

# Community-Led Food & Nutrition Model







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## Study conducted

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# **Community-Led Food & Nutrition Model**





# Preface



**Fr. (Dr.) Paul Moonjely**  
Executive Director  
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In developing countries, there is a high prevalence of undernutrition (protein–energy malnutrition, and micronutrient deficiencies), which is most critical in the fetal and neonatal stages, as well as the under 5-year-old age group. Food and nutrition security encompasses issues of food availability, access and utilization for maximum health benefits and social economic development. This can be achieved through enhanced agricultural productivity, proper small farm management, community awareness, enhanced community, and household capacity to withstand shocks and adapting appropriate practices that ensure better food utilization, for instance proper home care, personal hygiene, food preparation and feeding practices.

Improved food utilization can be achieved through a deliberate effort to integrate nutrition in all agriculture development programs. Caritas India extends her supports to 1366 most marginalised households and communities to increase access to and consumption of diversified foods from their own production through Smallholder Adaptive Farming and Biodiversity Network (SAFBIN).

Smallholder Adaptive Farming and Biodiversity Network (SAFBIN) a prestigious program of Caritas India is instrumental in bringing the marginalised rural households by implementing community led food and nutrition model. This model has successfully ensured balanced diet to more than 756 families with diverse range of local food items. This booklet is the evidence of the community led food and nutrition model owned by the rural women sustainably.

I congratulate the entire SAFBIN team for the implementation of the community managed food and nutrition model effectively for the people in need. This book is designed to help field based workers and other service providers engaged in agricultural extension and advisory services in communities to understand the link between agriculture, food, nutrition, and health.

# Foreword



**Fr. (Dr.) Jolly Puthenpura**  
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Communication for behavioural change (CBC) is one of the main strategies in improving community nutrition for increasing peoples' knowledge and motivation for change and is used for achieving different nutritional goals, such as improving complementary nutrition methods and increasing the acceptance of food supplements and the consumption of fortified foods. Women, especially mothers, are the key target group for modifying food habits for the health of both themselves and their children, and this is especially important in rural areas where mothers experience hard physical labour, multiple pregnancies, and inadequate diets. Communication strategies have to include fathers too.

Participation of community and family members in nutrition improvement programmes is successful only when they take on the responsibility of health, nutrition and social welfare in the community, and acquire the necessary skills to share in the process of their own development and that of the community.

Caritas India is greatly indebted to Caritas Austria Team for their generous support in building people's life through SAFBIN program. I acknowledged all those who participated in the development of the Community-led Food and Nutrition model especially the SAFBIN team who has done extremely well by capturing the process and the methodology of balanced diet preparation out of locally produced food for their daily consumptions. I also acknowledge the significant contributions of our implementing partner organisations and local stakeholders for ensuring this initiatives at the ground level effectively with an inclusive approach.

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# 1. Introduction

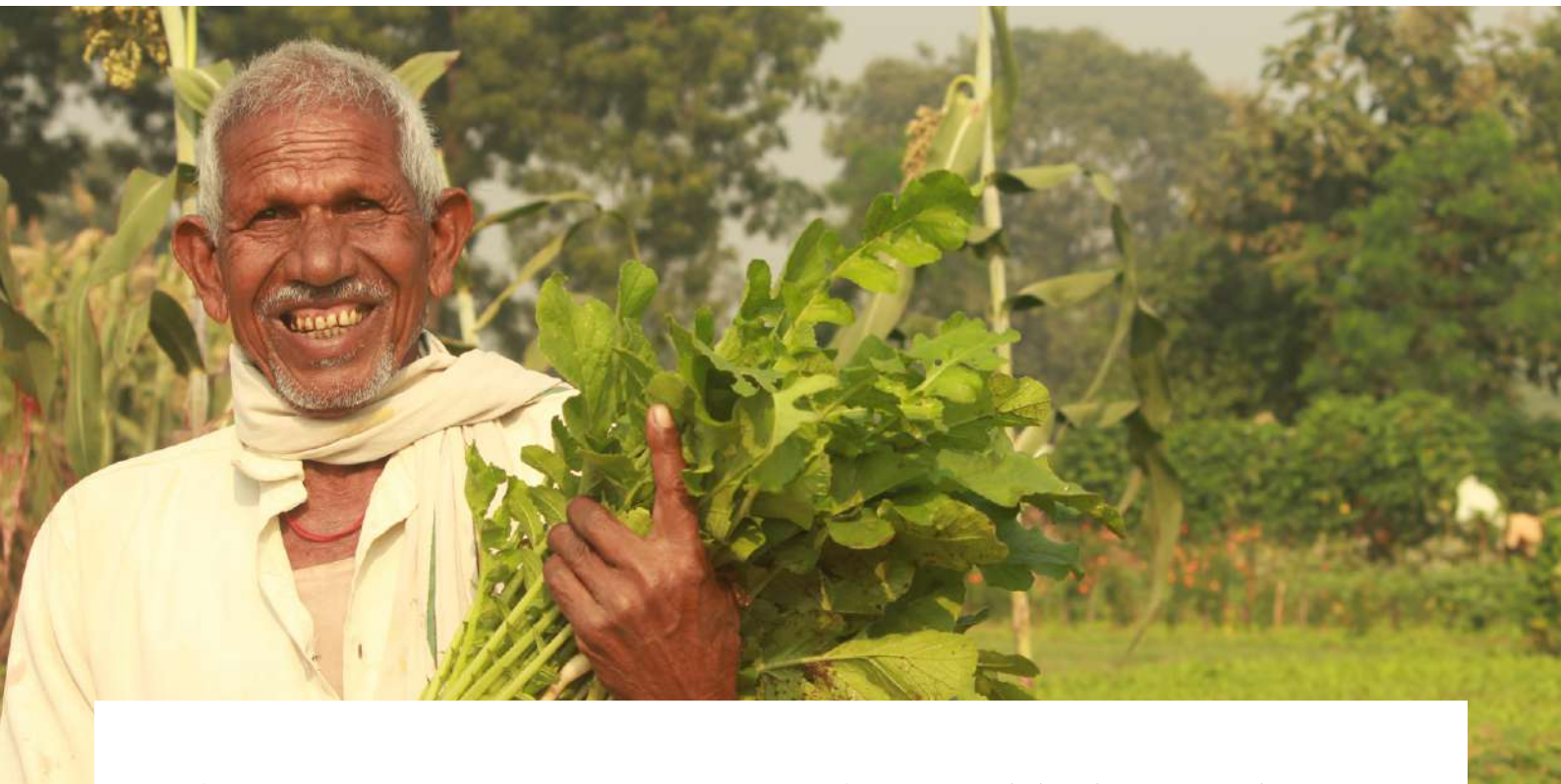
Climate change has forced the world community to strive for sustainable and resilient food systems. Production and consumption of food has implications not only on the people's health but also on our shared environment. In this Pandemic time nutrition become a hot topic. Health care system and communities is trying to address nutrient deficiencies while preserving our natural resources. Community managed nutrition means ensuring wholesome, nutrient-dense foods are accessible at their own locality, affordable and culturally relevant while preserving environmental resources and supporting local communities. Healthy diets help protect against the devastating effects of malnutrition, communicable and non-communicable diseases.

Caritas India is an active member of various platforms of civil society organizations that regularly

exchange views and seek joint dialogue with the government on specific social and political issues. As part of the Smallholder Adaptive and Biodiversity Network (SAFBIN) program, Caritas India facilitates the civil society organizations networking, dialogues, and learnings for better coordination in the field of climate adaptive agriculture and food sovereignty actions. To comprehensively address the challenges, the SAFBIN programme of Caritas India is designed to promote sustainable food production through integrated farming system (IFS) to ensure farm production, income, nutrition, resilience, and farmer's control by strengthening capacity of the targeted small farm families for adaptation to climate changes. SAFBIN II leverages the experience of SAFBIN I, especially around engagements with and for on-farm adaptive research (OFAR), climate change adaptation, farmer first approach, multistakeholder partnerships and research collaboration.



## 2. Background of the study



South Asia presents a mystery, where macro-economic growth and increase in household income and dramatic progress in some development indicators, have not been able to arrest and reverse persistent hunger and malnutrition. Manifestations and implications of the problems around food and nutritional security (FNS) are disproportionately linked to poor in general and SHF in particular, who are connected in either way, as producer and consumer, often losing at both ends. A pre-programme analysis on FNS is complex and interconnected with stagnant farm income, low farmers' access, and control over farm-resources, reduced small-farm resilience and increasing vulnerabilities to climate change, inadequate attention of support from policy, research and stakeholders and lack of linkage between the urban consumers and small producers, affecting their health and wealth.

SAFBIN intended to develop a model where the community managed the nutritional model which is a shared environment of smallholder farmers, consumers, other community members, and livestock, where all the components contribute to the nutritional security of the community keeping in mind the existing cultural and agricultural practices and revisiting the local varieties that used to grow before the onset of the chemical farming and the prevailing hybrid varieties. SAFBIN aim was to study if the local varieties are more resilient to the climate change through adaption of modern techniques. The rural women farmers were encouraged to cook the traditional food and the varieties of dishes in food competition among them. A research facility was developed to see the nutritional values of the local varieties and then a diet plan was developed by the communities.





Food security is not only about the quantity of food which we consume, but it is also about the quality and diversity of nutritious food at all times to meet the dietary need to lead a healthy life. Nutrition insecurity aggravates to the deaths of almost 10 million people each year and affects one billion people's health. Malnutrition, often called the hidden hunger can lead to life-threatening illnesses. Traditionally, nutrition security has been viewed as the monarchy of health professionals. Yet the nutrition challenge cannot be solved solely by the health sector. Farmers are the first nutrient providers, and the entire agri-food chain has a vital role to play. Continued focus on improving agricultural productivity is an important precondition in realising food security goals including nutrition security.

Climate Adaptive Agriculture and Food Sovereignty is one of the major themes selected by Caritas India to contribute towards Sustainable Development Goal 2 to 'End Hunger, achieve food security and improved nutrition and promote sustainable agriculture. The pan India coverage of Caritas India gives her the advantageous opportunity to work with the small and marginal farmers to increase their farm production and promote consumption of good food for good health.





## 3.SAFBIN India



Smallholder Adaptive Farming and Biodiversity Network (SAFBIN) is a smallholder-led initiative aimed to contribute towards SGD-2 to achieve sustainable food production through integrated farming system (IFS) to ensure farm production, income, nutrition, resilience, and farmer's control by strengthening capacity of the targeted small farm families for adaptation to climate changes.

Caritas India and her 2 partners launched SABFIN – A Programme for food and nutritional security of small farmers in Mandla, Sagar & Vidisha of

Madhya Pradesh, India. It lays stress on research led by smallholder farmers themselves; helping them adapt eco-friendly farming methods to cope up with increasingly erratic climatic conditions, with a cluster programme approach, for protecting the livelihoods and food supply of smallholder farmers from the vagaries of climate change and thus ensuring their Food and Nutritional Security. Along with it, the programme also focuses on strengthening of smallholder farmers collectives and control over land, seeds, and farm inputs.



# 4. Relevance of the study

Madhya Pradesh is undergoing a nutrition transition, driven both by demographic and socioeconomic changes. Understanding the causes and consequences of these changes could be important in preventing diet-related diseases of both under- and over-nutrition. Changes from traditional dietary patterns have been associated with increasing the incidence of obesity and diabetes throughout the states. The development of appropriate nutrition guidance remains challenging.

In Madhya Pradesh, study shows, 28.3% of women (15-49 years) and 45.7% adolescent girls (15-19 years of age) have low BMI ( $<18.5 \text{ kg/m}^2$ ). According to NFHS-4, prevalence of anaemia among women ever-married (15-49 years) has declined by merely 6% within a span of ten years i.e., from 55.9 percent in 2005-06 (NFHS 3) to 52.5 per cent in 2015-16. Yet, compliance of Iron Folic Acid Supplementation is only 23.6 percent. Also, there is a relatively lesser decline in low-birth weight (23.1% in 2013-14). Such high rates of poor adolescent and maternal undernutrition, anaemia, impacts fatal growth and result in low birthweight and subsequent stunting

Madhya Pradesh is one the EAG (Empowered Action Group) states of India where highest IMR (52 per 1000 infants' birth) recorded (SRS, 2014), this was the worse condition than the least developed country of Africa like Namibia (45.64), Malawi (48.01) and Haiti (49.43) in the same year (CIA Factsheet, 2014). High MMR (227 per 0.1 million mother) was also recorded in the state (AHS 2012-13) which was almost equivalent to the countries of Gabon (230), Papua New Guinea (230) (CIA Factsheet 2014). Above significant facts proved that Madhya Pradesh state was very poor in MCH status.

Out of the 51 districts of Madhya Pradesh, Sagar is one of the backward districts in the context of MCH services where IMR was 70 (AHS 2013) which was







higher than the country's average of 42 and it is also higher than some of the very least developed African countries like South Sudan (68.16), Zambia (66.62) and Burundi (63.44). MMR in Sagar district had recorded 322 which was higher than Pakistan (260) and Bangladesh (240) and also compared to Uganda (310), Swaziland (320) and Rwanda (340), etc. According to the above-mentioned facts it is clear that the development and extension of MCH services are very poor in Sagar district of Madhya Pradesh.

Sagar district has 29.5% Schedule Tribe with average Family size of 4-5 persons. Here the maximum temperature is 31 and minimum is 18. Annual average rainfall is 1156mm and 50.47% people depend on rainfed agriculture. Total Agricultural Land is 4565.87ha where area cover under single cropping is 1842.45ha and area under double cropping is 2498.12ha. Major Crop of Sagar district are Wheat, Soybean & Black Gram. Type of Soil is Black & Sandy soil. Percentage of Children under 5 years who are stunted (height-for-age) - 39.7% and percentage of Children under 5 years who are wasted (weight-for-height) - 17.5%. percentage of Children under 5 years who are underweight (weight-for-age) - 29.2% and percentage of Children aged 6-59 months who are anaemic - 67.8%. Percentage of Pregnant women aged 15-49 years who are anaemic - 39.6%. All women aged 15-49 years who are anaemic - 38.5%.

Mandla District has 57.2% Schedule Tribe with temperature of Max-32 & Min-18 and annual average rainfall is 1310mm. The Mandla district has total Agricultural Land of 5617.92ha where they take Major Crops namely Paddy, Maize & Millet. The area under single cropping is 5094.97ha and under double cropping is 491.78ha. Type of Soil in Mandla district is Black, Sandy & stony soil and 75% people depend on rainfed agriculture. The percentage of Children under 5 years who are stunted (height-for-age) is 39.4% and percentage of Children under 5 years who are wasted (weight-for-height) is 34.2%. Percentage of Children under 5 years who are underweight (weight-for-age) - 54.2% and Children aged 6-59 months who are anaemic - 71.4%. Percentage of Pregnant women aged 15-49 years who are anaemic - 75.7%. and all women aged 15-49 years who are anaemic - 74.4%.

This variability has made implementing nutrition interventions through the smallholder adaptive and biodiversity network (SAFBIN) program of Caritas India to make small farm families especially women, lactating mothers, pregnant women, mothers of 0-5yrs children and children aware on how to strengthen local food system by identification of knowledge and skill available at the local level. This initiative has led to introduced an innovative community managed nutrition model to strengthen the local system with more impact-based evidence in ensuring culturally relevant and nutritional rich food items.

# 5. Multi-stakeholder engagement in the study



Stakeholder engagement is a regular process of actively soliciting the knowledge, experience, judgment, and values to represent a broad range of interests in a particular issue, for a transparent and effective decision to make it more relevant. Considering the above, SAFBIN encouraged all relevant stakeholders and civil societies working in the region to discuss and share their ideas to develop an inclusive model. While documenting the nutrition model, the local stakeholders like representatives from anganwadies, district health department, district level nutrition rehabilitation center, horticulture and agriculture department were invited to share their views and observations to make it more socially acceptable to the community in consideration to their local context and food habits.

This approach of having multi stakeholder has benefited the program a lot. The project does not go as a stand-alone but involves other relevant departments and sectors to give their inputs and when they see the success in the model they tend to adopt and own it.

During the course of time, the health department has acknowledged the effectiveness of the model by developing the level of knowledge and skill in owning the practices at the local level and replicating in their respective self-help groups and hamlets with other farming families, the department has taken initiative and mainstreamed the model into their district action plan where the designated VRPs and Women leaders were invited as resource person to orient the SAFBIN form of community managed nutrition model in twelve other localities.



# 6.Objectives of the study

Documentation of community-based management of acute malnourish through community managed nutrition model developed by SAFBIN Team in coordination with local health department to improve their capacity to consume a Balanced Diet out of the local food items.





# 7. The key actions



Based on the model developed by the SAFBIN team in coordination with the community members, there are fourteen (14) key actions identified which was mutually discussed and prioritized by the members of the locality to address the challenges related to malnutrition issues

## a. Beneficiary Identification:

The primary target group members are belongs to small holder farmers categories having maximum of 2acres of land holding. Strategically, they are a critical constituency to address issues of poverty, malnutrition, and sustainable development. In selection of target groups, gender was a key criterion with at least one third of SHF directly participated and benefitted from the programme were women farmers. In the selection process, poorest and vulnerable among the SHFs (who own less than 2acres land) were prioritised. They were identified as per the participatory wealth ranking exercise conducted in each village and based on the vulnerability analysis, which assessed account asset ownership, skill sets, financial capital, existing stress etc. In line with the principles and policies of Caritas India, PWD, widows and other vulnerable



groups were also considered on priority. The beneficiary identification was done on the basis of criteria as above and suggestion from the CBOs, SHFC, DFF were considered.

## b. Volunteer Identification:

Considering the overall sustainability of the model, SAFBIN encouraged the community and introduced (women/girl) volunteers' concept right at the micro level to identify and mobilise the actual beneficiaries. In the first meeting with the community leaders and village para health workers, it was found that,

- i. Considering the geographical situation of the particular village/hamlets, practically it is not possible for the local health para workers to visit every beneficiary's house in different hamlets and provide adequate service delivery.
- ii. Due to huge numbers of children (aged 0-5yrs), it is also not possible for one health worker for quality monitoring.
- iii. Due to geographical remoteness and limited to proper network connectivity, families face many difficulties in availing facilities available



by the local government like ambulance service, doctor's visit, medicine etc. and bound to remain confined and limited to service facilities.

So, based on the above concern raised by the communities, SAFBIN in consultation with health para workers and community leaders, took efforts to identify local volunteers who can avail necessary support right at the hamlet/village (micro) level and mobilise them in community /stakeholder (meso) level for larger benefit which has agreed mutually and a criteria of volunteer selection discussed and mutually agreed which are mentioned below;

- i. Since majority of the beneficiaries are belongs to pregnant women, lactating mothers, and mother of 0-5yrs children, and children aged 0-5yrs, community decided to have women/girl volunteers right at the hamlet level to ensure necessary accompaniment support at the right time.
- ii. The women/girl volunteers should at least have the capacity to read, write, and communicate the situation properly to the nearest health workers at their locality.
- iii. The women/girl will be responsible to monitor and report jointly to village health para workers, can accompany for institutional service facilities in coordination with local health worker, organise regular meeting and counselling sessions at the hamlet level.
- iv. A total of 60 volunteers were engaged in coordination with local health workers and SAFBIN team in Sagar and Mandla districts.

This very step of identifying and engaging volunteer has brought significant achievements in mobilizing community, making them aware through various events, campaigns, rallies, and multi-stakeholder interactions. Volunteers played a greater role in building a healthy community for future generation.

### **c. Assessment of MCHN**

In MP, 28.3% of women (15-49 years) and 45.7% adolescent girls (15-19 years of age) have low BMI (<18.5 kg/m<sup>2</sup>). According to NFHS-4, prevalence of anaemia among women ever-married (15-49 years) has declined by merely 6% within a span of ten years i.e., from 55.9 percent in 2005-06 (NFHS 3) to 52.5 per cent in 2015-16. Yet, compliance of



Iron Folic Acid Supplementation is only 23.6 percent. Also, there is a relatively lesser decline in low-birth weight (23.1% in 2013-14). Such high rates of poor adolescent and maternal undernutrition, anaemia, impacts fatal growth and result in low birthweight and subsequent stunting. Madhya Pradesh is one the EAG (Empowered Action Group) states of India where highest IMR (52 per 1000 infants' birth) recorded (SRS, 2014), this was the worse condition than the least developed country of Africa like Namibia (45.64), Malawi (48.01) and Haiti (49.43) in the same year (CIA Factsheet, 2014). High MMR (227 per 0.1 million mother) was also recorded in the state (AHS 2012-13) which was almost equivalent to the countries of Gabon (230), Papua New Guinea (230) (CIA Factsheet 2014). Above significant facts proved that Madhya Pradesh state was very poor in MCH status.

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than Pakistan (260) and Bangladesh (240) and also compared to Uganda (310), Swaziland (320) and Rwanda (340), etc. According to the above-mentioned facts it is clear that the development and extension of MCH services are very poor in Sagar district of Madhya Pradesh. Maternal Child Health & Nutrition was assessed, and it was found that as per the research done that the identified project area had some very disheartening figures when it comes to MCHN.

In contrast to the above NHFS data, SAFBIN took initiative to collect the primary data and information through beneficiary to beneficiary (individual) interaction, focused group discussion, stakeholder consultation (anganwadies, nutrition rehabilitation centres, district health departments etc.) which was later compiled and presented to the community to make them aware of their food and nutritional situation along with the opportunity available at the local level to address it.

#### **d. Formation of PLW groups Hamlet wise Learning sharing**

Taking the suggestions from the community leaders and stakeholders, SAFBIN encouraged farming families to identified the beneficiaries in





coordination with local anganwadies, ASHA workers, and representatives of health department and a list of beneficiaries being prepared giving priority to the Pregnant and Lactating Women (PLW), Mothers of 0-5yrs children in each hamlet. This has helped the team to form a small group at the micro level to discuss their problems and monitor the progress while addressing the issues at the local level.

Women generally in rural areas due to their tradition, hesitant to share their health related problems in general or to someone those who do not know and often deprived of proper facilities, leading to various health problems. It is also observed that, due to cultural barriers, women are not allowed to go out of their house or premises. Considering the practical situation, formation of the micro level groups enabled these women to discuss, share their challenges and also build confidence to talk to the health representatives at their locality. Since the formation and operational model was democratically done, significant number of women have took the ownership to lead the mutual sharing at the micro level. On the other side, it was also revealed that, by forming such group actually create a support system and enhance the internal (family-neighbour-society) bonding as the people going through same phase of life would encourage others more empathically and sincerely.

#### **e. Stakeholder interaction cluster wise meeting**

Increasingly, multi-stakeholder processes have been recognized as being necessary to the development of policies seeking to promote systemic innovation in response to complex and multidimensional challenges, such as household food security, rural development, and environmental change. Stakeholder engagement is a process that can be followed in order to listen, collaborate with, inform, and dialogue with communities. This enables smallholders to identify, map and prioritize their major challenges with a localised solutions effectively while making the best use of available resources.

Considering the same, SAFBIN took the initiative in organising stakeholder interactions by inviting relevant stakeholders like anganwadies, district health departments, nutrition rehabilitation centres, horticulture, and agriculture department to discuss

the issues related malnutrition and propose a localised sustainable solution for the community. The entire program area was divided into three clusters and beneficiaries from respective clusters used to take part in the stakeholder consultation at their locality. The entire consultation was planned in line with their convenience and time, where SAFBIN took initiative to ensure the stakeholder's participation by creating a positive environment for dialogue. Today, anganwadies, ASHA workers are regularly participating to discuss and ensure possible service facilities to the rural women which is being organised by SHFC women members in each cluster.

Stakeholder interaction is being held once in every quarter to ensure quality monitoring of the beneficiary's health status, food habits, sanitation, and personal hygiene to be maintained at the household level. It is seen that more than 700 small farm families are now consuming balanced diet while maintaining sanitation and personal hygiene. A total of 1140 smallholder's households are aware as of now on the importance of maternal care and child health nutrition with better access to public health service facilities through volunteer engagement model.

#### **f. Interface with NRC/MTC Referral of SM Children**

Acute malnutrition or wasting is a failure to gain weight or actual weight loss caused by inadequate food intake, incorrect feeding practices, infections, or a combination of these. Considered both a medical and social disorder, Severe Acute Malnutrition (SAM) is defined by very low weight for height (Z-score below -3 SD of the median WHO child growth standards), or a mid-upper arm circumference (<115 mm/<11.5cm,) or by the presence of bipedal nutritional oedema.

Children with Severe Acute Malnutrition along with medical complications are referred from villages by frontline workers, such as Accredited Social Health Activist (ASHA), and Anganwadi workers, and are admitted to NRCs as per the defined admission criteria. These NRCs offer appropriate feeding of children, careful height and weight monitoring, and counselling to mothers and caregivers on age-appropriate caring, nutrition, and growth monitoring.

This is one of the major steps that has done significantly well by the field program team. SAFBIN mobilised a women group along with volunteers to prepare a list of children under nourished and severely malnourished. Representative from each cluster discussed with anganwadies worker and hold a meeting with district nutrition rehabilitation centre (NRC) where, the problem related to food and nutrition was precisely discussed. Based on the discussion, the team made a request to help the NRC in preparing a Balanced Diet chart out of locally available food items. Seeing the farming practices, availability of local food items and capacity of women and smallholders of the locality, it was requested to the NRC to suggest a localised food menu instead of a standard menu which is already available that might not be feasible enough with the resource poor farming families.

Based on the above, a list of locally available cereals, millets, pulses, oilseeds, and vegetables were shared with the representative of NRC and out which a localised balanced diet was suggested. The balanced diet was more inclusive and culturally accepted by the communities.

However, with regards to the severely malnourish, children were referred to the NRC with immediate effect. The entire process (counselling of parents, accompaniment to NRC, post NRC feeding management with localised balanced diet at home for additional 15 days) is being coordinated and monitored by the hamlet level volunteers. In this regard, volunteer – parents – local health worker – NRC coordination made the whole process more inclusive where respected families gradually took initiative by seeing impact of networking and collaboration with local health agencies.





### **g. Assessment of local food Identification of uncultivated food**

Malnutrition, including micronutrient deficiency, is especially acute among women and children in rural India. Eating a variety of local fruits and vegetables is associated with reduced risk of micronutrient deficiencies and non-communicable diseases. Locally-grown produce usually holds the key to improving diets and the nutritional status of rural women and children, but it is increasingly being eliminated from diets in many rural settings. This is due to urbanization and the proximity of villages to cities, increasing contact with people from other places, misconceptions about the safety of these foods, and a lack of knowledge about how to prepare them with a minimum nutrition loss.

During this study, it was found that breaking down misconceptions regarding locally-grown and widely available nutritious fruits and vegetables could help to improve diets and address micronutrient deficiencies among women of child-bearing age, children aged 0-5yrs and mothers of 0-5yrs children in rural India.

Based on the above scenario, the team put efforts and prepared a list of 41 locally grown traditional food items Rice, (Wheat, Maize, Kodo, Kutki, Madua, Jowar, Oats, Black gram, Arhar, Gram, Green Gram, Lentil, Mustard, Soybean, Sarguja, Ground nut, Potato, Tomato, Beans, Pumpkin, Amaranths, Bitter gourd, Coriander, Ridge gourd, Brinjal, Bottle gourd, Chilly, Cabbage, Cauliflower, pinach, Smooth gourd, Cowpea, Mint, Onion,

Carrot, Reddish, French Beans, Sem, Cucumber & Garlic) by smallholders and 12 uncultivated fruits (Jackfruit, Mango, Black berry, Blue berry, Jangli Jalebi, Star Fruit, Wood apple, Elephant Apple, Stone apple, Karonda, Char, and Kendu) which are locally available for consumption. The entire details presented in the stakeholder consultation to prepare a balanced diet out of these locally available food items.

### **h. Provision of input supply**

Young women in rural India are constrained by limited access to knowledge and economic opportunities. At the same time, women food producers, who have been hit hard by climate change and COVID-19, need information on resilient farming practices to maintain their family food and nutrition security. Unless strong efforts are urgently made to empower these aspiring young and marginalised women food producers, it will be difficult to lift them out of poverty.

Considering the local food habits, a feasible list of seed was prepared in coordination with SHFC and women members for input support. Priority was given to the crops and vegetables suggested by the NRC where apart from the major crops like paddy, wheat, millet, maize, and pulses, 13 types of local vegetables were proposed to include in backyard kitchen garden kit (Amaranths, Local saag, Coriander, Ridge gourd, Brinjal, Bottle gourd, Spinach, Smooth gourd, Cowpea, Carrot, Reddish, Tomato, and French beans). Orientation provided to raise these specialized nutrition garden with 1306



farming households to ensure fresh green vegetables at their arm length by adding additional nutrition to the plate/diet.

Behaviour counseling sessions was also conducted parallelly on sanitation and personal hygiene to make them more internalize on the importance of the good food and nutrition security for them and their family members.

#### **i. Balanced diet menu out of localised food items**

Eating well does not have to be complicated. When we talk about a balanced diet it means choosing a variety of foods from the different food groups – specifically: vegetables and fruits; protein (animal as well as plant protein), dairy product, carbohydrates like rice, wheat, millets, oats, potatoes, and bread – preferably wholegrain or wholewheat varieties.

In addition to the above listed food items, different types of food menu were prepared in consultation with district nutritional rehabilitation centre's representative and again shared with the women beneficiaries and SHFC members. The same was discussed in the context to the social and cultural values of the societies and suggestions were taken from the community leaders and village level para health worker for further actions.

The localised food item nutritional values were derived and evaluated scientifically and then a balance diet menu was generated with the help of community in coordination with NRC representative. The community has gained knowledge on what, when and how to eat certain food items.

#### **j. Positive deviance hearth**

It is a 15-day orientation program on nutrition including practical education session, mutual sharing of mothers of nourished children of the same locality and rehabilitation session. The education session consists of half hour education lesson and one and half hour peer-led cooking session to make the rural women know the best way of cooking food with minimum nutrition loss. The cooking demonstration will be led by volunteers (one of the mothers among them) from the identified groups.

Participating mothers will need to bring local available food items along their children during this session, prepare meal according to pre-planned menu and feed their children with the prepared meal after cooking as an additional meal. The rehabilitation session will be the rest of the days following each education session per day to make them aware of the importance of sanitation, hygiene with regards to maintain maternal care and child health nutrition. Growth monitoring session will also be conducted in every 7th day where mothers will be taught and trained to weigh their children.

#### **k. Campaign on local food**

Small farms nourish plants with cover crops and other sustainable methods that put nutrients back in the soil. Allowing crops, fruits, and vegetables to grow at their own pace with natural nutrients enables their roots to dive deeper into the earth, increasing the nutrients the food pulls from the soil. Local food has a shorter time between harvest and your table, and it is less likely that the nutrient value has decreased. Caritas India through SAFBIN has promoted nutritional garden for every household at the backyard with 10-12 local seasonal vegetables. The seeds were stored nicely at the household as well as community seed bank which is managed by the smallholder led collective.

Apart from this, Caritas India has been promoting consumption of local food by establishing nutritional garden in each household and organising a dissemination workshop in collaboration with local health departments to showcase the local food system by providing larger platforms to rural mothers to share their learning and experiences in maintaining their family nutrition requirements. During the session, mothers used to demonstrate their traditional recipes learned during the session and explained the entire process and impact of improved health status of their children and family members to motivate women and mothers of other regions.

#### **l. Learning sharing workshop:**

The learning and sharing workshop were organised to let the community level trainees take up the role of trainer to other communities and harness their





skill as trainer to upscale and replicate the model with other practitioners. The learning and sharing gave the community members the opportunity to learn from others as well as share their own knowledge base on nutrition. A total of 2303 mother, lactating women, mothers of 0-5yrs children were participated in two phases and shared the impact of the community led nutrition model developed and integrated by SAFBIN team

#### **m. Learning session for AWC**

A typical Anganwadi centre provides basic health care in a village. It is a part of the Indian public health care system. Basic health care activities include contraceptive counselling, supply, nutrition education and supplementation, as well as pre-school activities to the rural women and children. Due to geographic challenges and remote location of the communities with no network connectivity, many a times they are deprived of basic health services and facilities. Secondly, considering the huge numbers of children at the local level, it is often difficult to monitor each child on a regular basis. Hence, Caritas India with the help of the local

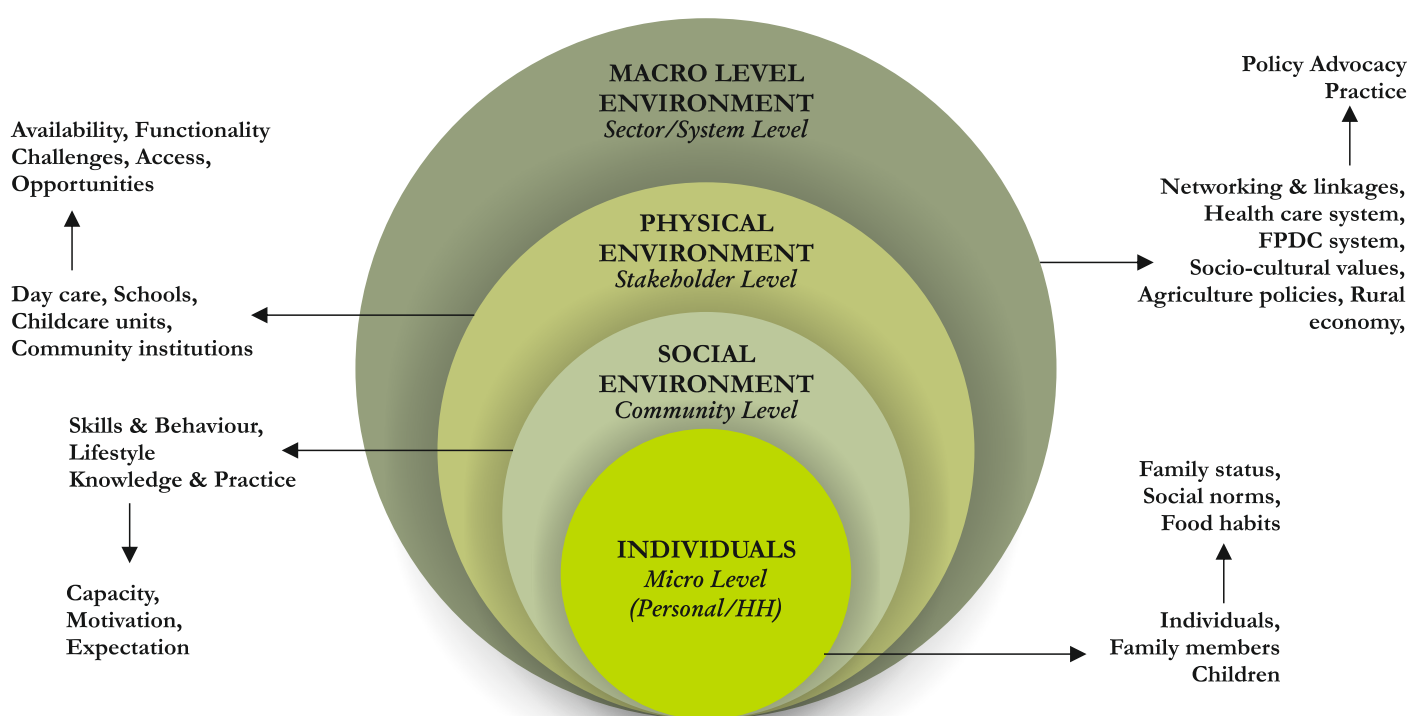
health works, identified volunteers and engaged them to extend their hands to support the local health system in securing better health facilities and services. To make the people and communities aware on the importance of health, series of campaigns were planned in schools and community level with educational sessions to make them aware of different health schemes and benefits.

#### **n. Nutrition audit**

The purpose of nutrition assessment is to obtain, verify, and interpret data needed to identify nutrition-related problems, their causes, and significance. It is an ongoing, nonlinear, and dynamic process that involves data collection and continual analysis of the patient/client's status compared to specified criteria.

Caritas India would conduct the nutrition audit through its implementing partners and volunteers to assess the health status and need of the target population in coordination with the local stakeholders. This will help the local stakeholders to ensure the basic service facilities.

# 8. Community led Food and Nutrition Model



**Community led Food & Nutrition Model**

The community led model comprises of major three (3) levels

1. Micro Level (Individual and Community level)
2. Meso Level (Physical Environment – Stakeholder level)
3. Macro Level (Sector/System/Policy level intervention)

The Micro level which is individual /personal/ household having family members and Children where the family status and social and cultural norms are followed along with food habits. Usually in rural area or per say Pan India the food habit meant to have either rice or roti (flat wheat bread cooked on tawa) and dal (cooked lentil) or sabji (cooked vegetable). The family's economic status, daily food habits and consumption pattern will be assessed to know type of food and varieties of food

they usually consume.

The immediate level is community level which is the social environment and here the community member's lifestyle, behaviour, level of knowledge & practices is being assessed. How community is utilizing the existing knowledge and expertise to address the issues and what are the expectation for future integration.

The next level of engagement is at stakeholder level called “Meso Level” where the community get the advantage to access the first basic knowledge, advise and first hand services from the community based institutions like Anganwadies, Day care centres, Childcare units etc. Mothers, lactating women can get easy access to the local health para worker while children received food and nutrition diets in Day Care centres (Anganwadies) Schools and Childcare





units along with basic knowledge sanitation and hygiene. The functionality of these institutions is the key to the wellbeing of the community. Hence the community to take the appropriate plan of action to monitor and exercise for the benefit of all people.

The Macro level environment consists of the local authorities, departments, service providers and policy makers where community get the opportunity to interact and share their major challenges to find a localised solution. The Macro level not only provide an opportunity to create a good identity with the district and state level departments through the stakeholder consultations to gain appropriate knowledge, procedure for easy access to the service facilities on due time period but also create a platform for mutual learning and dissemination of best practices, experience sharing

to motivate others while contributing to the regional and national goal of health and nutrition.

On the broader side, the Facilities Planning, Design, and Construction (FPDC) system is at this level which support the community in their endeavour for their well-being. The social cultural values system of the community matters a lot at this level as this will define their participation in the rural economy and the policies made by the government and the level of networking and linkage with various sectors and system. The agriculture policy and health care system implication can be witnessed at this level. This level deals with the policy engagement and the actual practise that take place in the sectors & system. The community's active participation at this level makes the program sustainable.

# 9. Key Lesson Learned



- Using volunteer model to reach out a wider geographic area and thereby increasing service coverage for health and nutrition interventions. The volunteer approach helped to facilitate integration of activities within the health and nutrition program to provide a holistic nutrition intervention as well as complementing nutrition interventions with integrated farming system activities. Food security programs similar to SAFBIN can effectively implement integrated farming system, maternal and child health nutrition with high coverage and impact through active community participation using the volunteer model.
- The Positive Deviance and HEARTH program can easily be scaled up using the hamlet based volunteers in coordination with local health para workers (Anganwadi workers) to recuperate mild to moderate malnourished children within their community set-up using food resources locally cultivated through collective farms, homestead gardens etc.
- Quality concept and implementation of positive deviance and HEARTH are effectively delivered through the volunteers smoothly. It involves close supervision of service providers along the community-based volunteers and helped to accomplish with accountability. This has increased efficiency in delivering health messages to the target groups through a network of volunteers under the control of community health workers and program team members.
- The use of appropriate teaching aids such as flip charts and facilitating community level training sessions by trained volunteers to build accountability and confidence to service providers and promotes community ownership. The use of IEC materials in training is a way of sharing information effectively to beneficiary mothers in their local dialect.
- It has the potential to enhance community participation at all levels and promotes program coordination and collaboration with the relevant departments to create self-sustaining structures at the community levels. Through this innovative community led model, Caritas India with the help of SAFBIN, enhanced coordination of community-based health and nutrition services. This can further be strengthened by linking the community based interventions for referral, feedback, and health surveillance.



# 10. Conclusion

The ongoing community led food and nutrition model of smallholder adaptive farming and biodiversity network (SAFBIN) program in Madhya Pradesh of India is significantly relevant to the context.

The community-based initiative has turned out to be highly effective in addressing the food and nutritional need of the rural mothers, lactating women, pregnant women, mothers of 0-5yrs children and 0-5yrs of children and most efficiently managed by the local team. The engagement of local volunteers in coordination with local health departments is one of the major contributions from SAFBIN towards availing the basic health services and facilities. The entire concept was developed in consultation with the community members and was successfully owned by the community in conducting and managing the activities at the local level. The positive impacts are also well explained and shared by the rural mothers to the stakeholders and mothers of other areas for replication.

The State Health Department Madhya Pradesh has referred a delegation team to review the implementation of SAFBIN form of community-led food and nutrition and found more relevant as per the community needs and requirements. Later the District Health Department, Sagar has replicated the innovative community-led food and nutrition model in eight adjacent gram panchayats to ensure adequate service deliveries to more than 500 vulnerable families. SAFBIN has successfully mobilized the resources from the state health department and made them acknowledged the initiative for future policy engagement. community has now adopted nutritional dietary diversity (85-90%) as a result of adaption of homestead and increase in farm income (100% SFH household claim their farm income increased). Food consumption score indicates that the SHFs are consuming balance diet around the year compared to previous status the increase is approx. 129% as per midterm evaluation.



# 11. Recommendation



In order to build a comprehensive and sustainable community led food and nutrition model that addresses all forms of malnutrition, following are the few recommendations for the community at large.

1. Consolidate and strengthen the community-based nutrition programmes, aiming at improved nutritional status and expand to all primary schools of the locality to create an appropriate learning environment through nutrition education, school gardening and school mid-day meals.
2. Apply a multi-disciplinary and multi-stakeholder holistic approach to support effective integration of community-based nutrition programmes and policies at local, regional, and national levels.
3. Promote local volunteers along with active involvement of community leaders, village health workers, parents, and representatives from local government in the development and implementation of community led initiative for larger ownership and accountability.
4. Promote the establishment of nutritional garden for every household, school, and anganwadi centres as an integral part of nutrition programmes.
5. Conduct a feasibility study in the promising administrative areas of Madhya Pradesh and develop an appropriate higher level program proposal and explore funding opportunities among bilateral, multi-lateral donors and potential NGOs.











## Community-Led Food & Nutrition Model



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