



COMPLETION REPORT

Multidimensional Intervention - combating Malnutrition



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Executive Summary

The project *Developing Women Led Entrepreneurship model of Realigning agriculture to improve Nutritional outcomes for Pregnant Women, Lactating mothers and Children under Age 2 among 14000 Households* has been started with the support of Star Grand Challenge Canada before 18 months. The goal of the Project was simple: improve the nutrition of Tribal and Vulnerable women, together with young children in tribal district of Rajasthan—Banswara. The approach, however, required the integration of several cross-sectoral activities inclusive of agriculture, nutrition and health, natural resource management. Self-help groups (SHGs) of women supported by VAAGDHARA were the anchor through which these activities were integrated.

- 1) By 30th September 2018, 65% Reduction in prevalence of chronic malnutrition among 3600 young children in 14000 families in tribal dominated Banswara District of India.
- 2) By 30th September 2018 Improving in nutritional status of more than 50% pregnant and lactating women in 14000 families in tribal dominated Banswara District of India.
- 3) By 30th September 2018, Integration of Agriculture, Nutrition, SHGs sectors activities to result in sustainable nutrition security among 7500 families of Banswara district of India.
- 4) By 30th September 2018 at least three number of evidence-based learning are shared at district level to influence at least one policy agenda at local, national, and international level to prevent child malnutrition.

While a target was not set regarding a change in social norms, intra-household decision-making dynamics on nutrition, women's mobility and empowerment, and self-perception were also measured to understand changes of these gender dynamics during the project period.

Women also reported greater intra-household decision-making, reduced fear of their husbands, and more confidence and satisfaction with their lives. A key reported impact of the project by beneficiaries was that they increased the number of diversity during meals and also improved the communication with their families on nutrition security.

A mixed-methods evaluation was used to assess the project and how well it met pre-determined targets and included a pre- and post-test quantitative survey through filled RMAF table as designed during the Project intervention completed with beneficiaries who were either pregnant or mothers of children under the age of two as well as focus group discussions and key informant interviews with Annapurnas, SHG members as well as other women.

Background

While global food security has improved over the last several decades, it is still a serious problem for poor countries such as India, which ranked 97th out of 118 in the 2016 Global Hunger Index study of food insecurity in both developed and underdeveloped nations.ⁱ The World Food Programme reports that approximately 25 percent of the world's undernourished population lives in India.ⁱⁱ Despite economic growth experienced across the country, anemia rates for all women originally estimated for the 2005–06 National Family Health Survey (NFHS) have only decreased slightly according to the 2015–2016 NFHS, particularly for rural areas; more than 50 percent of women still suffer from anemia. Men have almost half the anemia rate compared to women of the same age range, with children experiencing anemia at rates similar to their mothers.ⁱⁱⁱ

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Thousands of women and girls in India therefore still lack food and nutrition security due to socio-cultural barriers. In the 2011 census, Scheduled Tribes constituted approximately 13 percent of the total population in Rajasthan, making Rajasthan one of the top four states in terms of the concentration of the Scheduled Tribe population in India.^{vi} Scheduled Tribe populations are often defined by their historic geographic isolation from the general population in India, which has manifested in relative as well as absolute deprivation. Scheduled Tribe households generally face the greatest poverty and hunger, lowest levels of education attainment, and the poorest health outcomes. Seventy-six percent of the population in Banswara district in Rajasthan is Scheduled Tribe, making Banswara the district with the highest concentration of Scheduled Tribes in the state

Within the Indian state of Rajasthan, women face poor health outcomes and gender constraints, often at levels greater than the national average. Approximately 60 percent of children and 46 percent of women suffer from anemia, 39 percent of children under the age of five are stunted.^{xi} Stunting is highest among tribal children in the region compared to non-tribal children (54 percent compared to 45 percent, respectively); severe stunting was greatest among tribal girls compared to tribal boys (31 percent vs. 27 percent, respectively), clearly indicating gender discrimination in intra-household feeding patterns.

THE PROJECT

The project is designed to address the problem of chronic under nutrition by delivering sustainable and scalable cross-sectoral solutions to transform the lives of the poorest and most vulnerable communities in Banswara, South Rajasthan. One key aspect of the project involves exploring new ways to promote coordination between multi sectoral aspects i.e. agriculture, nutrition, women empowerment, enterprise development and community development. Malnutrition is a multidimensional problem and efforts from the Project to address it must be multi-sectoral as increased coordination and alignment between different sectors will be vital for sustained impact on nutrition outcomes. This model of Innovative and coordination develop Nutrition sensitive Farming system and encouraging community to adopt an approach through LANN (Linking Agriculture, Nutrition and Natural Resource Management) and link with develop business plan for Nutrition sensitive Farming school where Farmers been act as trainers to train the community on nutritive crop based management , essential inputs on nutrition related crops and other issues which leads to availability of nutrition security throughout among the community and trainers of school who are women Farmers will be entrepreneurs to share their success stories to replicable the model in other areas. The Group-based approach has been using through SHGs whereby the learning reflects and has a multiplier effect within and across communities.

1500 Annapurna as Change Agent over 300 Self Help Groups (SHGs) are key drivers of the programs. Village level nutrition volunteers are developed for providing handholding support and capacity building on numerous aspects .Annapurna were become change agent where supporting to Pregnant women, lactating mother, children and adolescent girls for improved Nutritional status through improved their knowledge on Nutrition and Health Education. Related changes have been seeing amongst tribal families in agriculture practices and nutritional status. Now, tribal families have started cultivation of nutritious crops as suggested through modules, developing backyard Kitchen garden/poshan wadi for improved consumptions.

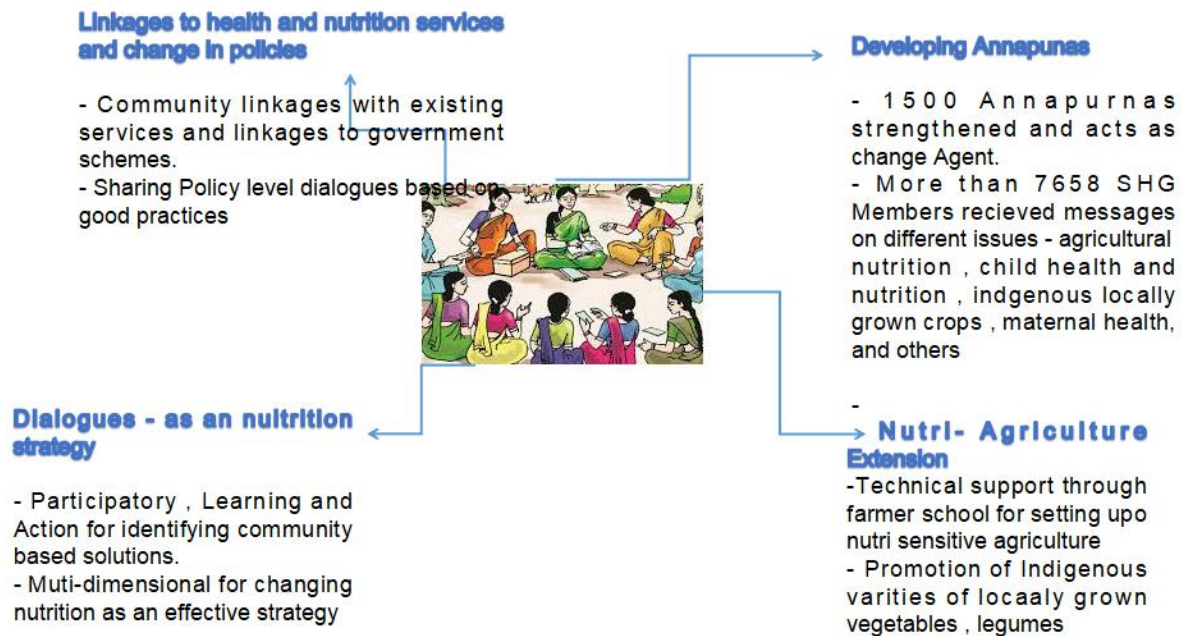


Figure 1 THE PROJECT

Vaagdhara Recognizes- Malnutrition only solve through Multi-Sector Interventions.

Through continual presence at Grassroot, we recognize that nutrition is not natural outcome of either an increased agricultural production or an increased income. Resolution of malnourishment needs an integrated approach to impact on the nutritional status of the most vulnerable population within a household; especially the child (1000 days) and the mother. Evidences from the field prove that improvements in nutritional status in the Tribal area have not kept pace with providing awareness on nutrition, strengthening the services and agricultural productivity. Some of the instances in field also demonstrating the point that higher income levels do not necessarily translate into an improved situation for the children. Vaagdhara believes that nutritional outcomes are determined by both food and non-food conditions. There are many drivers that need to work together for enabling a food and nutrition security but also maintain it and move beyond an episodic achievement. During our Reserach, there are many indigneous food which been forgotten by new generations are rich sources of micronutrients, carbohydrates, protiens and can easily avialable and grown in these areas.

As an Star grand Challenges Canada provided an opportunity to share the proposal of an innovation for addressing nutrition challenges, Vaagdhara put the proposal as an pilot

initiative for multi sectoral intervention which ensures the community , food and nutrition , indigenous agricultural production , policies, resources and action on same time.

The Project achievements is a remarkable efforts of our evidence that “nutrition specific” actions to address individual contexts of malnutrition such as provision of IFA or improved feeding practices for infants and children are further enhanced if combined with nutrition sensitive and governance intervention and more importantly trust, cooperation of Star Grand Challenegs who provide us to put our idea at groundlevel for betterment of Tribal Community.

ALTERNATIVE PARADIGN OF THINKING

Women - always look as Beneficiary	Women as “ Change Agents” - empowering women who can take decisions in nutrition level for their household.
One to One Counselling and individual learning	Cascade Model- has a multiplier effect within and across communities.
Focus on Specific health and Nutrition messages	Nutrition - as effective strategy for long lasting development and behaviour changes.
Sharing our knowledge and awareness to community	Participatory learning and Action - Community based approach to combat malnutrition.
Develop the indicators on singly cause	Multi disciplinary approaches - emphasis collaboration between agriculture, nutrition , livelihood , women empowerment and natural resources.

This makes our Project special-

The understanding of the issue of nutrition itself is different. It is given in the table above. In addition, the Project specialized itself in achieving three outcomes by its intervention:

1. Empowering women and women collectives, and establishing farmer schools for Household Food and nutrition security and make linkages with different variables.
2. Simplifying monitoring & management
3. Multiple approaches and collaboration with policies at same time.

KEY APPROACHES

To achieve impact in Project Intervention areas, We developed a comprehensive cross sectoral approach that built on the strength of the existing SHG programs where we developed Health Advocates termed as Annapurnas , Nutrition Volunteers who were able to integrate the nutrition and health approaches to provide outcomes in Intervention areas:

- Community Health Advocates : Strengthened 1500 Annapurnas who acts as change Agents and deliver the health and nutrition behaviour communication in tribal communities.
- Nutrition-sensitive agriculture: While agriculture extension services were already integral to VAAGDHARA, emphasis was put on promotion of indigenous and locally grown, drought-tolerant nutritious foods and linking the foods being grown in kitchen gardens to the nutrients they provide for vulnerable members of households. These foods included promotion of indigenous local foods various kind of millets, Air Potato, Luni, Kandagola, green and black gram (lentils).
- Linking Agricultural , nutrition and Natural Resources Management: LANN+ links the goal of Nutrition security to the five key areas of agriculture, resource management, water, sanitation and hygiene (WASH), alternative incomes and knowledge about nutrition. Our Nutrition Volunteers with support of Annapurnas worked with the communities to develop strategies tailored to the local situation through participatory methods which also formed Farmers school.
- Sharing Our Approaches to Policy Makers: We worked with comprehensive combined approach to tackle malnutrition where we shared our evidences to policy makers.

Continue to develop linkages with the government, health and food security services:

Despite the improved reported use of ICDS services by SHG members, improving the knowledge on Indigenous food there remains the perception that not all ICDS services are viewed positively due to inconsistent availability and quality of services. Some of the community members still not turns into behaviour change process which itself a long term process VAAGDHARA can make members more aware of services, promote usage of services and support their knowledge among indigenous food and locally grown vegetables. This requires deeper and longer collaboration with community and government to ensure greater reliability and accountability –

MAIN RESULTS

For analysis purposes, clients were described as either food secure or food insecure, whereas food secure households were those who answered “had enough food and of the kinds of nutritious foods we want to eat” and food insecure households combined the food insecure with no hunger, with moderate hunger, and with severe hunger categories into one category. Similarly, participants were asked to answer the same question in regards to their children, resulting in a child-level food security measure.

To calculate the Dietary Diversity Score (DDS) participants were assigned a value of 1 if they indicated they had eaten any of the foods that corresponded to a specific food group (e.g., meats, dairy, etc.) and a value of 0 if they indicated they had not eaten any of the foods that

corresponded to a specific food group. Scores were summed to generate an overall index score for diet diversity (0=least dietary diversity, 9=most dietary diversity).

1. At baseline, nearly 77 percent of the children and 79 percent of women were reported as being food insecure. At endline, there was a statistically significant improvement in food security among children and women, with an approximate 30 percentage-point improvement in both groups.

2. At baseline, the most consumed foods in the 24 hours prior to the survey were maize and wheat products, followed by oil products, beans, peas, lentils, roots or tubers, and milk products and other vegetables. There was very little consumption of nuts and seeds, green leafy vegetables, eggs, meat and meat products. The average number of food categories consumed by the respondents was 4.5 food groups; the minimum consisted of one food group and the maximum of 10 food groups. At endline, wheat and maize was still the most consumed followed by oil products, but "other vegetables" like tomatoes or okra, milk, roots or tubers and beans and lentils were also highly consumed. In all but five food groups (nuts/seeds, organ meats--both domesticated and wild, vitamin A fruits, grubs and snails), there were statistically significant improvements in consumption of the food items listed. "Other vegetables", green leafy vegetables and milk saw the largest percentage point improvements in consumption; all saw at least a 34 percentage-point improvement in consumption.

3. 67% percent felt that the quantity of foods eaten in their household had improved at least somewhat in the last twelve months. Among those, they attributed the increase in the quantity of food eaten mainly to their improved knowledge, or learning about the importance of eating more food. Among those who felt the quantity of food eaten had decreased or worsened, most attributed this to poor agricultural production.

4. 72% reported that the quality of the foods eaten had improved in their household, the majority of which again attributed this improvement to learning about the importance of eating better quality foods followed by improved agricultural production and diversity of foods planted.

5. 78% percent of households reported having a kitchen garden. Of those without one, the main reason was due to lack of water. If they had a kitchen garden, most grew tomatoes, green chili, green spinach, fenugreek and coriander leaves and ladies finger (okra). Most had been growing the vegetables they noted for more than a year, but approximately 14 percent had started growing the vegetables in the past year. However, 92 percent indicated they had increased the types of vegetables grown in their garden, suggesting that their interpretation of the question about how long they had been growing the noted vegetables is likely reflective of how long they had maintained a kitchen garden generally.

6. There is high decrease shift in malnutrition from 36% to 14% which can be reformative change.

7. 67% of Village health and nutrition day celebrated in all Anganwadi Centers with proper norm as according to government . 85% of Mothers visited the nutrition day every month for immunization services , awareness.

8. 65% of farmer families have started the finger millet production for improving the diet diversity and indigenous local food in the area.

9. Changing more than 7000 Farm Families through Participatory exercises done in LANN-PLA where used to create awareness and educate pregnant and lactating women, and adolescent girls on community based monitoring of maternal and child health care. It has caused significant changes in many community related issues like women are now planning their agricultural produce as according to provide nutrition diversity to families , improves the breastfeed within an hour as well hygienic conditions.

10. We shared our good practices to the policy makers through state level workshops , continual meeting and as result, state level policy makers appreciated the efforts and even start putting their efforts to put into the system. 3 major Evidences which we have shared are as :

- Promoting small grains especially millets in Tribal areas through providing into ICDS centers.
- Process documentation of 15 days nutrition camps and the outcomes of that 15 days follow up to SAM/MAM
- Capacity building of Annapurnas and their key messages to improve resilience against nutrition security

11. Establishing 61 “Farmer School” has been the another significant output where they together sharing nutri-sensitive interventions which enables the community through knowledge inputs to help decide which crops to sow from a food security and nutrition point of view. This helps to maximize the opportunity from agriculture to address nutrition. As most of the women and their families engaged with the program were farmers, they were helped in identifying and selecting crops to support their own needs of nutritional intakes. Using simple analogies such as the various colors of food that they should have on their plate during the training, the aspect of balanced diet and nutrition was conveyed to them. During cultivation periods, they were assisted with sowing more crops which would also help their household nutritional security.

POST PLANS FOR SUSTAINABILITY

The Project has shown encouraging results to reach out to the last family in the remote locations where malnutrition rate much higher. It provided an opportunity to share the encouraging results amongst the key stakeholders, nutrition Players and building linkages with health system , education, ICDS, PDS and otehr delievry platforms related to health and nutritions. As this project has short duration with small number of beneficiaries, now it is time to scale the validated model to adapt at wider level around the national as well as another partts of the globe. There is a planning of an institutional set-ups and ecologically accepted agricultural practices as a sustainable alternative integrated farming will add on efficacy and sustainability of farming system with nutrition focus;

The project interventions and actions forward in sustainable manner lies with “Farmer School” as peer group and Annapurna jointly. Approach of Farmer school will gradually build the understanding of the smallholders about market dynamics. The cooperation between the farmers and sharing between the communities will promote the culture of learning with nutrition lens which is crucial for the sustainability of the project. In each of the project village where VAAGDHARA initiate its work, it organizes a core committee of community leaders in the form of Village Development and Child Rights Committee (VD&CRC). In these villages also, it will organize such committee, which are part of wider network of tribal leaders i.e. tribal development forum. At cluster level a registered organization named “Janjatiya Swaraj Sangathan-JSS” will be made responsible for further growth in this direction.

CHALLENGES

1. Simplify the health messages, provide Frequently Asked Questions:

While the Annapurnas used flip books that were picture-based to help both remind them of the key messages they should share as well as to help them facilitate the session, there were a lot of topics to cover in the short 18-month period.

2. Short Project Duration which cannot show sustainability impact parameters

While the short span gave an impetus for implementing activities to realize the results, it also posed a challenge, which needed more time with the community. For instance, building the capacity of the community needed more time and it would have perhaps led to more behavioral change.

3. Multiple Issues

The effectiveness of each component determined is equally challenging and difficult to interpret the changes in each and every component. There would be development of effective MIS on tracking the each componenet whihc influences Health and Nutrition.

LEARNINGS

1. Projects like this are complicated and have many moving parts and stakeholders. Yet, complexity in design is necessary to match the complexity of the barriers that keep households malnourished despite economic growth. However its equally simple of planned and designed with proper tools and techniques.
2. At the beneficiary-level, this “design” complexity has to be perceived as simple action steps. In our Project case, SHG members were asked to take simple steps, such as eating meals with their Families to ensure equitable distribution of food , purchasing iron pots to cook from to improve the iron content of their foods, mixing flours to improve the nutritional content of their daily bread, growing nutrient-rich vegetables and drying them for the lean months to smooth food consumption, and leveraging the collective courage of their self-help group members to encourage change whether with their gatekeepers or within themselves.
3. It demonstrates that leveraging self-help groups of women is both a sustainable and effective way to encourage, and at some times, push change as they give women a greater voice, greater confidence, and ultimately agency to work for themselves, their families, and the well-being of their communities.
4. Integrated into the BCC were gender messages and dialogues such as the importance of supporting women during pregnancy with additional nutritious foods and support in chores and labor. Men were also engaged in topics regarding household decision-making for supporting food and nutritional security. For example, breaking tradition, husbands and wives and their families were encouraged to eat at least one meal per day together so as to visually see the portions and foods on each other’s plates.

OTHER ACCOMPLISHMENTS

1. VAAGDHARA's oral statement was delivered on 19th July, at the Trusteeship Council, United Nations Headquarters, New York. The Statement focused on recommending the strategies to build Sustainable and Resilient Indigenous communities which were evolved as a Charter of Demand during the Tribal Conclave organized by VAAGDHARA.
2. VAAGDHARA's Written Statement on "Promoting Community Owned solutions for sustainable development of Tribal Communities in Western India" has also been accepted and published in the UN Documentation System. Please find attached the Oral Statement which was delivered at the UN HLPF 2018, along with the Written Statement for your consideration. The Written Statement can also be accessed through the following link: <http://undocs.org/E/2018/NGO/19>.
3. The government of Rajasthan has supported our identified evidence and took major action in involving into the Policy. The concept of Annapurnas looks quite promising that under National Rural Livelihood Mission, The Govt. of Rajasthan provide their consent to set "Poshan Sakhi" in each of the villages who provide awareness on Nutrition security in Agricultural Production. and also knowledge building on social security schemes.

CONCLUSION

The Project approach was based on capitalizing the community based organizations and their processes already available in the field. The mantra lay in integrating the aspect of nutrition and making it their agenda – a first time discussion for many SHGs. The relevance of the issue and the program approach made people understand and pick up what they needed to do, and how. They are now reaping benefits, sharing useful information even with their families and with the women who are not a part of SHGs. It has achieved more than it set out to. Taking the intervention to the next level, the Annapurnas along with their own groups have begun to assume monitoring roles as parents and citizens of their Gram Panchayats. They undertake selfinitiated monitoring visits to not only ICDS centers but even the PDS shops to cross verify whether the work is being done the way it should be and to the schools to check the mid-day meal being cooked for their menu and quality compliance. The Farmer School helps to demonstrate the different linkages , so they can be less dependedent on market for nutritional outcomes. Women in groups go for these visits because they understand the power of a group vis-à-vis that of an individual.They have now started seeking their “entitlements” without any external prompts.

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