



## *Integration of Health and Nutrition into Livelihood Programs under DAY-NRLM*

## Context

Over the past two decades India has seen significant improvements in household incomes, agricultural productivity and child survival, although malnutrition among children remains high, despite improvements over the last decade. While stunting and underweight prevalence has gone down, trends in corporal wasting show an overall increase

in the last decade. The decrease in stunting has been from 48% to 38.4%, (1 percentage point per year). Similarly, underweight prevalence has reduced by 0.68 percentage points from National Family Health Survey (NFHS)-3 (2005-06) to NFHS-4 (2015-16).

Pregnancy and lactation have an adverse effect on chronically undernourished

women. Low pre-pregnancy weight and low pregnancy weight gain are associated with low birth weight and attendant consequences.

Overall, the percentage of women with low BMI has fallen from 35.5% (NFHS-3) to 22.9% (NFHS-4). It is also seen that overall, the levels of anaemia among

women and girls has fallen over the last decade from 55.3% in NFHS-3 to 53% in NFHS-4. Among pregnant women 50.3% were found to be anemic, and a considerably higher number in rural areas, amongst disadvantaged groups (particularly scheduled tribes) and women in poorer households.

### WEIGHT WOES AMONG WOMEN



THE DECREASE IN STUNTING  
48% to 38.4%,



DECREASE IN UNDERWEIGHT  
PREVALENCE  
0.68% in 10 years



DECREASE IN WOMEN WITH  
LOW BMI  
35.5% to 22.9%,



DECREASE IN LEVELS OF ANAEMIA  
55.3% to 53%

### ANAEMIA IN WOMEN & GIRLS



## Intervention

DAY-NRLM has adopted the Dasa Sutra Strategy<sup>1</sup> towards an integrated FNHW (Food, Nutrition, Health, WASH) approach for holistic development of SHG members. Through this approach, DAY-NRLM aims to create awareness and encourage behavior change among rural women on these issues as well as mobilize the SHG members to access related entitlements from the concerned public health and line departments. Further, these FNHW interventions are embedded in other key components of the broader program viz., Institution Building, Capacity building, Financial Inclusion, Farm livelihoods, Non-Farm livelihoods, Gender, Social Inclusion and Convergence with PRIs.

Lucrative and stable livelihoods are necessary for access to diverse foods; at the same time, good health and nutrition are a condition for inclusive livelihood development. Recognizing this link, 16 states have initiated various activities targeted particularly at women and children who fall into the 1,000-day window of opportunity (from conception to 2 years of age) to break the cycle of malnutrition in a minimum of two blocks per state. Some of the key interventions adopted by DAY-NRLM are:

### 1. Health and Nutrition:

- 1000 Days window – institutional delivery, colostrum feeding,

prenatal and antenatal care, exclusive breast feeding and complementary feeding

- Dietary diversification
- Reducing anaemia
- Menstrual hygiene – working with women and adolescent girls
- Development of nutri-enterprises

### 2. WASH:

- Usage of sanitary toilets
- Hand washing practices especially at 3 critical times
- Management of waste at home
- Development of sanitation-related enterprises

1. Ten rules/commandments for holistic development of SHGs including the 5 related to financial intermediation (regular meetings, regular savings, regular inter-lending, regular repayment, regular book-keeping), health including nutrition and WASH, education, PRI coordination, access to entitlements and sustainable livelihoods

## *The integration of Food, Nutrition, Health and WASH (FNHW) under DAY- NRLM*

The core of a sustainable livelihoods program is both the development of social capital and community institutions that form a strong base for layering of social development interventions. Similarly, an integrated health and nutrition program acts at multiple levels and is anchored in the understanding that behaviours are not just driven by individual choices but also social norms and values, accessible institutions, available and accessible goods and services. Given its scope, the DAY- NRLM is positioned as an effective platform to tackle the underlying causes of poor health including the soaring rates of malnutrition.

In 2006, under the Society for Elimination of Rural Poverty (SERP), Andhra Pradesh was the first State to bring health and nutrition under the purview of its livelihood program. The complementary roles played by both the service providers of health and nutrition and the SHG households, towards whom these services were targeted was recognized. To demystify the concept of medical health and integrate with social health, the program adopted social mobilization focusing on health and nutrition, and the development of the local social capital. Extensive efforts were made to introduce the health and nutrition agenda as part of regular SHG and federation meetings, and to influence the adoption of positive maternal and child health practices amongst SHG households. Convergence efforts to facilitate access to entitlements from the public health system also contributed towards reduction of household health expenditures.

The model was subsequently replicated in Bihar where the Bill & Melinda Gates

Foundation extended support in rolling out interventions through the SHG network at the village level. The focus has been on rolling out of Behaviour Change Communication (BCC) modules in SHG meetings, undertaking home visits for “first 1000 days” target groups, conducting awareness drives, provision of funds for sanitation and health issues etc.

In 2016, DAY-NRLM established a Special Convergence Fund (SCF) to evolve convergence models that are community centric and community led, engage with line departments to access schemes and entitlements; and evolve a more responsive system. The objective of the SCF was to provide an impetus to convergent planning and to demonstrate sustained mechanisms for mainstreaming results-based convergence with other government programs including the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), Pradhan Mantri Awas Yojana (PMAY), Swachh Bharat Mission (SBM), and National Social Assistance Programme (NSAP). This has since been implemented in 9 states (Bihar, Chhattisgarh, Jharkhand, Karnataka, Maharashtra, Rajasthan, Tamil Nadu, Uttar Pradesh, West Bengal) at a cost of INR 64.16 crores between April 2016 to June 2018.

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*Starting July 2016, the UNICEF supported “Swabhimaan” programme is being piloted in three states namely Bihar, Chhattisgarh and Odisha, focusing on integration of FNHW related interventions at SHG, VO and CLF level. Based on initial successes, the model is also being*

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*scaled up in these states under DAY-NRLM. Further, resource materials and other learning from the implementation of these initiatives have been used to facilitate state-to-state learnings.*

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The FNHW interventions include a (a) Food Security Fund (FSF) aimed at facilitating collective procurement of food grains at bargain prices, to be distributed to SHG households as an interest-free or with nominal interest loan to be repaid over a period of three months, (b) Health Risk Fund (HRF) where SHG members have an exclusive saving to meet health emergencies, (c) Food Fortification Units, (d) Behaviour Change Communication (BCC) and (e) Nutrition Sensitive Agriculture interventions.

While some interventions are implemented independently by the project, others are in partnership with external agencies such as Bihar Technical Assistance Support Team (BTAST) and Project Concern International (PCI). Additionally, to support households' access to water, sanitation and hygiene services, a Sanitation, Health and Nutrition (SHAN) fund in Bihar and Special Convergence fund (as stimulus fund) in Maharashtra were instituted to provide gap financing to households in need. In UP, a Government Order was issued to implement the FNHW interventions through partnership between UPSRLM and State Nutrition Mission in 2016, with clearly defined roles for various line departments such as Women and Child Development, Health and Rural Water Supply and Rural Development.

## *Strategies and approaches*

The basic foundation of the FNHW program under DAY-NRLM is that health and nutrition are best addressed by adopting a multi-sectoral approach that emphasizes the establishment of appropriate linkages with other key sectors like sanitation and

agriculture. Furthermore, the approach relies on leveraging the core strength of the institutional platforms of the poor, i.e. the SHGs and their federations to implement a multi-sectoral approach. Key elements of this multi-sectoral approach include the following:-

## **Behavior change and access to government nutrition services**

A comprehensive behavior change communication (BCC) strategy is being implemented to increase knowledge and practice of recommended nutrition



behaviors and improve the uptake of nutrition services with a focus on behaviors in the critical 1000-day period (from pregnancy to 2 years of age). In addition, capacity building efforts and coordination with the respective government departments ensure greater use and uptake of the nutrition services and food security entitlements being made available through the Government of India's ICDS and PDS. SHG members are also mobilized to participate in awareness events like Godbharai (Indian ceremony during pregnancy to welcome the unborn baby), Annaprashan (baby's first feeding ceremony), which organized at the Anganwadi Centres.

### Behavior change and access to government sanitation programs

Realizing the strong linkages with sanitation, the program is also implementing a comprehensive BCC strategy. This addresses the practice of open defecation by women, their children and household members, hygiene practices at birth, baby care, menstrual hygiene, hand washing and

cooking hygiene at home/at institutions, water purification and storage practices by the target households, and solid waste management.

Concurrently, the program is facilitating households' access to sanitation facilities being made available through Government of India's Swachh Bharat Mission.

### Behaviour change and access to government health programs

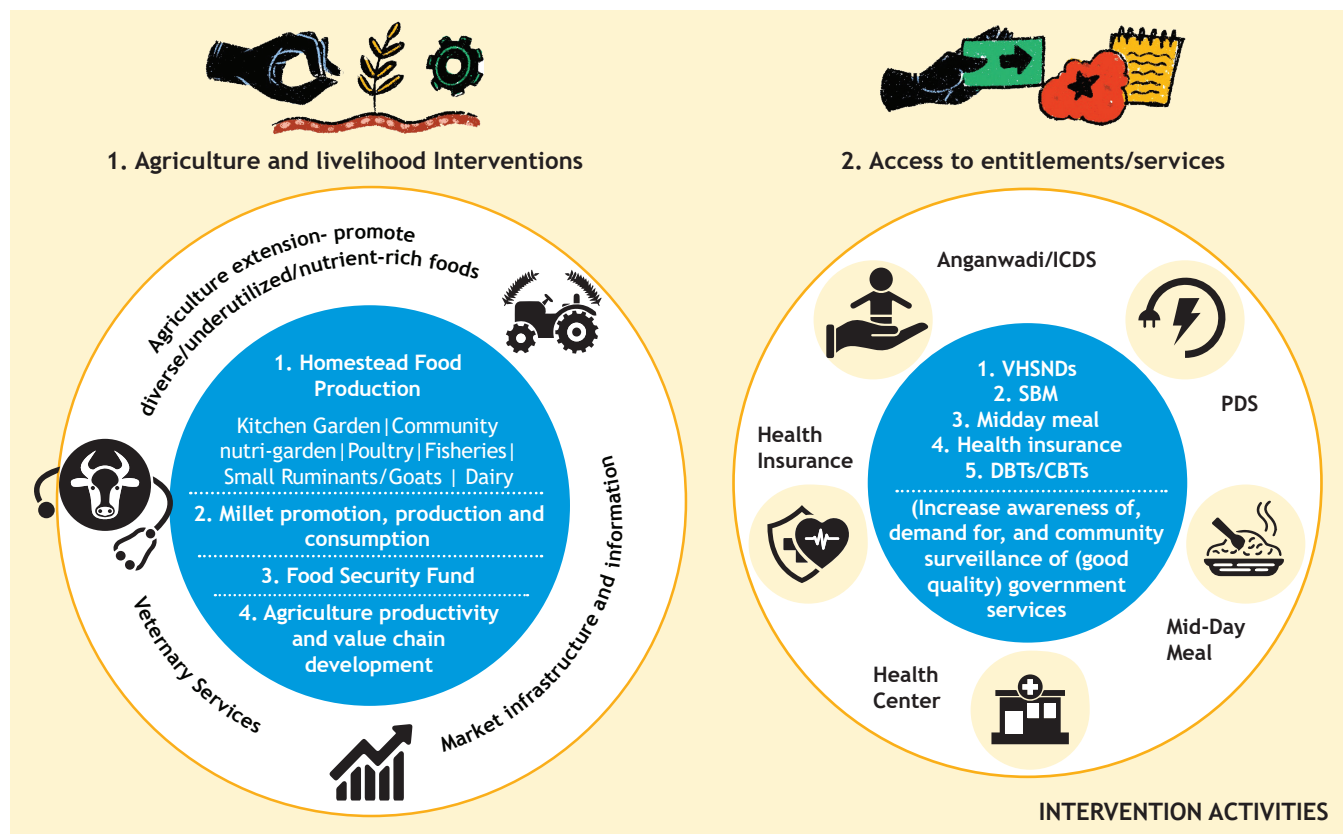
Under DAY-NRLM, SHGs and VO's are encouraged to promote and participate in the planning of Village Health Sanitation and Nutrition Days, which is the convergence platform for provision of health and nutrition services, and to mobilize community members to attend. Social Action Committees (SACs) and Community Resource Persons (CRPs) are encouraged to work in close coordination with ASHA and Anganwadi workers to ensure that target groups can access services in a timely manner. SHG members are also given information about other related entitlements and if required, SACs facilitate access to entitlements in coordination with the concerned line department.

### Dietary diversification through appropriate agricultural interventions

Under the guidance of the Farm Livelihoods vertical of DAY-NRLM, the program is also enabling dietary diversification at the household level through promotion of homestead food production including kitchen gardens, backyard poultry, dairy and small ruminants coupled with intensive counselling and food demonstrations for improving the quality of food consumed in the household. Convergence with related departments, agencies and institutions are also encouraged for technical assistance and implementation support.

### Promotion of FNHW related enterprises:

Enterprises on nutritious snacks, processing of foods, WASH related products are encouraged to enhance the livelihoods opportunity of the members as well as facilitate availability of products within the community.

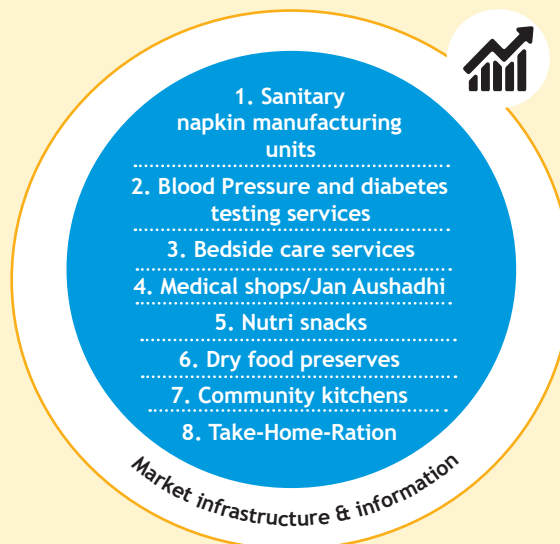




### 3. Behaviour Change Communication



### 4. Nutri Enterprises



### INTERVENTION ACTIVITIES

## PLATFORMS AND FACILITATORS FOR HNS INTERVENTIONS INTEGRATED INTO LIVELIHOOD PROGRAM



### Food

**INTERVENTION FOCUS:** Food Security Fund; Convergence with PDS

**PLATFORM:** SHG

**FACILITATORS:** Convergence Sakhi/VO/VO Procurement Subcommittee/PRI

### Health

**INTERVENTION FOCUS:** Fixed NHDs; Review by VHNSCs; HRF

**PLATFORM:** SHG/VHND

**FACILITATORS:** AAAs/VO/GP

### Nutrition

**INTERVENTION FOCUS:** Dietary diversification; IYCF-GMP; Management of SAM and MAM; Maternal and adolescent nutrition, Menstrual hygiene

**PLATFORM:** SHG/VO

**FACILITATORS:** CM/ICRP/Nutrition Counselor Convergence Sakhi & VO-Health Subcommittee and AWW & ASHA

### Sanitation

**INTERVENTION FOCUS:** Washing hands; ISLs; Safe water supply; Menstrual hygiene products; Nutrition - WASH linkages

**PLATFORM:** SHG/VHNSC

**FACILITATORS:** VO and Sarpanch & ANM

### Livelihoods

**INTERVENTION FOCUS:** Kitchen/community Gardens; Millet production; Nutri-mix; Nutri snacks; Ethnic cafe - millet products hubs; Sanitary napkin and sanitation

**PLATFORM:** VO/SHG

**FACILITATORS:** VO-Health Sub Committee; LH teams

Given that these activities are phased and targeted at different levels, it is important to identify the impact pathways through which

they intend to improve health and nutrition. These are based on the general understanding of the situation in SRLMs characterized by

insufficient livelihood assets, poorly targeted and low-quality entitlements, and lack of understanding of the benefits of dietary diversity.

## PATHWAYS TO LINK AGRICULTURE AND NUTRITION FOR IMPROVED DIET DIVERSITY



### AGRICULTURE PRODUCTION

Nutrition-sensitive Livelihood activities	Outcomes
Kitchen garden	Increased availability of diverse food basket, and access throughout the year for the household and at the local market
Poultry	
Dairy	
Goat/Small ruminant	

### INCOME

Nutrition-sensitive Livelihood activities	Outcomes
Agriculture productivity and market access/value chain development	Improved purchasing power for secure access throughout year and improve quality of food basket
Handicrafts	
Beekeeping	

### WOMEN'S EMPOWERMENT

Nutrition-sensitive Livelihood activities	Outcomes
Financial resources/decision making	Intra-household distribution and proper consumption as well as care practice
Labor and time	

### AWARENESS, SKILLS, AND KNOWLEDGE

Nutrition-sensitive Livelihood activities	Outcomes
BCC through various channels	Awareness, skills, and knowledge
	Improved dietary diversity, complementary feeding, exclusive breastfeeding, sanitation

### MARKET ENVIRONMENT

Nutrition-sensitive Livelihood activities	Outcomes
Value chain improvement by linking farmers with markets and improving market infrastructure including processing, storage/handling and food safety	Access to quality, nutrient-rich and safe foods throughout year

### SOCIAL PROTECTION/ENTITLEMENTS

Nutrition-sensitive Livelihood activities	Outcomes
Food security Fund	Access to staple foods for poor HH and during lean season
ICDS/Anganwadi	
PDS	

## Implementation; Progress of interventions

The experiences of the states like Bihar, Maharashtra, Uttar Pradesh, Jharkhand, Odisha, Chhattisgarh indicate that the integration of FNHW interventions in SHGs and their federations may be effective in inculcating desired behavior changes for achieving optimal health and nutrition status in rural communities. Recognizing these successes, the DAY-NRLM has committed to strengthening impact of its program on

health, nutrition and sanitation outcomes across its operations in states and UTs.

*To initiate the integration of FNHW in DAY-NRLM, a joint advisory for convergence on key issues was issued by the Ministry of Rural Development (MoRD), the Ministry of Women and Child Development and the*

*Ministry of Health and Family Welfare covering the details of the approach, suggestive interventions, and convergence with line departments.*

MoRD has partnered with Ministry of Women and Child Development under POSHAN Abhiyaan (National Nutrition Mission) for improving health and nutrition

indicators. Under POSHAN Abhiyaan, DAY-NRLM has advised all SRLMs to organize various activities at the CLF, VO and SHG level during POSHAN Maah and POSHAN Pakhwada in last 2 years. MoRD has also converged with ministries similar initiatives including Jal Shakti, Intensified Mission Indra Dhanush 2.0, Swachhta hi Sewa, Fit India etc.

Further, the Ministry has developed a partnership with Lady Irwin College, University of Delhi and the Bill and Melinda Gates Foundation to establish two technical

support units for providing technical assistance on the FNHW roll out to DAY-NRLM and SRLMs. To support SRLMs in developing a comprehensive FNHW state strategy and action plan, a pool of trained National Resource Persons (NRPs) comprising experienced professionals from relevant fields has been developed. These NRPs are assigned to SRLMs and support the state teams in conducting situational analysis, developing strategy documents, developing state level resources, imparting trainings to various stakeholders and demonstrating the FNHW interventions in

select blocks.

The initial efforts have led to the several SRLMs integrating FNHW interventions in their respective yearly Annual Action Plans. These AAPs detail key activities like preparation of state specific operational strategy with clear expected outcomes, orientation of state, district, block staff, activation & training of Social Action Committees, identification of community resource persons for taking forward FNHW agenda, utilization of vulnerability reduction fund for Food, Health and nutrition purposes etc.

## Findings from Studies Conducted in Select States

### Food Security Fund (FSF)

Implemented via more than 26,185 VOs in 534 blocks under JEEViKA - Bihar, FSFs had a profound impact on the poorest sections of society who struggle with food scarcity during lean seasons. Independent impact evaluations have shown reduced incidence of reported hunger and increased consumption of food grains for the poorest quintiles. The analysis showed a majority of the households (85%) had gone to bed after having a full meal in the past 30 days and that most households were able to procure food through different means such as food safety nets, subsistence cultivation or other means.



### Nutrition sensitive agriculture models

In Maharashtra, Nutrition Gardens improved diet diversity with foods rich in micronutrients and showed normal levels Haemoglobin (Hb) among women and adolescent girls with the Hb tests conducted locally before and after the intervention period. It also had a ripple effects on the livelihood teams of the project to use a nutrition lens into Agriculture.



92%

of households

Nutri - Gardens grown with >5 varieties of vegetables

97%

of households

used vegetables for own consumption

98%

of households

had regular consumption of 5-7 food groups



Maintenance of RDA in terms of vegetables consumption

Women and adolescent girls after 6 months of consumption from their own nutri gardens increased their Hb levels between 1 to 3 mg added to the initial value.

- Findings from midline evaluation<sup>2</sup> of FNHW interventions in Swabhimaan sites i.e. selected blocks in Bihar, Chhattisgarh and Odisha showed higher consumption of protein and iron-rich foods in the intervention area, as compared to control area among pregnant women. Also, higher rate of attendance in VHSND is recorded among the pregnant women who participated in the FNHW monthly meetings (maitribaitbaks) as compared to those who did not participate. Attendance in maitribaitbaks by mothers was found to have a significant reduction in their practice of open defecation and improved use of soap for hand washing before meals.



2. Factsheets available at <http://www.roshni-cwca.in/ResourcesFNHWReports.aspx?flag=1>, Midline evaluation study, 2018-19.



- A significant impact of intervention on diet diversity score among pregnant women in both Bihar (36.1%; ES=14.9\*\*\*) and Chhattisgarh (82.5%; ES=10.0\*\*) was observed. Chhattisgarh showed significant increase in use of safe pads or sanitary pads during period by adolescent girls from baseline (36.1%) to midline (61.7%) in intervention area as compared to control area. Though in Bihar, midline results show an increase from 27.7% to 39.5% in control, the change is not as high and significant as compared to the control area. Whereas, in Odisha similar increase from baseline to endline was recorded in use of pads in intervention and control area.



## Key Lessons and the Way Forward

Based on initial successes and learnings, DAY-NRLM is now focusing on accelerating the integration of FNHW interventions across SRLMs in a phased manner. The initial focus is on developing a state strategy and implementation plan, as well as the development of a resource pool and reference material before initiating implementation in at least 2 blocks in two selected districts within the state. The strategy development will be completed in consultation with representatives of all the verticals within SRLMs, relevant government departments and development agencies to ensure optimal utilization of available resources and entitlements under various schemes.

States are expected to develop and implement scale up plans linked to their implementation experience and learnings. The focus of the plans will be given on first 1000 days, reducing anaemia, diet diversity, menstrual hygiene, usage of toilets, hand washing practices, promoting FNHW enterprises including nutri-enterprises, nutri-gardens.

However, to establish linkages between agriculture and FNHW in livelihoods projects, concerted efforts and inter-ministerial convergence is needed to institutionalize processes and engender sustainability within the project.

Most interventions developed under FNHW component of DAY-NRLM are universal and can be sustained by leveraging and building capacity of the community. There is a need to integrate community cadre developed under NRLM (community mobilizers, convergence Sakhis) with the existing network of frontline health extension workers including Anganwadi and ASHA workers and ensure that efforts are complementary. The role of women's collectives and local mobilizers is critical to the success of mainstreaming health and nutrition interventions under large-scale rural livelihoods programs.

### ABOUT THE DISCUSSION NOTE SERIES

This note is part of the South Asia Agriculture and Rural Growth Discussion Note Series, that seeks to disseminate operational learnings and implementation experiences from World Bank financed rural, agriculture and food systems programs in South Asia.

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