

## Concept Note for Nutrition Security Interventions within the Mitandin Programme

Chhattisgarh has a persistent child malnutrition rate of around 52.9 percent and ranks “high” on nutrition insecurity.<sup>1</sup> The latest NFHS 3 data related to child feeding practices and nutritional status of children, show that although some indicators have increased compared to those in the previous years, the nutritional status in the state, especially the rural areas, are of real concern. The data from the National Sample Survey Rounds on consumption expenditure had told us that per capita calorie consumption, far from rising, has actually decreased, even for the poorest groups. The latest NFHS 3 (2005-06) data related to nutritional status of children, show that although some indicators have improved compared to those in the previous years, the nutritional status in the state still remain of real concern. The data from the National Sample Survey Rounds on consumption expenditure had told us that per capita calorie consumption, far from rising, has actually decreased, even for the poorest groups.<sup>2</sup> And now NFHS-3 provides some depressing reminders of the very poor nutrition status of most of population, especially the young. The percentage of underweight children at 52.1, stunting at 45.4, immunisation coverage of 43 percent in rural Chhattisgarh, and poor indicators for child feeding practices, such as initiation of breastfeeding with the first hour of birth at 24.5 percent, a significant increase in exclusive breastfeeding for 0-6 months at 82 percent, and timely initiation of complementary feeding at 54 percent, a 81 percent prevalence of anaemia among children and 59.4 percent among women, increasing to 62 percent during pregnancy, all indicate the urgency that is facing the situation of child health and nutrition in the state.<sup>3</sup>

Besides the evident relationship between poverty, hunger and child undernutrition that is found in Chhattisgarh, some other determinants contribute to this situation.

**Factors Related to the Community:** The complex relationship between traditional knowledge of feeding practices and the changing context in which such knowledge is applied, adds to the problem of child undernutrition. An erosion of traditional knowledge and local foods among tribal groups in Chhattisgarh as a result of deforestation and urbanisation contribute to an actual change in food behaviours and feeding practices, as well as a decrease in the availability of food items high on micronutrients. For example, the decrease in availability of meat due to decline of game and change in lifestyles is not compensated by increases in other sources of iron rich foods such as green leafy vegetables or lentils. Again the availability of rice and wheat through the public distribution system, instead of coarse grains such as millet which are richer in iron and calcium has led to a change of dietary patterns and a loss of variety, which in turn has led to high rates of anaemia, micronutrient deficiencies and malnutrition.

Information asymmetry and lack of knowledge and information among the community, leads to faulty practices related to child caring, feeding and food practices for women, especially during pregnancy and after delivery. Delayed initiation of breastfeeding, discarding colostrum, lack of exclusive breastfeeding, eating less during pregnancy, avoiding certain foods high on nutritious value, and fasting for the first three days after delivery signify some of these practices in the communities. The consequences of such asymmetries also get manifested in lack of awareness about entitlements from food schemes by the community, and therefore, ability to access them. For instance, the lack of awareness about services being provided by the ICDS (especially food for pregnant and lactating women, and health services such as IFA and Vitamin A distribution are not known by majority of the community members). This leads to a lack of demand, inaction when services are not provided, and a perpetuation of

<sup>1</sup> World Food Programme. 2001. *Country Strategies*. [www.wfp.org](http://www.wfp.org)

<sup>2</sup> Jayati Ghosh, 2005, *Nutrition Concerns*, [www.macroscan.com](http://www.macroscan.com)

<sup>3</sup> All data is quoted from the *National Family Health Survey – 3, 2005-06*, International Institute of Population Studies, Mumbai

inefficiencies and performance of these schemes in the absence of any community monitoring and accountability. Besides these, other determinants of undernutrition related to poverty and health behaviours are unsanitary conditions that result in recurrent infection-undernutrition cycles. In the lack of awareness about this interrelationship, repeated episodes of diseases such as diarrhoea, fever and respiratory infections that are common among children precipitates undernutrition, especially in the absence of appropriate health seeking behaviours and access to health care facilities.

**Factors Related to Food and Nutrition Programmes:** Government services and programmes directed towards prevention and management of undernutrition, such as Integrated Child Development Services (ICDS), the Mid-day Meals Scheme (MDMS), and the Public Distribution System (PDS), are all mandated to have universal coverage in Chhattisgarh. Chhattisgarh has a universalised Integrated Child Development Services (ICDS), with all the 146 rural blocks under the scheme. However, problems of poor coverage and quality of services continue to plague the scheme. With only 20,100 sanctioned Anganwadi Centres (AWCs) as against 54,000 official hamlets in the state poses constraints for universal coverage of children in poor rural areas due to issues in access because of long distances, geographical terrain and absence of roads and transportation. Moreover, within operational ICDS blocks most AWCs are located in areas inhabited by the upper class or caste thereby making access for the vulnerable sections, scheduled castes and tribes who are the intended beneficiaries of the ICDS difficult.<sup>4</sup> This is further aggravated by the fact that in one third of the cases the target population is often not even aware of the services provided at the AWC.<sup>5</sup> Other problems of the ICDS in Chhattisgarh is the poor functioning of AWCs. Large gaps exist in services related to health and nutrition education for prevention and management of undernutrition and the mobilisation of mothers committees by the Anganwadi Worker (AWW). Growth monitoring in the AWC, accurate interpretation of growth charts and grades of undernutrition by AWWs, and most importantly the counselling of the families of undernourished children by the AWW are almost absent. As far as health related services are concerned, immunisation occurs at the AWC with the greatest frequency, however, there is no other health activity such as deworming, vitamin A supplementation, paediatric anaemia correction, diarrhoea management and acute respiratory infection response. In this case the lack of awareness in the community regarding the services that the AWC is supposed to be providing also contributes to lack of demand and therefore, supply. As related to the supplementary nutrition programme component, almost less than 50 percent children in the village are utilising this service, and it is usually the most vulnerable children who get excluded. The dry ration of dalia is the only food item distributed, and the other ingredients of oil, peanuts, sugar, appropriately prepared weaning foods and cooked meals are not supplied. In several AWCs the food is not consumed at the centre, especially in case of women and children under 3 years, but is taken home where it is mostly distributed amongst other members in the household, with inadequate allocation for the actual beneficiaries.<sup>6</sup> The other factor that affects the success of this component is the quality and regular availability of the food. Supply of ingredients as well as ready-to-eat food to the AWCs is the responsibility of the state and thus most states provide locally appropriate material. The impact of this component is also diluted by the irregularity in the supply of the food. Since the objective of the supplementation is prophylactic as well as therapeutic, irregularity can delay impact and increase severity.

The performance of MDMS and PDS are comparatively better in the state (the positive changes being affected by concerted policy advocacy and activism by the Right to Food Campaign). While cooked meals comprising of rice, pulses, locally available vegetables are served to children under the MDMS, and supply of food items within the PDS has been regularised, periodic monitoring is required to maintain these services and prevent malpractices and inequities.

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<sup>4</sup> NIPCCD., (1992)

<sup>5</sup> Dutta, V.,(2001)

<sup>6</sup> This was gathered through a field visit

**The Resources in Chhattisgarh:** Chhattisgarh represents the unique resource of the Mitanins – a hamlet level community health volunteer, supported by Prashikshaks at the village level, block coordinators and field coordinators, with technical assistance in conceptualisation, operationalisation and implementation from the State Health Resource Centre (SHRC). The Mitanin Programme aims to provide better outreach for health education, health services, ensure provision of preventive, promotive and basic curative health care, as well as strengthen community level action and networks to improve health status. The programme has succeeded in placing trained health personnel at all decentralised levels - 60,000 Mitanins covering all hamlets across the state, 3000 Prashikshaks, 438 Block Coordinators, and 25 Field Coordinators. In a state like Chhattisgarh, with weak health systems and large shortfalls in medically trained human power in the public health facilities, the personnel of the Mitanin Programme represents a considerable health resource for reaching out to vulnerable communities, as well as to deepen impact, diversify roles and build linkages with other areas related to health such as nutrition. Focused on maternal and child health, the Mitanin Programme has a natural mandate to include interventions to reduce the high prevalence of child undernutrition, micronutrient deficiencies, childhood infections, maternal nutrition, and issues of knowledge, attitudes and practices related to undernutrition.

Another significant resource present in Chhattisgarh is the strong Right to Food Campaign (RTFC) and its network of individuals and organisations. The Right to Food Campaign Support Group became active in Chhattisgarh from 2002 onwards. Consisting of five people's organizations which work in 23 blocks spread across 7 districts of the state, the RTFC started with mass action on the MDMS which helped in creating mass awareness on the need for a strong mid day meal programme. With increasing participation of people, support from the Office of the Commissioners to the Supreme Court, and the need for a more intensive action on the Right to Food issues, the RTFC has focused on generating increased levels of community awareness on food issues and chronic hunger. This has resulted in ensuring allotment of Antyodaya cards to primitive tribes to facilitate access to the PDS. This experience encouraged the people's organizations and more concerted action started on MDMS and PDS across seven districts of the state in the form of a series of Public Hearings, resulting in the formation of a high powered state committee to examine the issue of hunger and malnutrition. Investigation of PDS shops, cancellation of licenses of shops found to be corrupt and handing them over to Panchayats, Government order banning private traders from running PDS shops, strengthening monitoring and vigilance mechanisms in PDS from village to state level, ensuring participation of women, disabled, tribal and Dalit communities in running as well as monitoring of PDS, issuing BPL cards in name of eldest male and female in a family jointly, were some of the results of this action. The experience of the RTFC in mobilising communities for collective action, monitoring food schemes, and generating awareness about entitlements of people, its network of people's organisations and trained community organisers represent resources that can be potentially utilised in interventions to address issues of nutrition security.

It needs to be noted that there exists considerable interaction between the RTFC and the Mitanin Programme. The RTF group has been the chief contributor in helping SHRC in formulating the training material for Mitanins on nutrition security on the basis of its experience in the state over the last three years. The RTFC has also provided resource persons for training the SHRC field coordinators and subsequent levels of trainers in this issue.

**Suggested Interventions for Nutrition Security:** Given the context, the Nutrition Security Innovations within the Mitanin Programme will be undertaken in 23 blocks across 11 districts<sup>7</sup> of Chhattisgarh. These blocks have been selected on the basis of the successful performance of the Mitanin Programme.<sup>8</sup> The specific interventions, that have been planned for a total

<sup>7</sup> The districts are: Koriya, Sarguja, Jaspur, Raigarh, Janjgir, Bilaspur, Raipur, Durg, Kanker, Dantewada and Bastar.

<sup>8</sup> This has been assessed on the basis of the internal evaluation of the Mitanin Programme undertaken by the State Health Resource Centre.

duration of 3.5 years, will involve the following.

**Interventions in Awareness Building and Behaviour Change Communication:** The most significant role of the Mitanin is behaviour change communication to alter dietary practices and related knowledge and attitudes in the community to achieve better nutritional status. While the Mitanin Programme has emphasised on changing exclusive breastfeeding practices, and has contributed to the significant improvement in the state (the current prevalence at a high 82 percent), the other indicators of child feeding practices such as initiation of breastfeeding, appropriate complementary feeding and identification of undernourished children with the AWW through regular growth monitoring and nutritional counselling to the families of these children to address the issue, are roles need to be strengthened.

Besides this, in the area of maternal nutrition the role of the Mitanin need to be intensified to generate awareness among families about the importance of adequate nutrition for women, changing harmful practices related to food intake during pregnancy and after delivery, and of changing inequitable food allocations within the household that discriminate against women and children. This is also true in case of take home rations from the ICDS. In her role to change these household knowledge and practices, the Mitanin need to recognise and address the various factors related to the lack of an enabling environment that impede the translation of knowledge into practice.

To address the interrelationships between nutrition and health, the Mitanin will strengthen health seeking behaviours at the household level, help in identification of common illnesses, and extend basic symptomatic care and facilitate referral for complications. Health and nutrition communication, undertaken by the Mitanin, for intake of IFA tablets and vitamin supplements among women and children, immunisation for children and pregnant women, and appropriate ANC and PNC will contribute to this.

Additional interventions to alleviate nutritional insecurity ranging from building awareness about nutritionally rich foods, kitchen gardens with nutritious vegetables for household consumption, changing superstitions about foods and eating practices can be promoted by the Mitanin.

**Interventions in Community Monitoring and Action:** An increased awareness about the food schemes – ICDS, MDMS and PDS, the services provided by them, the intended beneficiaries, and the entitlements of the community from these schemes are important to improve demand, access, as well as supply through community monitoring and action. The Mitanins, supported by the Prashikshaks and the Nutrition Fellows (at the block level) will organise the community around issues of nutrition security, and mobilise them towards collective action and monitoring of food schemes. This community mobilisation will be facilitated at the following levels:

**Hamlet level** meetings will be held regularly, facilitated by the Mitanins with members of the community, especially women's groups. To strengthen community support and participation at this level, active women from the hamlet will be designated as Mitanin Sahyogis, whose main role will be to support the Mitanin in her work of community mobilisation around nutrition.

At the **village level**, the Prashikshaks will facilitate meetings amongst the Mitanins from different hamlets, the women's groups, the Mitanin Sahyogis, and other community members. Collectivisation around the issue of nutrition security is expected to be more concrete. The issues of community monitoring of AWCs, PDS shops and MDM schemes will be discussed and actionable at this level.

To facilitate more dynamic problem solving, experience sharing, and strengthening of action towards attaining nutrition security, 4 to 5 Panchayats, community groups, Mitanins, Prashikshaks, and other community members will be aggregated at the **cluster level**. This will be mainly facilitated by the Nutrition Fellow, whose primary role will be to provide leadership to this collective, generate ideas, encourage sharing of experiences, formulating collective action strategies to monitor food schemes, address external constraints to behaviour change of communities, change unequal household food allocation and discrimination against vulnerable groups on the basis of caste, class or tribe in accessing food schemes.

**Other interventions:** To address the gaps in systemic performance, bringing about improvements in implementation of existing policies and programmes related to nutrition, and in advocating for new changes in policies and programme design, opportunities exist to work with the RTFC in Chhattisgarh. As mentioned above, the RTFC has played similar roles and brought about significant positive changes in processes within the PDS and the MDMS. Supporting the RTFC to undertake interventions in ICDS may lead to changes in programme implementation and design.

**Outcome Indicators:** The indicators in the following areas will be tracked within the Nutrition Security Innovation.

#### **Awareness Building and Behaviour Change Communication**

- Increase in community knowledge and awareness levels about nutrition practices and food schemes
- Increase in awareness among Mitanins about nutrition and food schemes, nutritional status of children, and interpretation of malnutrition grades of children.
- Knowledge among Prashikshaks about nutrition and food schemes, nutritional indicators, and interventions.
- Counseling of mothers and families on feeding practices of children by Mitanins
- Number of families counselled by Mitanin about nutrition, feeding practices for children and neonates, food for adolescents, pregnant women and lactating mothers, promotion of kitchen gardens, promotion of cooking and dietary practices for nutrition
- Changes in behaviours and practices in the community.

#### **Community Monitoring and Action**

- Number of children weighed in 0-5 years age group
- Number of times each child is weighed (atleast 1/6months)
- Number of women and children weighed
- Number of committees formed for monitoring food and nutrition schemes
- Number of active committees (including process indicators like number of meetings at hamlet, village and cluster levels; attendance and representation of members of the committees; maintenance of registers and their regular updation
- Actual improvements in functioning of and access by households to food schemes

**Research Studies:** The primary hypothesis is – Intensive behaviour change communication by community health workers, combined with community based collective action, will lead to an increase in awareness and knowledge about nutrition, improve nutrition related behaviours and practices, improve access to and functioning of food and nutrition schemes, and therefore, result in better nutritional status of children in the 0-6 age group. To evaluate the impact of the interventions on the above-mentioned outcome indicators, the following research studies will be undertaken.

- Baseline research (to map nutritional status – BMI of parents and children in 0-6age group; current functioning of food schemes – services provided by ICDS, MDMS and PDS; detailed diet surveys to understand the nutritional value of food consumed by households and intra-household allocations of food). The household surveys have been conducted for 2300 households, 10 from each of the 23 blocks, selected by without replacement random sampling method at the level of the Mitanins first, and then households from her hamlet - which had children in the specified age group. The diet survey is being carried out in for 100 households. The formats of NIN are being used for this.

- Qualitative studies, using Focused Group Discussions will be conducted to understand the KABP of the community regarding nutrition. This data will act as baseline information to measure the changes in knowledge, behaviours and practices after the interventions, as well as to inform the design of BCC messages and areas of emphasis in the interventions.
- Endline research, comprising of both qualitative and quantitative methodologies, will be undertaken after the intervention period of 3 years to evaluate the impact of the interventions.
- Operations research studies can be undertaken regarding processes of changes in KABP in communities through BCC and barriers to behaviour change, experiences and outcomes of community mobilisation strategies, interface with the RTFC, convergence between health and nutrition systems, and impact of community monitoring on different food and nutrition schemes.

**Human Resource and Training Plan:** In order to implement these proposed interventions, there is a need for additional human resources, their training, as well as the training of existing cadres of personnel within the Mitanin programme.

The existing Prashikshaks and Mitanins in the selected 23 intervention blocks will be trained on the issues of food and nutrition security. A new module has been designed for this purpose.

The Nutrition Fellows have been selected at the block level (1 per block). Their role is to provide leadership and mobilise around the issue of nutrition security. Most of these Nutrition Fellows are from a social movement background (preferably from the RTFC – in the 13 blocks where these interventions and the Campaign overlap). They are trained on the issues and are oriented to the Programme and the specific interventions within this innovation. The Nutrition Fellows help in training the Prashikshaks and the Mitanins, and provide continuous supportive supervision to these cadres.

At the regional level – north and south, two coordinators have been selected, to provide guidance and supervision to the Nutrition Fellows in these regions. This is supported by the state level programme coordinator, who facilitates the Nutrition Fellows and regional coordinators through regular monthly meetings, updates, technical support and systematic problem solving. Besides this, a person (medical doctor with experience in health research) has been selected to undertake quantitative data collation and analysis from the baseline research studies. Resource persons will be sought for technical inputs to the design and conduction of the qualitative studies, as well as to orient and train the Coordinator and Field Coordinators on qualitative research.

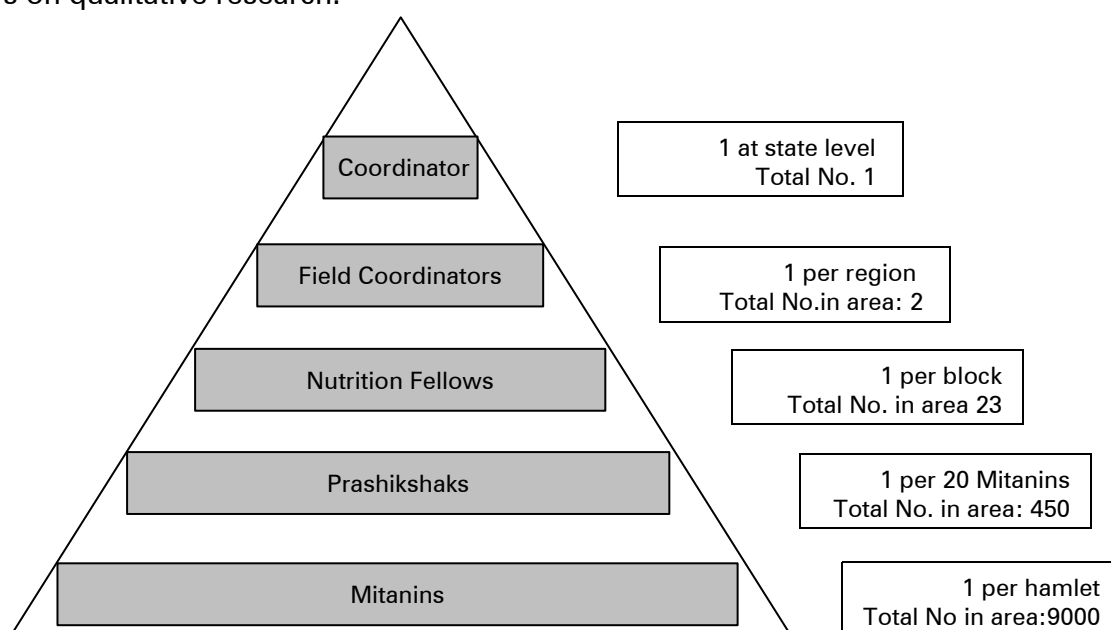


Figure: Structure of Human Resources for the Nutrition Security Interventions

