leafy vegetables and spices. These Poshanwadis were developed in backyards or on adjacent pieces of land, which are easy to access.

The community owned land traditionally grows staple food as food security measures like wheat, corn, etc. But growing vegetables enhanced their food intake quality and quantity, due to easy availability at home itself, and it was not needed to be purchased. On the contrary, people in remote locations used some vegetables grown as cash crops, which also helped to earn some money for other needs and

[1] The Food and Agricultural Organization (FAO) also recognizes that gardening can enhance food security in several ways, most importantly through: 1) direct access to a diversity of nutritionally-rich foods, 2) increased purchasing power from savings on food bills and income from sales of garden products, and 3) fallback food provision during seasonal lean periods. These are sometimes called backyard or kitchen gardens. These gardens have an established tradition and offer great potential for improving household food security and alleviating micronutrient deficiencies. http://www.fao.org/ag/agn/nutrition/household_gardens_en.stm

[2] For instance, spinach, fenugreek

emergencies. Growing vegetables at home enhanced food diversity, thus meeting and enhancing nutritional needs.

Families who were either hardly eating vegetables or eating them in smaller quantities due to their purchase, started not only to have variety in their food but also started to cook vegetables in enough quantity, which enhanced the nutrition intake for all family members, inclusive of women, as there was enough for the family, especially when their farm had vegetables, curtailing under nutrition.

Evidence shows that, often, loans from the SHGs were used for healthcare expenses

III. Access to financial services and health savings for emergencies

1. Access to Finances – the Self-Help Groups:

The RNP believed that to be empowered, women needed to be mobilized into a collective. The women SHGs provided an ideal vehicle for this. The SHGs, as a collective, were considered more stable. The link between the women and the SHGs was strengthened and sustained by making their saving, loaning and bank linkage activities regular and smooth. In areas where there were no SHGs, the program invested in forming and/or reviving dormant SHGs. The capacity of the SHGs for bookkeeping, and managing their affairs, was also built to ensure sustenance. The process of linking them to the banks, too, was facilitated, in many cases. Linking women to SHGs not only helped women to have an agency and voice, it also enabled women to take decisive actions towards nutrition and health, as they were able to access money independent of the men in the households.

2. Saving for health: Cover for out of pocket expenditures:

SHGs as 'Self -Health' Groups in the RNP

SHGs also became 'self-health' groups. They saved a certain percentage of money as a health fund. This was useful when anyone needed money for out of pocket expenditures to access healthcare. Evidence shows that often, loan from the SHGs was used for healthcare expenses. Hence, this contingency fund was created to meet the expenses of healthcare. This ensured that the loans from the SHGs were used more for productive activities than to access healthcare. Every SHG in the project location has a contingency fund. For pregnancy care, women were encouraged to access the entitlements due to them from the government.

CNAs were not only informed about importance of savings for health purposes, but their knowledge was also built around how falling ill impacts family expenditure, directly and indirectly like expenditure on treatment, unable to earn during the period of ill health, impacting other family members for taking care of patient at

home, often which is also from diseases which are preventable by adopting healthy habits related to nutrition and health.

IV. Linkages, Advocacy and Policy interventions across sectors

1. Ensuring Access to Entitlements:

Ensuring linkages with services and monitoring of the services by the women's groups in ICDS, PDS and school mid-day meal scheme has ensured that the community receives its entitlements. The process of asserting their rights has been a struggle as well, and women have successfully picked these struggles up. Ensuring the access to these entitlements has meant nutritious food for their children, saving them from serious diseases, and ensuring that pregnant women are taken care of in the villages where these services are of high importance, given their remoteness and poverty levels.

Community monitoring to leverage entitlements

There are various schemes of the government for the poor. However, there are significant leakages in their delivery, and the poor at the end of the distribution chain get nothing from these schemes. The capacity of the community was built to demand their entitlements. This has ensured that the government services were accountable to the community. The women began to monitor the school meals program and nutrition programs at ICDS centers; this has had a significant impact.

V. Empowered Women – Key cross-cutting element of the Intervention:

- There is an increasing recognition of the role of the primary caregivers on the children and adolescents in a household. There is significant global data on the strong correlation between an empowered mother and the nutritional outcomes of the child. An empowered mother can:
- Influence and impact the family's decision to allocate food and non-food resources in the best suited way;
- Keep nutrition on the agenda;
- Ensure right care and feeding practices for the infants and the young;
- Ensure cleanliness;
- Play their part in addressing issues of child protection and ensuring that a child's right to an unbiased environment is protected;

Investing in women's empowerment is not only about the realization of their human rights, but is also a critical tool for investing in the population of a country. It contributes to a healthy population and a more able workforce. This is also a key reason why women are kept at the center of various poverty alleviation programs.

The RNP believes that to be empowered, women need to be mobilized into a collective. The women SHGs provided an ideal vehicle for this. The SHGs, as a collective, were considered more stable (as described above).

❖ **Group-based programming:** A group-based program has been fundamental to the RNP, where the project has worked through the partners with the SHGs. These SHGs have been strengthened by providing them with opportunities of interface with government institutions, and involving them through the systematized inputs on capacity building.

Research and experience show that SHGs have opened many windows of opportunities. SHGs have enabled their members to participate in socio-economic and political spheres— an opportunity which is mostly available only for the members of a SHG. It is through the interactions at the SHG meetings that women start to get information about their rights and entitlements, and the processes to get it. They also save money as a regular savings practice, and obtain loans when needed. This has also ensured that women are 'productive members' of the family. She gets consulted when the family needs money, as she is the one who can obtain the loan.

There is also evidence that the group processes enable women to do many things that they would not be able to do as an individual, such as stepping out of the home, accessing government schemes and benefits, saving, having a say in how the loaned money should be spent/invested, etc. This enables many women to have the powers of negotiation.

The SHG platform enables solidarity among women. A cohort of women makes many things possible. In addition, SHGs meet regularly. The RNP capitalized on this to provide information critical to people's health and nutrition. Hence, as a strategy of the RNP, it was decided to reap the maximum possible benefit of a group that meets regularly. From the RNP's point of view, it helped in:

- ***Working with an assured number of people*:** As the members in the SHGs meet regularly, this meant that the project was reaching out to a certain and assured number of people.
- ***Working with a well-formed group*:** Since these are well-formed groups, the groups meet regularly, share information, take stock on progress, and have a space for people to share their difficulties and resolve them.
- ***Mainstream the perspective of 'saving for health'*:** These groups save regularly; they found the 'saving for health' aspect useful and initiated, keeping a separate contingency fund for health reasons.

- ***Getting nutrition based life-style changes implemented*:** As a self-help group, the members, upon receiving useful information, found strength in each other to change and alter household-based practices despite initial resistance from the family.

❖ **Increased access to financial resources:** Access to financial resources helps women to influence household decisions. Hence, the RNP leveraged the role of partner's efforts on SHGs. Women have been able to expand their agency, and have used the knowledge they have gained through the capacity building sessions, in their kitchens and household, and in negotiating with power structures both within and outside the family. For the women, the SHGs have enabled a social networking space; exposure to institutions, even decision makers at the local level, a feeling of self-worth and a cohort environment of taking up issues that concern their lives. It has also enabled an increased access to and control over financial resources in the household; this has a positive correlation with nutritional outcomes.

❖ **Towards strategizing to include men in women's care work:** Hours spent on unpaid work by women could translate into income, if equivalent time was spent by her on productive activities. Meetings and discussions with the women and their families were used to make them understand that the care for children and others in the household is also a form of unpaid work. The time that women spend on this is rarely recognized. Recognizing this and freeing women from this could unlock their potential for productive engagement. This also has an impact on their empowerment, and thus on the nutritional outcomes at the household level. Men and boys were encouraged to mark their participation in the household by doing household chores and playing an active part in feeding the children. Men who were active with understanding the aims of the project were also promoted and talked about as positive deviance.

The Rajasthan Nutrition Project used a set of tools for various purposes on the field. These were to understand the field and the nutritional context in terms of external environment and to carry out community engagement more methodically. Specifically, they were used to understand the following aspects:

- Food availability in the market and its cost
- Seasonality of food that impacts the community
- Methodical engagement of the community in monitoring.

1. Market Walk

Using the tool of Market Walk, various kinds of food availability in the local market was mapped. Market walks were undertaken by a group of people together to see the food available, along with its cost. Observations were recorded in a common format. Foods observed were placed into categories such as 'available food' and 'health-related products'. The latter included items like ORS, Paracetamol tablets, soaps, etc.

The availabilities were then analyzed. Some observations made during market walk include:

- The cost of some of the nutritious foods available in the market was affordable or reasonable. For instance, it was found out that groundnut, mustard oil, local honey and gram were available at a reasonable cost in almost all the villages, and people could access or buy them if needed. Iodized salt, too, was available in the market.

Noting of observations during a market walk

- The cost of some of the nutritive food was very high, and this included green leafy vegetables. This meant that it was better for people to grow their own leafy vegetables than buy it.
- Foods that were not available in the market were ORS – which was only available at the *Anganwadis* (ICDS centers).

Use of observations from the Market Walk: The observations from the market walks were used to identify program priorities:

- Diversifying in the diet: The information was taken to the communities, and details of foods that were available at an affordable cost was shared. They were told that they could buy these items thus ensuring diversity in the diet.

The community was also told about the nutritional value of these foods. This information was also used during training where the CNAs shared this information.

- Prioritizing what to grow in Poshanwadi: As described earlier, Poshanwadi was used to demonstrate the crops that could be grown at home, and that would ensure nutritional outcomes. The walk helped to choose the crop/ vegetable that could be grown, as it was expensive to buy in the market, for instance, the green leafy vegetables.

2. Seasonality Calendar

The seasonality calendar was used to assess the impact of season on:

- Workload, diseases, income, expenditure, food and water availability, patterns of borrowed credit, etc.
- Changes in livelihoods over the year
- Any diseases which showed a trend across the year.

The use of the tool to gather details generally took about two hours. The calendar could be drawn either on paper, or on the ground, depending on the resources available. When developing the seasonality calendar, the following aspects could be kept in mind:

- **Rainfall:** How does the rainfall influence decisions related to seeking health care, feeding families, health issues such as diarrhea, etc.? Are family members affected similarly (women versus men, adults versus children)?
- **Key functions/celebrations**: What key celebrations or functions happen throughout the year? How do families prepare for these days; does it involve significant financial burden? Does food consumption change during these days?
- **Food Scarcity**: When preferred foods are not available or easily accessible, what decisions are taken and how are decisions made? How does food scarcity relate to the agricultural and rainfall calendar? Does food scarcity affect all family members in the same way?
- **Income:** In which period do women/men receive the highest cash income? Do income sources differ between men and women?
- **Expenditure:** In which months do women/men experience the highest expenditures, and for what? How do saving and credit services support these? Do these expenditures differ between men and women?
- **Drinking water availability:** Is there variability in the amounts of clean water available to family members? What are the sources of water consumed? Do households treat their water? What methods are used to treat water to make it safe to drink?

- **Livestock**: What cycles exist for livestock? Is livestock raised for consumption or for income generation? What animals are raised? Which animals, if any, are consumed? What are key months for income or expenditure?
- **Credit**: What are the main sources of credit? What interest rate is charged? In which period is credit needed and for what uses? What formal and informal credit organizations are prevalent in the community? Is credit ever used for food needs?

- **Savings:** Where and how are savings made? Where and how are savings stored? How are they liquidated and turned into ready cash? How do micro-finance services support these? Are savings ever used for food needs?
- **Agricultural workload**: How does the agricultural workload change during the year for women who are members of SHGs, and other women/girls in their household? How does the agricultural workload change during the year for men in groups and other men/boys in their household? What crops are they responsible for? How does this load affect a family's ability to manage food stocks/make decisions related to food?
- **Non-agricultural workload**: How does the non-agricultural workload change during the year for women who are members of SHGs, and other women/girls in their household (crafts, other business or income-generating activities)? How does the non-agricultural workload change during the year for men in groups and other men/boys in their household? What businesses or income-generating activities are they responsible for? How does this load affect a family's ability to manage food stocks/make decisions related to food?
- **Agricultural cycle**: How does food availability vary throughout the year? *What* crops are available, *when* for consumption? Who decides which crops are grown? Which crops are consumed and when? And who decides?

3. Mapping linkages with service providers through a Venn Diagram

A Venn diagram helps to map the logical relationships between institutions/organizations and the community. The tool was used to get an understanding of the organizations (formal and informal) that the community uses for their health and nutrition needs and what their relationship with them is. Aspects of who participates in these groups in terms of gender and wealth were also included. The exercise helped to map out externally and visually, the services the community was using and services that community was not using. The idea was to raise awareness

and discussion, so that the communities understand what the points of access they must strengthen are, and motivate them to do the same.

Some indicative questions that could be used when using a Venn diagram are:

- Which organizations/institutions/groups are working in or with the community?
- Which institutions/groups do the villagers regard as most important, and why?
- Which groups are addressing household food security and nutrition issues?
- Which organizations work together?
- Are there groups which are meant for women or men only?
- Are some groups excluded from being members of or receiving services from certain institutions?
- What is your perception of various organizations?
- Which organization /institution you would like to use? What stands in the way? What are your alternatives?

A Venn diagram allows a pictorial representation of available services and people's perceptions and experiences around the same. This helps to determine what needs to be done to enable the linkages.

4. Participatory Learning and Action (PLA) for Nutrition

The process of PLA places the communities in the center. They themselves identify issues, map resources, assess gaps and plans the way further.

Indicative steps:

- **Identify the platform**: The PLA process needs to be followed over a period. It must have a certain number of follow-up meetings planned. Hence, it needs to be decided whether it will be facilitated through an SHG, a youth group or a Panchayat committee. The number of the group must be so that it can lead to a functional discussion.
- **Identify a facilitator**: A facilitator who will conduct these meetings and will be a common thread must be identified. This must be a community person who will hold all meetings and document the learning coming out of those meetings together.

- **Identify the issues**: The platform members must identify the issue at first; the ones that they want to focus on. It could also be 2 or 3 issues at a go, but a finite number of issues must be decided upon. Taking up all the issues at once is not advised, as it makes the process too spread out.
- **Unpacking the issue**: It is the primary responsibility of the facilitator to unpack the issue that has been prioritized. This could be done through stories, cards, movies etc.; any mode that will help engage the group members and help them recognize and name the various layers of sub issues that an issue has.
- **Listing down the problems /the bottlenecks in a visually represented form**: The group needs to get together and map out the problems in a visually represented form in their own village, so that both the illiterate and literate can relate to it and participate equally.
- **Listing down their vision**: The group members need to come on a common page on what their vision of a certain issue is. Subsequently then should also list down the solutions they see to all the parts of the issue which would ultimately solve the problem.
- **How do you get to the solution and what resources do you have**: Having identified the solutions, the members also need to be on a common page in terms of how they will get to the solutions and what the available resources in the village they can use are, and how. This will put together a strategy to address the situation.
- **Acting together**: The strategy will need to be broken down into a plan of actions - on an overall level as well as on the level of each member. The members will need to act together to address the situation based on the common plan of action.
- **Evaluate**: The group will also need to evaluate how the solutions are working and what else they need. Are there any further bottlenecks that have been identified during the process? How will they be solved? What have been the successes and what have been key contributors to that? All these are questions that the group needs to take up together, and further work out.
- **Re-adjustments**: Based on the experience, there might be readjustments needed in the plan, which must be allowed by everyone. They are coming from the community's own experience, and are a part of the process.

5. Community monitoring through Community Scorecard

The Community Scorecard (CSC) process is a community-based tool that is used to bring the users and the service providers together to discuss the issues of service delivery, levels of satisfaction from the service delivery, and the challenges identified.

Simply put, it is a process whereby both the parties share their experiences about the common issue face to face, say, what their expectations are, and then decide upon the solution. The process, in the end, generates a list of follow-up points for which both the parties are responsible.

As a tool to link service providers and community members, it is also used to provide direct feedback to the service providers. Through the CSC, the perception on quality, efficiency and transparency is sought from the users as well as providers. Implementing partners of the RNP used this tool to assess the status of ICDS centres in various regions.

Indicative steps:

Preparatory groundwork: Prioritizing the service area centre is step 1. Once the service and area is decided, community members are informed and oriented about the process of CSC. Service providers are also oriented about the process, to take their consent. A program schedule is prepared. It must be ensured that poor and marginalised families from the community are involved in the CSC process.

Input Tracking: A list of all the inputs used for delivering all or a part of the services, is created. Based on the list, perceptions of the people are recorded on the question of whether these inputs are provided to them or not. Similarly, perceptions of the service providers are recorded, too.

Developing scorecard by community: For developing the scorecard, firstly the community will be informed about the various services they are entitled to, from the service centre. Then, a list of expectations of the community from the services is noted down, and then the prioritization of the expectations is done for further assessment. Certain performance indicators will be selected by the community together, to evaluate the performance; the community decides the score for each performance indicator.

Self-evaluation by service providers: While the community develops a scorecard for indicators based on their expectations, the service providers also develop indicators separately, and score the services they are providing. The service providers also mention the reasons for poor services, recommendations for improving the services, and the support they need from the community to be able to do that.

Interface meeting: The Interface Meeting is considered as one of the most important activity in the Community Scorecards process. During the Interface Meeting, the findings of the performance scorecard and self-evaluation are brought together, discussed and an action agenda is developed to improve the services, based on recommendations and discussion. On each input, perceptions and experiences

of both the parties are assessed, and both the parties are invited to share their point. A resolution, in terms of a further plan of action, is reached, and an action plan for both the parties— the community as well as the service provider— is developed.

Making the follow-up plan public: The Action Plan that is developed must be displayed at commonly frequented places in the village. This helps as a reminder about the agreed action plan. A committee should be formed for making the monitoring visits, a spot checking and entrusted with the responsibility. The service providers should present the progress reports in Gram Sabha meetings. The community members should also present their findings of the spot checks. The Gram Sabha should further direct every responsible person to implement the action plan. A repeat or follow-up scorecard is also performed to assess the status and new expectations.

6. Freedom from Hunger's Food Security Survey

Since 1995, the United States Department of Agriculture (USDA) has incorporated a validated set of questions about behaviors and attitudes to measure levels of food insecurity across US households. In 2006, Freedom from Hunger validated the use of a modified version of the US Household Food Security Scale Module in Bolivia, Burkina Faso, and the Philippines. The US HFSSM has been similarly adapted and validated in similar contexts in Latin America, and in Africa and Southeast Asia.

What is the Food Security Survey (FSS)?

The food security survey is a 17-question survey instrument that measures household "access" to food through available resources to purchase or barter for food. The main nine survey questions serve as a scale and measure food security, with each subsequent question progressively measuring the degree of food insecurity. For example, question #1 measures whether a household has worried about not having enough food because food might run out, whereas question #9 measures whether an adult in the family had to go an entire day without eating because of a lack of food.

Generating the Food Security Score

There are two methods for scoring the food security survey. The principal nine questions measure the occurrence or prevalence of food insecurity (considered the "prevalence score") and the remaining questions measures the intensity of food insecurity in term of how often a phenomenon occurred ("rarely," "sometimes," or "often') . From these responses, we gain the degree to which respondents experience food insecurity at any time of the year on a chronic basis (considered the "chronic score".)

- **Method 1- Prevalence Score**: To determine whether the household has experienced periodic food insecurity during the past year, one scores each affirmative response ("yes") to a primary question as a "1," and each negative response ("no") to a primary question as a "0." At the end of the survey, the points are summed to give a raw score (which will be between 0 and 9). A score of zero corresponds to the most food-secure households; a score of 9 indicates the most food-insecure households, those suffering from hunger.
- **Method 2 –Chronic Score:** This measure assesses how severe or chronic the client's level of food-insecurity is. This is accomplished by scoring an answer of "yes, frequently" or "yes, sometimes" as a "1," and an answer of "yes, rarely" or "no" as a "0." Again, the points are summed to give a raw score, based upon which the client is classified as either food secure or food insecure.

To determine whether a household is food secure or insecure, a household that scores 0-2 on the scale is considered food secure, and a household that scores 3-9 is considered food insecure.

Number of Affirmatives	*Food-Security Status Level*
0-2	Food-secure
3-9	Food-insecure

Additionally, we can break up the food insecure households into two categories: those that score 3-5 are considered moderately food insecure, and those that score 6-9 are considered severely food insecure.

Number of Affirmatives	*Food-Security Status Level*
0-2	Food-secure
3-5	Moderately Food-insecure (or food insecure without hunger)
6-9	Severely Food-insecure (or food insecure with hunger)

FOOD SECURITY *(VERSION 1: money not referenced)*

	SCORE
1. During the last year, were you ever worried that your food would run out? **You may answer "yes" or "no."** 1) Yes 2) No – *Go to Question 2*	
1a. How often did this happen? 1) Often (frequently) 2) Sometimes 3) Rarely	
2. Was the food you had ever not enough? **You may answer "yes" or "no."** 1) Yes 2) No – *Go to Question 3*	
2a. How often did this happen? 1) Often (frequently) 2) Sometimes 3) Rarely	
3. Did you ever have to eat the same foods daily because you did not have other types of food in the house? **You may answer "yes" or "no."** 1) Yes 2) No – *Go to Question 4*	
3a. How often did this happen? 1) Often (frequently) 2) Sometimes 3) Rarely	
4. Did you ever serve yourself or any other adult in your household less food because you did not have enough food in the house? **You may answer "yes" or "no."** 1) Yes 2) No – *Go to Question 5*	

4a. How often did this happen? 1) Often (frequently) 2) Sometimes 3) Rarely	
5. Did you ever miss any meals (breakfast, lunch or supper) because you did not have enough food in the house? **You may answer "yes" or "no."** 1) Yes 2) No – *Go to Question 6*	
5a. How often did this happen? 1) Often (frequently) 2) Sometimes 3) Rarely	
6. Did you ever eat less than you felt you should because you did not have enough food in the house? **You may answer "yes" or "no."** 1) Yes 2) No – *Go to Question 7*	
6a. How often did this happen? 1) Often (frequently) 2) Sometimes 3) Rarely	
7. Were you ever hungry and did not eat because you did not have enough food in the house? **You may answer "yes" or "no."** 1) Yes 2) No – *Go to Question 8*	
7a. How often did this happen? 1) Often (frequently) 2) Sometimes 3) Rarely	

8. Did you or a member of your family ever lose weight because you did not have enough food in the house? This weight loss should not be caused by stress (worrying), hard work or sickness. **You may answer "yes" or "no."** 1) Yes 2) No	
9. Did you or another adult in your household ever not eat for an entire day because you did not have enough food in the house? **You may answer "yes" or "no."** 1) Yes 2) No	
9a. How often did this happen? 1) Often (frequently) 2) Sometimes 3) Rarely	
FOOD-SECURITY SCORE **(Key: Yes = 1, No = 0)** **Prevalence Score: Only score questions in shaded cells or those with whole numbers (do not score sub-questions, ex. 1a, 2a, 3a, etc.)** **Chronic Score: For all questions shaded questions coded as 1 for Yes, recode the question to a 0 if the person responded "rarely" to the sub-questions (ex. 1a, 2a, 3a, etc.)** **Food Secure = Scores 0-2** **Food Insecure = Scores 3-9**	**P-Score** **C-Score**

7. Understanding the process of resilience through decoding Coping Strategies

This discussion-based tool inquiries about the relative frequency of relying on coping strategies at the village or community level. Beans or stones can be used by a group of informants to depict the proportions of households in the community that are regularly relying on a given strategy or behavior, as depicted below. If ten beans or stones are provided to depict the answer in each case, you will get rough estimates of the proportion of the village population in tenths (or ten percent of the population) that rely on various coping strategies.

Indicative steps:

1. The exercise is best done in a closed area with the assistance of a small working group of 6-8 similar individuals all of whom have lived in the community for at least ten years.
2. Using the following chart as a guideline, write each suggested term on a card to represent the concepts for points a through l. Ideas for simplification for use with the group are provided in parentheses. Explain: "We are now going to discuss how households in this community cope with shocks and how this affects their decision-making regarding the food they eat in the household**."**
3. The moderator will place the coping strategies cards on the Y axis, one at a time.
4. The moderator will start by reading out the following "**Because they don't have enough food or enough money to buy food, what proportion of households in this community have to: (a) rely on less preferred and less expensive foods?**
5. The moderator will place the card **"less expensive food"** down in front of the group.
6. Then, the moderator will explain that the group needs to determine what proportion of the community **frequently** copes in this way, **rarely** copes this way, or **never** copes this way. Place the frequency cards down across the top, much like the way the table below is laid out. Either the terms "frequently, rarely, or never" can be written on these cards, or icons of some sort can be used to show greater and lesser amounts, as designed below. A completed "table" could look like Table 1. This matrix can either be put on a large flip chart or the column headings and row headings can be used to create a "matrix' on the ground or in the dirt. If this is the case, the column and row headings should be written on note cards.
7. Participants should then be asked to place small stones or stones/seeds/ bottle tops (0 to 5) to indicate the relative proportion of households that frequently, rarely, or never cope in this way with a crisis.
8. The important point is to allocate the same number of stones or beans for each question, so that answers can be compared. This exercise can be a useful way of ensuring that the set of coping strategies is complete and accurate for the given location. For example, if the majority never cope in a way, place 4 bottle tops, if a few copes this way, use 2 bottle caps, and if very few cope a particular way, use 1 bottle cap. See Table 1 for an example completed table.

9. After the exercise is completed, probe around the following questions:

   - How would you define the concept “resilient” in terms of a household experiencing a shock and recovering from it? What does the concept mean?
   - What does a “resilient” household look like in terms of their ability to feed their families? What makes one household resilient compared to another?
   - Think of the households that you marked as never or rarely having to cope with hunger in their family, what makes them different from those who frequently had to cope with hunger in the ways that have been discussed?

10. The final analysis worksheet should look like the table below.

Table 1: Completed Example

This table shows what a completed table might look like:

	Frequently	Rarely	Never	Explanation
a. Less Expensive	OOOO	OOOO	OO	Some households frequently eat less preferred foods. They'll stop adding vegetables and meat to their meals as an interim measure to cut back. Others rarely do this, and there are only a few households that never do this.
b. Family	OO	OOOO	OOOO	
c. Borrow	OOO	OO	O	
d. Credit	OO	OOOO	OOOO	
e. Hunt	O	OO	OOOOOO	
f. Eat Seeds	-	OO	OOOOOO	
g. Send Elsewhere	O	OOOO	OOOO	
h. Beg	O	OOOO	OOOO	
i. Smaller Portions	OOOO	OOO	OOO	
j. Eat Less So Children Can Eat	OOOO	OOOO	OO	
k. Workers Eat	OO	OO	OOOOO	
l. Fewer Meals	OOO	OOOO	OOO	
m. No Food All Day	O	O	OOOOOO	
n. Sell Assets				

Important Definitions

There are many terms and definitions used in the Guide. An overview of some of the key terms and definitions[1] is provided below.

- **Malnutrition**: Malnutrition refers to all forms of nutrition disorders caused by a complex array of factors, including dietary inadequacy (deficiencies, excesses or imbalances in macronutrients or micronutrients), and includes both under-nutrition and over-nutrition and diet-related diseases.
- **Under-nutrition**: Under-nutrition occurs when the body's requirements for nutrients are not met because of under consumption or impaired absorption and use of nutrients. Under-nutrition commonly refers to a deficit in energy intake from macronutrients (fats, carbohydrates and proteins) and/or to deficiencies in specific micronutrients (vitamins and minerals). It can be either acute or chronic. Under-nutrition is commonly referred to as malnutrition.
- **Stunting (chronic malnutrition)** is a form of growth failure, which develops over a long period of time. Inadequate nutrition over long periods of time and/or repeated infections can lead to stunting. In children, it can be measured using the height-for-age nutritional index.
- **Wasting (acute malnutrition)** is characterized by a rapid deterioration in nutritional status over a short period of time. In children, it can be measured using the weight-for-height nutritional index or mid-upper arm circumference. There are different levels of severity of acute malnutrition: moderate acute malnutrition (MAM) and severe acute malnutrition (SAM).
- **Micronutrient deficiency**: Micronutrient deficiencies are when there is an inadequate long-term intake of nutritious food or infections such as worms. Essential vitamins or minerals such as vitamin A, iron and zinc are lacking and women and children are high-risk populations.
- **Protein Energy Malnutrition (PEM):** Refers to a situation where there is inadequate calorie or protein intake. This may be caused due to external circumstances (for instance lack of protein rich food like in relief camps or cases of prolonged drought) or because of lack of care of the children.
- **Anemia/Iron deficiency**: Characterized by reduction in hemoglobin levels or red blood cells which impairs the ability to supply oxygen to the body's tissues, anemia is caused by inadequate intake and/or poor absorption of iron, foliate, vitamin B12 and other nutrients. It is also caused by infectious diseases such as malaria, hookworm infestation and schistosomiasis; and

[1] Nutrition-Wash toolkit by UNICEF

genetic diseases. Women and children are high-risk populations. Clinical signs include fatigue, pallor (paleness), breathlessness and headaches[2].

- **Neo-natal mortality rate:** A neonatal death is defined as a death during the first 28 days of life (0-27 days)[3].
- **Nutritional specific**: address the immediate causes of under-nutrition, like inadequate dietary intake and some of the underlying causes like feeding practices and access to food[4].
- **Nutritional sensitive programming:** can address some of the underlying and basic causes of malnutrition by incorporating nutrition goals and actions from a wide range of sectors. They can also serve as delivery platforms for nutrition-specific interventions[5].
- **WASH:** WASH is the collective term for Water, Sanitation and Hygiene. Due to their interdependent nature, these three core issues are grouped together as all of them are closely connected to desired nutritional and health condition.

[2] https://www.unicef.org/lac/Nutrition_Glossary_(3).pdf
[3] https://www.measureevaluation.org/prh/rh_indicators/specific/nb/neonatal-mortality-rate-nmr
[4] https://www.unicef.org/eapro/Brief_Nutrition_Overview.pdf
[5] https://www.unicef.org/eapro/Brief_Nutrition_Overview.pdf)

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