e-ISSN 2320 –7876 www.ijfans.org
Vol.11, Spl Iss. 4, 2022
Research Paper © 2012 IJFANS. All Rights Reserved, UGC CARE Listed (Group -I) Journal

STRENGTHENING WELFARE STATE IN INDIA: NATIONAL NUTRITION MISSION

Dr. Shivali Aggarwal

Assistant Professor

Department of Political Science

DAULAT RAM COLLEGE

INTRODUCTION

Extreme poverty has become the leading cause of chronic and persistent hunger in developing nations. Undernourishment, especially among children and women, is a persistent issue in low-income areas. When people do not get enough of one or more vital nutrients, their physical and mental development and health suffer. Unhealthy eating habits are linked to deficiencies in socially significant nutrients such as those needed for normal growth, development, and freedom of choice in physical exercise and employment. Malnutrition lowers efficiency and production on the job. Worldwide, it's the leading cause of mortality and sickness, responsible for 12 percent of all deaths and 16 percent of disability-adjusted life years. Malnutrition, as everyone knows, arises from a combination of unfavourable conditions. These factors all contribute to the perpetuation of chronic malnutrition, which undermines our capacity to fully realise the potential of our human resources, generation after generation.

In many third-world nations, child malnutrition is a serious public health issue. It is a tremendous drag on the potential for growth in these nations, on top of causing immense human misery on a physical and mental level. Why? Malnourished childrenburden their parents more and become less physically and mentally capable adults. A child's human rights are also violated when they are hungry. It stands to reason that other developing nations would benefit from studying the root causes of child malnutrition and the government's efforts to control and eliminate it in growing economies like India.

India is one of the South Asian nations with the most rapid economic, educational, and technical development. India has failed to tackle malnutrition, which hurts the country's socioeconomic development, despite the country's economic prosperity. India is home to overa third of the world's

malnourished youngsters. Bangladesh, India, and Pakistan are home to 50% of the world's malnourished kids (World Bank, 2009).

India is ranked 100th out of 119 nations on this year's World Hunger Index. Malnutrition among children is approximately twice as common in India as in Sub-Saharan Africa, and it has a major impact on India's mortality rate, productivity, and economic development. A staggering half of India's youngsters suffer from chronic malnutrition, and over a million don't survive their first month. Extreme malnutrition causes 43% of children in India underweight and 48%to be stunted before their fifth birthday.(3 out of every 10 children are stunted) (International Food Policy Research Institute, 2016).

The Indian government has launched various policies to eradicate this problem:

- Integrated Child Development Services Scheme
- Midday Meal Programme
- Special Nutrition Programme (SNP)
- National Nutritional Anemia Prophylaxis Programme
- National Iodine Deficiency Disorders Control Programme
- National Goitre Control Programme
- Applied Nutrition Programme
- Akshaya Patra Programme.

And on March 8th, 2018, the Prime Minister of India inaugurated a POSHAN Abhiyan in Jhunjhunu, Rajasthan. These measures are the government's answer to the problem of child and other population malnutrition.

According to the National Nutrition Strategy report by the National Institution for Transforming India (NITI), Aayog found that the prevalence of underweight children younger than 5 years old decreased across all states and Union Territories except Delhi, though absolute levels remained high (NITI Aayog, 2016). Over 1.5 million women and children died in 2010 from complications related to malnutrition, according to research by Lim et al. (2012). Partnerships and Opportunities to Strengthen and Harmonize Actions for Nutrition in India (POSHAN) data suggests that 309,300 infants die on their first day of life and 876,200 infants die in their first month of life due to complications from low birth weight, underweight, and iron deficiency. According to Agarwal and Sethi's (2013) estimate, 1.6 million children in 2012 did not live to see their fifth birthday.

 © 2012 IJFANS. All Rights Reserved, UGC CARE Listed (Group -I) Journal

NATIONAL NUTRITION MISSION

India's National Nutrition Mission (POSHAN Abhiyaan) was launched in March 2018 to reduce the rates of low birth weight babies, stunted growth, undernutrition, and the prevalence of anaemia in children under the age of six, adolescent girls, pregnant women, and lactating mothers over three years. The acronym "Poshan" refers to the "Prime Minister's Overarching System for Holistic Nutrition," which gives the scheme its name.

In addition to social audits, the mission includes mapping other nutrition-related schemes and enabling synergies through an information and communication technology (ICT)-based real-time monitoring system, robust convergence between the schemes, incentives for states and UTs to meet the targets, and optimising the functioning of Anganwadi centres. Pradhan Mantri Matru Vandana Yojana (PMMVY), Janani Suraksha Yojana (JSY), Scheme for Adolescent Girls (SAG), Swachh Bharat Abhiyaan (SBA), Public Distribution System (PDS), National Health Mission, etc. The mission plans for Anganwadi clinics to have the following:

- Giving incentives to Anganwadi Workers (AWWs) for using IT-based tools.
- Elimination of registers used by AWWs.
- Measuring the height of children at Anganwadi centres.

The aim also includes expanding the Integrated Child Development Services (ICDS) programmes that the World Bank funds.

The National Institution for Transforming India (NITI Aayog) is also crucial to the mission's success. The Vice Chairperson of NITI Aayog serves as the National Council on India's Nutritional Issues Chairman, which was established as part of the Poshan Abhiyaan. NCN is an abbreviation for "National Council on Nutrition," another group name. The NCN provides policy guidance and reviews nutrition-related programmes to alleviate nutritional difficulties. Its purpose is to facilitate nutrition-related coordination and convergence on a nationwide scale.

Target Group

Mothers of young children, adolescent girls, pregnant and lactating women, family members (husbands, fathers, mothers-in-law), and community members, as well as health care providers (ANMs, ASHAs, and Anganwari workers), are the primary targets of Poshan Abhiyaan's efforts to raise nutrition awareness and encourage healthy eating habits.

Mission Aims

The National Nutrition Mission aims to achieve the following:

- Reduce stunting by 2% annually.
- Reduce under-nutrition by 2% annually.
- Reduce anaemia by 3% annually.
- Reduce low birth weight by 2% annually.

Poshan Abhiyaan Pillars

The government has named the following as the pillars of the Abhiyaan:

- ICDS-CAS (Common Application Software)
- Convergence
- Behavioural Change, IEC Advocacy
- Training and Capacity Building
- Innovations
- Incentives

Key Nutrition Behaviours

For Pregnant Women

- Eat a balanced diet containing various foods rich in iron and vitamins.
- Take milk and milk products and iodised salt.
- Drink safe water.
- Get at least four antenatal checkups from a nearest health facility.
- IFA (Iron and folic acid) tablet and calcium supplementation

Lactating mothers

- Breastfeeding should be started within one hour of childbirth.
- Eat a balanced diet containing various foods rich in iron and vitamins.
- Take milk and milk product and iodised salt.
- Regular IFA tablets (till 6 months after delivery) and calcium supplementation.
- Drink safe drinking water.

 © 2012 IJFANS. All Rights Reserved, UGC CARE Listed (Group -I) Journal

Children

- Every newborn should be breastfed within one hour of birth.
- Mothers should exclusively breastfeed their babies for the first six months.
- Every infant should be given complementary foods on completing 6 months, with breastfeeding continuing till 2 years and beyond
- Every child should be provided full immunization under Universal Immunisation Programme.
- From 9 months onwards, give your child vitamin A supplementation and deworming syrup/tablet (from one year of age) twice a year.

Adolescent girls

- Eat a balanced diet containing a variety of foods that is rich in iron and vitamins
- Take milk and milk products and iodised salt
- Take IFA blue tablet every week.
- Maintain personal hygiene and menstrual hygiene
- Wash hands before eating and after defecation.

At community level

- Ensure safe drinking water in the community
- Every household safely disposes of child and animal faeces.
- Every member of all households usesthe toilet at all times.
- Promote girls' education, diet and right marriage age.
- Cultivation of vegetables in the community for local use.

PROGRESS AND ACHIEVEMENTS

Five years into the mission, its flagship initiative has yet to meet its objectives. According to information provided by Minister for Women and Child Development Smriti Irani, the Centre distributed 4,283 crores to various States and Union Territories. Even though funds were granted to 19 states in 2019-20, only 12 had used less than a third of the funds released in the previous two years. The top performers were Mizoram, Lakshadweep, Bihar, Himachal Pradesh, and Meghalaya. The worst performers were Punjab, Karnataka, Kerala, Jharkhand, and Assam.

 © 2012 IJFANS. All Rights Reserved,

ICDS-CAS

ICDS-CAS has been implemented in 27 states and union territories, as reported by MWCD in their December 2019 POSHAN Abhiyaan monthly progress Report (UTs). There are now 6,11,369 AWWs employing this technology, with 12,646 supervisors and 9,85,00,183 families enrolled. There have been 26,56,284 pregnancies, 41,32,763 breastfed infants, and 4,74,98,539 children 0-6 years old recorded. Twenty of the 27 States/UTs have implemented ICDS-CAS in every district. Less than 35% of the districts in Assam, Chhattisgarh, Jharkhand, Madhya Pradesh, Rajasthan, Telangana, and Uttar Pradesh have it. The Integrated Child Development Services (ICDS)-Center Administration System (CAS) has been implemented in more than 90% of Anganwadi Centers (AWCs) in 17 of the 27 States/UTs, in almost all (>99%) centres in 8 States, and in all centres in Chandigarh, Dadra & Nagar Haveli, and Mizoram. Less than 30% of AWCs have ICDS-CAS in Assam, Chhattisgarh, Jharkhand, Madhya Pradesh, and Uttar Pradesh (Ministry of Women and Child Development, 2019). Most States/UTs are making good headway in procuring smartphones for ICDS-CAS. Over half of the cellphones needed for ICDS-CAS have been purchased in 23 states and territories. There has been no smartphone procurement in the Indian states of Karnataka, Odisha, Punjab, or Haryana while tendering for their purchase is underway. (Ministry of Women and Child Development, 2019).

Convergence

By defining and consolidating the essential nutrition-related interventions, indicators, and objectives to be monitored and attained by the appropriate line ministries/departments executing the schemes, POSHAN Abhiyaan facilitates the convergence of diverse nutrition-related programmes at the governance level. Committees charged with implementing the Convergence Action Plan (CAP) have been formed. As of the end of 2018, 29 out of 36 States and UTs have filed their State-level CAPs for 2019–20. In 21 states that have filed CAPs, 100% of districts have completed district-level planning, and in 22 states, 100% of blocks have completed block-level planning. (Ministry of Women and Child Development, 2019).

Behaviour change communication

In March 2019, a two-week-long campaign was held to commemorate the 10th anniversary of the beginning of the POSHAN Abhiyaan as part of the social and behaviour change communication (SBCC) initiative run by Jan Andolan. Four States (Andhra Pradesh, Bihar, Gujarat, and Madhya Pradesh) produced evidence on SBCC in July 2019 to guide the observance of the second

 © 2012 IJFANS. All Rights Reserved, UGC CARE Listed (Group -I) Journal

PoshanMaah in September 2019 and long-term programming. Most people were reached via house visits (81%), television (69%), health, sanitation, and nutrition days in the village (66%), community activities (60%), and posters, hoardings, or wall paintings (59%). It was noted that frontline health practitioners just relayed information on practising behaviours during therapy without expressing the reasoning and reason behind them (IDinsight, 2019a). Nine of the eleven priority states designated by the World Bank have approved their yearly Jan Andolan plans. But, Tamil Nadu and Karnataka have not yet developed their strategies. To foster BCC connected to nutrition, several strategies are essential. Haryana, Odisha, and Telangana are among the remaining 25 States/UTs that have not yet created their Jan Andolan plans. (World Bank, 2019).

Capacity Building

Among the 21 ILA components, all were covered at the State level in Andhra Pradesh, Chandigarh, Dadra & Nagar Haveli, Daman & Diu, Gujarat, Haryana, Madhya Pradesh, Mizoram, and Tamil Nadu. Less than 10 modules were taught in Arunachal Pradesh, Assam, Jammu and Kashmir, Karnataka, Ladakh, Lakshadweep, Odisha, Punjab, and Telangana. The remaining states and UTs encompassed 10 or more modules. Training for the Indian Legal Administrators (ILA) has not yet begun in West Bengal (Ministry of Women and Child Development, 2019). Implementing ILA is proceeding methodically throughout all eleven of the World Bank's priority states. 7.6 lakh AWWs were trained on at least one module throughout these 11 states (World Bank, 2019). To supplement traditional incremental training, an online version of the courses, dubbed "e-ILA," is now available for use across desktop and mobile devices. All 21 ILA courses are available online at http://www.e-ila.gov.in, accessible in 13 different regional languages (World Bank 2019). There is a lot of work to be done in most States/UTs, as seen by a quick look at the current e-ILA training for AWWs and lady supervisors (LS). No AWWs registered in e-ILA have yet graduated in Andaman & Nicobar Islands, Assam, Delhi, Goa, Jammu & Kashmir, Meghalaya, Mizoram, Nagaland, Puducherry, Telangana, or Tripura. Andhra Pradesh, Daman & Diu, Gujarat, and Rajasthan all have lower completion rates for e-ILA than the national average, but at least 80% of registered AWWs have finished their courses. At the LS level, no one has finished e-ILA training in Andaman and Nicobar Islands, Arunachal Pradesh, Assam, Delhi, Goa, Jammu and Kashmir states Meghalaya, Mizoram, Nagaland, Puducherry, Telangana, or Tripura. The highest percentage of e-ILA graduates, 65% or above, can be found only in Andhra Pradesh, Gujarat, and Rajasthan (Ministry of Women and Child Development, 2019). The slow introduction of e-ILA was blamed on the fact that cellphones for AWWs were not purchased quickly enough and that this kind of education was not given high

e-ISSN 2320 –7876 www.ijfans.org
Vol.11, Spl Iss. 4, 2022
© 2012 IJFANS. All Rights Reserved, UGC CARE Listed (Group -I) Journal

priority. Of the 11 World Bank priority States, only Andhra Pradesh and Gujarat have reported having more than 50% of AWWs and supervisors complete all 21 e-ILA courses. (World Bank, 2019).

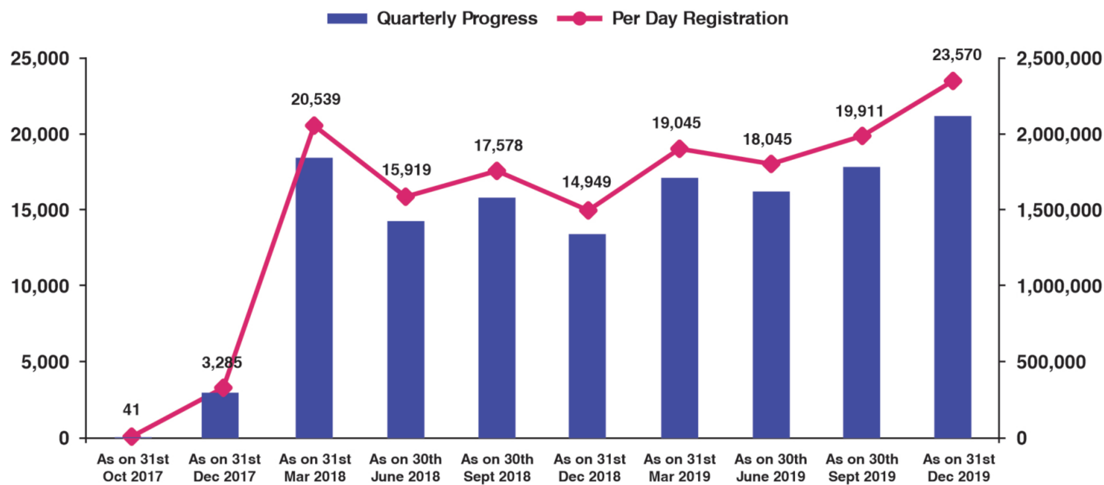
Core platforms for intervention delivery

Integrated Child Development Services

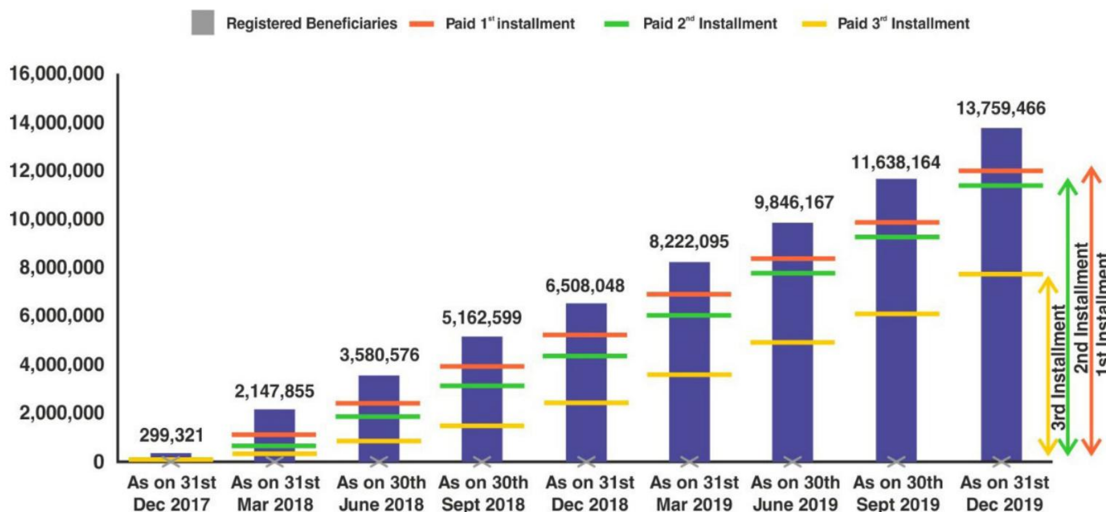
Utilization of ICDS services increased significantly between 2006 and 2016, as measured by data from the third and fourth rounds of the National Family Health Survey (2005-06 & 2015-16) in four key areas: supplementary food (9.6 to 37.9%), health and nutrition education (3.2 to 21%), health check-up (4.5 to 28%), and child-specific services (10.4 to 22%). Supplemental feeding of youngsters every month grew by eight percentage points throughout this time. On a nationwide scale in 2016, however, less than 60% of mothers and young children benefited from any of the primary ICDS treatments. However, it was shown that historically marginalised castes and pregnant women with low levels of education were less likely to use ICDS services than other groups. While the lowest income quintile had greater access to the services in 2016, the wealth gap in service use expanded during the decade. Those from UP and Bihar accounted for a disproportionate share of the impoverished who were left behind. Yet there was a lot of variation in participation in the programmes across and within the states. (Chakrabarti et al., 2019)

Pradhan Mantri Matru Vandana Yojana (PMMVY)

Since the Scheme's introduction (as of the 31st of December, 2019), approximately 1.37 billion people have registered to receive its benefits. Of these people, approximately 87% have received the first installment, 83% have received the second installment, and 56% have received the third installment, for a total cumulative payment of Rs. 4,894 billion. Once registered, the average duration to pay the first installment is around 30 days, but that number jumps to 293 days when measured against the woman's LMP. A meagre 17% of first payments have been made within 150 days of the LMP date.



The per day registration figure (of new Beneficiaries) has shown a record increase over all previous quarters, registered around 23,570 beneficiaries per day in the Quarter October-December, 2019. This is a short validation of the efforts of MoWCD as they organized the Matru Vandana Saptah (MVS) from 2nd-8th December 2019 with various objectives like enrolling new beneficiaries, increasing awareness about the scheme, clearing backlog cases and clearing correction queue.



65% of the total transfers were made through Aadhaar based payments, of which 67% matched the Bank Accounts provided by the Beneficiaries. However, 33% of Aadhaar based payments (i.e. in case of 69.71 lakh payments) had gone to a different Bank Account than what was provided by the Beneficiaries, which has substantially increased over last quarters.

 © 2012 IJFANS. All Rights Reserved, UGC CARE Listed (Group -I) Journal

National Health Mission

Anaemia Mukt Bharat

A comprehensive AMB training tool kit was developed for capacity building of the service providers and programme managers. First batch of National Training of Trainers was completed, and State level trainings were initiated. In Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Uttar Pradesh and Uttarakhand, the State resource pool of master trainers was trained by the National Centre of Excellence and Advanced Research on Anaemia Control (NCEAR-A). A pan India IFA Supply Chain Diagnostic assessment was completed to identify bottlenecks in the existing IFA Supply chain. The States which have started procuring 60 mg sugar-coated IFA, against 100 mg and enteric coated tablets, include Assam, Chhattisgarh, Goa, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Meghalaya, Odisha, Rajasthan and Telangana.

Home-Based Care of Young Child

Currently, in 27 States and 5 UTs, there are 28 National Resource Team members (NRTs) and 166 State-level trainers. Overall, there are 2,050 district-level trainers. In 22 States/UTs a total of 30,672 frontline workers have been trained. In 21 States/UTs, revised MCP cards have been provided to all the beneficiaries (instead of HBYC cards). The process is underway in Andaman and Nicobar Island, Andhra Pradesh, Chandigarh, Dadra & Nagar Haveli, Daman & Diu, Manipur, Mizoram, Odisha, Puducherry, Sikkim, Telangana, Tripura and Uttar Pradesh. Child-wise tracking for HBYC program monitoring is done through Reproductive Child Health (RCH) portal (https://rch.gov.in/).

CHALLENGES AND RECOMMENDATIONS

Convergence

At the implementation level, after the development of CAPs, States, Districts and Blocks are expected to conduct quarterly review meetings to examine progress and identify actions to meet the targets specified in the action plans. However, there is a lack of focus during such meetings, and the discussions are generic. Therefore, it is important to identify a core set of indicators that can be monitored and supported through CAP to make the review meetings meaningful and enable them to track progress (World Bank, 2019). In addition, lower-level CAP committees are less empowered to take financial and operational decisions to close implementation gaps. It is challenging to monitor the multiple data reporting structures across different departments, using multiple data platforms, for the same beneficiary children (Institute of Economic Growth 2019).

 © 2012 IJFANS. All Rights Reserved, UGC CARE Listed (Group -I) Journal

Behaviour change communication

For a targeted and effective BCC, it is therefore important that the right platforms are selected based on both reach and recall levels. Messages should be targeted towards behaviorsstill with low knowledge or practice levels, like the timely introduction of complementary feeding, child dietary diversity, and appropriate hand washing practices. Improving the quality of nutrition-related messages in community-based events and village health sanitation and nutrition days is also important. Frontline workers can improve counselling by emphasizing the rationale and reason of behaviors. Since poorer and less educated women have less exposure to most SBCC platforms, frontline workers should prioritize home visits to ensure that nutrition-related messages reach them (IDinsight, 2019a).

Capacity Building

To ensure that the ILA trainings are delivered quality, there are pre-and post- training assessments and visits by the ICDS officials. During the initial implementation of ILA, there was a dilution in the training quality down the cascade. In the 11 World Bank priority States, it was found that increasing the frequency of ILA trainings from once per month to twice a month was compromising the quality of the trainings(World Bank, 2019). However, MWCD specifies that the periodicity of ILA guidelines were revised for all States/UTs based on the demand from some States. To retain the quality of ILA trainings, it is essential to strengthen the systematic monitoring and supervision of ILA sessions by State, district and block level, and provide clear guidance and tools to facilitate the same. In a study conducted across 11 aspirational districts4 to assess the implementation of ILA trainings and the resultant AWWs' practice, the quality of ILA training at the sector level was poor. It was also recommended that the trainings be conducted by a pool of government and development partners' functionaries, under the leadership of State Resource Group (SRG). It is important to enhance the capacity of government trainers, who should be engaged in training. This study also found that participation from the health department is limited so far, whereas ILA training guidelines demand a strong convergence between the departments of health and WCD(Piramal Foundation, 2020).

Integrated Child Development Services

In an assessment, the key processes, implementation structure, program monitoring and the motivations and engagement of the human resources under ICDS were critically reviewed by the Institute of Economic Growth (IEG). One of the main challenges to service delivery through ICDS

 © 2012 IJFANS. All Rights Reserved, UGC CARE Listed (Group -I) Journal

platform is that AWWs, the village-level point-of-contact for all government schemes, are left with little time to carry out tasks related to the ICDS. In urban areas, AWWs sometimes also have to take on the work of ANMs/ASHAs if their post is vacant(Institute of Economic Growth, 2019). Upgradation of physical infrastructure of AWCs is instrumental in improving program coverage, uptake and service delivery. There are huge gaps in drinking water, toilet facilities and electricity supply provision across States/UTs. Since different line departments deal each item, convergent action at the highest level is necessary for universal provision of these basic facilities(Institute of Economic Growth, 2019). In terms of finance, the developmental funds available with the gram panchayats (GPs) that can facilitate the functioning of AWCs do not get used appropriately. For AWC construction-related problems, it is important that the ICDS budgeting for AWC construction should be sensitive to regional variations(Institute of Economic Growth, 2019). There needs to be a change in perception in the district and State administration, regarding the importance of listening to and solving the problems faced by frontline workers. With an increased reliance on digital technology in the ICDS system, frontline workers often experience difficulties operating these apps, both due to direct (such as illiteracy) and indirect factors (such as internet). A strong and functioning feedback mechanism for the AWWs is recommended. Till this is done, there will be a mismatch between inputs (technology and digital infrastructure) and outputs (erroneous/incomplete data, deliverables not being met)(Institute of Economic Growth, 2019).

Complementary feeding

Meeting the nutritional needs of children aged 6 to 23 months can be particularly challenging in resource poor settings. Complementary feeding practices for children 6–23 months old in South Asia are far from optimal (Aguayo, 2017). Complementary foods for children aged 6–23 months are primarily cereal- based diets and are lacking in the essential growth- promoting nutrients provided by fruits and vegetables (only 1 in 3 children 6–23 months old is fed fruits and vegetables) and foods of animal origin (less than 1 in 5 children is fed meat, fish, poultry, and eggs). This is of great concern given the high levels of child stunting in South Asia (Aguayo, 2017). India has a supportive policy environment to improve infant and young child feeding (IYCF) interventions and multiple operational platforms exist that can deliver counselling and complementary food supplements. India's policies are well aligned with the scientific evidence on improving complementary feeding – i.e., counselling interventions for food-secure populations and counselling combined with food or cash transfers for food-insecure populations (Avula et al., 2017). The ICDS program includes provision for counselling and food supplements, and the new efforts by the MoHFW around the

Home-Based Young Child program include provisions for counselling; finally, the Jan Andolan can play a key role in broadening the conversations around complementary feeding. However, the reach of these programs is not as widespread as it should be, especially in the States with the highest burden of stunting and the poorest complementary feeding practices (Figure 3.1 and 3.2). In addition, although we know that the reach of the ICDS THR is variable across States and districts, we know less about the quality, uptake and use of this major component of the program's interventions to improve complementary feeding.

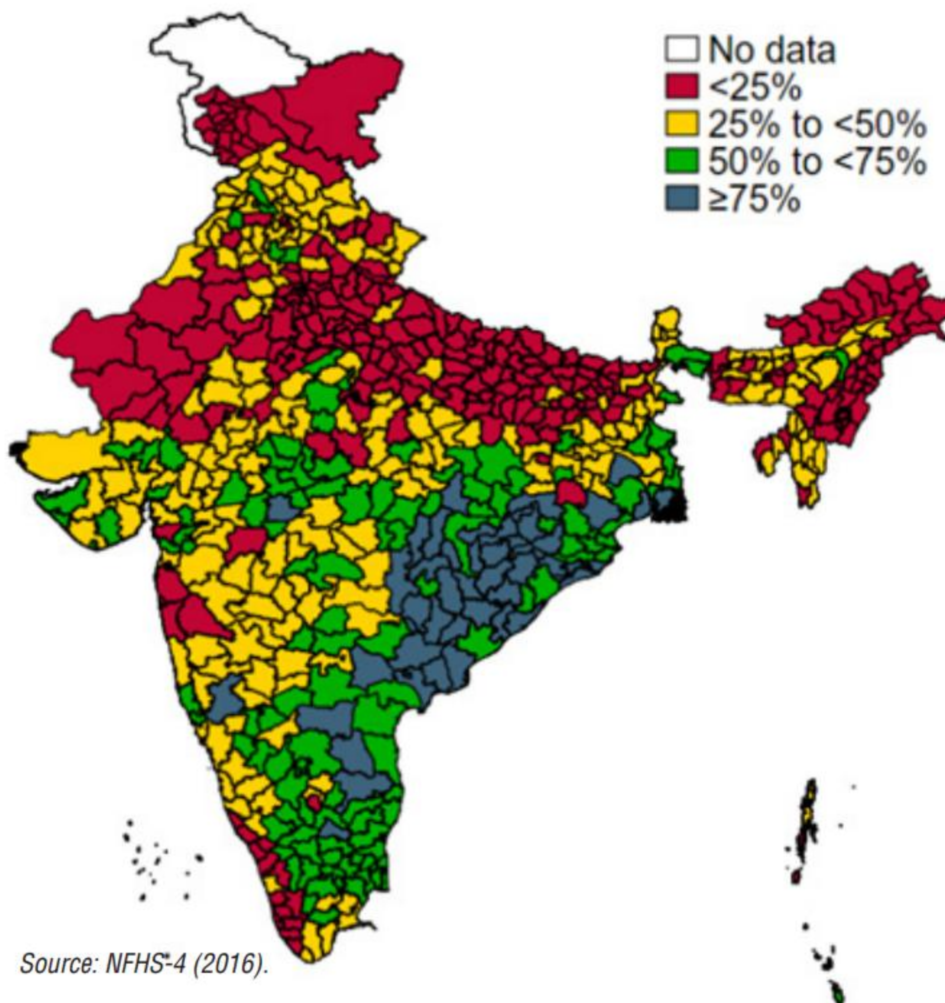


Figure 3.1: Percentage of women with children under five years of age who received health and nutrition education/counselling during lactation, by district, 2016

 © 2012 IJFANS. All Rights Reserved,

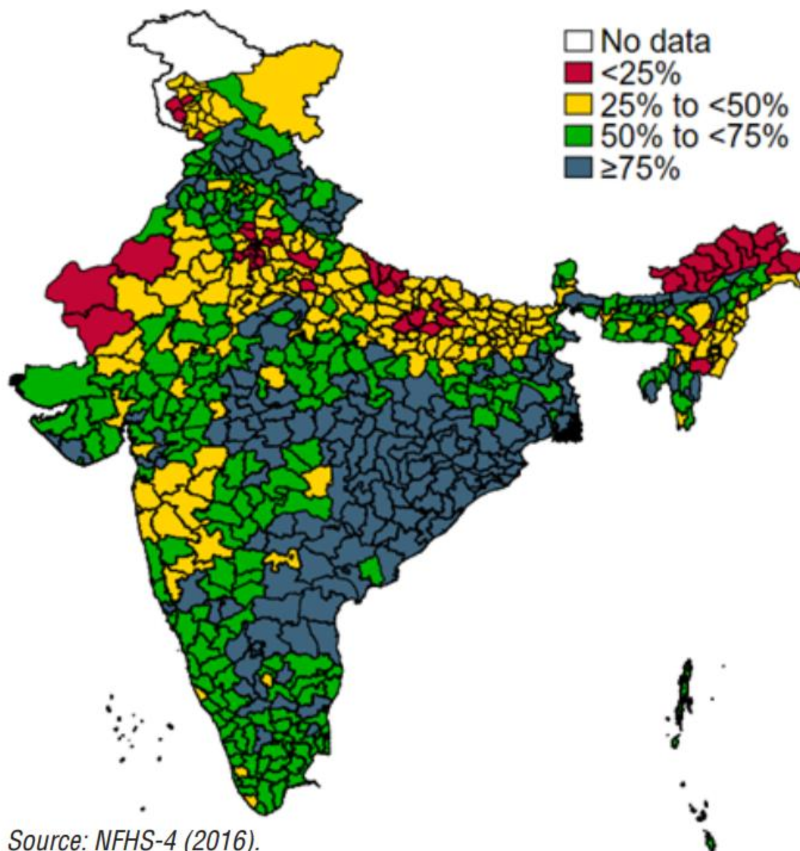


Figure 3.2: Percentage of children (6-35 months) who received food supplements by district, 2016

To further scale-up interventions to improve infant and young child feeding in India, it is recommended that:

- Content on complementary feeding in existing counselling and behaviour change interventions needs to be focused, salient and sharp
  - In the ICDS, health and nutrition education via interpersonal counselling to lactating women should address complementary feeding, and counselling services to mothers in the context of growth monitoring and home visits needs to be strengthened to address complementary feeding robustly.
  - In services offered by MoHFW, specific aspects of complementary feeding that can be addressed or reinforced by the home visits under the HBYC program should be strengthened o Community-based events and mass media should be used to expand coverage and reach of messages on complementary feeding
- Composition and quality of food in the form of THR and Hot-Cooked meals to be examined clearly

 © 2012 IJFANS. All Rights Reserved, UGC CARE Listed (Group -I) Journal

  - Re-examine current guidelines on the composition and quality of food in the ICDS program.
- To scale up both counselling and complementary food supplements, the following needs attention
  - Substantial gaps need to be closed to ensure higher contact of interpersonal counselling between frontline workers and 1000-day households, especially in high-population States. ICDS-CAS and other coverage/reach monitoring approaches can help with this.
  - Systems challenges related to capacity, finance, and governance must be addressed, prioritizing those geographies where the greatest numbers are currently being left out.

Overall, investments in program innovations, learning and evaluation, financing research, and strengthening of governance of existing programs to support complementary feeding are needed to support the scale- up of high- impact interventions to improve IYCF in India.

Anaemia

Public health strategies to prevent and control anaemia generally include a suite of interventions targeted across the life cycle:

- During pre-pregnancy and pregnancy: iron and folic acid supplementation, deworming, and malaria prevention strategies.
- In newborns, infants and early childhood: delayed cord clamping, exclusive breastfeeding for infants, iron and folic acid supplementation, and deworming.

Micronutrient deficiencies

The most commonly used strategies to control micronutrient deficiency are supplementation and fortification because they are cost-effective and relatively easy to deliver. However, little emphasis has been placed on food-based approaches to address micronutrient malnutrition. To improve dietary quality for poor populations, more interactions are needed among the nutrition, agriculture and development communities (Allen, 2003). Inadequate dietary intake is also dependent on inadequate household food insecurity. Hence it is necessary to focus attention on improving household food

 © 2012 IJFANS. All Rights Reserved, UGC CARE Listed (Group -I) Journal

security. It is also necessary to address other contributing factors of micronutrient deficiencies, like poverty, lack of purchasing power and limited knowledge about appropriate nutritional practices (Khan&Bhutta, 2010). In India, micronutrient deficiencies are being addressed under the Anaemia Mukt Bharat initiative by providing iron and folic acid (IFA) fortified foods and IFA supplements. There are directives from central ministries for schemes/programs such as ICDS, MDM and PDS about fortifying five staples - wheat flour, rice, oil, milk, and salt. In addition, the new initiatives, such as the Bharat Poshan Kisan Kosh, led by the MWCD, will shed more light on local strategies for diversifying diets. Key recommendations to improve and strengthen actions on addressing micronutrient deficiencies, which emerged at a vision-setting exercise, with the consensus of key nutrition stakeholders, include the following (International Food Policy Research Institute & NITI Aayog, 2019):

- Address data needs on outcomes, determinants and food consumption:
  - Bring together all micronutrient-related data, tools, aids, etc., in a single accessible space for convenience and enhanced usage.
  - Ensure that deep—dive nutrition surveys may be conducted every 3-5 years to generate adequate data on micronutrient malnutrition outcomes and determinants.
- Use a range of behaviour change strategies to increase awareness and make better and more diverse diets and better nutrition itself aspirational
- Improve policy guidance, policy coordination and monitoring of existing programs on supplementation and fortification:
  - Have guidelines on diet diversification, multiple micronutrient supplementation (MMS) and folic acid supplementation.
  - Increase the micronutrient content of staples delivered through ICDS, MDM, PDS either through fortification or biofortification.
  - Have policies to make fortification mandatory.
  - Appoint an expert in micronutrient deficiencies at the State-level as the key contact person.
  - Strengthen the capacity of service providers and manufacturers to address micronutrient deficiencies.
    - Assess and strengthen the capacity of national and State level laboratories for micronutrient testing and train regulatory personnel on appropriate sample collection, testing and related protocols.
    - Develop appropriate quality monitoring data at State and national levels.

- Invest in addressing food systems issues to ensure diet diversity:
  - Increase the production, availability and accessibility of diversified food commodities across the country with the full-scale engagement of agriculture and food & civil supplies sectors.
  - Assess and strengthen policies to address the prices of healthy foods and the affordability issues of nutritious food.

CONCLUSION

Among the developing countries, India has one of the most malnourished children. Nearly half of allchildrenin India are malnourished; each year, almost a million children die in one month.Many new mothers are adolescents, most of whom are anaemic. Compared to the global average, these mothers gain only half as much weight during pregnancy. Maternal andchild mortality and malnutrition rates in India are also alarmingly high. Sixty million children are too short for their ages, and half aretoo thin (acutely malnourished). The prevalence of malnutrition is still very high in India despite a reduction, according to UNICEF, from 40 to 29% between 1990 and 2009. Compared to developing countries with similar health profiles, India fares well in infant mortality rate (IMR) and under five mortality rate (U5 MR). India fares poorly when underweight under-5 children are used as an indicator for food security with rates comparable to that of Sub-Saharan Africa. Over the last few years, the Government of India has recognised this and expanded, consolidated, and introduced various programs to combat child malnutrition.

There still exist some issues and challenges with these interventions. Even so, awareness of these interventions and some lessons from them can be useful for countries poised toimprove child malnutrition in similar settings.The article discusses the challenges and recommendations for implementing Integrated Child Development Services (ICDS) in India, focusing on improving infant and young child feeding (IYCF). It highlights the importance of monitoring and evaluation at all levels of implementation, ensuring effective behavior change communication, delivering quality trainings, and addressing infrastructural and human resource challenges. The article emphasizes the need for program innovations and research investments to support the scale-up of high-impact interventions to improve IYCF. Additionally, the article outlines public health strategies to prevent and control anaemia across the life cycle.

REFERENCES

Adelman, S., Gilligan, D. O., Konde-Lule, J., & Alderman, H. (2019). School feeding reduces anaemia prevalence in adolescent girls and vulnerable household members in a cluster randomized controlled trial in Uganda. Journal of Nutrition, 149(4), 659–666.

Agarwal, S., & Sethi, V. (2013). Nutritional disparities among women in urban India. Journal of health, population, and nutrition, 31(4), 531.

Aguayo, V. M. (2017). Complementary feeding practices for infants and young children in South Asia. A review of evidence for action post-2015. Maternal Child Nutrition, 13(January), 1–13.

Alderman, H., Hoogeveen, H., & Rossi, M. (2009). Preschool nutrition and subsequent schooling attainment: longitudinal evidence from Tanzania. Economic Development and Cultural Change, 57(2), 239-260.

Allen, L. H. (2003). Animal Source Foods to Improve Micronutrient Nutrition and Human Function in Developing Countries Interventions for Micronutrient Deficiency Control in Developing Countries: Past, Present and Future. American Society for Nutritional Sciences, 133, 3875–3878.

Avula, R., Oddo, V. M., Kadiyala, S., & Menon, P. (2017). Scaling- up interventions to improve infant and young child feed in India: What will it take? Maternal Child Nutrition, 13(S2)(e12414).

Chakrabarti, S., Raghunathan, K., Alderman, H., Menon, P., & Nguyen, P.(2019). India's Integrated Child Development Services programme; equity and extent of coverage in 2006 and 2016. Bulletin of the World Health Organization, January, 270–282.

IDinsight. (2019a). POSHAN Abhiyaan Social and Behaviour Change Communication: What is the status one year later? (Vol. 2018, Issue November 2018).

Indiatimes. (2017). India Faces Massive Social And Economic Problems Due To Malnutrition And Anaemia. Retrieved from: https://www.indiatimes.com/health/healthyliving/india-faces-massive-social-and-economic-problems-due-to-malnutrition-and-anaemia-333342.html.

Institute of Economic Growth. (2019). Integrated Child Development Services (ICDS): An Evaluation of Governance, Processes and Implementation.

International Food Policy Research Institute, & NITI Aayog. (2019). A Common Vision for Tackling Malnutrition in India : Building on Data, Evidence and Expert Opinion.

International Food Policy Research Institute. (2016). Global nutrition 2016: from promise to impact: ending malnutrition by 2030. Washington, DC: IFPRI.

Khan, Y., &Bhutta, Z. A. (2010). Nutritional Deficiencies in the Developing World: Current Status and Opportunities for Intervention. 57(6), 1409–1441.

Lim, S. S., Vos, T., Flaxman, A. D., Danaei, G., Shibuya, K., Adair-Rohani, H., ... &Pelizzari, P. M. (2012). A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990–2010: a systematic analysis for the Global Burden of Disease Study 2010. The lancet, 380(9859), 2224-2260.

Ministry of Women and Child Development. (2019). POSHAN Abhiyaan Monthly Progress Report, December 2019 (Issue December).

Nguyen, P. H., Scott, S., Avula, R., Tran, L. M., & Menon, P. (2018). Trends and drivers of change in the prevalence of anaemia among 1 million women and children in India, 2006 to 2016. BMJ Global Health, 3(5), 1–12.

NITI Aayog. (2016). Nourishing India: national nutrition strategy. New Delhi: Government of India.

NITI Aayog. (2020). Weekly Update on Procurement of Smart Phones and Growth Monitoring Devices.

PATH. (2019). Improving nutrition and anaemia through promoting rice fortification as part of comprehensive strategy in multiple States in India.

Piramal Foundation. (2020). Assessment of ILA Training (Issue January).

Sedlander, E., Rimal, R. N., Talegawkar, S. A., Yilma, H., &Munar, W.(2018). Designing a socionormative intervention to reduce anaemia in Odisha India: A formative research protocol. Gates Open Research, 2(May), 15.

Ved, R., & Menon, P. (2012). Analyzing Intersectoral Convergence to Improve Child Undernutrition in India Development and Application of a Framework to Examine Policies in Agriculture , Health , and Nutrition. IFPRI Discussion Paper 01208.

World Bank. (2009). World bank report on malnutrition in India. Washington, DC: The World Bank.

World Bank. (2019). Mission Report 2.