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RE-EXAMINING AND RE-POSITIONING INDIA'S NUTRITION PROGRAMME FOR ACCELERATING IMPROVEMENTS IN MATERNAL AND CHILD NUTRITION

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LIST OF ABBREVIATIONS

ICDS Integrated Child Development Services

WHA World Health Assembly

NFHS National Family Health Survey

MIYCN Maternal, Infant and Young Child Nutrition

IDA Iron Deficiency Anaemia
EE Environmental Enteropathy

IFA Iron Folic Acid

GDP Gross Domestic Product
ANP Applied Nutrition Program

DGHS

CSSM

Child Survival and Safe Motherhood

SNP

Supplementary Nutrition Programme

GMP

Growth Monitoring and Promotion

NHEd

Nutrition and Health Education

LHV Lady Health Visitor
ANM Auxiliary Nurse Midwife

CTCC Central Technical Coordinating Committee
STCC State Technical Coordinating Committee

MHRD Ministry of Human Development

MWCD Ministry of Women and Child Development

SN Supplementary Nutrition AWCs Anganwadi Centres

AWW Anganwadi Worker

TINPTamil Nadu Integrated Nutrition ProjectINHPIntegrated Nutrition and Health ProjectMCHNMaternal and Child Health Nutrition

RCH Reproductive Child Health

ENIS Essential Nutrition Interventions
IYCF Infant and Young Child Feeding
SAM Severe Acute Malnutrition

RTE Ready to Eat

RMNCH+A Reproductive Maternal Neonatal Child Health & Adolescent

ASHAs Accredited Social Health Activists

SHG Self Help Groups

NRLM National Rural Livelihood Mission

MNREGA Mahatma Gandhi Rural Employment Guarantee Scheme

BBBP Beti Bachchao and Beti Padaho
MoRD Ministry of Rural Development
NFSA National Food Security Act

SBCC social behavioural change communication

NIDDCP National Iodine Deficiency Disorders Control Programme
NPPCF National Programme for Prevention and Control of Fluorosis

ODF Open Defecation Free

MKSP Mahila Kisan Sashktikaran Pariyojana

SMART Specific, measurable, achievable, relevant and time bound

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Re-examining and Re-positioning India's Nutrition Programme for Accelerating Improvements in Maternal and Child Nutrition

ABSTRACT India's progress in reducing the prevalent stunting rate in under-five children has been slow, and it must work hard to double the current annual rate of decline if it hopes to meet its sustainable development goals. Among others, this target requires ninety-percent coverage of women and children in the first one thousand days of life with evidence-based Essential Nutrition Interventions (ENIs) and maternal-child health services. Such coverage of ENIs must be complemented with selected nutrition-sensitive interventions including improving access to diversified food, improved sanitation and ODF, and women's empowerment. This paper argues for the redesigning of the country's nutrition programmes.

INTRODUCTION

Malnutrition, defined to encompass both undernutrition and overnutrition, have serious adverse impacts not only on mortality and morbidity. It hampers overall brain development, school performance, and productivity, and influences the onset of various noncommunicable diseases. In India, the undernutrition situation has improved over the past several years, though the progress has been slow: Today, four of every ten children are stunted and almost every third mother is undernourished. Meanwhile, the problem of overnutrition is increasing, with some of the more affluent states having over 40 percent of women being overweight or obese. With the current evidence of which strategies are more effective for addressing undernutrition, there is a need to redesign the country's nutrition programme and move away from the 'ICDS-centric' strategy for accelerating nutrition improvement in maternal, infant and young child nutrition (MIYCN). The mismatch in the delivery of the evidence-based essential nutrition interventions and the designated implementing system needs to be understood and

addressed. It is time that the complex and fragmented approach of implementing essential direct nutrition actions through ICDS and health is examined, redefined and re-organised. Moreover, there is an urgent need to address nutrition-sensitive issues such as accessibility to diverse diets, rapid improvement in sanitation, and making substantial improvements in the socio-economic and education status of women. This working paper presents an overview of the nutrition situation in the country, its determinants and implications, tracks the history of emergence of ICDS, and argues for the urgent need to correctly position the nutrition programme within the National Health Mission, under the Ministry of Health and Family Welfare. Further, the paper emphasises the issue of the first 1,000 days of life being the window of opportunity, and the significance of complementing the universal coverage of direct nutrition interventions with nutrition-sensitive actions being implemented by the Ministry of Rural Development and a number of other vertical programmes under the various ministries.

I. INDIA'S MALNUTRITION PROBLEM: EMERGING EVIDENCE AND CONCERNS

The term 'malnutrition' includes both undernutrition and overnutrition, although it is more commonly used to refer to undernutrition. Malnutrition occurs when the intake of energy, protein and essential micronutrients does not meet or exceeds the metabolic demand for those nutrients.1 An undernourished child is often imagined as the one who is thin or emaciated, with sunken eyes and a big belly. This is a stereotype that is often incorrect. Indeed, undernutrition in children is largely 'invisible'—and is measured by variables like stunting (height for age), underweight (weight for age), wasting (weight for height), as well as biochemical indicators. The World Health Organization (WHO, 2016) estimates that India has 61.7 million stunted children under five years, contributing to almost one-third of all 158 million stunted children worldwide.²

The findings of the most recent National Family Health Survey 4 (NFHS 4, 2015-16) present an update on the nutrition situation of

India. The data reveals that between 2005 and 2015, there has been a decrease in the rate of stunting in under-five children—from 48.0 to 38.4 percent.³ There is a wide variation in prevalence rates across states: from 20 percent in Kerala and Goa, to a high 46.3 percent in Uttar Pradesh, and an even higher 48.3 percent in Bihar. The annual rate of decrease in the stunting rate in the last decade is only about 1.3 percent. This rate needs to be doubled if the country is to achieve the Goal 2.2 of the Sustainable Development Goals (SDGs) that incorporates the World Health Assembly (WHA) target for 2025 of 40 percent reduction in the number of under-five stunted children.^{4,5}

NFHS-4 also indicates that the percentage of children who are undernourished is higher in the SC and ST classes and in the low-wealth index category. However, the rate of undernutrition is, surprisingly, high even in the high wealth index group (Figure 1). Further, in the last decade, stunting rate has remained almost stable: 25.3 percent in 2005 and 22 percent in 2015-16. This shows that low incomes and lack of access to nutritious food are not the only causes of undernutrition.

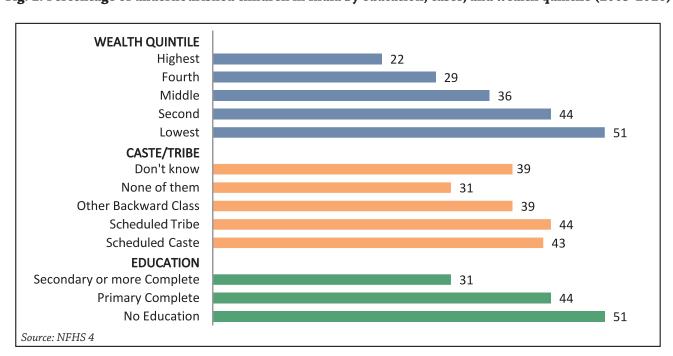


Fig. 1: Percentage of undernourished children in India by education, caste, and wealth quintile (2005-2016)

Global data, including of India, indicates that the prevalence rates of both stunting and underweight increase rapidly in the first two years of life, reach their peak at about two years of age, and then stabilise. Such a pattern of growth in the first two years of life was reported from monthly underweight rate analysis of nutrition survey undertaken in Uttar Pradesh with Unicef support in 1997-98. This trend was further confirmed by the national survey of 2005-06.8 The national data (Figure 2) indicates that the situation of stunting worsens with increase in age, from 30 percent in the first two months, to 32.7 percent at 9-11 months, and 46.9 percent at 12 -17 months, followed by a sharp increase to almost 58 percent by 23 months. In fact, undernutrition is reported right from birth. Recent findings indicate that almost 20 percent of all births are low birth weight, i.e., less than 2.5 kg, primarily due to intrauterine growth retardation.9 Stunting occurring in the first 1,000 days of life is largely irreversible. The first one thousand days of life, from conception to 24 months of age, is therefore viewed as the 'window of opportunity' for active interventions for improving maternal, infant and young child

nutrition (MIYCN). This is of urgent concern, given the association of childhood stunting and the incidence of adult-onset non-communicable diseases.

An emerging facet of India's malnutrition problem is the "double burden" of undernutrition, and overnutrition in children and women. In the last decade, undernutrition in women has decreased from 35.5 percent to 22.9 percent while overnutrition has increased substantially from 9.3 percent to 18.6 percent. Such an increase in the prevalence rate of overweight in women 15-45 years is noted in every state across the country, though there is wide variation (Figure 3). The prevalence rate of overweight is almost twice in the urban region (31.3 percent) as compared to that in rural areas (15.0 percent). The increasing incidence of overweight in women is in fact is observed to be higher in the rural region, which has resulted in reducing the rural-urban difference in the last decade. Interestingly, the rate of overnutrition in women is observed to be higher in those states where there is an increase in the percentage of women who have completed at least 10 years of education. This possibly indicates that women

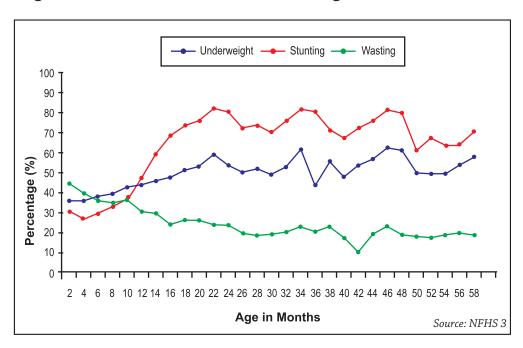


Fig. 2: Trend in undernutrition with increase in age in children 0-60 months

who are empowered have a better decision making position in the family and 'liberty' to use the family resources, resulting often in the consumption of what are regarded as "status" food but which are high-calorie and low in nutrients. This, combined with a sedentary lifestyle, contribute to overnutrition and an increase in the risk of non-communicable diseases.

Besides energy-protein deficiency, another public health problem is the deficiency of micronutrients, also referred to as 'hidden hunger'. The lack of micronutrients, iron, vitamin A, calcium, iodine and zinc, while not causing hunger pangs, has a serious adverse impact on the body's functions. According to the NFHS 4, the prevalence of Iron deficiency anaemia (IDA) in the country remains high across all socio-economic groups —every second child, girl and woman is anaemic. The primary reason for the high prevalence rate of anaemia is

poor intake of 'absorbable' dietary iron. Dietary survey findings from rural regions of 10 states across the country by NNMB confirms poor consumption of diversified diet with over 75 percent of young children, adolescent girls, and pregnant women consuming less than 50 percent of the recommended daily allowance of calcium, iron and vitamin A. ¹⁰

Current research also hypothesise on the implications of poor water-sanitation-hygiene conditions on adversely affecting intestinal lining, referred to as environmental enteropathy (EE), with high prevalence rates of anaemia. In the absence of diversified diets, pharmaceutical supplements of iron-folic acid (IFA) tablets is the immediate solution and is essential for all age groups, especially for women in their reproductive age. Fortification of food with micronutrients is a cost-effective solution to address the problem of micronutrient deficiencies in India.

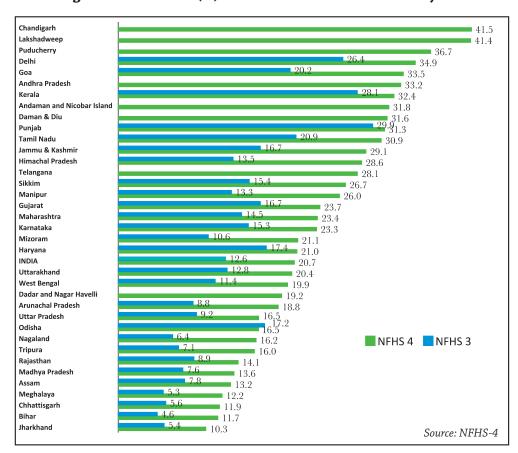


Fig. 3: Overnutrition (%) Prevalence rate in Women 15-49 years

II. MALNUTRITION: A NEGLECTED PUBLIC HEALTH EMERGENCY WITH SERIOUS IMPLICATIONS ON DEVELOPMENT

Undernourished children are at risk of not being able to attain their optimum physical growth and brain development. Undernutrition, both protein-energy malnutrition and micronutrient deficiencies, have serious consequences on child morbidity, mortality and development.12 Maternal and child undernutrition is estimated to be the underlying cause of nearly half of underfive child deaths. 13,14,15 Severely undernourished children are eight times at higher risk of dying than normal children. Undernutrition in mothers is estimated to be a cause of more than a quarter of all neonatal deaths. Besides impairing physical growth, undernutrition adversely affects brain development and cognitive abilities during the early days and can contribute to delayed enrolment, high drop-out rate, as well as poor performance in school and lower learning outcomes later in life.16 Undernutrition in early childhood also increases the chances of adultonset chronic diseases such as diabetes and cardio-vascular diseases, with substantial decrease in work capacity as well as earnings and an increase in health expenditure. 17,18,19

Deficiencies in micronutrients such as vitamin A and zinc have serious impacts on immunity, survival and growth of children. Anaemia contributes to high morbidity, mortality and reduces productivity. In India, 20 percent of maternal mortality is attributed to anaemia. Studies estimate that micronutrient deficiencies alone may cost India US\$2.5 billion annually, and that the productivity losses (manual work) from stunting, iodine deficiency, and iron deficiency together are responsible for a total productivity loss of almost three percent of gross domestic product. 2

Undernutrition in children is estimated to reduce the nation's economic advancement by at least eight percent due to the impact on young child mortality, increasing incidence of morbidity, direct productivity losses, poor cognition, and reduced schooling.²¹ WHO estimates that poor school attendance of stunted children results in reduced earning capacities equal to an average 22 percent loss of yearly income in adulthood.² The implications at the macro level are grave, estimated at yearly losses of Gross Domestic Product (GDP) of around 10 percent. Indeed, it cannot be overemphasised that "one underweight or one undernourished child is an individual tragedy. But multiplied by tens and millions, undernutrition becomes a global threat to societies, to economies and to generations to come."22

The value of addressing undernutrition is evident from the recent assessment that for every dollar invested in scaling up nutrition actions, \$16 are realised in return. Investing in nutrition means to accelerate economic growth rather than viewing nutrition improvement merely as an outcome of economic growth. The UN General Assembly has declared 2016-25 as the 'Decade of Action on Nutrition'. India is committed to achieve the nutrition targets of WHA 2025.

III. TRACKING INDIA'S EFFORTS TO ADDRESS MALNUTRITION

The country's early efforts to address the issue of undernutrition and hunger can be traced back to the Bengal famine of 1943. In post-independence India, food was in shortage and interventions primarily focused on improving the production of food. In the 1960s, a vertical programme, the Green Revolution, was launched for increasing production of wheat and moving away from dependency on imported

wheat under the PL 480 Programme of the United States. The Applied Nutrition Program (ANP) was introduced in 1963 through the school system for growing of vegetables in small areas. This was evaluated and discontinued in early 1970.24 During this period, Nutrition Cell was also operational at the Directorate General of Health Services (DGHS) attached to the Ministry of Health. State Nutrition Cells were operational in 18 states. These cells were incharge of nutrition (food-related) programmes such as iodisation of salt, prevention of food adulteration, Balahar (child feed or weaning product) programme, and provision of skimmed milk powder for severely malnourished.²⁵ Following research at the National Institute of Nutrition on the use of micronutrient supplements such as iron folic acid (IFA) tablets and vitamin A concentrate syrup, these supplements in the early 1970s were incorporated in the public health programme by the Ministry of Health and Family Welfare for addressing the clinical forms of deficiencies such as anaemia due to iron deficiency in pregnancy and blindness and damage to eyes resulting from vitamin A deficiency in under-five children. India, in fact, gave a global lead in the launch of such micronutrient supplement programmes. Another important lead given by India was the introduction of policy of fortification of salt with iodine. However, though incorporated in the Child Survival and Safe Motherhood (CSSM) Programme, the scaling up of these interventions remained a low priority.

In the 1970s, poor nutrition was attributed mainly to poverty and lack of food in the family. The social welfare sector was responsible for supplementary food provision programme, and undernutrition was viewed merely as a social ill. The Supplementary Nutrition Programme (SNP), or free provision of food to children under six years was launched in India in 1970–1971

with a high level of political commitment, to protect the weakest economic segments in the country against undernutrition. The SNP, as part of the Minimum Needs Program, aimed to provide extra food to children or families beyond the normal ration of their home diets.

In 1974-75, analysis and publication of a comprehensive Narganwal Project 1968-73, undertaken in 10 villages of Punjab by the Department of International Health, Johns Hopkins University, generated interest in the nutrition programme design. The Project investigated with interventions for addressing the problem of undernutrition and studying the interactions of malnutrition and infection and their effects on preschool child growth, morbidity and mortality.26 Based on the learnings of the Narganwal project, the ongoing SNP program of the Ministry of Social Welfare was redesigned as a comprehensive Integrated Child Development Services (ICDS) Program and was launched in 1975 in 33 blocks of the country. The principal beneficiaries of the ICDS scheme being children in the age group below three years and >3-6 years, pregnant and lactating women. The components of the programme included SNP, Growth monitoring and promotion (GMP), nutrition and health education (NHEd), immunisation, health checkup and health referral, as well as preschool education.

The Ministry of Social Welfare was administratively in charge of the ICDS programme. Interestingly, for provision of health services, a separate parallel team of health workers for ICDS was appointed, comprising the ICDS medical officer, ICDS Lady Health Visitor (LHV), and ICDS Auxiliary Nurse Midwife (ANM). At the central level, a Central Technical Coordinating Committee (CTCC) was established at the newly formed Human Nutrition Unit established at the All India

Institute of Medical Sciences, New Delhi. At the state level, a State Technical Coordinating Committee (STCC) was set up, comprising medical officers and staff of medical college as members. These committees worked closely with the health departments and ensured appropriate implementation by the health team of ICDS. This arrangement of a parallel health system was discontinued in 1981 since coordination of ICDS health team with state health department was rather difficult. Moreover, the routing of health staff budget through CDPO of ICDS was found to be not sustainable.²⁷ Subsequently, the health team of ICDS was absorbed into the national public health care system. The CTCC, funded largely by Unicef, was dissolved in the mid-1990s.

With the formation of the Ministry of Human Development (MHRD), ICDS was administratively placed initially under the Department of Women and Child. In 2006, the Ministry of Women and Child Development (MWCD) was formed and since then ICDS has been a part of MWCD. Today, MWCD is the designated nodal ministry to address the problem of malnutrition through the ICDS system which is officially the flagship nutrition programme.

The image of ICDS being the nutrition-centric programme gained recognition amongst the public and policymakers since feeding of beneficiaries or supplementary nutrition (SN) component of ICDS was a visible and a politically important input. Moreover, it fitted with the general perception of policymakers and planners that supplementing family food was the solution to the undernutrition problem. The provision of high-cost food under the ICDS programme was later questioned by experts in the early 1980s.²⁸ Contrary to such opinion, it gained a higher priority when the Supreme Court issued its order on 13 December 2006 for universal provision with quality of SN in a time-bound

manner. This implied SN provision to be not limited to a few fixed and selected mothers and children but to focus on universal feeding of all pregnant and lactating women and children 7-72 months living in ICDS catchment areas. Cooked meals were also made compulsory at the ICDS centre-based feeding of children over 3-6 years. Supplementary food (referred to by ICDS as supplementary nutrition or SN) gained high visibility. ICDS increased investment in SN component. A recent study estimates that 50 percent of ICDS budget is spent on SN component.²⁹

In the last four and half decades, there has been a steady expansion of the ICDS programme. Starting with 33 projects and 4891 ICDS centres or Anganwadi Centres (AWCs) in 1975, it has now reached 14 lakh AWCs across the country with 7076 ICDS projects.³⁰ On average, 120-150 AWCs per project/block and one Anganwadi Worker (AWW) per 1000 population is the prescribed norm. In actual practice, one AWW covers 1200-1500 population with large villages of 3000-3500 having 2-3 AWCs. However, the objective and components of the ICDS programme has not changed to date. In these 42 years of ICDS, the two nutrition components that have gained maximum attention by policymakers have been the SN and the growth monitoring and promotion (GMP). In fact, however, GMP is limited to the periodic weighing of children.

Earlier analyses of National Family and Health Survey (NFHS) data of both NFHS 1 (1992-93) and NFHS 2 (1998-99) reveal that there was little difference in the percentage of undernutrition in children in ICDS and non-ICDS villages.³¹ The NIPPCD Evaluation in 1992 concluded that one of the primary gaps in the ICDS programme was inadequate participation of health frontline workers (ANMs) in supporting ICDS services.³² With the

discontinuation of ICDS-linked special health staff, a need for ICDS system to converge with the health sector became crucial. Such a convergence was emphasised following the experiences of the innovative strategies emerging from the following experimented ICDS program models—the Tamil Nadu Integrated Nutrition Project or World Bank Phase I Project (TINP I covering 6 districts in 1980-89 and TINP II covering 24 districts of Tamil Nadu); Integrated Nutrition and Health Project II (INHP) in selected 747 blocks across nine states; Maternal and Child Health Nutrition (MCHN) project in eight blocks of four districts of Uttar Pradesh; and World Bank Supported ICDS II and III Projects from 1993-2006 in nine states.³³

TINP program results proposed proactive integration with the health system. Both the Integrated Nutrition Health Project II (INHP II) of CARE and MCHN presented with experience of promotion of appropriate infant and young child feeding practices and active coordination with the child health services of Reproductive Child Health (RCH) programme of the health These two projects focused on integrated nutrition and health services. There was special focus on under-two children and planned participation of NGOs or medical colleges as active implementing support partners. Support for essential maternal-child health interventions such as antenatal care services, home-based newborn care and child immunisation were emphasised. The concept of having community volunteers for effective interpersonal communication at the home level and other behavioural changes in communication activities were central to the programme. Additional management staff was also recruited. An interesting element of INHP design was at the central government level-MWCD was the nodal ministry

administratively in-charge of the project while at the state level, Health and Family Welfare Department was the nodal implementing department. INHP II received a high degree of political and programme support. An evaluation of INHP undertaken in eight states revealed that in five years, there was an eight percentage-point reduction in underweight in children 12-23 months. Such a reduction, to a great extent, was attributed to effective convergence with health sector and integrated health and nutrition inputs being led by the health sector at the state level.

These experiences highlight the significance of having a system in place that ensures effective convergence of health and nutrition actions. The globally accepted maternal and child nutrition conceptual framework of 1998 (Figure 4), also clearly indicates the need to simultaneously address the two immediate determinants: improved dietary intake and disease prevention through effective and timely health services. In the Indian context, this implies an effective convergence of the ICDS and health systems. In the current nutrition programme situation, this is in fact far from reality. Interestingly, even the sector boundaries of ICDS and Health are not coterminus which also contributes to poor joint planning and action by ICDS and health. In order to overcome this recognised programme gap of poor health and ICDS integration, many states including Maharashtra, Karnataka, Uttar Pradesh and Jharkhand, have attempted to resolve the problem of convergence through the formation of State Nutrition Missions. The functioning of these Missions, operating with substantial external development donor support for the overall management, deserves to be reviewed in an unbiased fashion to assess whether this is a cost-effective and sustainable mechanism which is an independent system or should remain driven primarily by the ICDS Program system.

Child Undernutrition CAUSES • DIRECT Nutrition Interventions • Infant and young child: Feeding, hygiene, & supplementary nutrition, micronutrient supplementation (IFA, dietary fortification), iodised salt - Inadequate dietary intake Adolescent and maternal nutrition: Additional food, IFA -Disease • Health services: Immunization, Antenatal care (ANC), Diarrhoea Management INTERMEDIATE - Household food insecurity INDIRECT Nutrition Sensitive Interventions -Inadequate care, feeding practices, & health • Agriculture/ Horticulture: (production, access & consumption) • Women's care and development (health, economic & social) services Improve water and sanitation -Unhealthy environment Household access to adequate quantity and quality of resources (land, education etc.) • Poverty reduction, building human nutrition manpower/institution, supportive political framework, -Inadequate financial, human, physical, & social improved governance capital Socio-cultural, economic & political context

Fig. 4: Conceptual Framework of Child Undernutrition

Today, there is a need to question what would be the better system arrangement for addressing undernutrition, especially since 2008 and later in 2013, there is evidence and global agreement that at least 90 percent coverage of selected evidence-based essential nutrition interventions (ENIs) in the first 1000 days of life would reduce undernutrition in children by almost 20 percent.35,36 These ENIs include establishing appropriate breastfeeding and complementary feeding practices (also referred to as appropriate infant and young child feeding or IYCF practices), supply and consumption of iron-folic acid supplements to all pregnant women and adolescent girls, provision of food supplement to undernourished pregnant women, administration of vitamin A supplementation in early childhood, as well as management of severe acute malnutrition (SAM).

IV. ACCELERATING UNIVERSAL COVERAGE OF ENIs: A SERIOUS CHALLENGE

Today, in India, policies for each of the above referred ENIs are in place except for policy and programme guidelines regarding energy-protein supplement to undernourished pregnant women and community-based care of severe acute malnutrition (SAM) cases. These two policies are also expected to be issued soon. Despite having policies in place, the coverage of ENIs in various states are far below the target of universal coverage (Figure 5). Efforts must be made to reach at least 90 percent of target population to accelerate the improvement of the national nutrition scenario.

The following sections examine the factors that may be responsible for the reported poor

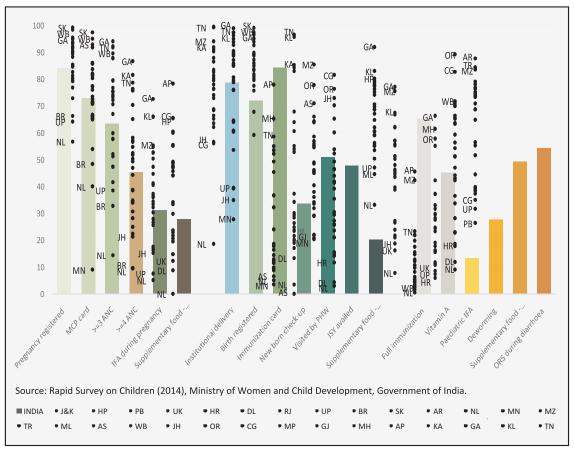


Fig. 5: Coverage of nutrition interventions across states

Source: IFPRI, 2017

coverage of ENIs. A mismatch of the actions pertaining to ENIs and the delivery system in place is possibly the primary reason. Today, the official lead agency for addressing undernutrition and delivery of ENIs is the ICDS Program. The ENIs pertaining to behaviour change for maternal and child care are also viewed as the primary responsibility of ICDS/MWCD. As per the ICDS programme design, AWWs are expected to use the regular potential contacts with pregnant women and young children with reference to provision nutrition services such as supplementary nutrition or SN (often supplied weekly/ fortnightly /monthly often in the form of Ready to Eat (RTE) Food packages to pregnant /lactating women and for children 7-24 months and cooked meals to 3-6 years children) or for undertaking periodic weighing of children 7-36

months. Available RSOC survey 2013-14 findings reveal that the ICDS system, neither has the reach nor the frequency of contacts with pregnant women and children below two years, i.e., in the most critical period of first 1000 days of life. As indicated in Figure 6, only 40.7 percent of mothers avail SN and of these only 27.8 percent receive SN for at least 21 days while 44.2 of children 7 months-3 years avail of SN and only 31 percent received for at least 21 days. Reaching infants 0-6 months by frontline workers of ICDS is also dependent on provision of SN to lactating mothers. As indicated in Figure 6, only 43.8 percent of young children are reported to have been weighed and only 17.2 percent of mothers of under-three receive any nutrition and health education. Reach and frequency of contacts with mothers and under-threes by ICDS system is rather poor.

89.7 72.4 49.2 44.2 43.8 40.7 31 27.8 21.3 17.2 Children 6-35 Children 36-71 Having Baby WHO Growth Growth Charts NHEd (Mothers Pregnant Women months months weighing scale Charts available prepared of 0-35 months) ■ SN Availed ■ SN Availed for ≥ 21 Days

Fig. 6: An overview of coverage of components pertaining to nutrition interventions

Source: RSOC survey 2013-14

For its part, the Reproductive Maternal Neonatal Child Health & Adolescent (RMNCH+A) programme, launched in 2013 under the National Rural Health Mission (now under the National Health Mission), focuses on a continuum of care through critical period of life and includes actions for registering pregnant women and providing antenatal care as well as newborn care services and routine immunisation to young children. The RMNCH+ A approach also includes many of the essential nutrition interventions such as infant and young child feeding promotion, prevention of anaemia in adolescent and women in reproductive age with regular supply of IFA tablets, administration of vitamin A supplements.³⁷ The only ENI which is not included in the RMNCH+A approach is provision of supplementary nutrition as energy-protein food supplements to undernourished pregnant women. It may be worthwhile exploring that nutrition actions are accorded priority as an integral part of RMNCH+A initiative and universal ENI coverage is made the responsibility of the Ministry of Health and Family Welfare. The goal should be universal coverage of ENIs.

With nutrition actions being under the purview of MWCD, the health sector in actual practice does not accord the desirable priority to nutrition actions to be implemented effectively along with essential well-defined maternal child-health interventions. Since 2005, under the National Rural Health Mission (now National Health Mission), a cadre of community-based Accredited Social Health Activists (ASHAs) have been included in the health team. Unlike frontline workers of ICDS (Anganwadi workers or AWWs) who are paid monthly honorarium, ASHAs are paid payment incentives against specifically defined tasks. ASHAs, along with ANMs, are in-charge of implementing actions for registering pregnant women and providing antenatal care as well as newborn care services and routine immunisation to young children. With nutrition interventions being a low priority, ASHAs are not entitled to incentives pertaining to ENIs which further lowers the focus on maternal and nutrition care. The regular contacts of health system with pregnant women and children in the first 1000 days are therefore apparently not paid any serious attention.

In addition to such bifurcation of the nutrition programme between the two systems (ICDS and health), the roles for execution of each of the ENIs are not clearly defined for ICDS and health sectors. The result is either no action at all by the two sectors, or at other times, an overlap of actions. Unfortunately, this results in the inability to make optimum use of the regular contacts of the health system with pregnant women and infants for the delivery of ENIs. The survey findings of RSOC, 2013-14 and NFHS-4, 2015-16 indicate that the contacts of the health sector with women and children in the first 1000 days of life has improved substantially in the last decade. The percentage of women registered for pregnancy care is as high as 84.1 percent. Women who attend the minimum four antenatal services or ANCs is 51.2 percent, and continues to steadily increase. Coverage of routine immunisation is 73.8 percent for three doses of vaccine and 62.0 percent full immunisation. Unfortunately, these are the missed opportunities by the health sector for improving ENI coverage.

Despite this described poor reach of ICDS (Figure 6) and evidence-based opportunities of health sector in reaching women and children with ENIs in the first 1000 days of life, MWCD (ICDS) is the designated ministry responsible for addressing malnutrition. The tendency to incorrectly equate ICDS with nutrition continues to exist. Convergence of ICDS with health sector continues to be only a 'hypothetical' merging. This mismatch as well as the poor convergence of ICDS with the health sector are important contributory causes of low ENI coverage. Moreover, the roles of two sectors are not well-defined except with regard to supply of food items or drugs. The responsibility for execution of actions in terms of demand creation for services or behavioural change or monitoring is far from explicit. This situation is

further aggravated by the ongoing routine conflict of MoHFW and MWCD regarding nutrition actions. Such a situation has resulted in the bifurcation of responsibilities with poor accountability. With such a scenario, the Health sector adheres to the responsibility for identifying and 'treating' severe acute malnutrition (SAM) children in an institution setting such as the Nutrition Rehabilitation Centres (NRCs), while community-based care of SAM children discharged from the NRCs is viewed as a preventive measure and the responsibility of MWCD. With such an artificial division of responsibilities, the end result is that children discharged from NRCs are often not given the required care at family level and are soon back in the trap of malnutrition with six to eight times higher risk of mortality. This is one of the examples of implications of an impractical division of responsibilities between MWCD and MoHFW. Moreover, this has also resulted in delay in policy formulation in the country for community-based care of SAM children. Similarly, the supply and logistics management of micronutrient supplement is the responsibility of the health sector while creating demand and ensuring compliance is not taken as the job function by either of the two sectors. Treatment of severe anaemic cases is the responsibility of the health sector.

Appropriate and optimum use of available maternal-child health platforms and adequate use of institutional arrangements remains far from adequate. In a study by the World Bank, lack of coordination between the two lead sectors, health and ICDS, for nutrition interventions has been acknowledged as resulting in insufficient coverage, inconsistent data reporting, and some redundancy in work performance.³⁸ The study concludes that besides the challenges of policy financing and capacity strengthening, the issue of defining the lead role

and coordination of the two sectors is crucial for ensuring successful service delivery of ENIs at scale in the country. The challenges of working across sectors is well recognised by programmers who note historically little horizontal coordination because of vertical structural constraints.³⁹ A study by IFPRI on delivery of direct nutrition interventions or ENIs in India concluded that "evidence base regarding how best to operationalize interventions for nutrition in India is weak."⁴⁰

For achieving the goal of universal coverage of ENIs, it is evident that there is a need to revisit the ministerial arrangement and address the issue of missed contact opportunities with pregnant women and under-two children for delivery of interventions, fragmentation of responsibilities and at times overlap of actions by health and ICDS. In such a situation, the rationale of continuing to make ICDS system and not the National Health Mission, the lead agency for reaching under-two's and accelerating the coverage of ENIs for reducing undernutrition seems far from being appropriate and cost-effective. Moreover, there are well-established facts that emphasise the rationale for health taking the lead in the country's nutrition programme. For one, malnutrition in young children is the underlying cause of 45 percent of under-five mortality, a major contributory cause of intrauterine growth retardation and low birth weight, an influential factor in increasing incidence of noncommunicable diseases and causative factor for anaemia and poor weight gain during pregnancy with serious consequences on maternal mortality. Inclusion of child nutrition status, as an indicator for measuring the health index, therefore deserves serious attention. In this context, it is vital to recognise that a higher focus on improving maternal infant and young child nutrition is imperative for achieving the

National Health Policy goals of neonatal mortality of 16, IMR of 28, U5MR of 23 by 2025 and MMR to 100 by 2025. The National Health Policy makes a reference to interventions to address micronutrient deficiencies. Reduction in stunting rates in children is included in the Policy as "cross sectoral goals related to health". It is time the country breaks away from this fragmented operational design and consider the value added by shifting the responsibility of ENIs or nutrition-specific actions in under-two's from ICDS to the health sector. 41 Such merging will be cost-saving in terms of financial, time and energy resources as well as functionally by disentangling the overlap of the ICDS and health systems.

V. COUPLING ENIS WITH NUTRITIONSENSITIVE ACTIONS IMPERATIVE FOR ACCELERATING IMPROVEMENT IN NUTRITION SITUATION: NEED FOR MULTI-SECTOR SUPPORT AND INVOLVEMENT

India's National Nutrition Policy of 1993 and the National Nutritional Plan of Action 1995 was a multisector plan for addressing undernutrition which unfortunately was never rolled out. 42 ICDS remained the flagship programme for reducing undernutrition. Global evidence today stresses that for a higher impact on reducing undernutrition, efforts for universal coverage of the direct nutrition interventions or ENIs need to be combined with nutrition-sensitive issues that are the intermediate and underlying determinants of undernutrition (Figure 6). This implies intensive measures for improving access to diversified food, sanitation facilities and hygiene environment as well as education and empowerment of women, prevention of early marriage and poor spacing in conception, prevention of domestic violence, ensuring adequate diversified food, proper sanitation,

among others.⁴³ It is now well accepted that stunting reduction is driven to a great extent by non-nutrition actions such as safe water and sanitation, as well as women's education and empowerment.^{44,45} There is now mounting global evidence of a strong linkage between poor sanitation and hygiene, and child undernutrition.⁴⁶

Today, these nutrition-sensitive issues in the country are being implemented, as indicated in Figure 7 by vertical high priority programmes being administered by various sectors, of the Central and State governments. These include interventions for improving water-sanitation situation (Swachh Bharat Abhiyaan or SBA), enhancing access to diversified food (Agriculture and Horticulture Programs, Public Distribution System/PDS), socio-economic empowerment of women through universalisation of formation of Self Help Groups (SHGs) of women of the

Deendayal Antyodaya Yojana: National Rural Livelihood Mission (DAY: NRLM) under the Ministry of Rural Development, improving income levels of women through Mahatma Gandhi Rural Employment Guarantee Scheme (MNREGA), gender sensitive Beti Bachchao and Beti Padaho (BBBP) Abhiyaan, and other specific state initiatives for increasing percentage of girls completing high school. In fact, SBA needs special attention since there is increased evidence that fecal pathogens are an important threat to nutritional outcomes.

In such a situation, the idea of a state and district-level multisector planning, as proposed by some international organisations, is not the answer, especially when convergence of even the health and ICDS sectors is proving to be a Herculean exercise. In fact, the effort and energy required for multisectoral planning and convergence may dilute the attention of

Ministry of Rural Development National Rural Livelihood Mission Ministry of Women and Child Ministry of Agriculture and Ministry of Consumers, Food & (DAY/NRLM) Development (ICDS) Farmers Welfare **Public Distribution** SHGs & microcredit enterprises Supplementary Nutrition# Improving access to food Public distribution services Improve access to diversified foods Health and Nutrition – cereals & pulses (PDS) Food security measured & vegetable Education/ SBCC (IYCF*, Horticulture activities Promote fortification of food Hygiene, Maternal nutrition*) Animal husbandry, items (cereals, oils) Demand & converge - sanitation, water Growth monitoring and dairying, fishing services, demand education of women NREGA Maternity benefits Ministry of Drinking Water and Ministry of Health and Family Sanitation Accelerate 90% Improving Safe drinking water Welfare (NHM) coverage of Essential of Nutrition ernal and child FNIs* Sanitation (Open defecation Nutrition Sensitive nutrition Improving IYCF* and Maternal free/ ODF) Interventions (ENIs)* Interventions nutrition* care practices Prevention & Management of Anaemia*(IFA,, deworming) Ministry of Human Resource Vitamin A supplements* **Development (Education)** School education & literacy · Diarrhoea management + Zinc Weekly Iron Folic Acid supplement Attainment of WHA targets (2025) & Food fortification ** (iodised Supplementation & biannual SDG 2.2 (2030) salt) deworming 40% reduction in number of stunted Health, nutrition and Management of Severe Acute under 5 children Malnutrition (SAM) sanitation education Reduction in childhood wasting to Maternal & Child Health services • 50% reduction in anaemia in women Ministry of Information Antenatal care of reproductive age · Routine immunization **Broadcasting** 30% reduction in low hirth weight Mass communication Treatment of ARIs & other Increase in rate of 6 months of diseases exclusive breastfeeding to 50% Institutional delivery No increase in childhood overweight Family planning services *ENIs: # ENIs include SN to undernourished mothers: ** Private sectors (wheat/rice/oil/salt industry)

Fig. 7: Role of various sectors in improving maternal and child nutrition

Source: Prepared by the author

programme implementers from rapid increase in coverage of ENIs which is imperative for reducing stunting rates by 20 percent. The solution possibly lies in institutionalising a system for using platforms of these programmes such as NRLM, PDS, SBA, Education, BBBP for disseminating information on hygiene, sanitation, maternal-child feeding and care practices as well as using the contacts with community for sensitising them of their entitlements and ensuring timely response by demanding effective implementation of each of the sectoral vertical programmes. Mapping districts with higher rates of stunting, using the current NFHS 4 district data, should be a high priority for such actions. It is also time the country recognises and positions stunting rate in children as an indicator of development of a district, since determinants of chronic undernutrition or stunting in children are multisectoral and inputs from the various sectors create an impact on the nutritional status of children.

The DAY: NRLM, under the Ministry of Rural Development (MoRD), aims to universalise the formation of Self Help Groups (SHGs) of women and these SHGs offer a platform not only for socio-economic empowerment of most disadvantaged women but for sectoral inputs including sanitation and also an opportunity to identify and reach the 'unreached women' with ENIs. 47 DAY: NRLM, as described in a May 2016 document released by MoRD, could play a critical lead role in strengthening nutrition-sensitive interventions that pertain to economic improvement of women, access to diversified diet, gender equalities, ensuring adherence to legal age of marriage, informed choice of family planning measures, and elimination of gender violence which are important, indirect and nutrition-sensitive factors that create an impact on maternal, infant and young child nutrition situation in the country. The efforts of MoRD

could be actively supported by MWCD spearheading policy decisions for the protection and empowerment of women.

VI. THE WAY FORWARD

The decade 2016-25 has been declared by the UN as the 'Decade of Nutrition Action'. India is committed to the achievement of World Health Assembly (WHA) 2012 targets on nutrition which are also part of the Sustainable Development Goal (SDG) 2.2. In fact, nutrition is central to the SDGs, with 12 of the 17 goals having indicators that are relevant for nutrition.²³ These WHA targets to be achieved by 2025 aim at reducing stunting and wasting in under-five children, low birth weight, anaemia, as well as preventing increase in overnutrition in under-five children. Low birth weight and its association with stunting and rising incidence of adult-onset non-communicable diseases is positioned high on the agenda. There is an urgent need for India to confront issues that adversely impact on accelerating the rate of improvement in the maternal, infant and young child nutrition (MIYCN) situation. The following recommendations are considered essential to fast-track improvement towards achieving the WHA targets and SDGs which are associated with nutrition improvement.

1. Redesigning the Nutrition Programme:

a. Universal Coverage of ENIs and complementing with nutrition-sensitive issues: Today, India is self-sufficient in cereal production. There is in place the National Food Security Act (NFSA), providing two-thirds of citizens the right to access to at least five kg of cereals at subsidised rate. For improving nutrition of women and children, it is imperative that policy and actions go beyond effective implementation of NFSA. Based on global and Indian evidence, the

highest priority and challenge is to ensure effective scaling up of ENIs. There is an urgent need to redesign the nutrition programme to ensure at least 90-percentage coverage of pregnant women and children with essential nutrition interventions (ENIs) in the first 1000 days of life. Such a coverage of ENIs, comprising primarily maternal nutrition care, appropriate young child feeding practices and prevention of anaemia, will contribute to at least one-fifth reduction in childhood stunting rate. For accelerating the improvement in nutrition situation of the country, there is need to register and reach out to the newlyweds. Women must enter pregnancy in a healthy state. Additionally, the following three nutrition-sensitive issues—WASH (water, sanitation and hygiene), increased production and access to diversified food and women's education— deserve special attention.

b. Redesigned Nutrition Programme Implementation Model—Merging ICDS with Health system: The ICDS programme, under the Ministry of Women and Child (MWCD) is designated as the nodal programme with the responsibility to address malnutrition. All national and international donor support for malnutrition reduction actions is directed or routed through the ICDS Programme which is officially the nutrition programme. It is, however, well recognised by most technical experts that the health sector should play the lead role in addressing immediate determinants of maternal and child nutrition. It is imperative that policymakers appreciate the advantage of positioning the nutrition programme in the health sector to spearhead actions by making optimum use of the maternal-child health programme

contacts with mother and children in the first 1000 days of life. A new model could be considered with the entire ICDS human resource and system, from state to village level, merged with the health system and administratively positioned under the control of MoHFW. ICDS workers being redesignated as community nutrition workers, nutrition supervisors and block nutrition officers. Preschool education component of ICDS could be explored to be linked with the primary education system, including the feeding of three-six years linked to mid-day meal program, especially only a third of children in this age group in ICDS covered household are reported to be attending the Anganwadi Centres. An integration of ICDS system within health sector need serious attention. The only experience of such a working model is available from the state of Gujarat where ICDS was in operation under the administration of the Department of Health and Family Welfare which was discontinued in the late 1980s. A study of this experience would add value in critically examining the advantages of such merging and redesigning the programme which is under the overall governance of the MoHFW.

c. Redesigning the ICDS Programme: Moreover, there is a need to address the design flaws. A major shake-up in policy with special focus on the younger age group and strengthening of convergence with related health and sanitation programs is imperative. Redesigning of ICDS with community participation has been expressed earlier by experienced bureaucrats. Based on current technical and programme evidence, the components and objectives of the ICDS programme conceptualised in 1975 also need to be revisited and reformulated. This includes examining the value addition

by continuation of two components—universal coverage of pregnant women with supplementary nutrition (SN) and Growth Monitoring and Promotion (GMP). A comprehensive evaluation of ICDS reported that although 81 percent of children below six years of age were living in an area covered by AWCs, only 31 percent of the children received SN and only 12 percent received it regularly. The RSOC survey, as presented earlier, also reports a similar poor coverage of both SN and GMP (Figure 6).

d. Redesign SN and GMP components and increase focus on Social Behaviour Change Communication (SBCC): The emerging global evidence also recommends that providing energy-protein supplement to only undernourished pregnant women is more beneficial as compared to universal coverage with food supplement. 2,35 There is therefore a need to revisit the policy and explore whether food being supplied by ICDS as Take- Home Ration (THR) in packages could be channelled through the Public Distribution System (PDS) or cash transfer linked with Aadhaar cards. Similarly, it needs be recognised that GMP, which was introduced as a tool for making "undernutrition" visible to caregivers and provide required inputs based on individual growth performance, has been limited to weighing of children or "doing GMP". A global review provides evidence on how GMP does not serve the purpose of promoting child growth in developing countries. The review refers to evidence from India (Integrated Child Development Services) and Bangladesh (Bangladesh Rural Advancement Committee and Bangladesh Integrated Nutrition Project) that growth monitoring has little or no effect on nutritional status in large-scale programmes with weak nutrition counselling.⁵⁰ Review

presents evidence from Tamil Nadu in a randomized trial found "that when mothers are visited fortnightly at home and have unhurried counselling, no additional benefit accrues from the visual depiction of growth on a chart. Growth monitoring may not be the best use of limited resources in countries with where coverage is poor and growth promotion action is often done badly. Efforts must be made to provide age-appropriate advice to achieve exclusive breastfeeding and appropriate complementary feeding, irrespective of decisions about growth monitoring". The significance of appropriate strategic planning and execution of social behavioural change communication (SBCC) has been demonstrated to have significant impact on health and nutrition practices in developing countries such as Bangladesh, Ethiopia and Vietnam.⁵¹ The six monthly or annual weighing of children is, however, recommended to be used as a monitoring tool for taking timely corrective actions in programme execution. For effective SBCC, based on reported experiences, selection and training of community volunteers, as mobilisers, is considered important (7, 34,47,57).

e. Roll out Food fortification guidelines:
Public and private partnership: Towards
accelerating improvement in maternal,
infant and young child nutrition situation,
there is a need to execute the recently issued
policy on standards on food fortification of
salt, wheat, rice, oil, milk. Food fortification
is a proven cost-effective strategy for
overcoming gaps in intake of micronutrients
which are public health problems. The
success story of iodised salt in India in the
last three decades sets a positive scenario for
private-public initiative for rolling out
micronutrient fortification initiatives. The

primary role was played by the salt producers with active leadership of salt commissioner's office based at Jaipur while the Nutrition and IDD Cell, located in the Directorate General of Health Services, was responsible for monitoring National Iodine Deficiency Disorders Control Programme (NIDDCP). It is important to note that this Cell is a low priority unit of DGHS in-charge of two National "Health" Programmes, i.e., NIDDCP and National Programme for Prevention and Control of Fluorosis (NPPCF) Programme. Besides these two programmes, the Cell has no responsibility for ENIs pertaining to Maternal Infant Young Child Nutrition.

f. Reaching children of high wealth index group: In India's effort to address undernutrition, it cannot be ignored that over two out of every ten children in the high-wealth group are also stunted. This is of extreme concern as these children are often not covered under the public health programmes. Lack of resources or poor access to food are not the only contributory factors of undernutrition. Inadequate or incorrect knowledge on appropriate food habits, poor infant and young child feeding practices, poor hygiene and sanitation environment are also responsible and need to be systematically tackled. This implies a much higher focus on SBCC. There is need to ensure private health providers and population in general are aware and adopt practices essential for preventing stunting and overweight. Besides the mass media, school education and 'child to community' could play lead roles.

2. Addressing Nutrition-Sensitive Issues:

a. **High priority to ODF:** The direct nutrition actions or ENIs need to be combined with the

nutrition-sensitive issues. National Health Policy 2017 "calls for synergy of inputs from departments like Women and Child Development, Education, WASH, Agriculture and Food and Civil, Supplies". The Health Policy could drive and ensure effective integration nutrition specific interventions with nutrition sensitive intervention, such as sanitation and hygiene, for optimal results." On the other hand, the politically supported campaigns for 'Open Defecation-Free India" (ODF) could be used as a platform for disseminating information on implications of poor sanitation on destroying the intestinal lining which adversely impacts nutrient absorption with resulting stunting and anaemia. Indeed, investing in improving WASH is crucial since the evidence base is now strong that faecal pathogens is an important threat to child nutritional outcomes.54

b. DAY: NRLM: A key partner in nutrition improvement: Another system, beyond health and ICDS, which could play a critical role is the National Rural Livelihood Mission (referred as DAY-NRLM). As recently proposed, NRLM could be systematically linked to ICDS and the health sector by identifying, mapping household and reaching the unreached women with ENIs. Simultaneously, village organisations (VOs) of SHGs have demonstrated how these can play a central role in catalysing demands and ensuring responses from a number of sectors in-charge of socio-economic empowerment of women, sanitation, as well as improved access to diversified food through appropriate agriculture-horticulture, dairy and poultry keeping activities. 47 The latter food production activities are a part of Mahila Kisan Sashktikaran Pariyojana (MKSP) activities of DAY: NRLM. The release of the strategy and operational guideline document by MoRD, entitled Livelihood cum Nutrition,

Health, Sanitation (LNHS) Initiative, presents the details of role of DAY: NRLM.

c. Introduction of Conditional Cash Transfer **Scheme:** The experience of other developing countries like Brazil indicate that social transfer programmes, such as conditional cash transfer (CCT), have high acceptance and is an important approach for addressing both immediate and intermediate cause of undernutrition. 55 However, CCT programmes must be targeted towards most vulnerable and disadvantaged with effective monitoring and payment system in place. Provision of subsidised cereals and other food items through PDS, using cash transfer approach, needs to be explored with the successful expansion of the universal bank registration scheme under Jan Dhan Yojana and universal identification of individuals under the Aadhaar cards scheme.

A few nutrition-sensitive actions such as those pertaining to improving sanitationwater-hygiene as well socio-economic situation of women should continue to be addressed as a high priority. Intensifying actions of the various vertical sectoral programmes is more desirable and doable than putting in effort for planning and executing a multi-sector nutrition plan.

3. Adequate Investments:

a. **Political commitment:** To achieve the global nutrition targets by 2025, it is important that adequate investments are made at least now to put effective implementation, monitoring and accountability mechanisms in place. As indicated in Figure 8, stunting rate has decreased at a rather slow rate from 63 percent in 1988-90 to 38 percent in 2015-16.

On the other hand, countries such as Thailand, Brazil, Vietnam and Bangladesh report a sharp reduction in malnutrition. Thailand, for example, has succeeded in

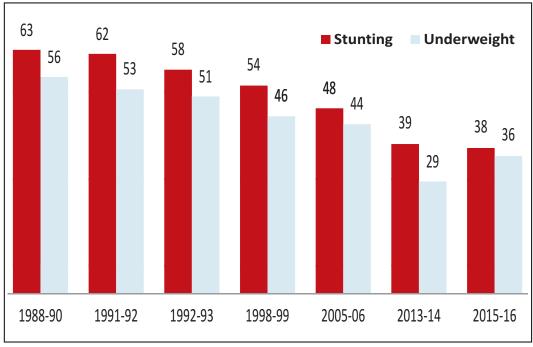


Fig. 8: Rate of stunting and underweight 1988-2016

Source: Multiple sources including NFHS and DLHS

bringing down its malnutrition rate from 50 percent in 1982 to 20 percent in 1991. Thailand's experience indicates that a strong political commitment and the positioning of nutrition as an investment for the country's future rather than as mere welfare expenditure was the key factor for remarkable achievement in reductions in undernutrition. 56,57 Between 1974-2007, Brazil effectively reduced prevalence of stunting from 37.1 percent to 7.1 percent. Success was attributed to increased maternal schooling, improved purchasing power, provision of healthcare, and better sanitation. Meanwhile, the decline in undernutrition in Vietnam—from 51.5 percent in 1985 to 24.6 percent in 2006—has been attributed not only to economic reforms but investment in well-structured child health and family planning programmes that emphasised increased investments in nutrition activities. Since 2006, its child malnutrition control programme, redesigned and implemented as an integrated maternal-child health nutrition program with nutrition targets, is being monitored by the National Institute of Nutrition established by Vietnam Government in mid-2000. The significance of commitment of the leadership at the highest level for reducing undernutrition, coupled with substantial investments to keep nutrition high on the development agenda, played a crucial role. 57,58

b. Financial investment for ENIs and mission approach: Recent analysis by POSHAN indicates that in India, the cost for achievement of ENIs is INR 9336 per year per child 0-24 months of age and it will require an annual investment of INR 43,000 crores for meeting the goal of universal coverage. ⁵⁹ Scaling up ENI coverage requires strong

planned advocacy with politicians and policymakers for generating political will, allocating adequate resources for appropriate financial and human resource management for operationalisation of effective evidence based strategies, including capacity building for program delivery. Mission approach adopted by a few states is an effort for focused accelerated effort for reducing undernutrition but is often aided by development partners and remains ICDS dependent. The advantages of such a mechanism and modifications that would add value need to be systematically studied prior to proposing Mission approach in other states. It may be more cost-effective, as stated earlier, to administratively redesign ICDS and shift the primary responsibility from MWCD to MoHFW administration. A mechanism needs to be set up for timely sharing of experiences by states and development agencies to facilitate in overcoming constraints and moving towards success.

c. Human Resource and Nutrition Institutes:

Urgent, concerted and focused attention is called for to ensure that India effectively moves towards attainment of WHA targets. For a sustained technical and effective program input, there is a need for a strong cadre of public health nutritionists with expertise in programme designing and implementation as well as skills for monitoring, guiding operation research, undertaking documentation of program process and impact. A Department for Nutrition could be established within the Ministry of Health and Family Welfare which could have a senior nutrition officer (Commissioner level) in position who is formally trained as a public health nutritionist. To date, unfortunately, there is no such position and no such person with such expertise in any Ministry, including the

MWCD. Building state level cadre of public health nutritionists with skills to adopt innovations, delivery and scaling up interventions is also lacking. The existing gap in experts of public health nutrition at central and state level also indicates the urgent need to establish a National Institute of Public Health Nutrition as well as strengthening the public health nutrition curriculum and field training in the home science colleges located in various states where there is inadequate emphasis on program management skills. Such institutes of nutrition established in Thailand, Vietnam and Bangladesh are spearheading formulation of nutritional policies as well as their effective implementation, including monitoring. Establishing such centres of excellence for public health nutrition is crucial in India to guide policy and programme, as well as support monitoring and nutrition surveillance. This needs to be urgently explored.57

d. Positioning Nutritional status of children as indicator of national development: The

three-year (2017-2020) action agenda of Niti Aayog states: "Over the course of next three years healthcare system in the country must prioritise public health and shift from being curative to preventive."60 In this context, integrating district health implementation plan with nutrition operation plans is crucial for effective preventive measure and making a rapid difference in the health of women and children. Keeping in mind the WHA targets, SMART (specific, measurable, achievable, relevant and time bound) nutrition objectives should be spelt out for state level and also reflected in the district plans. Use of district level information on various indicators reported by the recent National Health and Family Survey - 4 of 2015-16 could form the basis of such planning. Besides IMR, U5MR and MMR, using stunting rate as an indicator of development of a district, state and nation is crucial. It is time to change the narrative of India's nutrition strategy and give a greater thrust with a redesigned programme spearheaded by the MoHFW. ORF

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