# FSN - CHF INTERVENTION



## A QUALITATIVE EVALUATION REPORT



Report Submitted on 20.02.18 To the FSN Study Group M.S. Swaminathan Research Foundation, III Cross Road, Institutional Area, Tharamani, Chennai- 13

Ву

Shilpa Ashok Pandit, PhD Contact:panditshilpa17@gmail.com

## CONTENTS

List of Abbreviations
Background of the Evaluation
Evaluation Questions
From the Community side
From the Program implementation side
Key Stakeholders
Evaluation Matrix
Two Sites –Broad Common Observations
Two Sites- Overarching Unique Observations
Site 1- Wardha11
Description11
Site 2 – Koraput
Description
Comparative Observations On Site Description13
Evaluation – Wardha
Question 1 - How effective has the CHF identification and training been in bringing nutrition and health awareness into their own households and larger community networks?
Question 6 -What were the processes followed towards ideation, preparation and implementation on the CHF? In what manner was the ownership to the intervention woven in the CHF implementation?
Question 2- What changes in their farming practices and food and nutrition behaviors are perceived by the CHF themselves and the larger community?
Question 3- Radiating out from the CHF and their households, what have been the circles of influence of the CHF intervention towards the larger community, village leaders and social influencerss and leadership?15
Question 7 - What were the material and social mechanisms created towards an effective CHF intervention in the program villages?
Question 8- What were the challenges experienced by the program implementation team in the CHF intervention?
Question 4 What have been the challenges experienced that hinder sustainability?
Question 5 .What could be the material and social building blocks that can be leveraged for sustainability?16
Question 4 - What have been the challenges experienced that hinder sustainability?
Question 9 - In what manner, sustainable outcomes are embedded in the implementation of the CHF intervention as perceived by program implementation team?
Evaluation -Koraput
Question 1 - How effective has the CHF identification and training been in bringing nutrition and health awareness into their own households and larger community networks?
Question 6 -What were the processes followed towards ideation, preparation and implementation on the CHF? In what manner was the ownership to the intervention woven in the CHF implementation?

Question 2- What changes in their farming practices and food and nutrition behaviors are perceived by the CHF themselves and the larger community?
Question 3- Radiating out from the CHF and their households, what have been the circles of influence of the CHF intervention towards the larger community, village leaders and social influencerss and leadership?20
Question 5 - What were the material and social mechanisms created towards an effective CHF intervention in the program villages?
Question 8- What were the challenges experienced by the program implementation team in the CHF intervention?
Question 4 What have been the challenges experienced that hinder sustainability?
Question 5 What could be the material and social building blocks that can be leveraged for sustainability? 21
Question 4 - What have been the challenges experienced that hinder sustainability?
Question 9 - In what manner, sustainable outcomes are embedded in the implementation of the CHF intervention as perceived by program implementation team?
Conclusions And Recommendations23

## LIST OF ABBREVIATIONS

ASHA	Accredited Social Health Activist
CC	Cement Concrete Roads
CHF	Community Hunger Fighters
FAQ	Frequently Asked Questions
FGD	Focussed Group Discussion
FSN	Farming System for Nutrition
LANSA	Leveraging Agriculture for Nutrition in South Asia
MSSRF	M S Swaminathan Research Foundation
NGO	Non-Governmental Organization
OBC	Other Backward Castes
PDS	Public Distribution System
PHC	Public Health Centre
PRI	Panchayati Raj Institutions
SC	Scheduled Castes
SHG	Self Help Groups
ST	Scheduled Tribes

## BACKGROUND OF THE EVALUATION

Nutrition awareness has been a part of the Farming System for Nutrition (FSN) study under the research programme on 'Leveraging Agriculture for Nutrition in South Asia'(LANSA) project right from commencement of the study in 2013-14. Activities and programmes like observing National Nutrition week, Hand wash day, World Food day, etc.; target specific trainings like anaemia for adolescent's girls and women; recipe demonstrations and exhibitions have been conducted at village level in both Wardha and Koraput, as a part of nutrition awareness program. For sustainability of the FSN approach, it was decided to train community members to be ag-nutrition awareness champions at the village level. Capacity building and work in the direction commenced in mid 2016, following the Community Hunger Fighter approach designed and piloted earlier by Dr. Rama Narayanan in Koraput, Odisha.

Staff members working on the FSN study were first called for a discussion to understand their perception of nutrition awareness strategies and the feasibility of the CHF approach discussed with them. Following this, volunteers from each village were selected by community members through a participatory approach, to undergo training as CHFs. The selected CHFs were trained on nutrition and linking nutrition to agriculture through two residential training programmes at each site in late 2016. The CHFs were then followed up to observe the practice and dissemination of nutrition awareness. Continuous activities at village level are being conducted by organizing trainings as per the request from the community. The changes happening at village level with respect to food consumption and agricultural pattern were being observed and recorded as part of the FSN study.

It was proposed to commission an evaluation of the nutrition awareness and CHF initiatives by way of an end-line assessment in late 2017. This report is an outcome of the evaluation exercise.

## EVALUATION QUESTIONS

The broad research questions in the FSN component of research programme on Leveraging Agriculture for Nutrition in South Asia(LANSA) (Source: The FSN consortium proposal document) are:

How can agriculture and food systems become more nutrition sensitive?

How enabling is the wider context in linking nutrition-sensitive agriculture and food systems to other determinants of nutrition status?

What is the scope for the embedding of nutrition innovations within specific agricultural interventions?

The present evaluation looks at the same questions with regard to the FSN feasibility study, through the lens of the core actors and stakeholders on the ground – the farmers and their households-the community, including women, the Dalits and the landless as well as the rural social influencers - the ward members, village traditional leaders, PRI members, SHG leaders, ASHA, Anganwadi worker, PHC, school teachers and finally, the CHF themselves as the ambassadors of change in a microcosm of the village, habitation and the panchayat.

Therefore, mirroring the broader research questions in the FSN study, following research questions are set for the proposed evaluation:

#### FROM THE COMMUNITY SIDE:

- 1. Within the program research questions 1, 2 and 3, referring to the linkage between farming practices and nutrition, the questions are-
  - 1.1. How effective has the CHF identification and training been in bringing nutrition, and health awareness into their own households and larger community networks?

- 1.2. What changes in their farming practices and food and nutrition behaviours are perceived by the CHF themselves and the larger community?
- 1.3. Radiating out from the CHF and their households, what have been the circles of influence of the CHF intervention towards the larger community, village leaders and social influencerss and leadership.
- 1.4. What have been the challenges experienced that hinder sustainability?
- 1.5. What could be the material and social building blocks that can be leveraged for sustainability?

#### FROM THE PROGRAM IMPLEMENTATION SIDE:

- 2. Within the program research question 3, the questions are:
  - 2.1. What were the processes followed towards ideation, preparation and implementation on the CHF? In what manner was the ownership to the intervention woven in the CHF implementation?
  - 2.2. What were the material and social mechanisms created towards an effective CHF intervention in the program villages?
  - 2.3. What were the challenges experienced by the program implementation team in the CHF intervention?
  - 2.4. In what manner, sustainable outcomes are embedded in the implementation of the CHF intervention as perceived by program implementation team?

With the above mentioned research questions, the objectives of proposed exercise propose to:

1. Evaluate impact of individual programs on nutrition awareness

2. Assess impact of the CHF approach and its sustainability within the communities as the project draws to its close.

## **KEY STAKEHOLDERS**

It is proposed to follow a layered approach in the evaluation. Radiating outward from the core of the intervention -CHF and their households, via media the project volunteers are circles of influence towards larger community members, SHG groups and other village collectives, traditional village leaders, Ward members and Panchayat presidents, ASHA workers, PRI members, SHG leaders, ASHA, Anganwadi worker, PHC, school teachers etc. From the program implementation side as well, via media the volunteers and project staff, CHF is the core and radiating out are circles towards village volunteers working with MSSRF, MSSRF program staff on sites and the program staff in Chennai guiding the CHF intervention and Rama Narayanan, the consultant guiding the initiative . In the present report, following evaluation matrix was adopted. However, it is to be noted that since the evaluation questions from the program implementation side and the community side, broadly mirror each other, therefore, the selection of questions in evaluation segments may appear 'mixed up' in order during analytical reporting. . For example, Question 1 and Question 6 in the evaluation matrix are mirroring each other and are therefore taken together.

## **EVALUATION MATRIX**

SN	Evaluation Questions	Stakeholders and Method
1.	How effective has the CHF identification and training been in bringing nutrition and health awareness into their own households and larger community networks?	Program Staff and volunteers– 1 FGD on each site
2.	What changes in their farming practices and food and nutrition behaviors are perceived by the CHF themselves and the larger community?	CHF household members and community networks- 1 FGD in each village/habitation
3.	Radiating out from the CHF and their households, what have been the circles of influence of the CHF intervention towards the larger community, village leaders and social influencerss and leadership.	Key Informant interviews with village PRI, ASHA and Anganwadi workers as well as school teachers and SHG members. 5 interviews in each village
4.	What have been the challenges experienced that hinder sustainability?	1 FGD in each site, key informant interviews with select CHF who have been outliers on both sides of the distribution.
5.	What could be the material and social building blocks that can be leveraged for sustainability?	Record and documentation review and group discussion with CHF staff
6.	What were the processes followed towards ideation, preparation and implementation on the CHF? In what manner was the ownership to the intervention woven in the CHF implementation?	7 Key informant interview with program staff both at Chennai and Wardha/Koraput
7.	What were the material and social mechanisms created towards an effective CHF intervention in the program villages?	Record and document review FGD with program staff at Chennai and Wardha / Koraput
8.	What were the challenges experienced by the program implementation team in the CHF intervention?	FGD with program staff at Wardha and Koraput
9.	In what manner, sustainable outcomes are embedded in the implementation of the CHF intervention as perceived by program implementation team?	FGD with the program staff at Wardha and Koraput



#### Engaging with Stakeholders

During evaluation, attempt was made to engage with all the stakeholders – those who were directly associated with the project and those who were indirectly ' in the know' about the project.

In all, 24 Key Informant interactions in the field were conducted with school teachers, Anganwadi Workers, Sarpanch, Ward Members, Mid-day meal Cooks and local /tribal Healer/vaidya in the 5 villages in Wardha, Maharashtra and 7 villages in Koraput, Odisha.

Focused group discussions with Villagers were held in all the villages in Wardha and Koraput Sites. The group size in these meetings ranged from 12-35 members. There was lower participation of women in most of these meeting. The discussion time ranged from 40 minutes to 100 minutes.

Small group focused discussions were held with volunteers, the project staff and the CHF. The group here comprised of between 4 to 10 participants and the average discussion time was 60 minutes to 120 minutes.

All the interactions were held in local languages and recorded

Some of the common observations in both Wardha and Koraput sites are as below:

- 1. The timing of evaluation during harvest season In both Wardha and Koraput, the timing of the field visit was during the beginning of busy harvest (Kharif) season. In Wardha, cotton was being harvested and in Koraput, paddy harvest was ongoing. This meant that all working men and women, including in some cases, growing children, were extremely busy and pre-occupied. This meant that, all the interactions were held either during morning or evening time. Morning time was less preferred. The preoccupation of the farmers(men as well as women) meant that farming as such and issues surrounding farming was at the top of their minds. As a counterfactual, does this mean that any other time, the pre-occupation would be less? Perhaps only during the interregnum between a good rain and harvest, that the farmers would be less preoccupied?
- 2. The issues of rain fed agriculture and lack of irrigation/ water In both the sites, farmers (both men and women) continued to flag the concerns around a largely rainfed agriculture practice. During focussed group discussions, villagers rued the fact that, they cannot grow during the summers and therefore, the idea of farming for nutrition doesn't apply for all the twelve months of the year. This was equally expressed in both Wardha as well as Koraput.
- 3. A felt need for nutrition interventions- In both the sites, villagers, CHF, village volunteers and the key village functionaries such as school teachers, Anganwadi workers and Sarpanch, identified the need for more knowledge about nutrition as a key requirement. Some farmers in Maharashtra identified the use of chemicals in market procured grains and vegetables as a cause for 'nikrushta poshan' (low quality /damaging nutrition) and therefore a need for nutrition interventions, others identified the freshness of the vegetables(taaje) and some identified the novelty of some vegetables and fruits( poi bhaji(local spinach like green leafy vegetable), kheta( an edible flower), gaajar(carrots) as new /not seen in real/only seen in charts. Especially, school teachers in the villages in Wardha and one Anganwadi worker in Odisha identified this as a key knowledge requirement for children.
- 4. A desire for a better quality of life, through inter alia a social comparison with the urban city dwellers or 'others' Due to technology, education and proximity to urbanising areas in Maharashtra and due to exposure visits in Odisha and proximity of the MSSRF field office, the stakeholders and community members compared their life styles and food/nutrition patterns with 'Shahar' /Urban habitations with better access to infrastructure and information or with others. In this manner, social comparison was experienced as upward and aspirational towards a better quality of life- a desire for more knowledge and better practices, beyond simply the economic rationale of improving productivity.

## TWO SITES- OVERARCHING UNIQUE OBSERVATIONS

Whereas, there were indeed broad common observations, the textures of practice and experiences were quite different between Wardha and Koraput. These differences in the textures of experience emerged from a different agricultural practice as well as a different agrarian micro-economy, a different socio-demographic profile of the villages and the more nuanced differences in the program implementation for CHF interventions In the following subsection, three key unique overarching observations are briefly delineated to create a rationale for in-depth analysis on both the sites.

1. Unique Agrarian Practices, Different Agrarian Micro-economies with Unique Attendant Risks –It was noted in the CHF documentation earlier that the Wardha site had cotton as primary and pigeon pea, soyabean and sorghum (some extent) as a secondary crop. In Koraput, paddy is the primary crop with several minor crops of millets. At the first level, this fundamental difference in the agrarian micro-economy creates a different texture of living experience. In psychological/behavioural terms- the first link between – what we produce is what we also eat is broken. Food security itself is then largely dependent on the market. Farmers and households, during the FGDs discussed how they would depend on the market for not only rice and wheat

but also for the diversity in pulses/dals. So, the economic idea of raising productivity through cash crops , results in creating a decision making stress and possibly fracturing /breaking the key link, that the FSN /FSN seeks to study and advocate - To re-establish and embed nutrition in the farming systems through cropping diversity. In the subjectivity of the person (farmer/woman/child) there are two psychological connections. 1. What is produced and what is eaten/consumed and 2. What is consumed and what is nutritious to be consumed. The third, of course is an impact link- What is the subjective outcome of the nutritious food that is consumed. Thus, in Wardha, the first link between what is produced and what is consumed is broken leading to several implications discussed in later sections, to questions on gender and decision making, optimising profits and attending to risks. In Odisha, the production is still connected to what is consumed as paddy and millets are the main crops. Thus, the embedding of nutrition into farming systems has a clearer behavioural and psychological link between cropping diversity and dietary diversity.

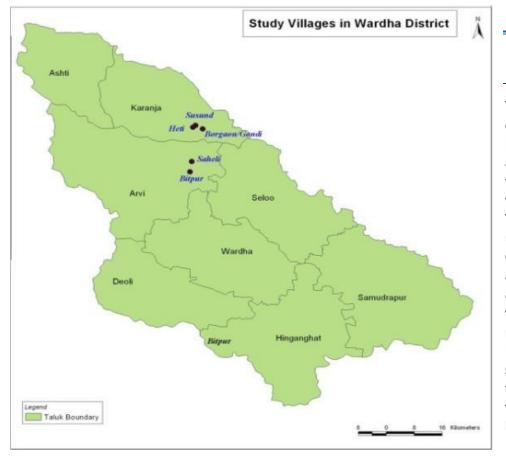
- 2. Difference in Agricultural Practice- In terms of agricultural practice, the tribal hamlets in Koraput, Odisha earlier followed a 'broadcasting' method of sowing, which involved 'broadcasting' the seeds and allowing the crop to grow with minimal/no inputs. During the FSN intervention, using a systematic demonstration design, the progressive farmers changed from a 'broadcasting' practice to a more ordered sowing in rows/lines with recommended package of practices. This was unique to Koraput and not found in Wardha, Maharashtra. This change in the agriculture practice in Koraput sets a different floor effect between the two sites in terms of agricultural parameters. It is indeed true that the line sowing intervention was not relevant in the context of Wardha, however, the above mentioned point still remains. More relevant to the present evaluation, this change in practice has a strong domino and sticky impact (positive) on the mindset of the villagers. The impact of the CHF then, is to be viewed through that lens in Koraput.
- 3. Risks in Agricultural Practice Whereas, each agricultural context has specific climatic, land, soil, market and other eco-system risks associated with the practice that impacts the yield/productivity/ agricultural incomes etc. Water, as mentioned earlier was reported as a common risk/concern in both Wardha and Koraput. However, the crop losses and damage due to animals, pests and birds was a very serious issue voiced by the farmers in Wardha, again and again. The adjacency of the farms to a protected forest area and the inability of the farmers to protect their harvest from wild life attacks was a significant distress uppermost in the minds of the farmers. It colored their overall perception of the project itself, as they continued to lament on the effort required to protect their crops. The impact of the CHF then, is to be viewed through this lens in Wardha.
- 4. Unique socio-cultural and macro developmental contexts in Wardha and Koraput Wardha and Koraput present two unique socio-cultural and macro developmental contexts. Even as the five villages selected in Wardha are backward and populated predominantly by historically marginalised tribal groups, the overall socio-cultural context of Maharashtra has an impact on the mindsets of the villagers, in the sense that people are more aware of their rights, there is awareness against inter group social distance/discrimination. At the psychological level, there is lowered symbolisation, higher receptivity towards empirical knowledge and a greater receptivity to 'modern /scientific' beliefs. As a developmental context, people in Wardha are more tuned to government welfare programs and the ideas of provisioning, welfare and being 'beneficiaries'. It appeared that, the villagers in Wardha also expect to be remunerated for doing work and thus express the passivity and the lack of community ownership that these development ideas of provisioning and being beneficiaries bring.
- 5. In the Koraput context, the tribal groups have more cohesion and within-group harmony, however, they show and practice, inter-group social distance. The Ranas for example, eat sitting among their group alone; Doms sit with their group members and eat. At a psychological level, living experiences have higher symbolisation of experience. For example, red coloured vegetables were not eaten because they remind/symbolise blood. However, there is reduced/limited expectation of remuneration for conducting activities and the ownership of action is higher. The CHF as well as the villagers have unlearnt/do not look at themselves and their collaboration with the project staff from a provisioning and beneficiary perspective.
- 6. Unique Social contexts of hierarchies including Gender and Age Even as both Wardha and Koraput villagers were inhabited by several caste and tribal groups, the textures of social life, participation in public places and assemblies and social interaction was unique and different in Wardha and Koraput. Women CHF in Koraput were more active and vocal in public spaces. They were certain that their views would be heard

and the men would show recognition of the woman's views, if not deference for the same. Women seemed to have more say in the cropping decisions and men seemed to be more aware of activities at home, even cooking, if and as the situation required. Therefore, the clear break of work allocation in terms of gender and its hierarchy was less rigid in Koraput as compared to Wardha. In Wardha, women CHF, especially the younger CHF had very limited or no say in the public spaces and gatherings. Their networks and therefore their communication pattern was within their gender and age cohort. The selection of the CHF and their socio-demographic characteristic thus becomes a critical factor for assessing the sustainability of the intervention.



Homestead nutrition gardens, seed banks, community nutrition gardens and school gardens are visible in Wardha, with vegetable seed banks operated and managed by women groups in the village (as seen in the photo above)





#### DESCRIPTION

The field visit was conducted during the second week of November, 2017. A schedule of activities to be completed during the visit was shared and agreed with the project staff at Wardha. There are five program villages under the FSN study FSN, with CHF. All the five villages are adjacent to the protected forest area and abutting an interior village road, away from the main road towards Morangana and Markasur. (the map of Wardha is shown below). These villages form two Gram Panchayats, the village Borgaon Gondi is fairly large and well-known.

In terms of socio-demographic composition, Susund village has a predominance of OBCs, whereas, all other villages have a fair representation of historically marginalised groups such as SCs and STs. The Gavali community and Gond tribes are predominant groups, inhabiting the villages.

As mentioned earlier, the field visit occurred during the harvest season. Also mentioned in the project documents is the fact that the primary crop in Wardha is cotton, which is a commercial crop. Along with cotton, farmers grow, pulses such as soyabean, pigeon pea and millets such as sorghum.

Agriculture as well as nutrition interventions had taken place in the five villages. Among the project staff, there was a clear separation of work on agriculture and nutrition. The agriculture interventions were systematic and seemed to have a higher recall among the villagers. Some of the interventions that were immediately recalled were- soil testing (maati parikshan), seed distribution, organic manure and methods of crop protection and increasing crop diversity/ introduction of food crops in the farms. Demonstrations fields and community owned vegetable and fruit gardens as well as community owned vegetable seed banks were seen and were functional as observed. Homestead Vegetable gardens as well as vegetable gardens in schools with information board were also observed. There was a Farmers Knowledge Centre with a vegetable garden as well as observed in one of the villages. These were the positive observations of the interventions as seen during the field visit.

However, nutrition interventions as 'seen' and nutrition intervention as 'felt' were varying. This variation will be analysed in the next section.

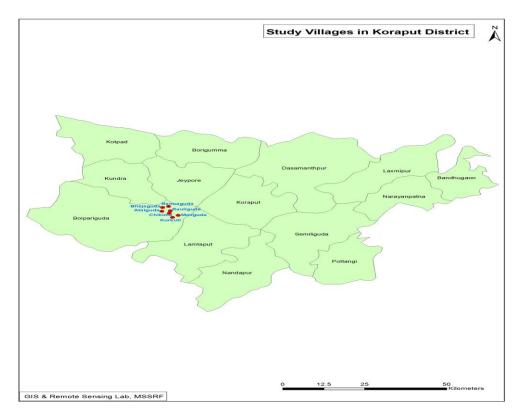
It was observed that there was a clear work allocation between men and women in the five villages in Wardha. Even though women also helped in the farm work and went for harvest work (picking cotton), men appeared to be the sole decision makers, even as work was shared between men and women. They reportedly worked more, also to protect crop damage due to animals and birds at night and during most part of the day. Cropping decisions were seen to be taken solely by men and only one CHF reported that she was able to influence her husband in increasing cropping diversity in the farm. The basic issue that emerges is the stronger delinking between agriculture practice and nutrition as well as a concomitant break and hierarchy of the man's work and the woman's work. Additionally, it

is overlaid on the caste and age hierarchy in the context. This sets a different floor of experience of the project intervention. This is to say that, work requirements from the project staff, the volunteers and the CHF are of a different qualitative nature than the work requirement for the project staff in Koraput.

## SITE 2 - KORAPUT

### DESCRIPTION

The field visit was conducted during the second week of December,2017. A schedule of activities to be completed during the visit was exactly similar to the schedule followed in Wardha and as shared and agreed with the project staff. There are seven program villages under the FSN study in Koraput. All the seven villages fall in the Boipariguda block and farmlands are intermingled with forest areas on an undulating terrain, although the forest areas are not dense or protected forests as in Wardha. There are very few landless households; however, most households have landholdings in scattered parcels. Due to the undulating terrain, the internal roads reportedly get swamped during the rains. All the seven villages are accessible through cement concrete (CC) roads and the main state road.



In terms of socio-demographic composition, the habitations are largely single community dominated and following traditional social practices such as community based social distancing. The Ranas are a dominant OBC group and other groups are Mali and Doms. All villages program have of tribal dominance ST communities of Bhumia, Paroja and Gadaba.

Similar to Wardha, as mentioned earlier, the field visit occurred during the late harvest season. The primary crop in Koraput is paddy and millets. Vegetables are also grown and sold commercially, particularly in Maliguda.

However, the mindset here is to consume first and then take the residue to the market. Also to be noted is that primary crops are food crops.

Agriculture as well as nutrition interventions had taken place in the seven villages. Among the project staff, there was a fuzzy separation of work on agriculture and nutrition. The project coordinator in Koraput was equally familiar with the agriculture and nutrition activities and could view them as a coherent whole. The assisting staff also were able to see the agriculture and nutrition interventions seamlessly. In the program villages, the villagers also discussed the agriculture and nutrition together. The agriculture interventions of introducing line sowing had the highest recall, since 'the broadcast method' was practiced both in the farmlands as well as homestead gardens. Some of the interventions that were immediately recalled were- introduction of pigeon pea, improved varieties of seeds, organic manure and methods of crop protection and increasing crop diversity in the farms. Demonstrations fields were functional as observed. Homestead Vegetable gardens as well as vegetable gardens in one school were also observed.

The first positive observations were higher number and social presence of CHF, the ease with which the villagers gathered around for discussion, seamless discussions between agriculture and nutrition and a sense of assurance that, even as the project was retreating, the 'office' was still present and help would always be available. <u>Thus,</u> <u>nutrition interventions as 'seen' and nutrition intervention as 'felt' were not varying.</u>

It was observed that there was a mixed and egalitarian work allocation between men and women in the program villages in Koraput. Men agreed that they cooked food at home, whenever the need arose and were quite aware of the work and time requirements in cooking cleaning etc. Women also helped in the farm work and went for harvest ; even though, cropping decisions were taken by men, women seemed to have some say in the cropping decisions. This could be primarily because the crops were food crops and the households seemed to assume that, they will first consume and only then sell the produce commercially. The basic observation that emerges is the stronger linking between agriculture practice and nutrition as well as a concomitant seamlessness of the man's work and the woman's work. This sets a different floor of experience of the project intervention.

## COMPARATIVE OBSERVATIONS ON SITE DESCRIPTION

Some of the preliminary comparisons are summarized as:

- 1. Whereas, the commercial cropping increases farmer incomes, besides the higher input costs, the dependence on markets for better price and other economic tradeoffs, the delinking of food consumption from farming and its impact on the relationship between food and nutrition is striking.
- 2. The delinking of food with nutrition is seen in the variation between the nutrition interventions as 'seen' and nutrition interventions as felt/experienced. Even if, community nutrition gardens are 'seen' in Wardha; nutrition interventions through demonstration fields and not community nutrition gardens and seed banks etc. are visible in Koraput, the mindset change is both seen and felt in Koraput, as compared to Wardha.
- 3. Gender relations seem to concomitantly change as the collaborative farming activity becomes more market driven and cropping shifts from food crops to commercial crops. Work also gets into a monetary hierarchy. Man's work is placed higher and woman's work lower.
- 4. Work requirements from the project staff, the volunteers and the CHF are of a different qualitative nature than the work requirement for the project staff in two different sites.

## EVALUATION -WARDHA

The observations are based on the detailed interviews and focussed group discussions conducted with all the stake holders during the field visit to Wardha and discussions with the project staff in the Chennai Office. They are organised according to the evaluation questions set and agreed to in the proposal. Since, the questions mirror each other-from the community side and the program side, some are combined for brevity.

## QUESTION 1 - HOW EFFECTIVE HAS THE CHF IDENTIFICATION AND TRAINING BEEN IN BRINGING NUTRITION AND HEALTH AWARENESS INTO THEIR OWN HOUSEHOLDS AND LARGER COMMUNITY NETWORKS?

## QUESTION 6 -WHAT WERE THE PROCESSES FOLLOWED TOWARDS IDEATION, PREPARATION AND IMPLEMENTATION ON THE CHF? IN WHAT MANNER WAS THE OWNERSHIP TO THE INTERVENTION WOVEN IN THE CHF IMPLEMENTATION?

We conducted FGDs with villagers in all the 5 villages of Saheli, Vitpur, Susund, Heti and Borgaon Gondi. At the first level of evaluation, a sense from the villagers as such and their views on the CHF intervention are important to be understood. Village FGDs comprised of men and women farmers, the CHF and sometimes Ward Members and the

Sarpanch. Average discussion time was about 60 -90 minutes. The questions for these FGDs followed a fixed flow. First, the FSN study was, in general discussed. Second, the agriculture and cropping diversity was discussed. This included a discussion on - if and in what manner is the change in cropping linked to food consumption at household level. Thirdly, nutrition interventions were discussed, both in terms of household consumption or dietary diversity due to cropping diversity and other nutrition interventions in the homestead. The discussion on nutrition also led to discussion on changes in quality of life, the perception of the villagers on changes in overall health, if any. Finally, in light of the abovementioned factors the CHF intervention was discussed.

In terms of the CHF intervention, only in three villages, the CHFs were recognised as such! In the initial stage of discussing, CHF were not 'known' to any of the villagers in two villages. This was then further probed and their memories refreshed. From the discussion, it appeared that high drop outs from the original pool of CHF, younger age of the CHFs selected were some of the reasons for the lower recall and influence of the CHF to carry and communicate the key messages regarding nutrition in the villages.

Thus on the evaluation question mentioned above, the part relating to CHF identification, the discussion further revealed that the reasons for selecting and identifying CHF was not very clear to the villagers as well as to the project staff (on site). Why were the CHF selected, what were their qualities/criteria for selection? - These were the questions discussed in both the village level FGDs and the Staff meeting. Even though, the initial conceptualisation in documented reports show that the selection process of the CHF was to be led and owned by the villagers, with only facilitation and introduction meetings by the project staff (not more or less), it appeared that, the project staff themselves were not clear on the spirit/vision of community hunger fighters and had visualised them as paid community resource personnel. Thus, the initial village meetings that set the frame of the CHF were probably not clear. Here, the cynicism and welfare fatigue inherent in development context such as Wardha/Vidarbha needs to be kept in mind. Villagers gave varied responses- Some reported that the CHF were identified because 'they had a lot of time to spare'. Some felt 'they were young and could help themselves with the training opportunity' and some felt that the 'CHF were educated so, could understand better'.

In the final instance, the volunteers selected by the villagers were 'interviewed' by the project staff to further bolster the impression that it was a paid assignment. It is indeed a futility to state that the motivation of a job-seeker and that of a volunteer are different. Thus, the identification and selection of the CHF in Wardha seem to be against the vision of Freire's ideas of conscientisation of the community as explained in the project document.

At the pragmatic level, younger CHF did not have adequate social status to communicate nutrition related messages and to be heard, in larger community gatherings. Since they were expecting remuneration, their motivation and enthusiasm for a self-directed action was also variable according to their other priorities in life. Thus, a conclusion is that CHF identification was not effective in Wardha.

The original pool of identified CHF underwent two trainings and these documents were cross-validated with key informant interviews and FGDs with the CHF. All the interviews reported that the training was participatory and the CHF learnt a lot from the trainings. However, there were a lot of dropouts and the initial small pool shrunk to a smaller pool by the second training program. There have been further dropouts after the training, as CHF have got married and/left the village for jobs.

The content of the nutrition modules for the CHF training in FSN included nutrition concepts such as balanced diet, nutrients, intake and their relationship to agriculture. These seemed to be adequate.

Therefore, it can be concluded that in Wardha particularly, even though the implementation steps and processes were embedded that it allowed for the community ownership of the CHF intervention, four significant factors caused a distortion of the same. First, at the community level, there appears to be a cynicism/ fatigue perhaps, with welfare measures and interventions or a fixity for harder, more concrete interventions , which was visible in agriculture interventions and was thus recalled. Second, a default assumption emphasised by project staff communications that there cannot be self and community-owned volunteer /knowledge worker model in the development or action research paradigm. Third, a lack of clarity among the staff and continued miscommunication; There appeared to be resistance to try new models or mind-sets. Finally, the community might have responded to a real need for jobs by

the rural youth in misplaced sympathy and goodwill. This is to say, that the community might have felt that doing this training might help the CHF to find better prospects in future, since the idea of a 'certificate' that helps in seeking jobs was much prized and meaningful in the context of Wardha than in Koraput.

## QUESTION 2- WHAT CHANGES IN THEIR FARMING PRACTICES AND FOOD AND NUTRITION BEHAVIORS ARE PERCEIVED BY THE CHF THEMSELVES AND THE LARGER COMMUNITY?

## QUESTION 3- RADIATING OUT FROM THE CHF AND THEIR HOUSEHOLDS, WHAT HAVE BEEN THE CIRCLES OF INFLUENCE OF THE CHF INTERVENTION TOWARDS THE LARGER COMMUNITY, VILLAGE LEADERS AND SOCIAL INFLUENCERSS AND LEADERSHIP?

## QUESTION 7 - WHAT WERE THE MATERIAL AND SOCIAL MECHANISMS CREATED TOWARDS AN EFFECTIVE CHF INTERVENTION IN THE PROGRAM VILLAGES?

### QUESTION 8- WHAT WERE THE CHALLENGES EXPERIENCED BY THE PROGRAM IMPLEMENTATION TEAM IN THE CHF INTERVENTION?

Across the board, during interviews and group interactions in all the five villages, participants reported that there have indeed been changes in the agriculture practice, but this change has not been consistent season on season. It has been subject to variation due to rain/availability of water, input costs, existing debt, seasonal contingencies and shocks as well as family events etc. Crop diversity is not seen as an imperative and there is an element of choice and flexibility in embedding it in agriculture practice. The response requires cautious optimism. Flexibility indicates a greater opportunity for internalization and ownership beyond the research agenda. One CHF, for example, reported discussing cropping changes with her husband and insisting on planting one row of pulse 'this season'. She said that 'sometimes he agrees, sometimes he doesn't, she tries nevertheless'.

The second link between agriculture practices such as crop diversity to food consumption at the household level is also fairly established as revealed in the discussions with the farmers and the CHF. Villagers reported food security with the stock of grain always available at home. They also reported the pleasure and joy of their children in eating fresh and 'abundant' vegetable and fruit grown in their homestead gardens. There was some variation as many men did not feel any change in their diets. Villagers reported enjoying fruits and vegetables seen only in pictures before the interventions. One village school teacher, reported that children in the school, during an exposure visit saw and then ate vegetables such as carrots, 'shalgam' and fig(as seen in an exposure visit) for the first time! The villagers also reported learning new ways of cooking vegetables and leafy greens.

The CHF have tried to incorporate the knowledge that they have received in their training in their life, only partially. While, changes in behavior such as drinking water upon waking etc. have been easy, working with villagers on the nutrition garden and influencing cropping decisions at the household level have been more challenging. This is esp. true of the younger, female CHF. Most of the CHF themselves reported growing vegetables and fruit in their backyard, but only one was observed during field visit. Lack of space, damage by animals and birds and lack of water were cited as reasons.

Whereas, food patterns have changed marginally, its impact on nutrition – the third link was expressed by the villagers readily in terms of their awareness and knowledge on nutrition. As one woman in the village Heti, who managed the community garden said, 'children are more attentive and calmer, because they are eating more nutritious food'. However, the question of the CHF influence in spreading the message among their larger networks and being community knowledge resources remains ambiguous. It was clear that concrete interventions such as seed banks, community nutrition gardens and school gardens were more effective in the mindsets of the villagers than the CHF.

CHF intervention and influence did not seem to radiate outwards from their own households towards villagers, esp. those who are the key decision makers. This is with the exception of one village- Borgaon Gondi, where, the woman CHF raised the nutrition related discussions with the lady Sarpanch, who was also personally interested in nutrition related knowledge and practice; thus, there is enough sense that CHF was effective in Borgaon. The CHF also intermittently interacted with the Anganwadi worker for nutrition meetings, on their own initiative. Interestingly, they did not feel the confidence and the courage to coordinate or engage with the schools in all the five villages, where school teachers did not know about CHF, unless prompted in detail. The CHF seemed to, however, have influenced their own age cohorts and family networks.

On the question of the social and material mechanisms inbuilt into the intervention, the selection by the villagers was by itself a key social mechanism that ensured ownership and sustainability. However, this was compromised due to 1) less number of CHF by community and Caste and, by 2) the younger age of CHF cohort.

In the Indian social hierarchical structure, collectivization and increase in numbers is one strategy to visibilize the marginalized groups against the powerful status quo. This has been done to bring courage, ability to raise voice and be taken seriously. This intention /impulse can be seen in Woman SHG and Farmer Cooperative movements. In the current case, the number of CHF dropping out per community and a less number of CHF overall, meant that the CHF ability to discuss the nutrition related issues and be taken seriously in larger public spaces was severely constrained. The second factor is the younger age of the CHF cohort which compromised their capacity to communicate and be taken seriously. Communication between the young and the elderly is marked by rules, esp. in the public sphere and unless there are other associative markers of power and responsibility such as responsibility of a household, a formal or informal position etc. communication patterns between the younger and elder members in public spaces are distorted, by assumptions and statements such as 'what do they know about life; I have seen more rains/seasons than them'

The biggest challenge faced by the project staff in the CHF intervention was the correct understanding and internalization of the concepts and operations/methods of intervention, within themselves. This intervention required a commitment to the spirit of fellowship. In a significant manner, the mandate was more than a positivistic research project, where typically the social reality is viewed in a lab like fashion and people are viewed as subjects. It was also not an implementation project- where the project staff is typically forced to be dependent on the persons/beneficiaries for the 'achievements of their targets'. This intervention required egalitarianism in its true spirit, in active and passive resistance to the hierarchical social reality, where all outsiders, esp. more educated, the one's who have come with noble 'research 'goals are viewed as 'Higher ups/elders'. It is easy to be mesmerized by the notion, that one (project staff) is superior with assumptions that 'we will do this for you, we will give you this knowledge' , othering the villagers and compromising the basic rapport between human beings. This reflects in an unequal relationship between the staff and the villagers, during the village meetings esp. the meetings held for the selectin and identification of CHF. The doubt and mis-communication experienced by the project team about the voluntary nature of the CHF would reflect in the manner in which the CHF perceived themselves and their role and enthusiasm for action in the village.

Since, an initial resistance to new ideas implies a learning curve and the team on site (any team) is expected to take its time to unlearn the earlier held notions of projects and their typical conceptualizations, the Wardha team could have had more preparation time. he CHF intervention could have been initiated even as the baseline was being prepared ;when the project itself was initiated and the staff prepared on the idea of a non-paid community knowledge human resource.

#### QUESTION 4 WHAT HAVE BEEN THE CHALLENGES EXPERIENCED THAT HINDER SUSTAINABILITY?

#### QUESTION 5 .WHAT COULD BE THE MATERIAL AND SOCIAL BUILDING BLOCKS THAT CAN BE LEVERAGED FOR SUSTAINABILITY?

The difficulties and challenges experienced have been explained in the analysis from a program point of view in the earlier section. Here, the challenges experienced by the CHF and the community that hinder sustainability are

discussed. One of the critical challenges that hinder sustainability is the softness or the unmeasured ness of the CHF intervention. Whereas, it is idealistic and perhaps correctly so, that the community resource person's are not measured for their 'performance', during and after the CHF intervention, the downside is that the CHF and the community have no way – institutional or social mechanism of feedbacking on their work. Therefore, we see an individual centric variation in the CHF intervention, based on their individual motivations and commitment. This is a critical challenge for the self-motivation, self -regulation and action of the CHF and the community 's ability to enable or support them, thus leading to a broader ownership of the intervention. At the systemic level, some mechanism of three levels of ongoing feedbacks- self-feedback, peer or cohort feedback and community feedback can be instituted. These feedbacks may not be quantitative targets ;rather could be qualitative and focus on learning and initiatives taken by CHF. Over a period of time, the feedback session may be led by the CHF themselves. Going forward, in CHF interventions in other projects these may be conceptualised and implemented along with the training and capacity building.

The softness of nutrition intervention capacity as a community resource is also one of the most important challenge that hinders sustainability. This is to say that, it is easier to see health impacts, or economic impact etc. A nutrition impact is hidden and can therefore, drop off easily, unless it again emerges as a 'health' concern. This makes the task of the CHF and communities more difficult and easy to slide down, hindering the sustainability of the intervention after the project retreats from the context. This is also true for the staff in an ongoing intervention, since the focus is invariably on manifest outcomes.

What could be the social or material building blocks that can be leveraged for sustainability of the CHF intervention? – In the context of Wardha, there are three key social and material mechanisms that can be leveraged. Firstly, respondents and villagers across all the five villages were literate and expressed the importance of and appreciation towards the public boards displaying information on nutrition interventions. The literacy and awareness among the villagers needs to be leveraged to create more knowledge materials, with support from MSSRF staff. Second, there was appreciation for women's community nutrition garden groups. These can be leveraged for sustainability, where, the CHF may be formally linked with these groups. Thirdly, the villagers and CHF expressed comfort for being linked or re-linked to formal mechanisms such as Panchayat, the Anganwadi and school functionaries. In this manner, they can continue to contribute through school nutrition weeks, or meetings with pregnant mothers etc.

#### QUESTION 4 - WHAT HAVE BEEN THE CHALLENGES EXPERIENCED THAT HINDER SUSTAINABILITY?

## QUESTION 9 - IN WHAT MANNER, SUSTAINABLE OUTCOMES ARE EMBEDDED IN THE IMPLEMENTATION OF THE CHF INTERVENTION AS PERCEIVED BY PROGRAM IMPLEMENTATION TEAM?

At the policy and program leadership level, therefore, the biggest challenge is the selection of a good team or staff for operationalisation of the concept and the objectives of the program. Pragmatically, it is tougher done than said! Given the project timelines and the actual and available pool of qualified personnel on site, it is indeed a challenge to recruit and retain staff. This particular aspect hinders the sustainability of the outcome. Project timeline and balancing the urgency to recruit and get started vis-a-vis challenges of getting the right kind of staff to get started could lead to some trade-off and the project timelines need to account for it.

On sites and contexts, where several welfare or funded programs and project have happened (such as Tamil Nadu), the villagers and the locally available qualified professionals are already socialised into the 'project and program management' dharma! Whereas, getting the logframe results faster is eas (ier) In such a situation, conceptualising and running with new ideas, esp. those which require a commitment to change one's mindset is quite an ask. It is to be noted that in the CHF intervention, there was indeed no pressure to achieve any targets. Does that mean that, if pressure to perform and be reviewed is taken out of the equation, the task simply languishes or that it cannot be called as a project commitment at all? This is relevant when discussing the communication between CHF and the project staff, as well as with the villagers. It is reasonable to assume, that there would be a weekly, if not daily

interaction of the project staff with the villagers and with the CHF? If so, then, there were indeed several opportunities to re-motivate or re-commit the CHF, find different opportunities along with the CHF to push for nutrition related action and CHF visibility and contribution via media the staff interaction with the village influencers (the aura effect). This could have been possible even in the absence of any such specific instructions for the staff. This did not happen, because, there indeed was no imagination in the project staff on site. They themselves could not connect the CHF as the sustainable knowledge resource for the village and that mentoring/working with them would be an action towards sustainability of the whole program concept. It appears then that there were three siloes in the minds of the local project staff-agriculture, nutrition (within project) and CHF (training). The idea and the imagination that CHF as a knowledge resource <u>overlapping</u> both farming and nutrition did not occur to them. Thus, at the first level, the local project staff could not perceive the sustainable outcomes embedded in the CHF intervention and on the second level, the structural context of commercial cropping, a larger agricultural distress etc. was not an enabling context for facilitation of such an integration either. Indeed, as Dr. Rama Narayanan, has said, 'it would require about 4-5 years, for the community owned interventions to truly start becoming community owned. In this case, there seems to have been indeed no time for unlearning, re-committing and then stabilising a truly community owned CHF intervention

In conclusion thus, on the evaluation questions mentioned above, (1) the recruitment of the staff and their conventional mind-sets that resisted learning new ideas, (2) the attrition at the site at the leadership level, (3) the context specific challenges of an already existing break between food and farming linkage, and (4) the break between food and nutrition work that runs through the implementation of action research by the project staff at Wardha were the main factors that could not be bridged and hindered the sustainability of outcomes in Wardha.

## EVALUATION -KORAPUT

## QUESTION 1 - HOW EFFECTIVE HAS THE CHF IDENTIFICATION AND TRAINING BEEN IN BRINGING NUTRITION AND HEALTH AWARENESS INTO THEIR OWN HOUSEHOLDS AND LARGER COMMUNITY NETWORKS?

## QUESTION 6 -WHAT WERE THE PROCESSES FOLLOWED TOWARDS IDEATION, PREPARATION AND IMPLEMENTATION ON THE CHF? IN WHAT MANNER WAS THE OWNERSHIP TO THE INTERVENTION WOVEN IN THE CHF IMPLEMENTATION?

We conducted FGDs with villagers in all the 7 villages Atagulda, Bhejaguda, Banuaguda, Chikima, Kurkuti, Maliguda and Rauliguda. Village FGDs comprised of men and women farmers, the CHFs and children. Average discussion time was about one and half to two hours. The questions for these FGDs followed a fixed flow as in the Wardha villages, mentioned earlier.

Firstly it was observed that, it was very easy for villagers to assemble and discuss, even when it was also a very busy harvest season in Koraput. Most FGDs were conducted during evening stretching into the night, although two FGDs were conducted during the day time.

In terms of the CHF intervention, in all the FGDs the CHF were recognised and were actively participating in the village meeting. There was no need to probing further. It was immediately clear that three factors had contributed to this significant positive qualitative observation. Firstly, in every village there were more than 3 volunteers. The total pool of CHF thus was about 20-24 CHF for seven villages and there was significant number within the village itself. Second, there was a good rapport and understanding between the CHF and the MSSRF volunteers. The meetings were led and coordinated by the volunteers. Third, there was an easy rapport between the CHF and villagers,

All these observations help the inference that there has been a consistent past experience of working with each other. Finally, the age profile of the CHF was slightly mature. Every CHF was more than 30 years of age and their word obviously 'carried weight'.

**On the evaluation question mentioned above**, the part relating to CHF identification and selection, the discussion revealed that most villagers 'sent out' the CHF as they were 'bold' and 'could share the learning with the villagers'. Thus, the rationale for selecting the CHF as a community knowledge resource was fairly clear to the villagers and the CHF themselves. The women CHF- higher in number were clearly bold and powerful women, who spoke their mind and were deeply interested in the nutrition related discussions. There was no question of any monetisation of their work as CHF and the CHF were simply pleased to have learnt so much.

The process of selection also, did not include any interference by the project staff. In the final instance, the volunteers selected by the villagers were indeed the CHF who participated in the training. It is significant to note that, there were no drop outs from the already large pool of CHF.

So, what are the factors that 'explain' the positive findings of selection of CHF and their commitment to give back to the community? First, at the broader macro level, even as the communities were engaged in farming, the crops that they harvest are predominantly food crops, which they traditionally subsist on. It appears that, the MSSRF agricultural intervention, changed their agricultural practice and that sudden positive impact on crop yield has had a domino effect, leading to a greater appreciation of the concept of crop diversity <u>and the idea of CHF</u> as well. It was also discussed that perhaps due to smaller landholding scattered around and village areas, agriculture activities had equal contribution from both men and women and this was both seen and expressed. More importantly, men seemed to cook food at times. Men were very interested in food and nutrition and didn't seem to relegate it to a woman's job. Thus, the continuation of food crops in the farming systems and a more egalitarian socio-cultural context appeared to help the CHF.

Second, the fact that MSSRF had been engaging with the communities set a different floor effect as all the earlier projects translated into greater goodwill and rapport for the staff and project volunteers to communicate better. This seems a strong addition to the domino effect on the selection of the CHF. Importantly, the earlier CHF project led by Dr. Rama Narayanan meant that some of the older project staff working on the FSN study were oriented towards the conceptualisation and vision of CHF and did not have to cross that steep learning curve. It is emphasised here is that, this clarity by the project staff translated into community engagement which was 'just about right' and allowed the village communities to unlearn the provision mentality(since, they too have been recipients of welfare programs and beneficiary mindset) as well and select the CHF volunteers for the reasons that would make them effective and the intervention as such sustainable.

The original pool of identified CHF underwent two trainings and these documents were cross-validated with key informant interviews and FGD's with the CHF. All the interviewees reported that the training was participatory and the CHF enjoyed and learnt a lot from the trainings. Important to note that there were no drop outs in the CHF and the trained CHF continued with their volunteer work-communicating messages related to nutrition.

**Therefore, it can be concluded that in Koraput**, due to factors such as past learning and experience with CHF concept, clarity among the staff and volunteers and the nature of farming system itself, the selection/identification of the CHF was more aligned to the conceptualised intervention. The village communities 'intuitively' selected volunteers who were enthusiastic, better networked, bold and assertive in public gatherings and whose word carried weight.

## QUESTION 2- WHAT CHANGES IN THEIR FARMING PRACTICES AND FOOD AND NUTRITION BEHAVIORS ARE PERCEIVED BY THE CHF THEMSELVES AND THE LARGER COMMUNITY?

## QUESTION 3- RADIATING OUT FROM THE CHF AND THEIR HOUSEHOLDS, WHAT HAVE BEEN THE CIRCLES OF INFLUENCE OF THE CHF INTERVENTION TOWARDS THE LARGER COMMUNITY, VILLAGE LEADERS AND SOCIAL INFLUENCERSS AND LEADERSHIP?

## QUESTION 5 - WHAT WERE THE MATERIAL AND SOCIAL MECHANISMS CREATED TOWARDS AN EFFECTIVE CHF INTERVENTION IN THE PROGRAM VILLAGES?

## QUESTION 8- WHAT WERE THE CHALLENGES EXPERIENCED BY THE PROGRAM IMPLEMENTATION TEAM IN THE CHF INTERVENTION?

In reference to the above mentioned evaluation questions, one of the most significant change in agriculture practice was shifting from the 'broadcasting' method of sowing to a 'row/line' method of sowing. This shift in the agriculture practice would be expected to increase crop yield, as was confirmed by the villagers. This increase in the crop yield and the systematic and logical nature of farming practice, appears to have led to a greater appreciation of the idea of crop diversity. The villagers reported that, they would grow pulses earlier as well, however now they grow a variety of pulses such as moong/Green Gram, arhar/Pigeon Pea and urad/Black Gram. This was in addition to their earlier crops of paddy and millet. Similarly, in the village and homestead nutrition gardens, they shifted from the broadcast method to a row method and were able to maintain the homestead gardens better. This change in agriculture practice and the subsequent openness to crop diversity brought close the agriculture and nutrition interventions in the minds of the villagers. It was thus, not perceived as siloes, but importantly as farming systems integrally related to food, subsistence and nutrition.

The effectiveness of CHF piggybacks on this spread of the ripple. Significant to note is -The CHF as farmers themselves as well as vegetable growers in the farms and homestead had completely internalized this critical link of farming systems, food and nutrition. Thus, greater behavior change in terms of food and nutrition awareness was observed in Koraput as compared to Wardha. The middle-age profile of the CHF cohort and greater gender equality meant that women were able to influence in cropping decisions in the farms. The shift in cropping was also not so drastic say as compared from food crops(paddy and millet), plus more food crop(pulse) in Koraput to Cash crop plus some food crop in Wardha. Because, the CHF themselves were farmers and responsible members, their views in public discussion carried a lot of weight and their change in practice had a modeling effect on other villagers.

The link between agriculture practices such as crop diversity to food consumption at the household level is also clearly established as revealed in the discussions with the farmers and the CHF. Villagers reported food security with stocks of grain always available at home. They also reported the pleasure and joy of their household, including children eating fresh and 'abundant' vegetable and fruit. CHF also reported that nutrition behavior has changed now as families receive PDS grains and children eat food at Anganwadi and school as well. Nutritious mid –day meal programmes were observed in the villages. The CHF felt that there is no fear of starvation now and learning more about nutrition was very critical to improve their life further. The CHF wanted to know more about growing apples and grapes as well. Villagers reported enjoying fruits and vegetables, including leafy greens such as 'poi bhaji'.

Thus, it is clearly noted that since, CHF themselves were farmers and not young jobseekers/reluctant farmers and they themselves integrated the agriculture and nutrition related intervention in their own approach as well as communication to others. Since they integrated in their own approach and agriculture practice, their words were credible. This credibility in communication created a further acceptance of the other project interventions in a seamless manner –a cycle of virtue!

Thus, from the interviews and FGD's, it is clear that food patterns have changed substantially ith a clear impact on nutrition – the third link was expressed by the villagers readily visible in terms of their awareness and knowledge and behavior change.

CHF intervention and influence radiated outwards from their own households towards villagers, esp. those who are the key decision makers. All the CHF had interacted with the Anganwadi for nutrition meetings, on their own initiative. Here again as in Wardha, they did not feel the confidence and the courage to coordinate or engage with the schools where school teachers did not know about CHF, unless prompted. The CHF seemed to have influenced the public spaces as well as their family networks.

On the question of the social and material mechanisms inbuilt into the intervention, in case of Koraput, we see a good case scenario, where the mechanism of within group cohesion, group initiative in selection and identification and selection of bold and independent CHF allows for a stronger and sustainable impact of the CHF intervention.

The biggest challenge faced by the project staff in the CHF intervention were primarily understanding and awareness generation on related social issues such as inter-community distance and discrimination. With the CHF group meetings, it was observed that due to caste norms, some CHF had ate separately. In Koraput, we see a greater within community cohesion and inter-community distance. Whereas, this within community cohesion helps the CHF to communicate nutrition related learning better, it still fences them off from larger networks. This negotiation of leveraging greater within community coherence towards effectiveness of CHF vis a vis confronting inter-community distance was not undertaken by project staff. Secondly, focus on all sections of the society-including those who are typically invisible and stigmatized such as people with disability and/or mental illness could have made the CHF intervention complete.

## QUESTION 4 WHAT HAVE BEEN THE CHALLENGES EXPERIENCED THAT HINDER SUSTAINABILITY? QUESTION 5 WHAT COULD BE THE MATERIAL AND SOCIAL BUILDING BLOCKS THAT CAN BE LEVERAGED FOR SUSTAINABILITY?

The CHF in Koraput, expressed satisfaction on the training and support received by them and felt that they experienced very few challenges. One of the interesting insight given by them during FGD was the importance of 'concrete' money in hand, which is clearly related to the earlier discussion on the 'softness' of nutrition awareness and knowledge resources in the community. They felt that the money in hand can be seen immediately and that makes one let go of the possibilities of better nutrition, because it is not seen in the body immediately and is in future. If not 'thought through' with a facilitating staff, this intangibility of nutrition awareness can easily result in a mindless acceptance of the market solutions. For example, the School Teacher in Atalguda, Koraput, while discussing the rising price of eggs and claiming that the allocation for eggs is not enough under MDM declared that after seeking consent from the children, he has decided to 'substitute' eggs with biscuits! The villagers and the CHF need to be strong enough to question him!

The point being made here is that – the community needs to be conscientisized and engaged with for longer terms as sophisticated market solution that promise quick fixes have already pervaded and will continue to pervade the community and user landscapes. The significance of a CHF like intervention, through an MSSRF project is that it connects and builds a bridge between the expert/technocratic discourse and the community knowledge base. This cannot be done by the CHF alone after the project closes and will inevitably lead to a drop off, although the tapering will be much gradual than in Wardha. A longer follow up, a mechanism for CHF to raise doubts and questions, even when the project closes are two ways towards greater sustainability of the intervention.

What could be the social or material building blocks that can be leveraged for sustainability of the CHF intervention? – In the context of Koraput, the intra group cohesion works both as an enabler and sometimes as a barrier to social change. In the present context, a mechanism for the community to support and provide a platform for the CHF on an ongoing basis during the formal handover process would be able to sustain the CHF influence better.

#### QUESTION 4 - WHAT HAVE BEEN THE CHALLENGES EXPERIENCED THAT HINDER SUSTAINABILITY?

## QUESTION 9 - IN WHAT MANNER, SUSTAINABLE OUTCOMES ARE EMBEDDED IN THE IMPLEMENTATION OF THE CHF INTERVENTION AS PERCEIVED BY PROGRAM IMPLEMENTATION TEAM?

In a site and context such as Koraput, where several enabling features exist in the agrarian economy and the program management, the biggest challenge that hinders the sustainability of the outcome in CHF intervention is a lack of a systematic weaning strategy. A true shift from a provision and beneficiary mind-set to a fully conscientised community owned model of change would imply that a clear vision and implementation plan for weaning or exit exists at conceptualisation itself. This was not visible in both Wardha and Koraput, but is striking for its lack in Koraput, given the presence of positive features in the context and the commitment and enthusiasm of the CHF to carry forward in the learnings, in the absence of programmatic support.

Thus, at the policy and program leadership level, the discussions in Koraput teach that the challenge is to keep up with the learning and knowledge appetite of the CHF in Koraput. In the program design itself, the mechanism of continued learning would help sustainability in future projects. It is fairly discouraging to recognise that CHF started on a learning journey and would have to now look for resources themselves as there seems to be no weaning strategy on CHF after their training.

At the program preparation level, it is reiterated that CHF and similar human interface need to be an integral part of research projects. Appropriate human interface makes interventions sustainable, such that human interface clearly needs to be viewed as beyond 'agriculture extension' activities.

At the implementation level, again, the project staff and the CHF themselves were unprepared for imagining any weaning strategy for sustainable outcomes on CHF intervention. While it true that learning and training theoretically implies an irreversible behaviour change, in actual terms, there can be several ways in which weaning and follow-up activities can be implemented throughout the project cycle. At this level of effectiveness, the lack of closure through an exit or a weaning strategy is noteworthy.

Based on the analysis of the two sites FGDs and In-depth Interviews, the following conclusions and recommendations are made:

- 1. The idea of a CHF intervention is not only complementary to the basic conceptualization of the FSN action research, it is integral to it and needs to reflect in action from the beginning itself. As an ethical research practice as well, the unpaid truly community owned CHF intervention is in line with the latest developments in research methodologies, where, persons /villagers/communities are not treated as subjects for the purpose of research alone. Therefore, at the policy level, it is salutary that the MSSRF initiated this intervention and sets a correct precedent for all its other interventions in agriculture that give back something to the society.
- 2. At the program preparation level, it is concluded that not only should interventions such as CHF be conceptualised at the design stage itself, but a significant learning time be configured for staff and the community. Given the typical models of research, which do not normatively give back to the society as a research ethics practice, the research and technical staff needs an unlearning and relearning time. The research leadership at the local level, with adequate orientation would more likely view CHF or such human interventions as integrated and not siloed out from the other agricultural/any other interventions.
- 3. Local Research Staff needs to be accordingly recruited, going beyond the laboratory and office oriented work to more field based work involving human interface.
- 4. As mentioned, this mindset change is critical for not the communities alone but the project team as such. Thus, in Koraput, we do see a 'moderate effect' of the CHF intervention, which certainly is better than the 'mild effect' in Wardha. However, with planning and visualisation, both the sites and/or other sites in future could have a strong effect, going beyond economic and technical concerns towards human development and a better quality of life.
- 5. The two sites thus represent two radically different conditions and might require different timelines, different intermediate objectives and different team capacity. This might need to be reflected in separate sub documents towards the larger and coherent project objective.
  - 5.1. Thus, in summary, following points are made for conceptualisation and policy level:
    - 5.1.1.It is reemphasised that at the programmatic level, the CHF intervention and such human interface indeed contributes to the sustainable outcomes not only for research but for the community as well.
    - 5.1.2.Strong Effect -If we look at CHF intervention on the relevance and impact continuum, a 'strong effect' would occur, in the following conditions; (1) if it was inbuilt in the design and implementation and initiated along, with the research program, terminating beyond the other project activities, (2) if it was ending as part of a longer follow up period. A longer follow up period is required, given that behaviour and social change requires longer incubation time to become sustainable. (3) if project local staff were oriented or committed to the egalitarian spirit of the community intervention, (4) if sufficient time and additional resources were allocated for unlearning and retrining, (5) if staff leadership did not change or suffer from attrition, (6) if local staff leadership ensured a non-siloed vision, (7) If this integrated vision was internalised by the volunteers , (8) if volunteers were extremely active and facilitated the selection of CHF, (9), if the CHF selection was for a much larger pool and of varied age, if not middle age, (10) if training was continous or followed up regularly with refreshers and (11) if exit or weaning strategy was placed at the outset of the project activities itself. Best outcome would be, if CHF is initiated, perhaps before the research activities as a preparation to core research. There are indeed no blank, untouched communities however, if a doubt arises that it could contaminate the baseline that could be statistically parsed out.
    - 5.1.3. **Moderate Effect** A moderate effect would occur, if CHF intervention or similarly conceptualised human community owned interventions are initiated along with all the project preparatory activities and co-terminate with other research activities. All other conditions might be variably met, as according to the ground conditions. This seems to have happened in case of Koraput.

- 5.1.4. **Mild Effect** A mild effect would occur, if, the CHF or similar human interventions are initiated *after the* other project activities. All other conditions are marginally met. This seems to have happened in case of Wardha. In the last case, the CHF approach would be merely complementary, when it potentially can significantly strengthen the central research objectives in almost all cases of field work based research.
- 6. Based on the above brief discussion, the recommendations are:
  - 6.1. In the remaining project timeline, at least three/four refresher programs with the help of staff and volunteers may be held.
  - 6.2. The content of the refresher may be largely defined by the CHF, to increase ownership. However, they need to include discussions on sustainability requirement. The CHF discussed a poster, a text with FAQ or similar knowledge materials to refresh their memories.
  - 6.3. The CHF could be re-introduced to the Panchayat/Gram Sabha and the larger public gathering as part of the handover process.
  - 6.4. The remaining public or community programs of the FSN study may be led by CHF, with a receding role by the project staff as a signalling method to the larger community.
  - 6.5. Since, the 'office' continues in Koraput, the CHF may be formally connected to other like- minded NGO's in Wardha, so that their informational and mentoring needs may be fulfilled. In Koraput, the CHF may continue to visit the 'office' for additional seed requirement etc. They may be formally connected to some official for advice and mentoring.
  - 6.6. Other visibility options for the CHF, such membership of child welfare or nutrition committees may be examined according to their context and discussions with the CHF.
  - 6.7. Future meeting routines between /within CHF as a group may be formalised as a way of sustaining contact and further learning. This again needs to be according to the discussions.