

12 THINGS THAT SHAPED NUTRITION SMART COMMUNITY DEMONSTRATING RESILIENT FOOD SYSTEMS IN BANGLADESH, INDIA AND NEPAL IN 2023

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We all know that high-quality nutrition and social participation can unquestionably repair our food systems. A sustainable food system must be the agenda for present and future generations to cease the impairment of demographic dividends, human capital potential, growth, and productivity. Nutrition Smart CommUNITY (NSC) program by Welthungerhilfe (WHH) has been responding to this in Bangladesh, India, and Nepal through smallholder farmers' initiatives and nature-based solutions. It is providing a sustainable solution to the broken food systems and addressing multifaceted causes of hunger and malnutrition. Embedding participatory planning and community empowerment mechanisms, Nutrition Smart CommUNITY has successfully demonstrated evidence-based impacts.

- *70% of women of reproductive age consume ≥ 5 food groups per day in program areas of Bangladesh, India, and Nepal.*
- *Minimum acceptable diet (MAD) among children aged 6-24 months: Bangladesh - 41%, India - 31%, Nepal - 12%*
- *Households aware of their entitlements: Bangladesh - 35%, India - 66%, Nepal - 72 %*

The year 2023 has been remarkable as the program's deep alignment with the government's vision has shaped the agenda and transformed the narrative.

12 initiatives and enablers that made a breakthrough in the year 2023 for sustainable and resilient food systems:

01. Nature-Based Solutions - Climate-Smart and Nutrition-Sensitive Agriculture That Is Chemical-Free.

Primarily, Sustainable Integrated Farming System (SIFS), the chemical free, inclusive, and integrated technique yielded RESULTS to nourish the undernourished and transform the production and farming systems. This enabled people to meet their dietary requirements in difficult situations using nature-friendly means. The program has also helped the farmers revive and believe in forgotten yet essential crops including millets, tubers, and roots.

Haor is among the most vulnerable regions of Bangladesh, which faces the wrath of flash floods throughout the year. People in the region practiced kite garden, sac garden and floating garden techniques to grow vegetables and crops despite the areas being water-logged. These techniques are low-cost and help to yield a wide variety of crops even in unfavourable situation.

In Sheopur district of Madhya Pradesh, India; Kodo millet was cultivated after 40 years. Revival of this coarse grain during International Year of Millets 2023 has created awareness among farmers to priorities millet cultivation, keeping in mind its numerous health benefits such as strengthening immune system, blood purifier, diabetic and non-communicable diseases (NCDs) friendly production system.

Playing a key role in Millet Revival Drive, Nutrition Smart Communities in Madhya Pradesh are making intensive efforts to motivate the farmers to grow millets. As an instance of encouraging development, 291 farmers have produced millets and now other farmers are motivated to grow Millets (Shri Anna) too. The best part is that millet recipe demonstrations are organised in these villages, and millets are now consumed in daily diet. Millet seed banks are getting established in communities to enhance millet production. Collectively, it is a great achievement for the program in International Year of Millets (IYM 2023).

02. Nutrition-Sensitive Micro Planning and its Synergy with Local Bodies.

The participatory village development plans in Agri-Nutrition sector included mapping of the available resources, seasonality and then plan using local resources. Interestingly, the mapping starts with screening of the malnourished children and ends in feeding nutritious food groups that are safe and hygienic. Special focus is given on children and women who are the hardest hit. Together, the plans and aspirations are taken up with the local government bodies and district administration to leverage resources. The process is empowering and improves access and entitlements.

For Rajgadh and Paroha districts of Nepal, a total of 34 Master Trainers have been empowered with Nutrition-Sensitive Micro Planning. This effort led to the development of 98 village-level Nutrition Sensitive Micro Plans, with 49 plans each in Rajgadh and Paroha. These plans focus on enhancing the nutritional status of both municipalities. The microplanning has been completed for 232 households that have malnourished children.

03. Participatory Learning and Action (PLA)

The Participatory Learning for Action (PLA) methodology has been adopted for conducting LANN+ (Linking Agriculture with Natural Resources towards Nutrition Security) meeting cycles in the community to ensure knowledge and behaviour change through actions at the village level.

Nutrition Smart CommUNITY volunteers in the villages of Bangladesh, India and Nepal conduct the screening of children (up to 2 years of age) to identify their nutritional status as Moderately Acute Malnourished (MAM) or Severely Acute Malnourished (SAM) or Well-Nourished. Children in MAM category can mostly be treated at home by feeding them with nutritious food, i.e., 4 to 5 food groups every day. Mothers are taught to prepare Nutrimix and feed their children with the same. However, in case of SAM children, regular monitoring is required and so they are sent to a 15-day Nutrition Camp organized by the program. Mothers are taught to cook Nutrimix. Also, they are made aware of the easily accessible food as an alternate of an unaffordable one. In most cases, health of SAM child improves, and he/she gets discharged for home. In more critical cases, the children are referred to a government health center for treatment.

04. The Art of Social Behaviour Change Communication (SBCC) in MIYCF (Maternal, Infant and Young Child Feeding) space - NSC Is Changing Narratives

Nutrition came naturally as NSC program achieved what many still struggle to achieve. Consumption of 4-5 food groups by population, specifically women and children in the remotest of the villages that follow natural farming was a breakthrough in MIYCF (Maternal, Infant and Young Child Feeding) space. How was it possible?

i) Farmer Field School – Demonstrations on diverse food groups organised on the fields of the lead farmers of the NSC provide opportunity for other farmers to learn about natural farming techniques, cattle rearing, fishery and other production and farming systems. Training sessions are organised at fixed intervals to compound the learnings.

ii) Message on Demographic Dividend - Cognitive Development, Growth, Productivity, Human Capital Potential – The first 1000 days of life starting from conception to two years of age are critical – these are the days of embryonic and foetal growth and development of multi-organ functions along with cognitive and higher brain functions.

And so, it becomes necessary for the mother and child to consume at least 4 to 5 groups daily during that period. In case a child consumes only calorie-rich food during that period, then she/he is more likely to grow up with micro-nutrient deficiency. Through social sanction activities, inter-personal communication, and joyful learnings; the villagers specifically women and adolescent girls learn the power of diverse food groups and how it can transform child's potential and build the society. The sustained behaviour changes through sustainable farming are unique in NSC program.

iii) Katori-Chammach Demonstration (Feeding the Child Using Bowl and Spoon) – Using a clean bowl and spoon for feeding the child not only ensures hygiene but also the appropriate quantity to be consumed by the child. That is why in the 15-day Nutrition Camp, its demonstration is done to train mothers. Screening of a total 10,975 children screening was done in 200 villages of India with the joint support from Government ICDS (Integrated Child Development Services) frontline workers. Total 41 Nutrition camps were successfully organised in which 1063 children took part and were fed using spoon and bowl (katori-chammach). Apart from 15-day Nutrition Camp, a 2-day Baal Bhoj was organized in 149 villages.

iv) WASH (Water, Sanitation and Hygiene) Messaging – Nutrition Sensitive Initiative linking to hidden hunger management – Clean drinking water and hygiene are important for healthy living because it prevents diseases and illness. A disease-infected person develops a weaker immune system and thus is prone to regularly falling ill. So, along with a nutritious diet, a clean environment and clean habits are necessary. NSC promotes safe water, hygiene, and cleanness practices like use of chappals, sun drying and limited exposure for Vitamin D and use of homemade Tippy Taps for handwashing. If we go to Gulat village of Chhatarpur, Madhya Pradesh, India, we can see that almost every house has a Tippy Tap and handwashing station and home-made matka water filter. In India, Tippy Tap demonstrations were done in 100 Anganwadi centers for community awareness in 2023.

v) Joyful learning- Songs – that nurture farming, dietary diversity, *Self-Pride* – Connecting with the local cult and emotions becomes important while educating the people. Through folk songs and slogans, people can easily learn about different aspects of farming and begin to obtain dietary diversity. People learn more when learning becomes fun through songs, games, role-plays etc. Gond tribal women in Chhatarpur recite food groups and link to their culture and heritage.

05. Appropriate Technology - Cost-effective and Context-Specific

Whether it is the bamboo frame kite garden from Bangladesh or a homemade Tippy Tap from India, the commonness between these two different tools is that they both are cost-effective and context-specific. One can produce a large bunch of vegetables through kite garden, which is prepared with minimal investment in bamboo sticks and ropes for fastening. Similarly, Tippy Tap is a tap at handwashing station made either at low cost or no cost at all. Moving further, if one person in a village has boring for irrigation, he/she can supply water to other farmers as well, instead of several borings in the same village. Millet processing tool can be installed in one village and other villages can also be benefitted by the same. These are some examples how technology and cost-effectiveness can go hand in hand on the demand of the context.

06. Poshan Badi (Nutri-Garden) Adds Colours To The Plate

In all three countries, nutrition garden has become the pride of a farmer's home. Smallholder farmers including women plant their nutrition gardens to grow vegetables and fruits through natural means. They not only consume the fruits and vegetables but also sell the remaining to make some money. The journey from nutri-garden to consumption of 4-5 food groups and households becoming self-reliant has been an essential part of food systems.

07. Phulwari Camp- Restoring Stolen Childhood

Volunteers from Nutrition Smart CommUNITY do the screening of children up to two years of age. If a child is Moderately Acute Malnourished (MAM), then she/he along with the mother taken to the 15-day Phulwari Camp where regular monitoring of the child is done after getting admitted. Mothers are taught to cook Nutrimix. They are made aware of the easily accessible food as an alternate of an unaffordable one. In most cases, health of MAM child improves, and he/she gets discharged for home. Children with Severely Affected Malnourished (SAM) are referred to Nutrition Rehabilitation Center (NRC).

08. Good Governance- Good Policy-Synergy with the Government

Nutrition Smart CommUNITY does advocacy for the initiatives to involve the Government authorities and thus provide policy-based benefits at a larger scale. NSC programs in Bangladesh, India and Nepal deeply engage with the government. In India, the program aligns with POSHAN Abhiyaan and National Mission on Natural Farming agenda.

Sahana Begum from Gaglajur village, Mohonganj in Bangladesh introduced various innovations including advisory services, input services to the community, and income-generating activities. She purchased personal hygiene products, children's clothing, and mask-making supplies based on community demand. Due to Sahana's leadership, enthusiasm, and good behaviour, she became an active member of Standing Committee on Health and Family Planning of the Union Parishad, the "Mina" group by the Women Affairs Bureau, and the local graveyard committee. And now, she aims to establish a bigger hygiene center in her village to help more people.

Situated in Karahal block of Sheopur district in Madhya Pradesh, Sonipura village is famous as a Nutrition Smart Village. To include in Gram Panchayat Development Plan, village people had pointed out some issues like the problem of drinking water; beautification, deepening and repairing of village pond; earning livelihood through farming; cemented road in the village; etc. Since all these issues were important, therefore Panchayat approved action, and now the village is Nutrition-Smart.

09. Gender Equity and Diversity At Core

The outcomes of malnutrition are deeply unfair. NSC program deliberately and systematically focuses on tribals, women smallholder farmers and villages in distant and difficult geographies. It follows a value system where all genders and ethnic groups are respected and treated equally. Jitendra from 'Madhesis' community in the Terai region of Nepal got linked to Nutrition Smart CommUNITY when his wife died, and he found that his son was undernourished. He along with other mothers learned to cook Nutrimix food and fed his son with the same. He attended the sessions and defied the gender roles in traditional society to restore his child's health.

10. Food Systems Academy- Building Institution

Deeply aligned with UNSDG-2 on achieving Zero Hunger and country visions, WHH is conceptualising a "Food Systems Academy" under the larger ambit of Nutrition Smart CommUNITY. It will be an international Centre of Excellence and a knowledge aggregator. The academy would set agenda and provide techno-managerial support and engage in breakthrough research for nutrition-secure and resilient food systems. The pioneering Centre of Excellence envisages transforming the global food systems landscape and providing informed choices to the marginalized smallholder farmers we work with to address all forms of hunger and malnutrition sustainably.

11. One Health- Deepening Interconnection With Animal, Plant and Human Health Systems.

The NSC programs target optimal health outcomes recognizing the interconnection between people, animals, plants, and their shared environment .

Nutrition is not just enriching the human body with nutrients, it is about conserving soil and water, and providing other creatures a healthy environment to survive. Poor quality of soil cannot produce nutrient-rich crops and therefore maintaining the soil fertility by natural means like cow urine, cow dung manure etc. is important. Chemical fertilizers worsen the quality of soil while natural manure increases its productivity for long. Water quality matters not only for drinking but also for rearing fish so that they thrive in a healthy environment. The NSC program follows a holistic approach that is climate-smart, nutrition-sensitive and resilient.

Selected farmers in Karahal block of Sheopur district in Madhya Pradesh, India were given 500 chicks of a special nutritious variety for their farms, and 62 demonstrative farms were established with more than 5 subsystems.

12. A bond with Culture, Legacy, and Heritage

People from the tribes or villages belong to rich ethnic groups and they have a significant share in local history. While working among such people, an exchange of ideas can be done, and their identities can be highlighted in their regions for expanding the program among the public and eventually to the authoritative bodies. For example, Gondwana tribes in Chhatarpur, Madhya Pradesh used to be the rulers of their respective areas in past, however, over time, their social status has changed. Still, reminding them of their original stature motivates them to be strong by being nutrition-secure rather than vulnerable.

Small Is Beautiful But Big Is Necessary

Nutrition Smart CommUNITY program provides an informed choice. It has established its niche in Maternal, Infant Young Child Nutrition (MIYCN) space and paved the way for inclusive, accountable, climate-smart, nutrition-sensitive food system to amplify demographic dividend. The program proves that agriculture has the power and potential to serve all purposes to make the community healthy, wealthy, and wise. Inclusive and accountable food systems led by women smallholder farmers for a sustainable planet are possible and feasible to address all forms of hunger and malnutrition.

The plan is to build every community nutrition-smart for a healthy and empowered nation. Six African countries' teams visited Chhatarpur, Madhya Pradesh in India for exposure and learning to support scaling up of the program. The multisectoral malnutrition-free Nutrition Smart Villages are islands of excellence and generating interest in the continent of Africa, including Ethiopia in East Africa, Malawi in Southern Africa, and Sierra Leone in West Africa to transform the food systems.

