# Freedom from Hunger for Children Under Six

*An Outline for Save the Children and Civil Society Involvement in Childhood Undernutrition in India*

Save the Children

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Save the Children

4th Floor, Farm Bhavan, Nehru Place
New Delhi 110019

**Save the Children**

Save the Children is the world's leading, independent organisation for children that works in over 120 countries around the world. Save the Children India, member of the International Save the Children Alliance, is working on four core issues including Child protection, Child Survival, education and disaster risk reduction in 12 states and union territories and has reached over 3 million children across India.

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# PREFACE

India's burgeoning economy has not been kind to the majority of it's children. The disparities between rich and poor are acutely observed in the shocking hunger and malnutrition rates for large numbers of India's children. Even after decades of efforts and government good intentions, child malnutrition rates in several parts of India are worse than in many sub-Saharan African countries, and they stand out as a paradox in the country.

Of India's one billion plus population 158 million are between 0-6 years. The infant mortality rate in India is 57/1000 live births. The neonatal mortality rate is 39/1000 live births. The stark reality is that almost one in every three babies in the world who die before they are four weeks old is from India.

Over half of all women in India are anaemic as are 70% of children under the age of five. 22% of all children whose birth weight record is available are low birth weight babies[1], which is a significant contributing factor to malnutrition later in life. The issue of underweight children is particularly serious in rural areas and among poorer families, ethnic minorities, lower castes and other socially marginalized groups.

India's public expenditure on health remains abysmally low and in some places financing for child nutrition programs remains unspent. In effect, well-meaning programs have fundamentally failed to deliver.

Save the Children concurs that providing adequate nutrition to pregnant women and children under 2 years old is crucial; however, this practice alone has not been effective nor has it succeeded in sufficiently changing child feeding and hygiene practices. Many women here remain in ill health and are ill fed; they are prone to giving birth to low-weight babies and tend to be unaware of how to best feed their children. Even when aware, inability to buy appropriate food hampers providing adequate nutrition.

Save the Children argues that the problem of malnutrition and infant and maternal mortality can be solved if it is addressed at the grassroots level in villages and districts. To make this a reality, however, there must be greater collaboration, consultation and joint action planning among key stakeholders; namely, the Ministries of Health and Ministry of Women and Child Development working together with the community.

This report reinforces the urgency of the situation for millions of children in India, and the urgency of tackling hunger and malnutrition on an emergency footing if we are to meet our promises to the world and India's children.

**Shireen Vakil Miller**
Director Advocacy and Policy

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The report is informed by the recent work done in this field by the Right to Food Campaign and the Commissioners to the Supreme Court of India. The report draws upon their reports and papers, the special issue of the *Economic and Political Weekly* (August-September 2006) and the recent *Lancet* series on child development (January 2007) and malnutrition (January 2008). It has also used material from the official websites of the Ministry of Health and Family Welfare, NFHS-3, Ministry of Women and Child Development and the Planning Commission of India and other sites.

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# ACRONYMS

AAY ..... Antyodaya Anna Yojana
AIE ..... Alternate and Innovative Education
ARWSP ..... Accelerated Rural Water Supply Programme
ANC ..... Antenatal Care
ANM ..... Auxiliary Nurse-Midwife
ASHA ..... Accredited Social Health Activist
AWC ..... Anganwadi Centre
AWH ..... Anganwadi Helper
AWW ..... Anganwadi Worker
BLCC ..... Block Level Coordination Committee
BSUP ..... Basic Services for Urban Poor
BPL ..... Below Poverty Line
CHC ..... Community Health Centre
CPMU ..... Central Project Management Unit
CBO ..... Community-based Organisation
CRSP ..... Central Rural Sanitation Programme
CIRCUS ..... Citizen's Initiative for the Rights of Children Under Six
CDPO ..... Child Development Project Officer
CMHO ..... Chief Medical Health Officer
DRDA ..... District Rural Development Agency
DPO ..... District Programme Officer
DWCD ..... Department of Women and Child Development
EAG ..... Empowered Action Group
EGS ..... Education Guarantee Scheme
ECE ..... CCCC
ERU ..... Educational Resource Unit
ECCE ..... Early Childhood Care & Education
FPS ..... Fair Price Shops
FRU ..... First Referral Unit
GDP ..... Gross Domestic Product
GoI ..... Government of India
HPS ..... High Performing States
ICDS ..... Integrated Child Development Services
IEC ..... Information Education & Communication
INGO ..... International Non-Governmental Organisation
IFA ..... Iron and Folic Acid
IYCF ..... Infant & Young Child Feeding
IPHS ..... Indian Public Health Standards
ICD ..... Integrated Child Development
IMNCI ..... Integrated Management of Neonatal and Childhood Illness
JSY ..... Janani Suraksha Yojana
LHW ..... Lady Health Worker
LS ..... Lady Superintendent
LPS ..... Low Performing States
LRP ..... Local Resource Person
MDM ..... Mid-day Meal Scheme
MHRD ..... Ministry of Human Resource Development
MMR ..... Maternal Mortality Rate
MO ..... Medical Officer
MOHFW ..... Ministry of Health and Family Welfare

MTC ..... Malnutrition Treatment Centre
MWCD ..... Ministry of Women & Child Development
NFHS ..... National Family Health Survey
NGO ..... Non-Government Organisation
NHD ..... Nutrition & Health Day
NHE ..... Nutrition & Health Education
NIPCCD ..... National Institute of Public Cooperation & Child Development
NREGA ..... National Rural Employment Guarantee Act
NRHM ..... National Rural Health Mission
NSSO ..... National Sample Survey Organisation
NSS ..... National Sample Survey
NNP ..... National Nutrition Policy
NMBS ..... National Maternity Benefit Scheme
NOAPS ..... National Old Age Pension Scheme
NDWM ..... National Drinking Water Mission
NFBS ..... National Family Benefit Scheme
NP-NSPE ..... National Programme of Nutritional Support to Primary Education
NCHS ..... National Centre for Health Statistics
NACP ..... National AIDS Control Programme
NACO ..... National AIDS Control Organisation
OBC ..... Other Backward Classes
ORT ..... Oral Rehydration Therapy
ORS ..... Oral Rehydration Salts
O&M ..... Operation and Maintenance
PDS ..... Public Distribution System
PHC ..... Primary Health Centre
PRI ..... Panchayati Raj Institutions
PEM ..... Protein Energy Malnutrition
RCH ..... Reproductive and child health programme
RTE ..... Ready-to-Eat
RACHNA ..... The Reproductive and Child Health, Nutrition and HIV/AIDS Programme
RSVY ..... Rashtriya Sam Vikas Yojana
RTI ..... Reproductive Tract Infections
SC ..... Supreme Court
SC/ST ..... Scheduled Castes / Scheduled Tribes
SPOA ..... Special Plan of Action
SCF ..... Save the Child Fund
SGRY ..... Sampoorna Grameen Rozgar Yojana
STI ..... Sexually Transmitted Infections
SC BR ..... Save the Children Bal Raksha Bharat
SHG ..... Self-Help Group
SMC ..... School Management Committee
SNP ..... Supplementary Nutrition Program
SSA ..... Sarva Shiksha Abhiyan (Education for All Campaign)
TSC ..... Total Sanitation Campaign
THR ..... Take Home Rations
UWEP ..... Urban Wage Employment Programme
UT ..... Union Territory
VEC ..... CCC
VWSC ..... Village Water and Sanitation Committees
VCD ..... Village Contact Drives
WCD ..... Women and Child Development
WFP ..... World Food Programme

# EXECUTIVE SUMMARY

## Background:

Eminent nutritionists and child development specialists are unanimous in the need for tackling under-nutrition on a war footing. There is almost complete agreement across different stakeholders that while income-poverty rates have declined there is compelling evidence to show that the nutritional status of people, especially women and children, is a major cause of concern. India is home to 40 percent of the world's malnourished children and 35 percent of the developing world's low-birth weight infants; every year, 2 million children die in India, accounting for one in five child deaths in the world. More than half of these deaths could be prevented if children were well nourished. According to the Global Hunger Index (GHI) developed by IFPRI, which captures three dimensions of hunger viz: insufficient food availability, child malnutrition, and child mortality - India ranks 96th, far behind Brazil (28), China (47), Thailand (58), and Vietnam (75), and barely ahead of Bangladesh (102). Nearly two-thirds of India's alarmingly high GHI score is attributable to India's high child malnutrition rate. It is shocking that in child malnutrition India ranks 117th of the 119 countries ranked, right before Bangladesh and Nepal and after countries such as Sudan, Cambodia, and Ethiopia (IFPRI 2008). The findings of the National Family Health Survey-3 (NFHS-3) have highlighted the urgent need to turn the spotlight on maternal and child under-nutrition.

Sadly, the Integrated Child Development Services (ICDS) programme which was intended to tackle this problem has not been able to make a dent; there is strong evidence that the programme has not led to any substantial improvement in the nutritional status of children under six. India's prevalent rate of under-nutrition in this age group continues to remain one of the highest in the world. It is in this context that the organisations committed to child rights and development have to bring this issue centre-stage in their ongoing development work in India.

This report attempts to capture the situation as it prevails on the ground today, especially with respect to child health and nutrition, maternal health and the existing interventions to address these. It attempts to understand and appreciate the interconnectedness of maternal and child health and also the inter-linkages between health, nutrition, sanitation and livelihood security and explores alternative approaches and makes specific recommendations.

## Health & Nutritional Status of Children:

India is among the countries where childhood malnutrition/under-nutrition is severe - it continues to feature in the list of 20 countries with the highest burden of under-nutrition. According to recent Maternal Mortality Rates (MMR) data on 20 countries with the highest burden of under-nutrition, the situation in India is also not very encouraging – estimates of MMR in deaths per 100,000 live berths range from 300 to 600, with a median rate of 450.

Under-nutrition continues to be a major public health problem in India, the most vulnerable groups being women in the reproductive age group and young children. NFHS fact sheets reveal the following trends:

- In 1992-93, the prevalence of underweight children (weight-for-age) below three years was 52 per cent. There was limited progress in improving the prevalence of child malnutrition of less than one percentage point per year between 1992-93 and 1998-99 (NFHS-2: 47 per cent). According to NFHS-3, in 2005-06, 45.9 per cent of the children below three years were underweight i.e., there was only 0.2 percentage point progress per year since 1998-99.

- Disaggregating underweight statistics (NFHS-3) by socio-economic and demographic groups reveals that weight-for-age underweight prevalence is higher in rural areas (45.6 per cent) than in urban areas (32.7 per cent); higher among girls (43.1 per cent) than among boys (41.9 per cent); higher among Scheduled Castes (47.9 per cent) and Scheduled Tribes (54.5 per cent) than among other castes (33.7 per cent).

- There are wide variations when it comes to the nutritional status of children across India. A huge gap exists between the worst states and the best states. There is also a large inter-state variation in patterns and trends in underweight. Bihar, Madhya Pradesh, Uttar Pradesh and Rajasthan account for more than 43 per cent of all underweight children in India. The percentage of underweight children is the highest in Madhya Pradesh (60%), Bihar (56%), Jharkhand (57%), Chhattisgarh (47%), Uttar Pradesh (43%), Orissa (41%), West Bengal (39%), Gujarat (45%) and Maharashtra (37%).

- Nearly 23 per cent of all children born in the country have low birth weight.

- The proportion of children (6-35 months) who are anaemic increased from 74.2 per cent to 79.2 per cent and that of pregnant women from 49.7 per cent to 57.9 per cent between 1998-99 and 2005-06.

- Bihar, Chhattisgarh, Sikkim and West Bengal witnessed substantial increase in children's vaccinations, while the coverage actually worsened in Andhra Pradesh, Gujarat, Maharashtra, Punjab and Tamil Nadu.

- Poverty levels alone do not explain the nutritional and health status of children. Educational levels of the population, especially women make a big difference. Where educational levels are not very low, the mother's ability to assert herself and take decisions based on the knowledge she may have acquired through education is influenced by the general status of women in society.

It has long been accepted that there is a close relationship between maternal and child health. Weak, undernourished and anaemic women give birth to low birth-weight babies. It is these women who have to work long hours and are often deprived of nutritious food. Given prevailing gender relations in society, especially in northern, western, and central India, young mothers have little decision-making powers and are not able to take decisions about the health and nutrition of their children. Typically, it is the poor women who are also the ones who are denied education, and this in turn perpetuates the vicious cycle.

Recent GoI initiated surveys (NFHS-3 and NSSO – 58$^{th}$, 60$^{th}$ and 61$^{st}$ Rounds) drew the attention of the Government to the grim nutritional situation of children. The significant message that emerged

was that as per 2004-05 NSSO statistics, 27.5% of the people still live below the poverty line. The states with the highest levels of poverty are: Orissa (46.4%) Bihar (41.4%), Chhattisgarh (41%), Jharkhand (40.3%), Uttrakhand (40%) and Madhya Pradesh (38.3%). Under-nutrition level is serious in rural areas, in lower wealth quartiles, among SCs and STs and among families with no educated adult. The percentage of undernourished is far higher than the income poverty rates. Therefore, there is an urgent need to reach out to not only those living in abject poverty but also families that are on the borderline.

In view of the worrying finding that only about half the children in the age group of 6-9 months receives semi-solid foods, there is a need to urgently address infant and young child feeding practices. Only 33 per cent of age-eligible children received any service from ICDS, 26 per cent received supplementary food, 20 per cent received immunisation and growth monitoring was done for only 18 per cent children. It is therefore necessary to ensure that more children are covered under existing government schemes.

National and international evidence points to the urgent need to focus on the nutritional and overall developmental needs of infants. The golden interval for intervention is believed to be from pregnancy to 2 years of age, after which, undernutrition will have caused irreversible damage for future development towards adulthood. Poor foetal growth or stunting in the 1st two years of life leads to irreversible damage and inadequate cognitive or social stimulation in the first two to three years has lifelong negative consequences on educational performance and psychosocial functioning. However, there is no magic technological bullet to solve the problem of undernutrition. Long-term investments in improving the status of women to realise their potential through education, economic, social, and political empower-ment will be the only way to deliver sustainable improvements in maternal and child nutrition, and more generally in the health of women and children.

## Frameworks for Analysis & Action:

For over three decades now it has been argued that five inter-connected factors determine the nutritional status of children: **Health and nutritional status of the mother during pregnancy, infant care and feeding, prevention of communicable diseases, timely and rational management of childhood illnesses, and persistent poverty, seasonal food shortages and hunger and workload of the mother.** It is also recognised that improving the nutritional status of young children requires a multi-pronged approach of simultaneously addressing livelihood and food security and changing infant and child feeding practices. However, given the nature of India's administrative system, programmes for women and children's health and nutrition are delivered through different channels leading to the existence of parallel programmes that do not always converge on the ground. While interconnectedness is appreciated and also understood at the policy level, ground level synergy has remained a difficult area.

There are several complementary conceptual frameworks that are used to unpack and understand the situation. The first, UNICEF conceptual framework essentially calls for action at all three levels—at the household level involving women and children by improving childcare and feeding practices, at the community level for improving the environment in which children live and also access timely healthcare services and finally it also makes a case for enhancing access to supplementary food for children in diverse poverty situations. UNICEF views malnutrition and child death as two of the manifestations of a multi-sectoral development problem that can be analysed in terms of immediate, underlying and basic causes. Another important (complementary) approach developed by Prema Ramachandran who argues that poverty exacerbates malnutrition. Income poverty leads to women being engaged in hard physical labour, living in unsanitary conditions

leading to frequent bouts of infections, low income resulting in low food intake and the well known cycle of frequent pregnancies and large families. Ramachandran cautions that while it is important to understand the impact of income poverty and the workload of women from poverty households, increased incomes would not automatically lead to better nutrition. The World Bank also developed a comprehensive framework in 2003 to look at the continuum of child development. This framework explores what needs to be done at every stage of a child's life and complements the preceding frameworks because the deficiency faced and resultant outcome at an early stage in the life of an infant is carried forward to the next stage thus compounding the impact.

Several key informants interviewed by the authors of this report were unanimous about the need to arrive at a shared understanding of the situation on the ground, the factors that can make a difference and the fact that strategies needed to change. Strategies that are pushed from above often do not find resonance on the ground. Talking the same language and sharing a common understanding is the first way forward.

## Programmes, Policies and Practices:

The report briefly reviews child malnutrition related policies and programmes, practices, and strategies, both Governmental and non-Governmental. These include:

- The National Nutrition Policy, 1993
- Nutrition related schemes: The Integrated Child Development Services (ICDS) scheme and the mid-day meal scheme (MDM) in primary schools;
- Food security programmes: Public Distribution Scheme (PDS), Antyodaya, Annapurna Yojana;
- Livelihood related programmes: The National Rural Employment Guarantee Act (NREGA), the Sampoorna Grameen Rozgar Yojana (SGRY), National Food for Work Programme and the Rashtriya Sam Vikas Yojana (RSVY);
- Health and social security programmes: The National Maternity Benefit Scheme (NMBS), National Old Age Pension Scheme (NOAPS), National Family Benefit Scheme (NFBS); and
- Drinking water and sanitation related schemes: Accelerated Rural Water Supply Programme (ARWSP), Swajaldhara and the Central Rural Sanitation Programme (CRSP).
- Two interesting practices in Rajasthan; the Reproductive and Child Health, Nutrition and HIV/AIDS Programme (RACHNA), a five-year programme of CARE India & USAID; & Dular, a promising practice in Bihar; & Rajasthan Government's *Anchal se Angan Tak* strategy as a community-based care model in seven districts.

## Recommendations & the Way Forward:

The fundamental issue that emerges is that the programmes that were designed to address hunger, malnutrition, abject poverty and a host of other survival issues have not been able to deliver. While there is recognition of the need for a multi-pronged approach, departmental turfs have been impossible to overcome. High levels of systemic inefficiency to deliver and monitor further compound this problem. Recurrent instances of large-scale corruption, lack of accountability of local level workers and leakages make the situation impossible. There are some notable exception – for example in Tamil Nadu child nutrition has remained a political priority for over 30 years.

India is a land of tremendous diversity one strategy or one programme template cannot work across the country. Given different social and economic situations, the different environmental

and ecological terrain and given different political and administrative cultures what India really needs is local level and very context-specific planning. Therefore, while the problem of malnutrition is indeed countrywide, the solution has to be specific.

1 **One**, Identify SC India focus states for intensive inputs using a mix of indicators like percentage of people living below the poverty line; states with high levels of child malnutrition (Grades I, II, III and IV malnourished); and states where there are NGO partners who have the capacity to take on nutrition programmes.

2 **Two**, develop a Shared Understanding: initiate a region-by-region visioning exercise to come to a shared understanding of the enormity of the problem, the most vulnerable areas / socio-economic groups and what is it that SC India can do along with its NGO partners. It is important to go through with this as the first step in order to make sure that all the key stakeholders in a given area / region are on the same wavelength.

3 **Three**, support NGO partners to do an assessment of ICDS and NRHM to Identify Critical Gaps and Opportunities. NGO-led social audits are an effective mechanism for information gathering as well as educating people and local leaders about the state of child health and nutrition.

4 **Four**, start local and move upwards as it is important to identify local partners, be it the administration (District Collector, CDPO, CMHO or even a block level supervisor) or local leaders and groups, including the Panchayat. When a group of local people, including key service providers, their supervisors and officials see the situation on the ground for themselves, they may be more willing to act.

5 **Five**, explore and educate on myths about malnutrition. Malnutrition happens because of a range of factors and food availability is just one of the various reasons why children slip into malnourishment. Bringing about behavioural change is a painstaking process. Given the diversity prevalent at all levels, it is important to engage with people, understand their constraints, mind-sets and habits.

6 **Six**, enable people to demand their entitlement by taking support from legal instruments like Right to Information.

7 **Seven**, encourage civil society leaders and local Panchayats to turn ICDS and other child health programme upside down, bending / adapting the exiting programmes and thinking afresh on how best we can reach out to the most vulnerable – planning specifically for different sub-groups of children looking at the specific needs of home-based care and outreach services up to 3 years and a centre-based approach for the 3+ group. It may be worthwhile to explore if SC India partners could focus on a dedicated home-based programme to promote health and nutrition of children in the 0-3 years age group. This is absolutely essential if we are serious about reaching out to this very important segment of our population. Poor health, malnutrition and frequent bouts of illnesses at this stage have an irreversible impact on the overall health and well-being of children.

There are no short-cuts. SC India needs to engage with NGO partners to bring about sustained practice change on the ground – through intensive and targeted education and awareness, enabling people to become more vigilant about government programmes to improve the overall health and nutrition situation of children and enabling the most deprived to come forward with greater confidence and information.

## *Section I:*

# INTRODUCTION

India is a country of contrasts. On the one hand it is among the fastest growing economies of the world with substantial growth reported in the industrial and service sectors in the last decade. In spite of the current global economic slow down, the growth of the Indian economy in 2008-09 is projected at 6%-6.5%, which would be impressive by global standards as the economies of the developed countries are shrinking (Narasimhan CRL 2009) . At the same time slowdown in agricultural growth continues. The *Economic Survey 2007-08* (Ministry of Finance, Government of India), has summarised the situation as:

- The growth of Gross Domestic Product (GDP) at market prices accelerated from 3.8 per cent in 2002-03 to 9.7 per cent in 2006-07, giving an annual growth of 7.9 per cent for the Tenth Five Year Plan;
- Per capita income growth rate was up from 2.2 per cent in 2002-03 to 7.2 per cent in 2007-08;
- Per capita consumption growth rate was up from 1.1 per cent in 2002-03 to 5.3 per cent in 2007-08;
- Manufacturing, construction and communications were the leading sectors in the acceleration of growth during the Tenth Five Year Plan, judged by their increased contribution to growth; but
- The secular decline in the share of agriculture in GDP continued, with a decline from 24 per cent in 2001-02 to 17.5 per cent in 2007-08.

The National Sample Survey Organisation's (NSSO's) 61st Round large-scale quinquennial survey on employment and unemployment conducted during 2004-05 shows how the annual growth rate of employment, which had declined from 2.1 per cent during 1983-1994 to 1.6 per cent during 1993-2000, went up to 2.5 per cent during 1999-2005. Employment, with the demographic dynamics and higher labour force participation grew faster than before. The rate of unemployment (as measured by the 'usual principal' status) also went up marginally from 2.8 per cent to 3.1 per cent during 1999-2000 to 2004-05. While a detailed analysis of the results of the survey is yet to be carried out, the slowing down of the growth in agriculture could be one of the main reasons for the growth in the unemployment rate. Further, the worrisome marginal decline in employment in the organised sector between 1994 and 2004, according to the Annual Survey of Industry data, has raised some disturbing issues about optimal regulations and incentives.

It is indeed noteworthy that the Government of India (GoI) recognises that the 'inclusive nature of the growth itself will be conditioned by the progress that is made in the areas of education, health and physical infrastructure... The goal of inclusive growth can be achieved only through effective government intervention in the areas of education, health and support to the needy. Value for every tax rupee spent has to be ensured by emphasizing the outcomes and avoiding any wastage

or leakages in the delivery mechanism of public goods and services. Appropriate design of programmes and placing effective monitors over the programmes are critical in this regard' (*Economic Survey 2006-07*, Ministry of Finance).

In November 2007, a 'Coalition for Sustainable Nutrition Security in India' met under the chairmanship of Prof. M S Swaminathan. While summing up the proceedings, Prof Swaminathan highlighted the need to 'take on the silent emergency of malnutrition from a "war footing" and involve all political parties, academia, corporate sector, international partners, and civil society, including community and self-help groups. The Coalition should consider nutrition in a comprehensive manner, considering dietary diversification, supplementation, food fortification, horticultural interventions and public health measures. It should advocate for nutrition as a national priority and seek to integrate nutrition into in all existing government programs and missions'.

Eminent nutritionists and child development specialists are unanimous in the need for tackling under-nutrition on a war footing. There is almost complete agreement across different stakeholders that while income-poverty rates have declined there is compelling evidence to show that the nutritional status of people, especially women and children, has remained a major cause of concern. Data on time trends in poverty ratio and energy consumption computed from NSSO consumer expenditure surveys, since its reorganisation in 1970, reveal that *decline in poverty is not associated with an increase in the energy intake*. Over this time period, food grains were readily available, were accessible to all and the prices were quite low, especially for below poverty line (BPL) families. Even so 'consumption poverty' continued to be a high with wide state-wise variations. During interviews in March 2008, experts Prema Ramachandran, Shanti Ghosh and N C Saxena argued that the decline in energy intake is not due only to problems of access or affordability of food. Equally, a review of recent evidence-based research studies clearly brings out the critical importance of the first two years in the life of children as the health and nutritional status in these formative years have a long lasting impact on their physical and intellectual (cognitive) development. In a series of five papers on maternal and child undernutrition published by The Lancet in early 2008, various researchers have, inter alia, concluded that the short-term consequences of under-nutrition include mortality, morbidity and disability, while the long-term consequences include adult size, intellectual ability, economic productivity, reproductive performance, metabolic and cardio-vascular diseases.

The findings of the National Family Health Survey-3 (NFHS-3) highlighted the urgent need to turn the spotlight on maternal and child under-nutrition which prompted the Prime Minister of India to draw the attention of Chief Ministers to the alarming situation and how the Integrated Child Development Services (ICDS) programme that was intended to tackle the problem had not been able to make a dent. In April 2007 the Prime Minister wrote: 'A number of reports and surveys, including the National Family Health Survey (NFHS-3) …seem to indicate a noticeable decline in the qualitative aspects of the (ICDS) programme. There is strong evidence that the programme has not led to any substantial improvement in the nutritional status of children under six. Our prevalent rate of under-nutrition in this age group remains one of the highest in the world' (Ministry of Health and Family Welfare).

The fundamental problem that India is confronted with is the persistence of high levels of child malnutrition, as measured using three indicators: underweight, reflecting in low weight for age; stunting, a chronic restriction of growth in height indicated by low height-for-age; and wasting, an acute weight loss indicated by low weight-for-height and less visible micronutrient deficiencies. Further, the problem of under-nutrition is exacerbated by poverty, non-availability of healthcare services and unhygienic living conditions that enhance the risk of frequent infections/illnesses, lack of access to safe drinking water and poor sanitation. Equally, these very social development factors also become important determinants of persistent under-nutrition among children. There is today

compelling evidence to show the interconnectedness between poverty, living conditions, food and income security, access to water and sanitation and education (of children and mothers). It is in this context that the organisations committed to child rights and development have to bring this issue centre-stage in their ongoing development work in India. The complex web is summarised in Table 1.1.

**Table 1.1: Interconnectedness of nutrition, health, education and development**

| Under-nutrition and malnutrition | Social and educational consequences |
|---|---|
| Under-nutrition (protein energy and malnutrition) | - Impairs mental development/cognitive development.<br>- On recovery, children remain impaired<br>- Motor development affected<br>- Poor emotional development possible<br>- Frequent bouts of illnesses make it worse<br>- Infants-affects psychomotor development |
| Iron deficiency and anaemia | - Older children-weak, listless, get tired, irritable, cannot concentrate and susceptible to illnesses/infections<br>- Gender differences in access to food and medical care<br>- Adolescent girls attaining menarche may not have access to iron and folic acid |
| Iodine deficiency | - Iodine essential for brain development-mental development affected by deficiency<br>- Hypothyroidism in the mother can lead to mental retardation in children |
| Worm infections | - May lead to weakness/aggravate malnutrition<br>- Hookworms can lead to anaemia |
| Infectious diseases, tuberculosis, malaria, meningitis, scabies, gastrointestinal infections/ diarrhoeal diseases | - Weakness, frequent spells of illnesses<br>- Cognitive impairment<br>- Skin eruptions/oozing soars leading to segregation/alienation from other children in school<br>- Long-term behavioural problems (especially with scabies and skin infections) |
| HIV/AIDS infection in children/risk of infection | - Children withdrawn due to stigma, care of the ill<br>- Children orphaned and have to take on survival tasks<br>- Children with AIDS are most likely to have lost one or both parents<br>- Increased rates of depression and feeling of helplessness<br>- Social stigma-no support structure |
| Violence and child abuse | - Early exposure to violence impacts on the architecture of the maturing brain<br>- Social, emotional and cognitive impairment including substance abuse, early sexual activity, anxiety, depressive disorders, aggressive behaviour<br>- Eating and sleeping disorders<br>- Feeling of shame and guilt-could also lead to suicide attempts |
| Corporal punishment, bullying and gender-based violence in schools | - Child withdraws in school, does not participate<br>- Negatively impacts self-esteem and leads to feelings of shame and guilt<br>- Lead to dropping out |

Source: Adapted from Vimala Ramachandran (forthcoming, 2008).

This report attempts to capture the situation as it prevails on the ground today, especially with respect to child health and nutrition, maternal health and the existing interventions to address these. This report tries to understand and appreciate the interconnectedness of maternal and child health and also the inter-linkages between health, nutrition, sanitation and livelihood security. The report also explores alternative approaches and makes specific recommendations for the consideration of SC in India.

## *Section II:*

# HEALTH & NUTRITIONAL STATUS OF CHILDREN

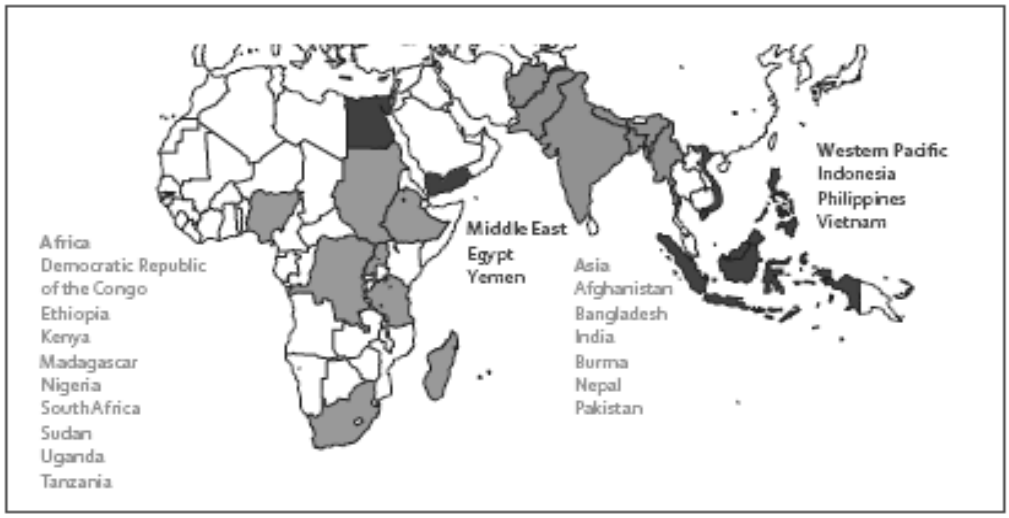
India is home to 40 percent of the world's malnourished children and 35 percent of the developing world's low-birth weight infants (IFPRI 2008); every year, 2 million children die in India (UNICEF 2009), accounting for one in five child deaths in the world. More than half of these deaths could be prevented if children were well nourished. According to the Global Hunger Index (GHI) developed by IFPRI, which captures three dimensions of hunger viz: insufficient food availability, child malnutrition, and child mortality - India ranks 96th, far behind Brazil (28), China (47), Thailand (58), and Vietnam (75), and barely ahead of Bangladesh (102). Nearly two-thirds of India's alarmingly high GHI score is attributable to India's high child malnutrition rate. It is shocking that in child malnutrition India ranks 117th of the 119 countries ranked, right before Bangladesh and Nepal and after countries such as Sudan, Cambodia, and Ethiopia (IFPRI 2008).

At the outset it would be valuable to locate the Indian situation in a global context. As evident from the picture of the state of health in the world's developing countries of children less than 5 years of age (Figures 2.1 and 2.2) India is among the countries where childhood malnutrition/ under-nutrition is severe—it continues to feature in the list of 20 countries with the highest burden of under-nutrition.

**Figure 2.1: Prevalence of Stunting in Children under 5 years**


Source: Black, Robert E.; et al. *The Lancet*, 2008

**Figure 2.2: The Twenty Countries with the Highest Burden of Under-nutrition**




Source: Bryce, Jennifer; et al. *The Lancet*, 2008.

According to recent Maternal Mortality Rates (MMR) (in deaths per 100,000 live births) data on 20 countries with the highest burden of under-nutrition, the situation obtained in India is not very encouraging (Table 2.1).

**Table 2.1: MMR for 20 Countries with Highest Burden of Under-nutrition**

| Country | Reference Point of Latest Data or Estimate | Estimated MMR (with uncertainty bounds) |
|---|---|---|
| Congo | 1999 - 2005 | 740 (450-1100) |
| Ethiopia | 1999 - 2005 | 720 460-980 |
| Kenya | 1993 - 2003 | 560 340-800 |
| Madagascar | 1993 - 2003 | 510 290-740 |
| Nigeria | 2005 | 1100 440-2000 |
| South Africa | 2110 | 400 270-530 |
| Sudan | 2005 | 450 160-1000 |
| Uganda | 1992 - 2001 | 550 350-770 |
| Tanzania | 1995 - 2005 | 950 620-1300 |
| Afghanistan | 2005 | 1800 730-3200 |
| India | 2001-2003 | 450 (300-600) |
| Burma | 1999 | 380 260-510 |
| Bangladesh | 2000 | 570 (380-760) |
| Nepal | 2005 | 830 290-1900 |
| Pakistan | 2005 | 320 99-810 |
| Egypt | 2000 | 130 (84-170) |
| Yemen | 2005 | 430 150-900 |
| Indonesia | 1998-2003 | 420 240-600 |
| Philippines | 2005 | 230 60-700 |
| Vietnam | 2005 | 150 40-510 |

Source: Hill; et al. (2007)

## Evidence from National Family Health Survey-3

Under-nutrition continues to be a major public health problem in India, the most vulnerable groups being women in the reproductive age group and young children (see Map 2.1).[1] NFHS-3 fact sheets reveal the following trends (Ministry of Women and Child Development, 2007).

- In 1992-93 (NFHS-1), the prevalence of underweight children (weight-for-age) below three years was 52 per cent. There was limited progress in improving the prevalence of child malnutrition of less than one percentage point per year between 1992-93 (NFHS-1) and 1998-99 (NFHS-2: 47 per cent). According to NFHS-3, in 2005-06, 45.9 per cent of the children below three years were underweight i.e., there was only 0.2 percentage point progress per year since 1998-99.

- Disaggregating underweight statistics (NFHS-2) by socio-economic and demographic groups reveals that weight-for-age underweight prevalence is higher in rural areas (50 per cent) than in urban areas (38 per cent); higher among girls (48.9 per cent) than among boys (45.5 per cent); higher among Scheduled Castes (53.2 per cent) and Scheduled Tribes (56.2 per cent) than among other castes (44.1 per cent).

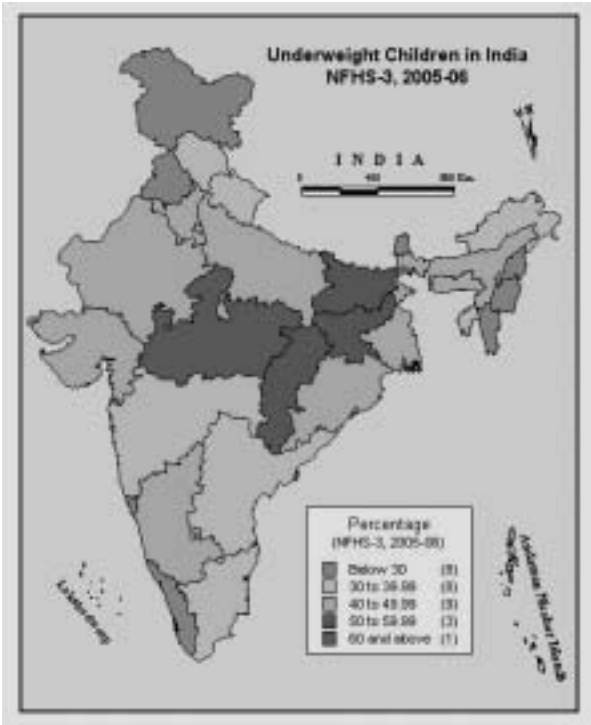
- There is also a large inter-state variation in patterns and trends in underweight. In the six states of Maharashtra, Orissa, Bihar, Madhya Pradesh, Uttar Pradesh and Rajasthan at least one in two children are still underweight. The four states of Bihar, Madhya Pradesh, Uttar Pradesh and Rajasthan account for more than 43 per cent of all underweight children in India (NFHS-2).

- Nearly 23 per cent of all children born in the country have low birth weight (NFHS-2).

- The proportion of children (6-35 months) who are anaemic increased from 74.2 per cent to 79.2 per cent and that of pregnant women from 49.7 per cent to 57.9 per cent between 1998-99 and 2005-06.

[1] Charts and maps in this section are mainly based on NFHS-3 from the MOHFW website at http://mohfw.nic.in/NFHS-3%20Nutritional%20Status%20of%20Children.ppt (accessed on 26 March 2008).

**Map 2.1: Underweight children in India**




Source: MOHFW, GOI Website

The most worrying findings, at least as far as government outreach services go, pertain to immunisation trends. Notwithstanding the high profile vaccination campaign (Pulse Polio) only 44 per cent of the children have received all vaccinations. Prevention of six childhood illnesses continues to be an uphill task and frequent bouts of illnesses further exacerbate the nutritional status of children pushing them into a downward spiral.

What is significant is that malnutrition does not affect the poorest of the poor alone; children across different social, economic and occupational groups were found to be malnourished or anaemic. NFHS-3 found that 63 per cent of urban children were anaemic, 56 per cent children in the wealthiest households were anaemic and similarly 55 per cent children of mothers who had more than 12 years of education were also anaemic.

However, notwithstanding these figures, the mother's level of education was seen to be one of the factors that make a big difference to the overall well-being of children:

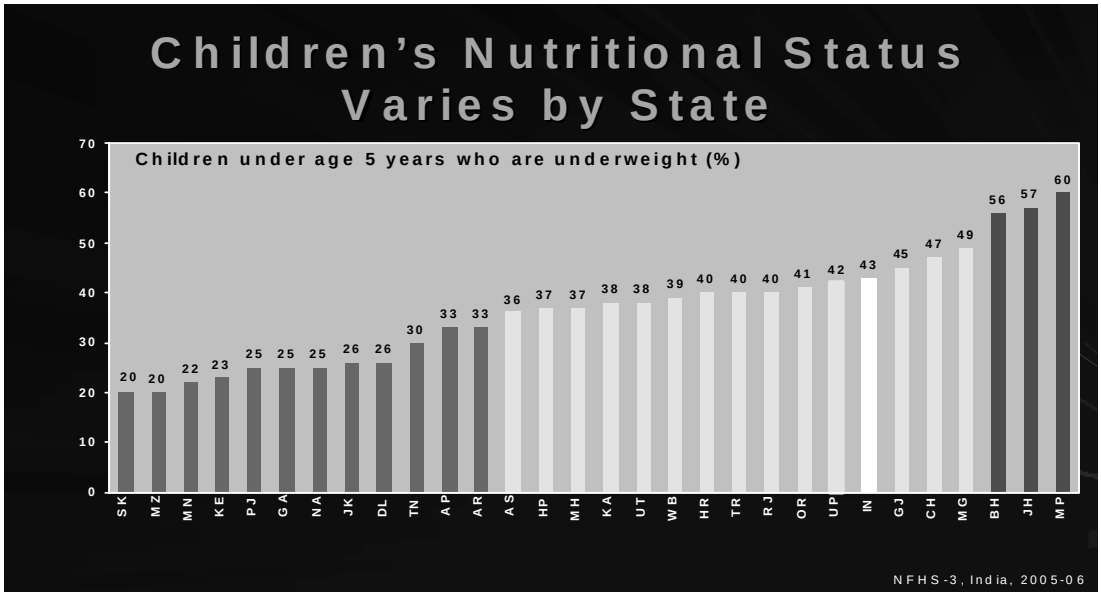
- 15.7 per cent of children of women with 12+ years of education weighed less than 2.5 kg at birth; the corresponding figure was as high as 26.2 for women with no education.

- 75.2 per cent children of educated mothers received all basic vaccinations while only 26.1 per cent children of mothers with no education received all vaccinations.

Among social groups, the situation of Scheduled Caste (SC) and Scheduled Tribe (ST) children is uniformly worse than the others in almost all child health indicators. An important learning from NSSO and NFHS data sets is that when income, residence (urban, rural, tribal area and remote area), social group, mother's education and migration status are triangulated would it be possible to identify the most vulnerable children. Such an exercise cannot be done at a national level but

could easily be done at the district and sub-district levels in order to accurately target specific programmes.

**Figure 2.3: Nutritional Status of Children in Different States in India**




NFHS-3 reiterates the findings of past surveys, i.e., NSS and NFHS-1 and 2:

- When it comes to the nutritional status of children, there are wide variations across India. There is a huge gap between the worst states and the best states (Figure 2.3).

- Vaccinations: Bihar, Chhattisgarh, Sikkim and West Bengal witnessed substantial increase while the coverage actually worsened in Andhra Pradesh, Gujarat, Maharashtra, Punjab and Tamil Nadu.

- Under-nutrition rates: States like Orissa, Bihar, Uttar Pradesh, Assam, Madhya Pradesh and Rajasthan have low per capita income and high under-nutrition rates in women and children under-three years. Delhi has high per capita income and is also low on under-nutrition rates. However, Maharashtra and Gujarat, with high per capita incomes, have high under-nutrition rates perhaps because of inter-regional differences within these states. For example, poverty and under-nutrition rates are high in Vidarbha in Maharashtra and in Saurashtra in Gujarat. Kerala, with a relatively low per capita income has a low under-nutrition rate that is comparable to Punjab where income levels are high (Prema Ramachandran, 2008).

- Madhya Pradesh, Jharkhand, Bihar and Orissa emerge as the most vulnerable states in the country.

- The big message that comes out of a careful analysis of recent data is that a lot needs to be done across the country and among different social and economic groups. Based on the special prevailing situations, prioritisation needs to be done at the district level (Interviews with Prema Ramachandran, Shanti Ghosh and N C Saxena, March 2008).

- Poverty levels alone do not explain the nutritional and health status of children. Educational levels of the population, especially women make a big difference. Where educational levels are not very low, the mother's ability to assert herself and take decisions based on the knowledge she may have acquired through education is influenced by the general status of women in society. Perhaps this is the reason why the situation in Rajasthan, Assam and Uttar Pradesh (low female education and low status of women) is as bad as that in Haryana and Punjab (where educational levels of women are not very low but their status is extremely low). Key health indicators for women and children for different states are given in Table 2.2.

**Table 2.2: Key health indicators**

| Indicator | All India Average | Best State | Worst State |
|---|---|---|---|
| Per capita net national product in 2004 (Rs. per person at 1993-94 prices) | 11799 | 16679 | 3557 |
| Consumption poverty in 2004 (Head Count Ratio %) | 27.8 | 5.2 | 46.5 |
| Infant mortality rate (2006) per 1000 live births | 57 | 15 (Goa & Kerala) | 74 (MP) |
| Under-five mortality (2005) | 74.3 | 16.3 (Kerala) | 90.6 (Orissa) |
| Neonatal mortality rate per 1,000 live births (2005) | 39.9 | 8.8 (Goa) | 51.1 (Chhattisgarh) |
| Children given all basic vaccinations (BCG, measles, three doses each of DPT and Polio vaccine (2005) | 43.5 | 80.9 (Tamil Nadu) | 21.0 (Nagaland) |
| Children given no vaccinations (2005) | 5.1 | 0.0 (Tamil Nadu) | 24.1 (Arunachal Pradesh) |
| Children given 3 + 1 Polio vaccination (2005) | 78.2 | 87.8 (Tamil Nadu) | 46.2 (Nagaland) |
| Maternal Mortality Rate* (2003) per 100,000 deliveries | 407 | 28 | 670 |

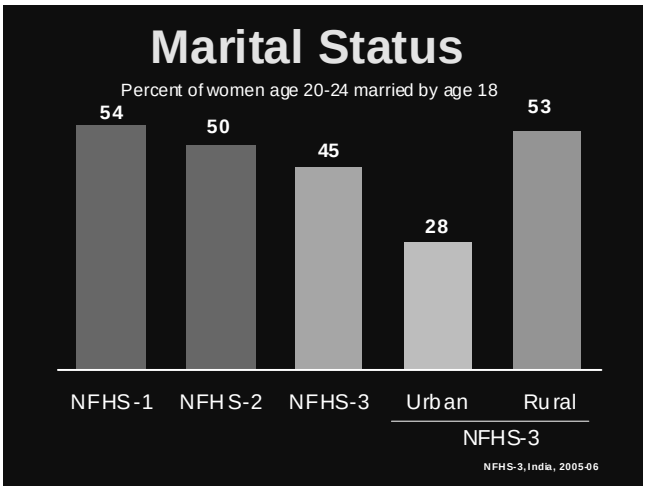
Source: Approach Paper to the XI Five Year Plan**, Planning Commission, GoI** and National Report of NFHS-3, IIPS 2007, SRS Vol. 42 No 1 – Oct 2007

Note: * Periodically, UNICEF, WHO and UNFPA evaluate these data and make adjustments to account for the well-documented problems of under-reporting and misclassification of maternal deaths and to develop estimates for countries with no data. On its website, UNICEF reports an 'adjusted' MMR in 2005 as 450, to reflect the most recent of these reviews (http://www.unicef.org/emailarticle/infobycountry/india_statistics.rhtml; accessed on 25 March 2008)

## Maternal Health

It has long been accepted that there is a close relationship between maternal and child health. Weak, undernourished and anaemic women give birth to low birth-weight babies. It is these women who have to work long hours and are often deprived of nutritious food. Given prevailing gender relations in society, especially in northern, western and central India, young mothers have little decision making powers and are not able to take decisions about the health and nutrition of their children. Typically, it is the poor women who are also the ones who are denied education, and this in turn perpetuates the vicious cycle. They are the ones who marry early and have their first few children before the age of 20. The proportion of women who were married before they were 18 (among the surveyed in the three NFHS) reveals that even in 2005, 53 per cent of the women in rural areas were married before they were 18 years old. This is the first step in the slippery slope of malnutrition among children (Figure 2.4).

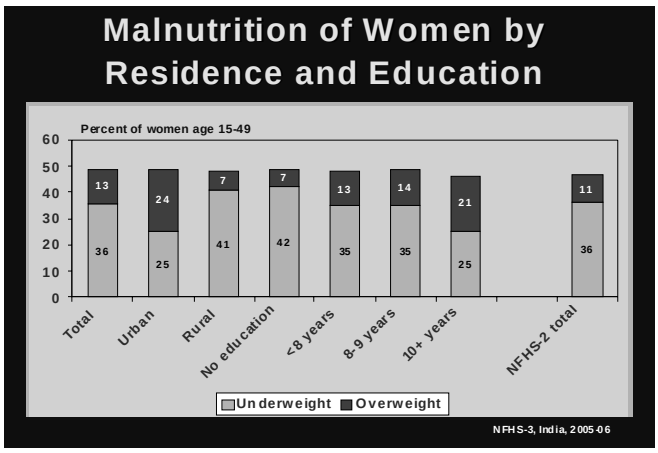
**Figure 2.4: Percentage of women married before 18 years of age**




The Maternal Mortality Rate (MMR) is currently estimated at 4 deaths per 1,000 births. Forty per cent of maternal deaths during pregnancy and childbirth relate to anaemia and under-nutrition. Early marriages and teenage pregnancies are big issues in India. A large number of girls are married before the age of 18, and many of them even before they are 15. The phenomenon of sex-selective abortions has further compounded the problem of early pregnancies and abortions. More than three-quarters of pregnant women in India receive at least some antenatal care (ANC), but only half of the women have at least three ANC visits with a health provider during their pregnancy, as recommended. The disparity between urban and rural women is especially pronounced. A substantial proportion of married women (40 per cent) report that they have experienced physical or sexual violence at some time in their lives, with large variations among the states. Gender disparities frame women's access to nutrition and health.

There are significant inter-state differences in maternal health. According to the government the 18 states identified as being the most in need of government support through the National Rural Health Mission (NRHM) are Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Himachal Pradesh, Jharkhand, Jammu & Kashmir, Manipur, Mizoram, Meghalaya, Madhya Pradesh, Nagaland, Orissa, Rajasthan, Sikkim, Tripura, Uttaranchal and Uttar Pradesh. Among them Empowered Action Group (EAG) states have been identified for more focused supervision by GoI. These states may have been identified as needing special focus but there is ample micro evidence to show that there may be blocks and clusters within relatively forward states as well where the situation may be as bad or worse. Equally, these indicators do not tell very much about the differences between different social groups and economic status.

**Figure 2.5: Status of malnutrition among women (by residence and education)**



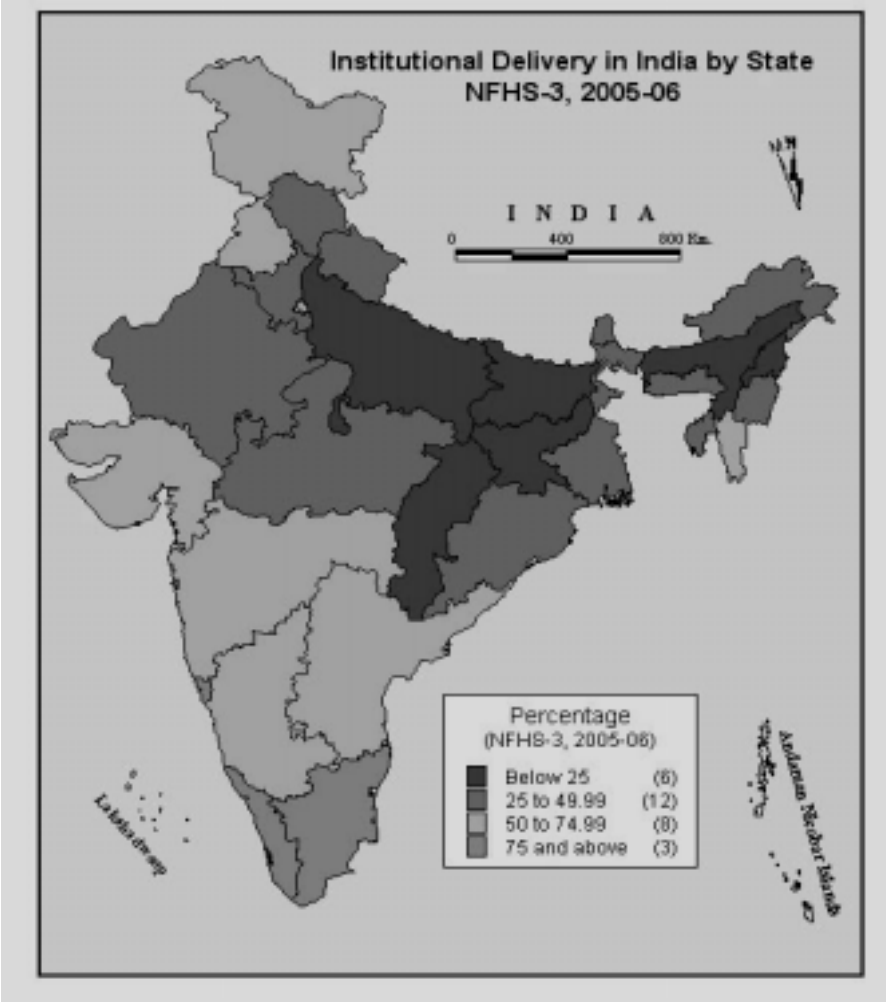

Close to 42 per cent of rural women and adolescent girls (16 years to 49 years) surveyed were found to be underweight. In all probability they were also anaemic. The odds are that it is these young women who would have either very little education (barely three to five years of schooling). And given the state of our healthcare services they probably received little care during pregnancy.

Malnutrition is a huge issue among adults and children alike. Thirty six per cent of the women in the 16-49 years age group were found to be underweight. This proportion went up to 41 per cent among rural women and 42 per cent among women with no education. Given the

malnutrition rates among young women (rural, with no education or with less than eight years of education) the absence of maternity care can be disastrous for both mother and child (Figure 2.5).

The chances are that rural women in some of the most difficult areas of the country are the ones who have least access to institutional facilities for delivery. As we move from the south to the north and north-east the proportion of institutional deliveries comes down (Map 2.2). The situation is quite clear: healthcare services are poor in the central heartland of India starting from Madhya Pradesh and Orissa to Rajasthan in the west and the north-eastern states. Interestingly, this is also the area where child malnutrition is high and progress on women's education front has also been weak. Almost all data sets and reports reveal that the areas/social groups where maternal health is weak are also the ones where the child health situation continues to be precarious.

**Map 2.2: Institutional deliveries in India (by state)**




## Summing Up

Recent GoI initiated surveys—NFHS-3 and NSSO (58, 60 and 61 Rounds)—drew the attention of the government to the grim nutritional situation of children. The significant message that emerges is that 28.3 per cent of rural people live below the poverty line (below Rs. 356 per capita per month) and the situation in Orissa where 46.68 per cent of the people live in poverty merits serious attention (NSS, Round 61). The surveys also reveal that under-nutrition is serious in rural

areas, in lower wealth quartiles, among SCs and STs and among families with no educated adult and that the percentage of undernourished is far higher than the income poverty rates (NSS Round 58 triangulated with NFHS-3). Therefore, there is an urgent need to reach out to not only those living in abject poverty but also families that are on the borderline. In view of the worrying finding that only about half the children in the age group of 6-9 months receive semi-solid foods, there is a need to urgently address infant and young child feeding practices.[2] Further, as per NFHS-3, only 33 per cent of age-eligible children received any service from ICDS, 26 per cent received supplementary food, 20 per cent received immunisation and growth monitoring was done for only 18 per cent children. It is therefore necessary to ensure that more children are covered under existing government schemes.

Similarly, international evidence also points in the same direction. *The Lancet* recently published a five part series on maternal and child nutrition (January-February 2008). Summarising the key finding of the study Richard Horton[3] notes, 'There is a golden interval for intervention: from pregnancy to 2 years of age. After age 2 years, undernutrition will have caused irreversible damage for future development towards adulthood. There are proven effective interventions to reduce stunting and micronutrient deficiencies. According to strict criteria around admissible evidence, breastfeeding counselling, vitamin A supplementation, and zinc fortification have the greatest benefits. Attention to maternal nutrition through adequate dietary intake in pregnancy and supplementation with iron, folic acid, and possibly other micronutrients and calcium are likely to provide value. These interventions need additional pro-grammatic experience about how to achieve full coverage…There is no magic technological bullet to solve the problem of undernutrition. Long-term investments in the role of women as full and equal citizens—through education, economic, social, and political empower-ment—will be the only way to deliver sustainable improvements in maternal and child nutrition, and more generally in the health of women and children. The compelling logic of this scientific evidence is that governments need national plans to scale-up nutrition interventions, systems to monitor and eval-uate those plans, and laws and policies to enhance the rights and status of women and children.' The *Lancet* series essentially argues that poor foetal growth or stunting in the 1st two years of life leads to irreversible damage and inadequate cognitive or social stimulation in the first two to three years has lifelong negative consequences on educational performance and psycho-social functioning.

National and international evidence points to the urgent need to focus on the nutritional and overall developmental needs of infants.

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[2] 'NFHS 1, 2 & 3 show that the substantial inter-state differences in exclusive breastfeeding and timely introduction of semi-solid foods still persist. Andhra Pradesh and Kerala fare well in terms of appropriate infant feeding practices. Too early introduction of supplements is a major problem in states like Delhi, Himachal Pradesh and Punjab and too late introduction of supplements is the problem in Bihar, Uttar Pradesh, Madhya Pradesh, Rajasthan, and Orissa. Both these faulty feeding practices are associated with increased risk of undernutrition and infection. Comparison of data from NFHS-2 and NFHS-3 shows that exclusive breastfeeding has significantly decreased in states like Madhya Pradesh and Haryana. West Bengal, Assam, Maharashtra, Himachal Pradesh and Delhi, have shown improvement in exclusive breast-feeding rates. In states like Karnataka, Orissa, Madhya Pradesh, Rajasthan and Uttar Pradesh, the percent of infants (6-9 months) receiving solid/semi-solid food and breast milk has improved' (Prema Ramachandran, 2008).

[3] Horton notes that 'Four-fifths of undernourished children live in just 20 countries across four regions… Africa, Asia, western Pacific, and the Middle East. In order of population size, and excluding the countries with highest mortality rates, the ranking, in terms of under-5 mortality rates, is: India, Indonesia, Pakistan, Bangladesh, Vietnam, Philippines, Egypt, South Africa, Sudan, and Nepal… Nutrition is a desperately neglected aspect of maternal, newborn, and child health. The reasons for this neglect are understandable but not justifiable. When one con-siders specific actions to improve maternal and child survival, one is drawn to particular interventions—vaccination, oral rehydration therapy, and the treatment of infection and haemorrhage. In recent years, this portfolio of responses has broadened to embrace the health system—human resources, financing, and stewardship. Somehow, nutrition has slipped through the gap. What public-health experts and policymakers have not done is to gather the evi-dence about the importance of maternal and child nutrition, catalogue the long-term effects of under-nutrition on development and health, identify proven interventions to reduce undernutrition, and call for national and international action to improve nutri-tion for mothers and children,' *Lancet*, 2008.

## *Section III:*

# FRAMEWORKS FOR ANALYSIS AND ACTION

### The backdrop

The period starting from conception to 11 years needs to be seen as a continuum. Child development is an essentially cumulative phenomenon whereby what precedes influences the quality of what follows. Therefore, in effect, each sub-stage becomes a readiness for the next, thus determining the potential for ensuring expected outcomes. A child's development is also multi-dimensional and varies as a function of his/her nutritional and bio-medical status, genetic inheritance and socio-cultural context. One must look at it as a process integrating all critical variables—health, nutrition, education, social, emotional and spiritual. Evidence from fields of nutrition, health, sociology, psychology and education continues to accumulate, indicating that the quality of life in the early years is crucial in the formation of intelligence, personality and social behaviour. The physical, social and psychological capacities that children are born with allow them to communicate, learn and develop. Studies show that under-nutrition, specifically during pregnancy and early childhood, can have profound effects on the cognition and developmental behaviour later in the continuum. Studies also reflect that most early failure in growth is irreversible.

For over three decades now it has been argued that five inter-connected factors determine the nutritional status of children:

**a.** **Health and nutritional status of the mother during pregnancy**: Maternal health and well-being are a critical determinant of the status of children. Weak and undernourished women have a higher probability of giving birth to low-weight babies.

**b.** **Infant care and feeding**: Birth weight and the health of the mother during pregnancy and lactation; introduction of breastfeeding immediately after birth and exclusive breastfeeding up to six months and frequent feeding of supplementary food (solids and semi-solids) from six months to 36 months. Since the mid-1970s (especially at the start of the ICDS programme in 1975) the importance of proper infant care and feeding received focused attention not only in India but also across the world.

**c.** **Prevention of communicable diseases**: Notwithstanding birth weight and feeding practices, frequent bouts of diarrhoea or fever, measles and other childhood illnesses can exacerbate a poor nutritional status and set in motion a vicious cycle where malnourished children become more susceptible to infections. Full immunisation, safe water, proper sanitation and family and personal hygiene of the mother have known to make a huge difference.

**d.** **Timely and rational management of childhood illnesses**: The Government of India and UNICEF have focused on the importance of rational management of childhood illnesses like making available ORS for diarrhoea management for over 30 years now.

Similarly, timely availability of medical care has remained an important area of concern and this has received renewed attention under NRHM.

e. **Persistent poverty, seasonal food shortages and hunger and workload of the mother**: The fifth determinant of the nutritional status of children is poverty and availability of food either through the year or during lean seasons coupled with the increased workload of mothers engaged in wage labour and lack of time or other resources to care for the infant and the child.

These five factors have been acknowledged by policy making as well as programme implementation agencies of the government, notably the Planning Commission of India and the Department of Women and Child Development (DWCD). It is also recognised that improving the nutritional status of young children requires a multi-pronged approach of simultaneously addressing livelihood and food security and changing infant and child feeding practices.

However, given the nature of the administrative system, programmes for women and children's health and nutrition are delivered through different channels leading to the existence of parallel programmes that do not always converge on the ground. Similarly, environmental hygiene, public health initiatives (malaria control etc.), sanitation and drinking water are also managed as separate/ parallel programmes. While interconnectedness is appreciated and also understood at the policy level, ground level synergy has remained a difficult area.

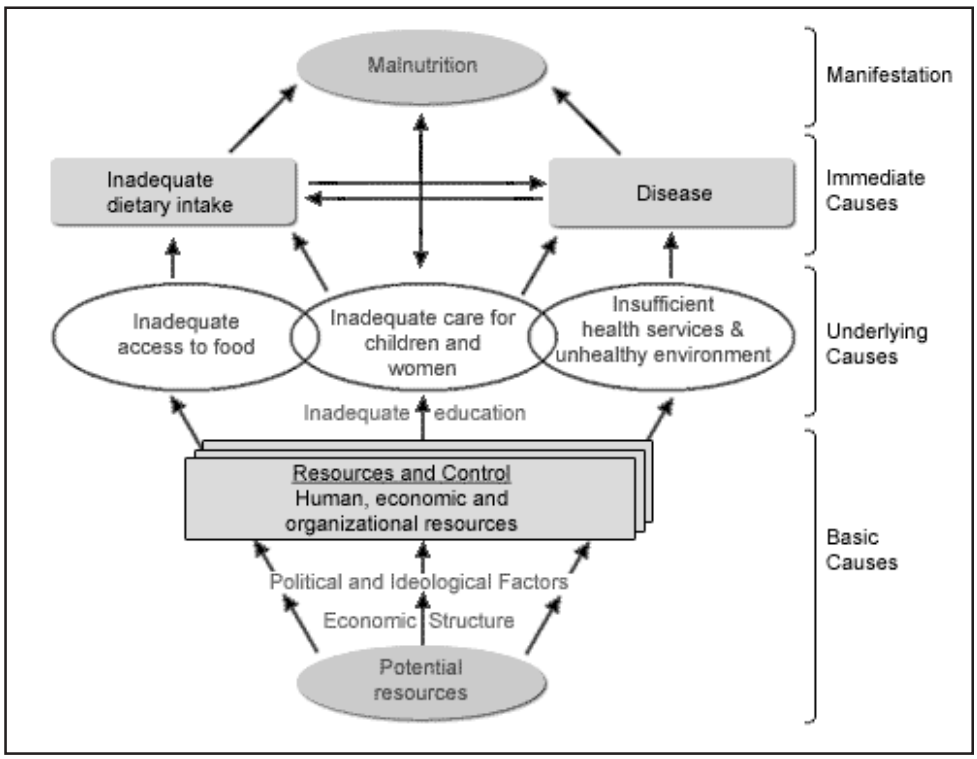
## UNICEF Conceptual Framework

There are two complementary conceptual frameworks that are used to unpack and understand the situation. The first, which has been developed by UNICEF[4] views malnutrition and child death as two of the manifestations of a multi-sectoral development problem that can be analysed in terms of immediate, underlying and basic causes. The immediate causes are inadequate dietary intake and infectious diseases; the underlying causes are household food insecurity, inadequate maternal and childcare and inadequate health services and health environment; and the basic causes include formal and non-formal institutions, political and ideological superstructures, economic structure and potential resources. Although more refined versions of this framework have since been developed (e.g., adding female education just below the underlying causes and distinguishing human, economic and organisational resources), all of them contain the basic elements shown in Figure 3.1. In this framework malnutrition is viewed as one important *manifestation* of a larger development problem. The framework does not imply that food, health and care are inadequate in all settings but that these three define the full range of possibilities and the relative importance of each must be assessed and analysed in each setting in order to define priorities for action. The overlapping circles among food, health and care in Figure 3.1 are meant to imply that these three are related to each other in complex ways, which must be analysed and properly understood in a given context in order to design appropriate action. For instance, food secure households may still contain malnourished children because the burden of women's agricultural and other work (as well as other factors such as inadequate caretaker knowledge) may compromise the quality of childcare. This framework emphasises the importance of developing a sound understanding of the causes of malnutrition in a given setting in order to design appropriate actions (UNICEF and World Bank, 2002).

[4] This is a part of the UNICEF's *Strategy for Improved Nutrition of Children and Women in Developing Countries* first published in 1990.The two key features of this strategy are a method for assessment, analysis and action related to nutrition (Triple A cycle), and this conceptual framework to guide the analysis of the causes of malnutrition in a given context.

This approach essentially calls for action at all three levels—at the household level involving women and children by improving childcare and feeding practices, at the community level for improving the environment in which children live and also access timely healthcare services and finally it also makes a case for enhancing access to supplementary food for children in diverse poverty situations. This framework recognises that the interplay of the three domains needs to be understood in a holistic manner and argues that larger political/economic and 'ideological' factors determine the commitment of governments/administration to make a difference. This perhaps explains the wide inter-state variations that are evident (as discussed in Section II).

**Figure 3.1: UNICEF's Conceptual Framework for Malnutrition**




Source: UNICEF (2008).

The UNICEF framework has been discussed and debated since the 1990s when it was first developed. David L. Pelletier (2002) points out that one of the most important features of alternative views of malnutrition is the absence of an *explicit* conceptual framework combined with some *implicit* notions that deviate widely from the UNICEF framework. The implicit notions often are:

- Mono-focal (they emphasise a limited set of potential causes);
- Universal (they underestimate context-specificity);
- Insular (they underestimate the linkages among causes of malnutrition);
- Supply-oriented (they emphasise problems in the supply of food, nutrients or health services);
- Excessively macro or micro in perspective (they either focus at the individual behavioural or biological level or at the level of aggregates like markets or food supplies);
- Discipline-bound (they emphasise the perspectives from one or a limited range of disciplines); and
- Expert-oriented (they overestimate the ability of experts and outsiders to analyse and comprehend the complex realities that create malnutrition and they overestimate the degree

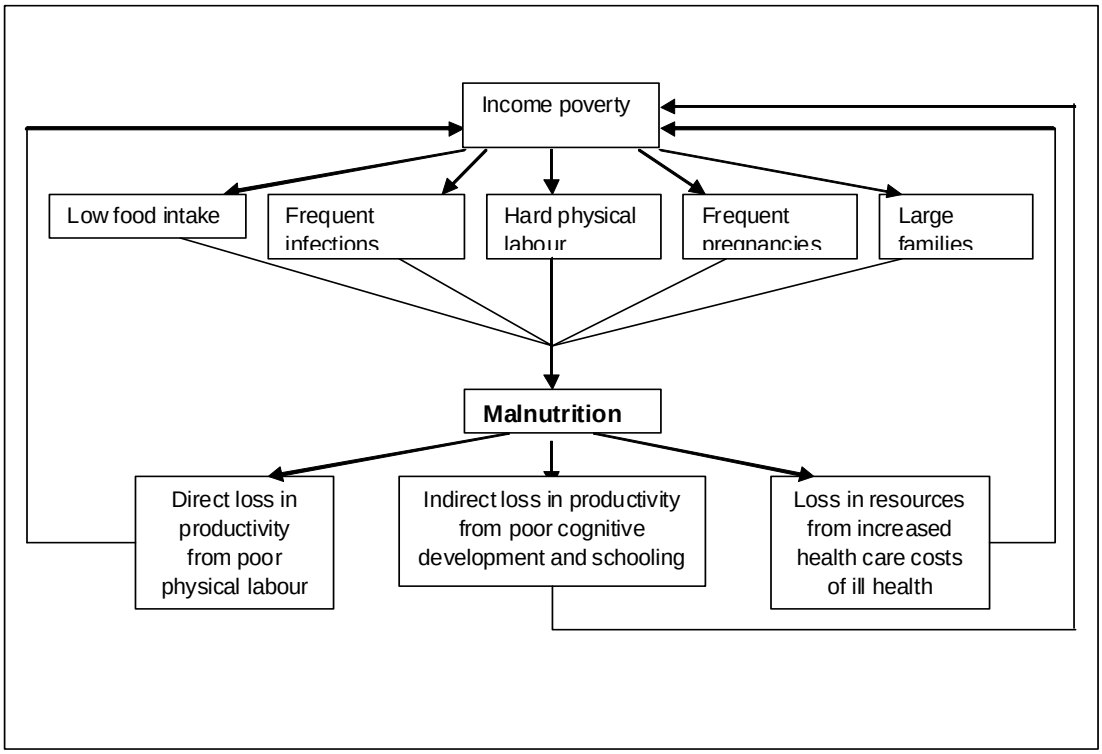
to which experts, outsiders or governments can control the process of social and behavioural change. Related to this, they underestimate the importance of local or community knowledge and the important role of communities in social change).

While conceptual frameworks are valuable in so much as they enable policy makers/programme development professionals to visually depict the complex interplay of immediate and environmental factors they cannot always lead ground level planners to context specific strategies. However, the UNICEF framework has provided an important starting point but each programme has to start with the ground situation.

## Poverty and Nutrition—the NFI Framework

Another important (complementary) approach has been captured by Prema Ramachandran (Figure 3.2). She argues that poverty exacerbates malnutrition. Income poverty leads to women being engaged in hard physical labour, living in unsanitary conditions leading to frequent bouts of infections, low income resulting in low food intake and the well known cycle of frequent pregnancies and large families. It is often argued that provision of additional food or increased income would lead to improvements in malnutrition but experience on the ground reveals that there is a need to directly communicate/counsel mothers and enable them to adopt rational infant and child feeding practices. Ramachandran cautions that while it is important to understand the impact of income poverty and the workload of women from poverty households, increased incomes would not automatically lead to better nutrition.

**Figure 3.2: The vicious cycle of poverty and malnutrition**




Source: Prema Ramachandran (2008).

She underscores the importance of acknowledging poverty as one of the important determinants of poor nutrition of children. Therefore, Prema Ramachandran's (2008) framework needs to be located in the larger context of prevalent feeding practices and lack of knowledge of how existing food resources at home can be used to improve the food that the children eat. She argues, 'Contrary to expectations the decline in poverty is not associated with an increase in the energy intake... The decline in energy intake cannot be due to problems in access or affordability of the food (alone). Perhaps the major factor responsible for the decline is the reduction in energy requirements due to changes in the life style among the population… It is well known that under nutrition increases susceptibility to infections; and that infections aggravate under nutrition. If uninterrupted this vicious circle could result in death. Poor dietary intake, poor caring practices and lack of access to health care are major factors responsible both for under nutrition in children and high infant mortality.'

This is best illustrated in the May 2007 ranking of districts in India done by the World Bank to identify the 200 'most in need' districts on the nutritional front calculated on the basis of two variables to capture the performance of a district in nutrition—weight-for-age of children in the age group 0 to 71 months and anaemia levels among pregnant women (age group 15 to 44 years). An important and startling finding is that these worst 200 districts are spread over 21 states and that the relatively more prosperous (in terms of economic growth and infrastructure) states like Gujarat, Punjab and Maharashtra have a large number of districts in the bottom 200 list. On the other hand, states that are economically deprived with a high proportion of BPL households like Orissa have fewer districts on this list (Table 3.1).

**Table 3.1: Distribution of the worst 200 districts on nutritional front**

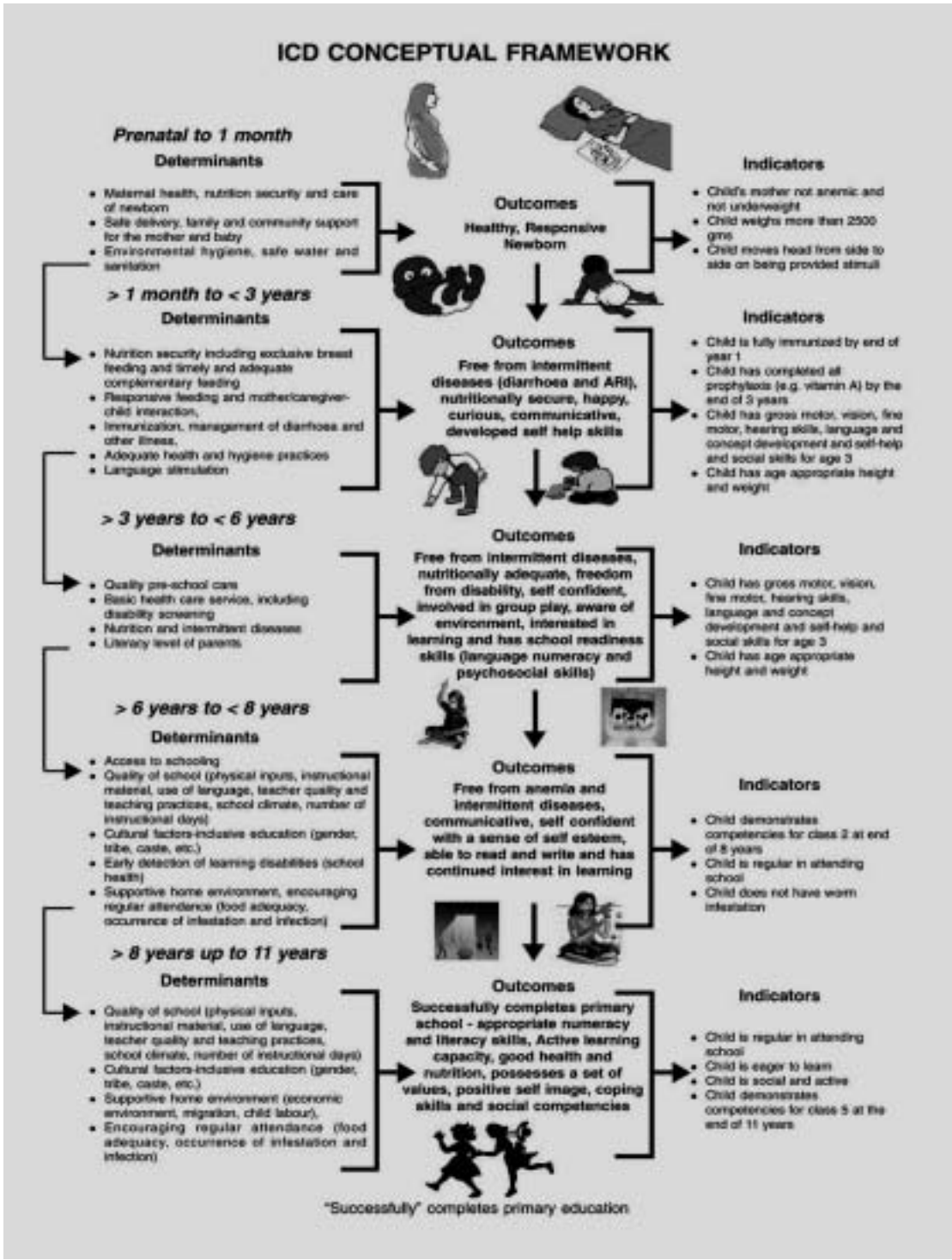
| | State | Districts falling under bottom 200 |
|---|---|---|
| 1 | Andhra Pradesh | 1 |
| 2 | Assam | 3 |
| 3 | Bihar | 19 |
| 4 | Chhattisgarh | 9 |
| 5 | Dadra & Nagar Haveli | 1 |
| 6 | Daman & Diu | 2 |
| 7 | Gujarat | 15 |
| 8 | Haryana | 5 |
| 9 | Himachal Pradesh | 3 |
| 10 | Jharkhand | 6 |
| 11 | Karnataka | 3 |
| 12 | Madhya Pradesh | 30 |
| 13 | Maharashtra | 20 |
| 14 | Meghalaya | 1 |
| 15 | Nagaland | 1 |
| 16 | Orissa | 6 |
| 17 | Punjab | 6 |
| 18 | Rajasthan | 20 |
| 19 | Uttar Pradesh | 41 |
| 20 | Uttaranchal | 6 |
| 21 | West Bengal | 2 |
| | 200 Worst Child Nutrition districts | 200 |

Source: World Bank (2007).

## World Bank's Integrated Child Development (ICD) Conceptual Framework

The World Bank developed a comprehensive framework in 2003 to look at the continuum of child development. This framework explores what needs to be done at every stage of a child's life. This framework complements the preceding frameworks because the deficiency faced and resultant outcome at an early stage in the life of an infant is carried forward to the next stage thus compounding the impact (Figure 3.3).

**Figure 3.3: ICD Conceptual framework, World Bank**



## Common meeting ground

The key informants interviewed were unanimous about the need to arrive at a shared understanding of the situation on the ground, the factors that can make a difference and the fact that strategies needed to change. Vandana Prasad of the Right to Food campaign argues that unless all the key actors in a given geographical space come to a shared understanding, implementation will suffer. She cites examples where strategies that are pushed from above often do not find resonance on the ground because the people who are in-charge of implementing them are not convinced about them. Talking the same language and sharing a common understanding is the first way forward. Similarly Shanti Ghosh cited examples from Bangladesh where the focus was on sitting with women in small groups in their homes and looking at what resources they have and what they can do to improve the nutrition of children. The local facilitator has to be highly focused and her mission should be to make sure that malnourished children come out of it. Different strategies are required in different situations/social and economic groups. For example, the problems faced by women engaged in daily wage labour are different from those who work within their homes and in their own fields. The National Rural Employment Guarantee Act (NREGA) worksites could be an appropriate starting point for day care centres where women are also educated about nutrition. Similarly, the strategy adopted in tribal areas would have to be different from that in non-tribal areas or in urban slums (interviews with Shanti Ghosh and Vandana Prasad, March 2008).

One of the main reasons for the initial success of the Maharashtra Rajmata Jijau Mother-Child Health and Nutrition Mission was that all the stakeholders agreed to a simple yet comprehensive list of things that needed to be done (Box 3.1). The first and simple message that went out was that all pregnant women and children need enough food and of the right kind. The accent was on mapping what is available in the village and then working around it.

**Box 3.1: Learning from Maharashtra—the Rajmata Jijau Mother-Child Health and Nutrition Mission**

- ♣ Enough food and the right kind of food
  - ⇒ Chronically undernourished
  - ⇒ Nurturing newborns
- ♣ Nutritional needs of young children
  - ⇒ Breastfeeding
  - ⇒ Complementary foods at the right age
  - ⇒ Continuous feeding during diarrhoea
- ♣ Protecting children from infections
  - ⇒ Immunisation against common childhood diseases
- ♣ Diarrhoea prevention and management
  - ⇒ Safe water—harvesting, disinfection, treatment, purification, storage
  - ⇒ Hygiene and sanitation facilities
  - ⇒ Quality care when children fall ill
  - ⇒ Education programmes for healthcare providers
- ♣ Micronutrient deficiencies
  - ⇒ Iodine, Iron, Vitamin A, Zinc, ...
- ♣ Nutritional needs of girls and women
  - ⇒ Chronically undernourished women tend to bear low-birth weight babies stop the vicious cycle of under nutrition into the next generation

Source: Health Education to Villages (http://hetv.org; accessed on 12 March 2008).

## Heterogeneous and Gendered Axis of Hunger and Malnutrition

As discussed above, a triangulation of NSS and NFHS data reveals that the web of backwardness is quite complex:

- Rural-urban differences in the nutritional status of children are quite high and in many ways they could also be greater than gender and social group differences;
- The difference between backward-forward areas is much greater than social group differences;
- Disparities between very poor households (below poverty line) and the top quartile are much higher than gender, social and regional differences;
- Differences between social groups, especially between tribal communities, Muslims and specific sub-groups among the SCs on the one hand and the Forward Castes/Christians and other religions is also high; and
- Inter-community differences are often as severe as intra-community differences. For example, the nutritional status of some Other Backward Caste (OBC) groups could be far worse than others; even among Dalit and ST populations there are significant differences.
- Severely disadvantaged communities and those residing in tribal, hilly, desert and remote habitations;
- New migrants/seasonal migrants into cities;
- Children living in places where there is social strife and conflict;
- Children of families displaced due to natural as well as man-made disasters;
- Children of sex workers, people affected with HIV/AIDS and single women (widows, deserted/ separated women, unwed mothers); and
- Among all of them the situation of girl children is more worrisome than that of boys.

Even where formal access to ICDS is provided, as N C Saxena pointed out (interview, March 2008), they do not always have real access. The social/economic status of the anganwadi worker (AWW), location of the ICDS centre and prevalent prejudices often work against the most deprived families. While overall issues of access, infrastructure, functionality, quality and attitudes affect all children, given the prevailing social inequalities and hierarchies, these factors affect poor women and children and among them girls much more that they affect the more privileged sections of society.

Therefore, there is a need to adopt more area and context specific approaches to child development with greater investments in terms of human and financial resources being channelled into more difficult areas and to the most deprived social groups. Quantitative data used to measure access and distribution of supplementary nutrition reveals little about the texture of inequalities inherent in society. Coming to grips with gender and social equity issues in nutrition and overall child development requires a framework that can capture heterogeneous gendered realities and multiple disadvantages. Gender is embedded within a complex social and institutional structure in India; therefore it is necessary to look at gender inequalities within the broader framework of social, economic and location specific inequalities on the one hand and the prevailing delivery system for child health and nutrition services on the other.

## *Section IV:*

# POLICIES, PROGRAMMES AND PRACTICES

### National Nutrition Policy, 1993

The National Nutrition Policy (NNP) (1993)[5] advocated a comprehensive, inter-sectoral strategy for alleviating all the multi-faceted problems of under/malnutrition and its related deficiencies and diseases so as to achieve an optimal state of nutrition for all sections of society but with a special priority for women, mothers and children who are vulnerable as well as 'at-risk'.
The major problems related to nutrition were classified as:

- Under-nutrition resulting in:
    - Protein Energy Malnutrition (PEM);
    - Iron deficiency;
    - Iodine deficiency;
    - Vitamin 'A' deficiency; and
    - Low birth weight children;
- Seasonal dimensions of nutrition;
- Natural calamities and the landless;
- Market distortion and disinformation;
- Urbanisation;
- Special nutritional problems of hill people, industrial workers, migrant workers and other special categories; and
- Problems of over-nutrition, overweight and obesity for a small section of the urban population.

Under NNP 1993, nutrition was recognised as a multi-sectoral issue that needs to be tackled at various levels. It was, therefore, considered important to tackle the problem of nutrition both through direct nutrition intervention for especially vulnerable groups, as well as through various development policy instruments which would create conditions for improved nutrition. The nutrition policy instruments were therefore classified under two heads: direct intervention (short- term) and indirect policy instruments i.e., long-term institutional and structural changes.

### Direct short-term interventions:

1. Expanding the safety net with nutrition interventions for specially vulnerable groups; covering the remaining 15.46 million children in the remaining blocks of the country by 2000; triggering appropriate behavioural changes among mothers; reaching out to adolescent girls so that all

[5] Details sourced from http://nrcw.nic.in/index2.asp?sublinkid=468 (accessed on 31 March 2008).

such girls from poor families would be covered through ICDS by 2000 in all development blocks of the country and in 50 per cent of the urban slums; and ensuring better coverage of expectant women (to include supplemen-tary nutrition right from the 1st trimester which should continue during the major period of lactation, at least for the first one year after pregnancy);

2. Fortification of essential foods with, for example, salt with iodine and/or iron. Research in iron fortification of rice and other cereals should be intensified. The distribution of iodised salt should cover the entire population in endemic areas of the country to reduce iodine deficiency to below endemic levels;

3. Popularisation of low cost nutritious food efforts from indigenous and locally available raw material to be intensified. It was necessary to particularly involve women in this activity; and

4. Control of micronutrient deficiencies amongst vulnerable groups; deficiencies of Vitamin 'A', iron and folic acid and iodine among children, pregnant women and nursing mothers would be controlled through intensified programmes. Iron supplementation to adolescent girls would be introduced. The programme would be expanded to cover all eligible members of the community. The prophylaxis programme did not cover all children in 1993. It was hence necessary to intensify all these efforts and work on a specific time frame. Nutritional blindness would be completely eradicated by 2000. The National Nutritional Anaemia Prophylaxis Programme would be extended and strengthened to reduce anaemia in expectant women to 25 per cent by 2000.

## Indirect policy instruments: long-term institutional and structural changes

1. Food Security: In order to ensure aggregate food security, a per capita availability of 215 kg/ person/year of food grains needs to be attained;

2. Improvement of dietary pattern through production and demonstration: The production of pulses, oilseeds and other food crops would be increased with a view to attaining self-sufficiency and building surplus and buffer stocks. The production of protective food crops such as vegetables, fruits, milk, meat, fish and poultry would be augmented. Preference shall be given to growing foods such as millets, legumes, vegetables and fruits (carrots, green leafy vegetables, guava, papaya and *amla*). The National Food Policy should be consistent with national nutritional needs and this calls for the introduction of appropriate incentives, pricing and taxation policies.

3. Policies for effecting income transfers so as to improve the entitlement package of the rural and urban poor.

4. Land Reforms: Implementing land reform measures so that the vulnerability of the landless and the landed poor could be reduced. This would include both tenural reforms as well as implementation of ceiling laws.

5. Health and Family Welfare: Through the 'Health for All by 2000 AD' programme, increased health and immunisation facilities shall be provided to all. Improved prenatal and postnatal care to ensure safe motherhood shall be made accessible to all women. The population in the reproductive age group shall be empowered, through education, to be responsible for their own family size. The small family norm and adequate spacing shall be encouraged.

6. Basic health and nutrition knowledge with special focus on wholesome infant feeding practices shall be imparted to the people both extensively and effectively. Nutrition and health education concepts shall be effectively integrated into the school curricula as well as in all nutrition programmes.

7. Prevention of food adulteration to be strengthened by gearing up the enforcement machinery.

8. Nutrition surveillance to be improved.

9. Monitoring of nutrition programmes like ICDS and of nutrition education and demonstration by the Food and Nutrition Board to be continued.

10. Research into various aspects of nutrition, both on the consumption as well as the supply sides must accurately identify those who are suffering from various degrees of malnutrition and enable the selection of new varieties of food with high nutrition values which can be within the purchasing power of the poor.

11. Equal Remuneration: Special efforts would be made to improve the effectiveness of programmes related to women. The wages of women shall be brought at par with that of men in order to improve their economic status. This requires a stricter enforcement of the Equal Remuneration Act. Special emphasis will have to be given to expanding employment opportunities for women.

12. Communication through established media is one of the most important strategies to be adopted for the effective implementation of the NPP.

13. Minimum Wage Administration: To have an effective, minimum wage administration to ensure its strict enforcement and timely revision and linking it with price rise through a suitable nutrition formula. A special legislation should be introduced for providing agricultural women labourers minimum support and at least 60 days leave by the employer in the last trimester of pregnancy.

14. Community participation.

15. Education and literacy to be improved as it has been shown that education and literacy, particularly that of women, is a key determinant for better nutritional status.

16. Improvement in the status of women: Emphasis on women's employment and education, particularly nutrition and health education, should provide the bedrock of the nation's nutritional intervention.

The policy also outlined how it would be implemented, how the nutrition situation would be monitored and what the role of state governments would be. Indian planners have since put in place some of the largest and most unique food security and nutrition related programmes in the world. These can be broadly classified into five categories:

- Nutrition related schemes: The Integrated Child Development Services (ICDS) scheme and the mid-day meal scheme (MDM) in primary schools;
- Food security programmes: Public Distribution Scheme (PDS), Antyodaya, Annapurna Yojana;
- Livelihood related programmes: The National Rural Employment Guarantee Act (NREGA), the Sampoorna Grameen Rozgar Yojana (SGRY), National Food for Work Programme and the Rashtriya Sam Vikas Yojana (RSVY);
- Health and social security programmes: The National Maternity Benefit Scheme (NMBS), National Old Age Pension Scheme (NOAPS), National Family Benefit Scheme (NFBC); and
- Drinking water and sanitation related schemes: Accelerated Rural Water Supply Programme (ARWSP), Swajaldhara and the Central Rural Sanitation Programme (CRSP).

## Integrated Child Development Services

The Government of India launched the Integrated Child Development Services (ICDS) programme in 1975 with the following objectives:

- To improve the nutritional and health status of pre-school children in the age group of 0-6 years;
- To lay the foundation for the proper psychological development of the child;
- To reduce incidence of mortality, morbidity, malnutrition and school drop-outs;
- To achieve effective coordination of policy and implementation amongst the various departments to promote child development; and
- To enhance the capability of the mother to look after the normal health and nutritional needs of the child through proper nutrition and health education (see Table 4.1 for the package of services offered under ICDS).

**Table 4.1: Package of services offered by the ICDS programme**

| Children 6-12 months & 1-3 years | Children 3-6 years | Women (15-45 years), pregnant and lactating | Adolescent girls 11-18 years |
|---|---|---|---|
| Health check-up,<br>Immunisation,<br>Growth promotion,<br>Supplementary feeding,<br>Referral services,<br>Vitamin and iron supplement. | Health check-up,<br>Immunisation,<br>Growth promotion,<br>Supplementary feeding,<br>Referral services,<br>Pre-school education,<br>Vitamin A and iron supplement. | Health check-up,<br>Immunisation,<br>Referral services,<br>Registration of ante/ postnatal care,<br>Vitamins and iron supplements.<br>Nutrition and health education. | Health check-up,<br>Referral services,<br>Vitamin A and iron supplement,<br>Health and nutrition education,<br>Self-development, recreation, skill formation. |

Source: Based on DWCD annual reports (various years), GoI.

These objectives were sought to be achieved by providing a package of six concurrent services comprising of (i) supplementary nutrition, (ii) immunisation, (iii) health check-up; (iv) referral services, (v) pre-school non-formal education, and (vi) nutrition and health education. As the programme has developed it has expanded its range of interventions to include components focussed on adolescent girls' nutrition, health, awareness and skill development, as well as income generation schemes for women. The scheme covers rural and tribal areas and the slum population in urban areas. ICDS is implemented through a network of anganwadi centres (AWCs) at the community level.

The ICDS team comprises of anganwadi workers and helpers, supervisors, Child Development Project Officers (CDPOs) and District Programme Officers (DPOs). An anganwadi worker is a lady selected from the local community and she is a community based frontline voluntary worker of the ICDS programme. Besides medical officers, lady health visitors (LHVs), Auxiliary Nurse Midwives (ANMs) and female health workers from nearby primary health centres (PHCs) and heath sub-centres form a team with the ICDS functionaries to achieve convergence of different services (Table 4.2).

**Table 4.2: ICDS target groups and the service providers**

| Services | Target Group | Service provider |
|---|---|---|
| Supplementary Nutrition | Children below 6 years; pregnant and lactating mothers | AWW and AWH |
| Immunisation | Children below 6 years; pregnant and lactating mothers | ANM/MO |
| Health check-ups | Children below 6 years; pregnant and lactating mothers | ANM/MO/AWW |
| Referral | Children below 6 years; pregnant and lactating mothers | AWW/ANM/MO |
| Pre-school education | Children 3-6 years | AWW |
| Nutrition & health education | Women (15-45 years) | AWW/ANM/MO |

Source: DWCD, GoI.

Providing supplementary nutrition to children and pregnant mothers is an important component of ICDS. Supplementary nutrition includes supplementary feeding and growth monitoring and prophylaxis against vitamin A deficiency and control of nutritional anaemia. All families in the community are surveyed to identify children below the age of six and pregnant and nursing mothers, who are then provided supplementary feeding support for 300 days in a year. By providing supplementary feeding, ICDS attempts to bridge the protein energy gap between the recommended dietary allowance and average dietary intake of children and women.

Growth monitoring and nutrition surveillance are two other important activities that are undertaken under ICDS. Children below the age of three are weighed once a month and children between 3-6 years are weighed every quarter. Weight-for-age growth cards are maintained for all children below six years, which are meant to detect growth faltering and help in assessing nutritional status. Severely malnourished children are given special supplementary feeding and referred to health sub-centres or PHCs as required. The effort is to provide, on an average, daily nutritional supplements to the extent indicated and as per the cost norms in Table 4.3.

**Table 4.3: Average daily nutritional supplements**

| Beneficiaries | Calories (cal) | Protein (gm) | Cost Norm |
|---|---|---|---|
| Children below 3 years*, and 3-6 years | 300 | 8-10 | Rs 2 /child per day |
| Severely malnourished children | Double of above | | Rs 2.70 /child per day |
| Pregnant & Lactating Mothers / adolescent girls | 500 | 20-25 | Rs 2.30 per beneficiary/day |

Note: * Provisions regarding promotion of breastfeeding as recommended in the Infant and Child Feeding (IYCF) guidelines are relevant.

The various health services include regular health check-ups, immunisation, management of malnutrition, treatment of diarrhoea, de-worming and distribution of simple medicines. Immunisation is given against poliomyelitis, diphtheria, pertussis, tetanus, tuberculosis and measles. Health check-ups and referral are delivered through the public health infrastructure—health sub-centres and primary and community health centres (CHCs). Health check-ups include healthcare of children under six years of age, antenatal care of expectant mothers and postnatal care of nursing mothers. During health check-ups and growth monitoring, sick or malnourished children in need of prompt medical attention are referred to the PHC or its sub-centre. In addition, Iron and Vitamin A supplementation to children and pregnant women is done under the Reproductive and Child Health (RCH) Programme of the Ministry of Health and Family Welfare (MOHFW). Nutrition and Health Education (NHE) forms a part of the behaviour change communication strategy of women and child development and is expected to build capacities of women in the age group of

15-45 years so that they can look after their own health, nutrition and development needs as well as that of their children and families (the population covered and the year-wise progress made by ICDS are given in Tables 4.4 and 4.5).

**Table 4.4: Population norms in the extended ICDS scheme**

| Location | Population covered | No. of AWCs |
|---|---|---|
| For Rural Projects | 500 - 1500<br>150 - 500 | 1 AWC<br>1 Mini AWC |
| For Tribal Projects | 300 - 1500<br>150 - 300 | 1 AWC<br>1 Mini AWC |
| Urban Projects | 500 - 1500 | 1 AWC |
| For habitations with less than 150 populations, special approvals to set up AWCs can be sought by state governments. | | |

Source: DWCD, GoI.

**Table 4.5 Year-wise progress of ICDS**

| Year ending | Development blocks where operational | Operational AWCs | No. of Supplementary nutrition beneficiaries (in mi) | No. of pre-school education beneficiaries (in mi) |
|---|---|---|---|---|
| 31.03.2002 | 4,608 | 545,714 | 37.509 | 16.656 |
| 31.03.2003 | 4,903 | 600,391 | 38.784 | 18.802 |
| 31.03.2004 | 5,267 | 649,307 | 41.508 | 20.438 |
| 31.03.2005 | 5,422 | 706,872 | 48.442 | 21.841 |
| 31.03.2006 | 5,659 | 748,229 | 56.218 | 24.464 |
| 31.03.2007 | 5,829 | 844,743 | 70.543 | 30.081 |
| 30.06.2007 | 5,885 | 863,472 | 73.696 | 31.491 |

Source: http://www.wcd.nic.in/; updated with figures from Finance Minister's Budget Speech February 2008 and *Economic Survey 2007-08.*

The Government of India is in the process of planning for ICDS-IV, which will be a five-year project with the support of the World Bank. The ICDS scheme will get into mission mode rather than the present programmatic mode. In the revised framework, the strategies to be adopted will be targeting children below three years more effectively and promoting IYCF practices, promoting convergence of inter-related services (Reproductive and Child Health (RCH)-II/National Rural Health Mission (NRHM)/Sarva Shiksha Abhiyan (SSA)/safe drinking water and sanitation etc.), empowering and building capacities of ICDS functionaries, AWWs and helpers, as well as promoting community participation.

The key project principles outlined are: better targeting (i.e., a mechanism to address the needs of specific states/districts/blocks where malnutrition amongst children is more pronounced), providing management/implementation flexibility (e.g., SSA/RCH models), decentralised planning with increased role for Panchayati Raj Institutions (PRIs), district/community level planning and accountability, focused on nutrition during pre-pregnancy to three years of age, early education outcomes for older children and a stronger convergence at the operational level with (a) health—RCH/NRHM (i.e., joint training, supervision, observations of AWWs, Accredited Social Health Activists [ASHAs] and ANMs); and (b) the primary school system.

ICDS-IV will have two major components: nutrition and ECE. Based on the findings of a study titled 'Mapping and Profile of Target Districts', carried out by the World Bank, 160 districts of the seven high burden states of Uttar Pradesh, Madhya Pradesh, Maharashtra, Rajasthan, Bihar, Chhattisgarh and Jharkhand and Andhra Pradesh have been selected for intensive support for the nutrition component. AP is selected on account of its successes in community involvement in development through self help groups and mothers committees. The nationwide component will have two major activities: (a) training/capacity building of field functionaries, family members in the community and key project management staff; and (b) state specific information, education and communication (IEC).

Interestingly, growth monitoring of children of 0-3 years is proposed to be strengthened through at least two adolescent volunteer girls who have been provided with 3-4 days training, for every AWC. Other action in the nutrition component that is worth mentioning includes the scaling-up of ready-to-eat (RTE) energy food for under-three children via the take home ration (THR) route, a performance appraisal system for AWWs, inter- and intra-state study tours for AWWs/ supervisors/CDPOs/DPOs, making some funds available to every AWC (to be operated by mothers' committees) to improve the nutrition status of undernourished children, rationalising monitoring and evaluation systems (to ease the burden on AWWs), focus on outcomes rather than outlays, setting up of Block Level Coordination Committees (BLCCs) consisting of members of the community, Panchayat and NGOs to monitor and coordinate programme implementation and trying out the SSA/NRHM society model to ensure the smooth flow of funds from the centre to the implementation agency.

## ICDS in the Eleventh Plan

The strategy for restructuring ICDS is mentioned in detail in the Eleventh Plan document. The most important feature of restructured ICDS will be that it will be run on a Mission Mode, with a mission structure at the Central and the state levels. Universalisation with quality will be the guiding principle of ICDS. In this context it needs to be added that the Supreme Court of India was compelled to pass orders on 7 October 2004, directing the Government of India to increase the number of ICDS centres to cover 14 lakh (1 lakh=0.1 million) habitations. The same order had also recommended the increase of the allocation of 'rupees one per child per day' to 'rupees two per child per day'. As a response to this the Eleventh Plan has made the ICDS available on demand basis in every hamlet and slum of India (GoI 2008). Government has also increased the per child allocation for ICDS for supplementary nutrition is increased from Rs. 2/- per child to Rs.4/- and for severely malnourished kids from Rs.2.70/- to Rs.6.[6]

The Eleventh Plan points out that since malnutrition sets in before the age of two, it is very difficult to reverse the process. It also identifies that it is the Under Three years group that is often left out of the ambit of ICDS. Most ICDS centres only provide some form of nutrition to children in the 3–6 years age group. The Plan therefore, notes that it is important to recognize the different target groups under ICDS and to understand their varying needs.

- The Plan locates the mother at the beginning of the cycle of ill-health and malnutrition. The first task in preventing malnutrition in the 11th Plan therefore is to ensure the health nutritional status, ANC, and immunization of pregnant women. Mothers also need proper counselling, iron, folic acid supplements, vital for the health of both the mother and the child.

[6] Mentioned in Speech by Ms. Loveleen Kackar , Jt. Sec. MWCD, GoI, at the 'Unite for Nutrition Conference organised by DFID in New Delhi on 19th Nov. 2008.

- Under the Plan the AWW and ASHA will promote exclusive breastfeeding for children up to six months of age. Lactating women will also be counselled and provided with adequate nutrition.

- The second important target group as per the Plan for checking malnutrition is children in the six months to three years age group. To tackle malnutrition the Eleventh Plan will introduce an intensive malnutrition control programme within the ICDS scheme. Under this, 6–8 hour crèches for children under three will be provided in the most nutritionally backward districts of the country. The Village Health Sanitation and Nutrition Committee will be funded for providing at least three meals per child per day at these crèches.

- The Committee will be responsible for ensuring that the health workers visit the crèche on a monthly basis for immunization and health check-ups of children. Continuation of the scheme in the village will depend on the performance of the village crèches.

- In areas where the new programme is not introduced, children under three will continue to get Take Home Rations and will be provided home-based care through the ASHA.

- The final target group under the ICDS is adolescent girls. It is extremely important to reach out to this segment of the population to break the cycle of ill-health. As of now, however, this group is most neglected. In addition to SNP, and IFA tablets, they require proper counselling. The ANM and AWW will conduct a monthly meeting to educate and counsel this group.

Box. 4.1

**Community Management of ICDS Centres in the Eleventh Plan** The Eleventh Plan document remarks that various surveys show that high expectations from the ICDS scheme along with lack of proper training, implementation, monitoring, and financial resources are the reasons why anganwadis have been unable to deliver. It notes that at present, the Angan Wady Worker (AWW) is expected to perform 21 tasks. In addition to this, given her proximity to the people in the villages, she is often used for non-ICDS duties. So, in the Eleventh Plan targets for child nutrition, health care, immunization, early childhood education, etc.will be set for AWWs, to frame her work profile better. Since the condition of children and their problems vary from region to region and even within districts in the country, these targets and objectives will be district or block specific. At the district-level a committee comprising the District Collector, District Health Officer, women Panchayat members, and mothers groups will be set up to decide the targets for ICDS. Performance of the ICDS centres will be evaluated against these targets and well-performing centres will be rewarded. Besides, streamlining the work and expectations from the AWW, the new ICDS will also tackle issues of programme design, implementation, and financial allocations.

In the Eleventh Plan, community involvement will be the strategy for ensuring better functioning of ICDS centres. Involving the local community not only creates a sense of ownership and facilitates monitoring, it also ensures that the programme is tailored according to local needs.

A Village Committee comprising mothers or representatives 'of mothers' groups, AWW, ANM, ASHA, women Panchayat members will be constituted to look at issues like appointment of AWWs and helpers (which should take place through an open *Gram Sabha* with at least 60% attendance), content of Supplementary Nutrition Programme (SNP), procurement and preparation, meeting the targets set for the ICDS, and organization of monthly Mother and Child Health Days.

The AWW will be answerable to this village level committee and the committee should have the power to recommend to the district level committee for removal of the AWW, ANM, ASHA, or helper by a simple majority. The District Committee will have the power to remove nonperforming workers. The village level committee would be also entrusted with the proper use of flexi-funds being suggested for AWCs.

Notwithstanding significant investments the fact remains that the ICDS programme covers a small proportion of children under six. According to NFHS 3 only 26.3 % of children received food supplements, a still less 20% received immunisations while a far less 15.8% had their health check ups at the ICDS. ( IIPS 2007) N. C. Saxena (2008) points out that the programme is not reaching out to vast number of children (60 million out of 164 million children from 6 months to 6 years), that ICDS centres tend to be located in richer parts of the village and are 'out of reach for vulnerable children of poorer households, lower castes and those living in remote areas'. The World Bank, one of the important stakeholders of the ICDS programme and a significant financer, has been arguing for dedicated services for under-threes. The latter however is expected to be addressed in the Eleventh Plan.

## Performance of ICDS[7]

Any discussion on persistent under-nutrition of children would be incomplete without a review of the ICDS programme which since 1975 has been positioned as the flagship programme of the government. While the ICDS programme is a central sector scheme, with the Government of India assuming the leadership and making a significant financial contribution to the programme, the state governments from their own non-plan resources finance the food component of ICDS. Equally significant is the fact that external assistance by way of a loan from the World Bank or as a grant from other multilateral agencies like UNICEF (except the WFP) is channelled for the geographical expansion of the programme and for infrastructure development, personnel training and monitoring. The core components of the programme are fully funded by the government—GoI and the concerned state governments.

However, the continued poor performance of ICDS prompted the World Bank Supervision Mission of September-December 2003 to note that 'The CPMU and the World Bank agree that it is now necessary to improve the quality of execution of the ICDS III project and the general ICDS program by focusing on the execution of all the activities that need to accompany the investment in infrastructure development for ICDS to have an impact on children's and women's well-being, including their nutritional status.' In November 2006, the Bank released its 'Implementation Completion & Results Report' on the ICDS-III project, where the overall outcome[3] rating was assessed as 'Moderately Satisfactory'.

Despite repeated mention of slow/irregular procurement in states like Uttar Pradesh and despite recommending the adoption of local procurement of supplements, not much headway has been made in this direction. Ensuring a regular supply of nutrition is within the purview of the state governments. Discussions with the Department of Women and Child Development (DWCD) and National Institute of Public Cooperation and Child Development (NIPCCD) reveal that their role is one of compiling data and monitoring the programme through quarterly reports. DWCD issues guidelines from time to time on almost all aspects of the programme. These guidelines are communicated to the state and an exhaustive compendium of these guidelines is available. NIPCCD provides guidance with respect to training and has in the past conducted detailed studies on the impact of the programme. GoI's ability to ensure regular supply of SNP is limited. Equally important is the fact that the external agencies are also not in a position to make their support conditional on regular procurement and supply of nutrition supplements.

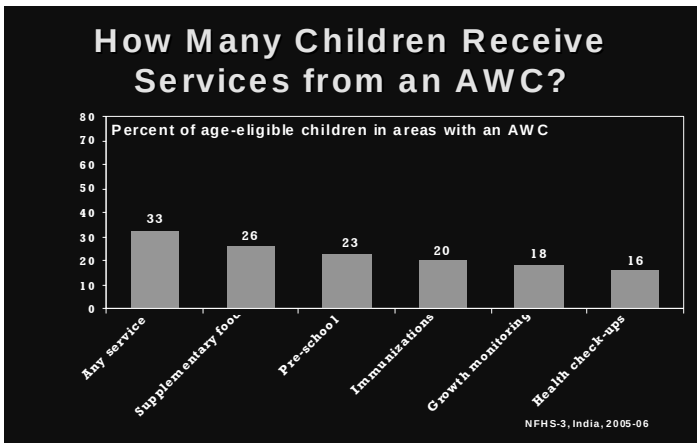
[7] This section draws upon the exhaustive field notes and reports of the Educational Resource Unit's study on ICDS for GoI and the World Bank done in 2004.

[8] Revised ICDS-III target was 'project specific reduction in severe and moderate malnutrition in 0-36 month old children (<-2SD, NCHS growth standards), up to 2% annual in project blocks (as compared with non-project and non-ICDS blocks) presuming a secular trend of 1% (i.e. at least 10% points decline over 5 years.' Other 2 original indicators (% children born with low birth weight and reduction in Infant Mortality Rate) were dropped after the mid-term review due to various reasons.

Given this situation, it is not clear to what extent GoI can actually ensure the realisation of the core objectives of reduction in malnutrition, targeting poor households, targeting under-threes and behaviour change communication. Given the federal structure of the country and given the uneven development across social sectors, national designs and national norms make little sense. Perhaps the only answer is to move towards state-specific norms and state-specific Memorandum of Understanding between GoI, the external donor agency and the concerned state government. Such an approach could lend itself to more intensive technical support and monitoring in the more difficult regions and a more hands-off approach in those states where the programme is functioning well.

Notwithstanding significant investments the fact remains that the ICDS programme covers a small proportion of children under six. This fact was driven home convincingly after the NFHS-3 data was released (Figure 4.1).

**Figure 4.1: Number of children receiving services from an AWC**




The debate on the effectiveness of ICDS and its coverage has been a contentious issue in India for over ten years now. Civil society groups and concerned citizens have knocked on the doors of the Supreme Court (SC) to make the government sit up and take notice of children and their rights. For many decades now the government has been talking of adopting a rights perspective in women and child development. Yet, progress on the ground remains tardy. Children's right to food, care and education remain elusive.

In 2001 the Supreme Court of India passed a landmark order. Biraj Patnaik, *Principal Adviser to the Commissioners of the Supreme Court,* points out that in an interim order on 28 November 2001, the Supreme Court converted most food and employment-related schemes into 'legal entitlements'. This also implies that the Government of India and state governments cannot change these schemes without the permission of the SC till the final judgment is passed in this case. The campaign hopes that this case will culminate in the Right to Food becoming a fundamental right that can be made justiciable in any court of law in the country. The interim orders of the SC reflect the growing complexity of the case and the diverse issues being covered. The orders on universalising access to food, especially for children—relating to mid-day meals (MDM) and ICDS—have been landmarks. On 28 November 2001, the Supreme Court directed state and central governments to universalise mid-day meals and provide hot, cooked meals to all primary school children in India. The interim order also universalised the ICDS programme, making it mandatory for the government to provide supplementary nutrition and the other five services under ICDS to all children below the age of six, all pregnant women and nursing mothers and adolescent girls.

This order explicitly states that: 'We direct the State Governments/Union territories to implement the Integrated Child Development Scheme (ICDS) in full and to ensure that every ICDS disbursing centre in the country shall provide as under:

- Each child up to 6 years of age to get 300 calories and 8-10 grams of protein
- Each adolescent girl to get 500 calories and 20-25 grams of protein

- Each pregnant woman and each nursing mother to get 500 calories and 20-25 grams of protein
- Each malnourished child to get 600 calories and 16-20 grams of protein
- Have a disbursement centre in every settlement.

When the state and central governments did not comply, the SC was compelled to pass further orders on 7 October 2004, directing the Government of India to increase the number of ICDS centres to cover 14 lakh (1 lakh=0.1 million) habitations. This would mean starting at least 7 lakh additional centres as a minimum requirement to universalise ICDS. The same order recommended the increase of the allocation of 'rupees one per child per day' to 'rupees two per child per day', with the central and state governments contributing one rupee each. The same interim order also directed the government to make 'earnest effort to cover the slums under ICDS', and ensuring that all SC/ST habitations got an anganwadi 'as early as possible'. The SC also categorically banned the use of contractors for providing supplementary nutrition and directed the Government of India and all states and union territories to use local women's self-help groups and mahila mandals to supply the supplementary food distributed in anganwadi centres (Patnaik, 2007).

The reports compiled by the Commissioners of the Supreme Court of India detail the abject situation that prevails on the ground. N. C. Saxena (2008) points out that the programme is not reaching enough children (60 million out of 164 million children from 6 months to 6 years), that ICDS centres tend to be located in richer parts of the village and are 'out of reach for vulnerable children of poorer households, lower castes and those living in remote areas'. He further points out that the programme does not reach out to children under-three years and the component of nutrition education and behaviour change 'is neither implemented nor monitored'. He also makes a case for more decentralised and situation-specific strategies and makes a strong plea for a dedicated worker to exclusively reach out to mothers and children below the age of three. The Working Group Report of the Eleventh Plan also made a strong case for additional workers to exclusively reach out to under-threes. The Right to Food campaign (Right to Food Campaign Secretariat, 2007) gives a detailed justification for adding another AWW.

The World Bank, one of the important stakeholders of the ICDS programme and a significant financer, has been arguing for dedicated services for under-threes. In its document 'Reaching out to the child' the Bank makes a convincing argument for a more holistic approach to child development—one where the life of a child from conception to age 11 is seen as a continuum with each stage influencing the outcomes of successive stages: 'Given the size of the problem, and the complexity of issues involved, there is no alternative to a multi-sectoral and decentralised approach towards addressing the developmental and educational needs of Indian children. Meeting their needs does not only mean more resources, but more care and attention at the level of planning, programme design and delivery, as well as monitoring and evaluation' (World Bank, 2004).

There are several field-based investigations as well as research studies that show that nutrition education and hands-on support to women for improving infant care and feeding practices in ICDS has received a setback in the last 30 years.[9] Almost all the key informants interviewed emphasised the importance of family-level education, counselling and support showing women what they can do with existing resources. The important issue is that there is a need to acknowledge that there is a gap between what is desired and the social customs and perceptions of families. The disjuncture needs to be addressed at the level of the family and the community; advocacy through the media is not adequate (Table 4.6).

[9] Bhandari, (2003); Educational Resource Unit, (2004); Gupta, (2003); New Concept Information Systems Pvt. Ltd. (2003); NIPCCD (2000); Planning Commission, (2001).

**Table 4.6: Disconnect between desired good practice and ground realities[10]**

| DESIRED GOOD PRACTICE | OBSERVED PRACTICE ON THE GROUND |
|---|---|
| From conception to birth | |
| - Healthy mother essential for a healthy child.<br>- Pregnant women should eat well and gain weight.<br>- Keep count of month of pregnancy.<br>- Antenatal care important, at least three or four check-ups, measure blood pressure, check for anaemia and other danger signs.<br>- Anti tetanus injection and Iron and Folic Acid (IFA) tablets. | - Eat normally, not too much.<br>- Desire small child for easy delivery.<br>- Do not go for antenatal care or to a doctor unless there is a 'problem'; pregnancy a part of life, it is not and illness'.<br>- Not really aware of exact weeks of pregnancy, have a rough idea.<br>- Not serious about anti tetanus injection, not sure why it is necessary.<br>- Iron pills given by AHW thrown away or eaten irregularly. |
| From birth to 18 months | |
| - Mother to eat well and balanced diet, to produce sufficient milk for the child.<br>- Breastfeeding immediately after birth and exclusive breastfeeding up to six months and continue to breastfeed up to one year.<br>- Demand feeding (the child knows best when it needs a feed).<br>- Weaning food /solids after 3 months on.<br>- If supplementary milk is unavoidable, emphasis on keeping bottle clean (sterilised). | - Mother to eat well but only 'hot' foods and foods for healing the wound'.<br>- Varied practices with respect to breastfeeding immediately after birth.<br>- Breastfeeding till next child is on the way, feed up to 2 years. Demand feeding and comfort feeding and to keep the child quiet, even when the mother has little milk.<br>- No special weaning food among the very poor; child eats whatever is cooked for others.<br>- Supplementary feeding irregular, mostly with spoon or glass. If a bottle is used, it is just washed. |
| Early childhood care, immunisation and illness | |
| - Immunisations absolutely essential:<br>- Triple antigen (DPT)<br>- Polio-at least three doses<br>- Measles<br>- Vitamin A<br>- Approach to illness is preventive<br>- Proper nutrition and safe water important<br>- Faeces disposal practices, environmental hygiene essential to prevent infections. | - No much motivation for immunisations, all 3 doses not given.<br>- Polio drops given if available at doorstep and because of sustained campaign. Little knowledge of triple antigen and measles vaccines. Not aware of Vitamin A. Educated parents more serious about immunisations.<br>- Approach to illness is curative. Cold, cough, skin irritations, moderate fever not considered serious.<br>- Nutrition not directly connected with health, special diet (not necessarily nutritious) after an illness, is important. 'Filling the stomach' is of primary importance. |
| Growth | |
| - Height and weight for age an important indicator of health.<br>- Also age specific milestones for assessing physical and mental development. Immunisations and proper nutrition are for achieving these ends. If milestones are inordinately delayed, a doctor should be contacted. | - Height and weight have little meaning to parents unless very noticeably different from other children.<br>- Children not tracked accurately after 2 or 3 years. As a result, the height/weight/age charts don't mean much, not even to the AWWs.<br>- There is a different awareness of milestones (not the result of awareness-building efforts). |
| Environmental hygiene | |
| - Good health is dependent on cleanliness of the self and of the surroundings.<br>- Wash hands before cooking, eating.<br>- Keep surrounding free of household waste, urine, defection, cow dung etc. | - Poverty, poor housing, no sanitation, no safe drinking water lead to poor personal hygiene and unclean surroundings.<br>- This is not necessarily correlated to illness in the family or persistent diarrhoea. |

[10] Adapted from Vimala Ramachandran, et al. 2004

## Mid-Day Meal Scheme[11]

With a view to enhancing enrolment, retention and attendance and simultaneously improving nutritional levels among children, the National Programme of Nutritional Support to Primary Education (NP-NSPE) was launched as a centrally sponsored scheme on 15 August 1995 initially in 2,408 blocks in the country. By 1997-98, NP-NSPE had been introduced in all blocks in the country. The programme is popularly referred to as the Mid-day Meal Scheme (MDM) and now covers children in Classes I-V in government (normally in the age bracket of 6-14 years), government aided and local body schools and also children studying in centres run under the Education Guarantee Scheme (EGS) and the Alternative and Innovative Education (AIE) Scheme.

Central assistance under the scheme consists of the following:

- Free supply of a cooked mid-day meal providing 300 calories and 8-12 grams of protein per child;
- Subsidy for transportation of food grains up to a maximum of Rs. 100 per quintal for special category states and Rs. 75 per quintal for other states;
- Cooking cost @ Re. 1 per child per school day; this includes cost of ingredients like pulses, vegetables, cooking oil and condiments. It also includes cost of fuel and wages/remuneration payable to personnel or amount payable to an agency (SHG, VEC, SMC) responsible for cooking;
- Management, monitoring and evaluation costs @ 2 per cent of the cost of food grains, transport subsidy and cooking assistance;
- Provision of a mid-day meal during summer vacations in drought affected areas; and
- Provision of essential infrastructure including kitchen-cum-store, adequate water supply for cooking, drinking and washing, cooking devices (stove, *chulha* etc), containers for storage of food grains and other ingredients and utensils for cooking and serving. Infrastructural requirements are met through convergence with other development programmes, including the Sampoorna Grameen Rozgar Yojana (SGRY), Basic Services for Urban Poor (BSUP) and the Urban Wage Employment Programme (UWEP) for the construction of kitchen-cum-store. Water supply requirements are met through convergence with the Accelerated Rural Water Supply Programme (ARWSP), Swajaldhara and the Sarva Shiksha Abhiyan (SSA).

Amartya Sen and Professor Jean Dreze and the Right to Food campaign have argued that the MDM programme is of great value for a number of reasons. First, most underprivileged children suffer from serious nutritional deficiencies and chronic hunger, which has a strong negative effect on their educational accomplishments. Second, most children in India (and an overwhelming majority of the underprivileged) attend government schools and the government is the only organisation that is backed by a structure that can reach all the children. Investment in the mid-day meal programme, besides boosting attendance levels, serves the critical need of plugging nutritional deficiency. They make the case that even from a purely economic perspective, there are few better social investments that our country can make than the mid-day meal programme.[12]

[11] Sourced from www.education.nic.in/mdm/mdm.asp (accessed on 10 March 2008).

[12] Sourced from http://data.ashanet.org/datastore/data/Campaigns/RightToFood/MiddayMeals/Asha_Midday_Meal_Campaign.htm. accessed on 10 March 2008

## National Rural Health Mission[13]

The flagship health programme of the country is the National Rural Health Mission (NRHM) (2005-2015). The main goals of the programme are to provide effective healthcare to rural population throughout the country with special focus on 18 states which have weak public health indicators and/or weak infrastructure. The key components of NRHM are provision of a female health activist in each village; a village health plan prepared through a local team headed by the Health and Sanitation Committee of the Panchayat and strengthening of rural hospitals for effective curative care and making them measurable and accountable to the community through the Indian Public Health Standards (IPHS). NRHM aims at the integration of health with sanitation and hygiene, nutrition and safe drinking water through a district plan for health.

India has a pyramidal structure in health services. The basic unit is the sub-centre, which is the operational base of the Auxiliary Nurse Midwife (ANM). A village level Accredited Social Health Activist (ASHA) who works within the community, now supports her. The ANM is expected to draw support from the Primary Health Centre (PHC) which is supposed to be equipped to handle routine illnesses and also the management of infectious/communicable diseases. PHC is also the first port of call. PHC is expected to provide basic maternal and child health services. Just above the PHC is the Community Health Centre (CHC) (which is really an upgraded PHC with more facilities for referral). Above the CHC are sub-divisional and district hospitals providing referral services. Ratio of hospital beds to population in rural areas is almost 15 times lower than that for urban areas (Table 4.7).

**Table 4.7: India's health delivery system**

| Type of health service in Rural India | All India |
|---|---|
| District hospitals | 558 |
| Sub-divisional hospitals | 1,140 |
| Community health centres (CHC) | 3,910 |
| Primary health centres (PHC) | 22,669 |
| PHCs working 24 x 7 | 756 |
| Sub-centres | 144,988 |

Source: MOHFW (2007); Finance Minister's Budget Speech, (February, 2008).

Unlike rural areas where there is an organised 3-tier health delivery structure, there is no such structure available in urban areas. Municipal hospitals exist in most Indian cities but public hospitals are inadequate for the rapidly expanding urban population. Apart from a large private sector, the different public health infrastructures that cater to the urban population include PHCs, industrial hospitals and dispensaries (some set up as part of the Employees' State Insurance Schemes and Urban Health and Family Welfare Centres) run by state governments or city municipal corporations. Most of these provide curative services but do not specifically cover slum populations, hence an urban primary healthcare infrastructure has been established through specific schemes and programmes sponsored and funded by the central and state governments. Even though these services exist, there are no uniform organisational structures. There are 985 urban hospitals across the country.

[13] Sourced from mohfw.nic.in/national_rural_health_mission.htm (accessed on 10 March 2008).

Out of the 639,729 doctors registered in India, only 67,576 are in the public sector. It is a similar story when it comes to ANMs and nurses. State-wise absence rates in primary healthcare centres (PHC and sub-centres) vary from around 65 per cent in Bihar to 27 per cent in Madhya Pradesh.

Globalisation has had a significant negative impact on the health delivery system. Experts argue that there has been a steady decline in the public health system, especially in the last 17 years. Almost 82 per cent of the health expenditure in India comes from private sources and nearly 67 per cent of the population in India does not have access to essential medicines. There is a predominance of the private sector for primary and tertiary care in almost all the states. 'Three rounds of National Sample Survey (NSS) data from 1986-87 onwards show that the utilisation of private sector services has been increasing over time. According to the 2004 NSS, for ailments not needing hospitalisation, 22 persons per 1,000 use government facilities against 78 per 1,000 who frequent the private sector. In the urban areas the corresponding figures are 19 and 81 per cent'.[14]

India today allocates 1.39 per cent of its GDP (*Economic Survey, 2007-08*) to health and will not reach its avowed target of even 3 per cent of GDP if current trends continue. United Nations' calculations show that India's spending on public health provision, as a share of GDP is the 18th lowest in the world. In this context, NRHM is truly an ambitious programme that seeks to enhance people's access to basic maternal and child health services. It is too early to say whether the proposed initiatives of GoI are actually bearing fruit on the ground.

## Public Distribution System[15]

The Public Distribution System (PDS) means distribution of essential commodities to a large number of people through a network of fair price shops (FPS) on a recurring basis. The commodities that are distributed are:

- Wheat
- Rice
- Sugar
- Kerosene

PDS evolved as a major instrument of the government's economic policy for ensuring availability of food grains to the public at affordable prices as well as for enhancing food security for the poor. It is an important constituent of the strategy for poverty eradication and is intended to serve as a safety net for over 300 million poor who are nutritionally at risk. PDS with a network of about 4.78 lakh FPS is perhaps the largest distribution network of its type in the world.

PDS is operated under the joint responsibility of the central and state governments. The central government has taken the responsibility for procurement, storage, transportation and bulk allocation of food grains. The responsibility for distributing these to consumers through the network of FPS rests with state governments. The operational responsibilities including allocation within the state, identification of families below poverty line, issue of ration cards, supervising and monitoring the functioning of FPS rest with the state governments.

[14] This sub-section draws upon the recent Oxfam India/Wada Na Todo Campaign Essential Services Report, in particular Dr. Imrana Qadeer's sector paper on health (2007).

[15] Sourced from www.planningcommission.nic.in/plans/planrel/fiveyr/10th/volume2 (accessed on 10 March 2008).

## Antyodaya Anna Yojana[16]

The Antyodaya Anna Yojana (AAY) was launched by the Prime Minister on the 25 December 2000. This scheme reflected the commitment of the Government of India to ensuring food security for all to create a hunger free India in the next five years and for reforming and improving the Public Distribution System so as to serve the poorest of the poor in rural and urban areas. The main focus of the Antyodaya Anna Yojana was the poorest of the poor. It was estimated that 5 per cent of the population was unable to get two square meals a day on a sustained basis throughout the year. Their purchasing power was so low that they were not in a position to buy food grains round the year even at BPL rates. It was this 5 per cent of the population (50 million people or 10 million families), which constituted the target group of AAY.

AAY contemplated identification of 10 million families out of the total number of BPL families who would be provided food grains at the rate of 35 kg per family per month. The food grains were issued by the Government of India @ Rs.2 per kg for wheat and Rs. 3 per kg for rice. The Government of India suggested that in view of the abject poverty of this group of beneficiaries, the state governments may ensure that the end retail price was retained at Rs.2 per kg for wheat and Rs.3 per kg for rice.

## National Rural Employment Guarantee Act (NREGA)

Enacted on 25 August 2005, the National Rural Employment Guarantee Act (NREGA) provides a legal guarantee for 100 days of employment in every financial year to adult members of any rural household willing to do unskilled manual work at the statutory minimum wage (currently Rs. 60 per day).

The central government meets the cost towards the payment of wages, three-fourth of the material costs and a certain percentage of the administrative costs. State governments meet the costs towards unemployed allowance and one-fourth of material and administrative costs.

To avail of the benefits under NREGA, adult members of rural households submit their name, age and address with a photograph to the Gram Panchayat. The Gram Panchayat registers households after making enquiries and issues a job card. The job card contains the details of the adult member enrolled and his/her photo. The registered person can submit an application for work in writing (for at least 14 days of continuous work) either to the Panchayat or the Programme Officer.

The Panchayat/Programme Officer accepts valid applications and issues a dated receipt of the application; letters providing work are sent to the applicants and also displayed in the Panchayat office. The employment is to be provided within a radius of 5 km; if the distance is more than 5 km, extra wages have to be paid. If employment under the scheme is not provided within 15 days of receipt of the application, daily unemployment allowances have to be paid to the applicants.

The scheme started on 2 February 2006 in 200 districts (including the 150 in the Food for Work Programme) and is expected to cover all districts within five years. As per GoI's *Economic Survey 2007-08*, the number of districts currently being covered is 330.

[16] Sourced from http://fcamin.nic.in/dfpd/EventDetails.asp (accessed on 10 March 2008)

## Sampoorna Grameen Rozgar Yojana[17]

The Sampoorna Grameen Rozgar Yojana (SGRY) was launched with effect from 25 September 2001 to provide wage employment in rural areas. The Employment Assurance Scheme (EAS) and the Jawahar Gram Samridhi Yojana (JGSY) have been merged with the Sampoorna Grameen Rozgar Yojana (SGRY). The programme is being implemented as a single unit from 2002-03.

It is envisaged that about one billion person-days of employment will be generated every year in the rural areas through SGRY. The scheme is being implemented in two streams: first, at the district and intermediate Panchayat levels, and the second at the village Panchayat level. The basic objective of the first stream would be to provide additional wage-employment while the second stream would primarily aim at the creation of a need-based rural infrastructure.

## Rashtriya Sam Vikas Yojana

The Backward Districts Initiative under the Rashtriya Sam Vikas Yojana (RSVY) was initiated by the Planning Commission in 2002-03 with the main objective of putting in place programmes and policies with the joint efforts of the centre and states that would remove barriers to growth, accelerate the development process and improve the quality of life of the people. The scheme aimed at focused development programmes for backward areas which would help reduce imbalances and speed up development. A sum of Rs. 150 million per year was provided to each of the districts for a period of three years (a total of Rs. 450 million per district). Funds were released to state governments on a 100 per cent grant basis in suitable instalments linked with the satisfactory progress of the district plan. The state governments, in turn, were to release the funds received under the programme to a separate head created for the purpose under the District Rural Development Agency (DRDA).

This scheme was to cover 100 districts. The identification of backward districts within a state was made on the basis of an index of backwardness comprising three parameters with equal weight to each: (i) value of output per agricultural worker; (ii) agriculture wage rate; and (iii) percentage of SC/ST population in the districts. The number of districts per state was worked out on the basis of incidence of poverty. In addition, 32 districts which are affected by Left Wing extremism were also covered. Fifty Backward Districts and 16 districts affected by Left Wing extremism were covered in Annual Plan 2003-04.

The main objectives of the scheme are addressing the problems of low agricultural productivity and unemployment, and to fill critical gaps in physical and social infrastructure.

## National Maternity Benefit Scheme[18] & Janani Suraksha Yojana

The National Maternity Benefit Scheme (NMBS) was launched in 1995. It was part of the National Social Assistance Programme (NSAP) to be implemented by the Ministry of Rural Development which was later transferred to the Ministry of Health and Family Welfare (MOHFW). Under NMBS, pregnant women from BPL families were entitled to cash assistance of Rs. 500 which was disbursed in one instalment 8-12 weeks prior to the delivery for up to two births (Sinha, 2006) subject to certain conditions.

[17] Sourced from www.rural.nic.in/book01-02/ch-2.pdf (accessed on 10 March 2008).
[18] Sourced from www.planningcommission.gov.in/reports/sereport/ser/maker/mak_cht5c.pdf (accessed on 10 March 2008).

Based on reports that NMBS did not have any impact on maternal mortality, the scheme was modified into the Janani Suraksha Yojana (JSY) and launched in April 2005. MOHFW modified the scheme from one which was a nutrition improving initiative to one addressing the entire aspect of maternal health. The objectives of JSY are reducing maternal and infant mortality through increased deliveries in health institutions.

Though JSY was implemented in all the states and union territories, it focuses especially on those states which have a low institutional delivery rate. The scheme is 100 per cent centrally sponsored and integrates cash assistance with maternal care.

The states where the institutional delivery rate is abysmally low (Uttar Pradesh, Uttaranchal, Bihar, Jharkhand, Madhya Pradesh, Chhattisgarh, Assam and Jammu & Kashmir) have been categorised as Low Performing States (LPS) while the remaining states have been categorised as High performing States (HPS).

The scheme targets:

- All pregnant women in the low performing states (LPS).
- All BPL pregnant women of age 19 years or above in high performing states (HPS).
- All ST and ST pregnant women from both LPS and HPS states.

The current scales of cash assistance per delivery are shown in Table 4.8.

**Table 4.8: Scales of Cash Assistance under JSY**

| Category | Rural Areas | | Total | Urban Areas | | Total |
|---|---|---|---|---|---|---|
| | Mother's Package in Rs | ASHA's Package in Rs | in Rs | Mother's Package in Rs | ASHA's Package in Rs | in Rs |
| **LPS** | 1400 | 600 | 2000 | 1000 | 200 | 1200 |
| **HPS** | 700 | | 700 | 600 | | 600 |

Source: www.planningcommission.gov.in/reports/sereport/ser/maker/mak_cht5c.pdf (accessed on10 March 2008).

In LPS states a mother's package is available to all women including all SC and ST women, delivering in any public or accredited private institution. No age or BPL certification is insisted upon. Similarly, restriction on number of childbirths has also been removed.

In HPS states a mother's package is available to all BPL pregnant women including all SC and ST women, aged 19 years and above, up to 2 births, delivering in any public or accredited private institution.

ASHA's package (available in LPS and NE states) consists of transport assistance to the mother and compensation assistance to ASHA in rural areas. In urban areas, the money is only for ASHA to meet her transactional cost of accompanying the pregnant woman for delivery.

Other benefits under the scheme are:

- All BPL pregnant women aged 19 years or above preferring to deliver at home will receive cash assistance @Rs.500 per delivery, up to 2 live births.

- If hospitalisation for delivery is followed immediately by tubectomy/laparoscopy, the beneficiary would get compensation money available under the existing family welfare scheme at the hospital.

- Where government specialists are not available in the government's health institution, for managing complications assistance up to Rs. 1,500 per case is being given to the health institution for hiring services of experts in a government medical facility. If a private medical expert is not available, expert doctors working in the other government set-ups may be empanelled, provided his/her services are spare.

The scheme links cash assistance to antenatal check-ups and institutional deliveries. Dipa Sinha (2006) argues that linking the benefits of the scheme to various conditions would severely undermine the rights of a woman to use social assistance under NMBS to access food, nutrition and rest during pregnancy and after, and also the rights of the child to breastfeed and get care. Calculations in the Sixth Report of the SC Commissioners shows that on an average nearly 65.5 per cent of the eligible beneficiaries under NMBS would get zero direct cash assistance under the proposed JSY.

### National Family Benefit Scheme[19]

Central assistance is available under this scheme in the form of a lump sum family benefit for households below poverty line (BPL) on the death of the primary breadwinner in the bereaved family, subject to the following conditions:

- The 'primary breadwinner' is a member of the household, male or female whose earnings contribute substantially to the total household income.

- The death of such a primary breadwinner occurs while he or she is more than 18 years and less than 65 years of age.

- The bereaved household qualifies as one below poverty line according to the criteria prescribed by the Government of India.

- The amount of benefit is Rs. 10,000 irrespective of the cause of death—natural or accidental—of the primary breadwinner. The family benefit is paid to such surviving member of the household of the deceased who after local enquiry, is determined to be the head of the household.

Like for the other schemes, there is no accessible independent assessment of whether this scheme has really made a difference on the ground, especially for women and children.

### Swasthya Bima Yojana[20]

Workers in the unorganised sector constitute about 93 per cent of the total workforce in the country. The government has been implementing some social security measures for certain occupational groups but their coverage is miniscule. A majority of the workers are still without any social security coverage. Recognising the need for providing social security to these workers, the central government introduced the Swasthya Bima Yojana Scheme.

[19] Sourced from www.planningcommission.gov.in/reports/sereport/ser/maker/mak_cht5b.pdf (accessed on 10 March 2008).
[20] Sourced from http://labour.nic.in/ss/SwasthyaBimaYojana.pdf (accessed on 27 March 2008).

One of the major insecurities for workers in the unorganised sector is frequent incidences of illness and the need for medical care and hospitalisation of such workers and their family members. Despite the expansion in health facilities, illness remains one of the most prevalent causes of human deprivation in India. It has been clearly recognised that health insurance is one way of providing protection to poor households against the risk of health spending leading to poverty. However, most efforts to provide health insurance in the past have faced difficulties in both design and implementation. The poor are unable or unwilling to take up health insurance because of its cost, or lack of perceived benefits. Organising and administering health insurance, especially in rural areas, is also difficult.

Some salient features of the Swasthya Bima Yojana scheme are:

**Eligibility:**

- Unorganised sector workers belonging to BPL[21] category and their family members (a family unit of five) shall be the beneficiaries under the scheme.
- It will be the responsibility of the implementing agencies to verify the eligibility of the unorganised sector worker and his family members who are proposed to benefit under the scheme. The beneficiaries will be issued smart cards for the purpose of identification. The cost of smart card will be borne by the central government.

**Premium:**

Contribution by GoI—75 per cent of the estimated annual premium of Rs.750 (maximum of Rs. 565 per family per annum) with the state governments contributing the balance. The beneficiary will have to pay only Rs. 30 per annum as registration/renewal fee.

**Benefits:**

The beneficiary shall be eligible for such in-patient healthcare insurance benefits as would be designed by the respective state governments based on the requirements of the people/geographical area. However, the state governments are advised to incorporate at least the following minimum benefits in the package/scheme:

- The unorganised sector worker and his family (unit of five) will be covered. Total sum insured would be Rs. 30,000 per family per annum on a family floater basis.
- Cashless attendance will be given to all covered ailments.
- Hospitalisation expenses will be paid, taking care of most common illnesses (with as few exclusions as possible).
- All pre-existing diseases will also be covered.
- Actual transportation costs will be reimbursed (with maximum limit of Rs. 100 per visit within an overall limit of Rs. 1,000).

[21] BPL as defined by the Planning Commission.

## Rajmata Jijau Mother-Child Health and Nutrition Mission, Maharashtra[22]

The Rajmata Jijau Mother-Child Health and Nutrition Mission was constituted by Government Resolution dated 11 March 2005 issued by the Department of Women and Child Development, Government of Maharashtra with the primary objective of reducing Grade-III and Grade-IV malnutrition in children in the 0-6 years age group in the state of Maharashtra.
Complementary objectives of the mission include:

- Ensuring provision of neonatal care to pregnant women, new-born care and special focus on health;
- Nutrition and complete immunisation of children in the 0-3 years age group (in effect, focus on the entire period from the stage of conception to the time the child is three years old);
- Reduction of Grade-I and Grade-II malnutrition in the state; assisting the Public Health Department in provision of training for implementation of the Integrated Management of Neonatal and Childhood Illness (IMNCI) and home-based new-born care programmes on a pilot basis in selected PHCs;
- Focus on the education of adolescent girls to reduce the incidence of child marriages and promote spacing between children; and
- Making efforts to bring about social transformation through participation of the community so that the responsibility for nutrition management is transferred from the government to civil society.

While no evaluation reports of this programme are available (the programme is less than 3 years old) it is believed that such a community-based programme has been able to make a dent.

## Accelerated Rural Water Supply Programme (ARWSP)

Taking into account the magnitude of the problem and to accelerate the pace of coverage of problem villages, the central government introduced the Accelerated Rural Water Supply Programme (ARWSP) in 1972-73 to assist states and union territories with 100 per cent grants-in-aid to implement schemes in such villages. The programme was given a mission approach when the Technology Mission on Drinking Water and Related Water Management, also called the National Drinking Water Mission (NDWM), was introduced as one of the five societal missions in 1986. NDWM was renamed the Rajiv Gandhi National Drinking Water Mission in 1991.

ARWSP was implemented till 1998-99 though it was envisaged that all the rural habitations in the country would be covered during the Eighth Plan period and the implementation of the programme would be discontinued by the end of the Eighth Plan period. However, the objectives of the programme could not be attained as envisaged due to lack of sufficient funds and the re-emergence of 'Not Covered Habitations' and so the programme continued to be implemented during the Ninth Plan period onwards as well. An increased outlay by the government, particularly in the last decade and a change in technology focus to hand-pumps fitted on tube wells and bore wells, did result in an impressive increase in the total rural water supply coverage. However, even though about 1 lakh habitations are covered every year, the number of problem habitations has not declined proportionately. GoI has hence issued revised guidelines to energise the system towards overcoming

[22] Sourced from http://hetv.org/nutritionmission/ accessed on 4 April 2008.

these problems and achieving the goal of providing safe and sustainable drinking water to all rural habitations.

The implementing agencies for ARWSP are decided by the state governments and implementation may be through one of: Public Health Engineering Department, or Rural Development Department/ Panchayati Raj Department/Board, Corporation or Authority.

The norms adopted for providing potable drinking water to the population are:

- 40 litres per capita per day (lpcd) for humans.
- In addition, 30 lpcd for animals in hot and cold desert/ecosystems in 227 identified blocks of certain states.
- One hand-pump or stand-post is planned for every 250 persons. However, in case of an independent habitation/hamlet/*wadi*/*tola*/*majra*/*mohra* etc., if the population is less than 250 persons and there is no potable water source within its location, a source may be provided.
- A rural habitation not having any safe water source with a permanently settled population of 20 households or 100 persons, whichever is more, may be taken as the unit for coverage.

The states/union territories (UTs) are required to earmark and utilise at least 25 per cent of the ARWSP funds for drinking water supply to SCs and another minimum 10 per cent for STs. Where the percentage of SC or ST population in a particular state is considerably high warranting earmarking/utilisation of more than the stipulated provisions, additional funds can be utilised.

The allocation of central assistance under ARWSP is subject to the matching provision/expenditure by the states under the state sector minimum needs programme. The effective integration and coordination of project components at the village, district and state levels is ensured via a state-level Water and Sanitation Mission, District Water and Sanitation Mission and Village Water and Sanitation Committees (VWSCs). Since women are the principal beneficiaries of this programme, it is expected that prominent women from the habitation will be represented on the village level water monitoring committees.

All the states are required to compile data regarding district-wise rural schools in existence and the number of them having drinking water facilities. The remaining rural schools and anganwadis are to be provided with drinking water facilities.

### Swajaldhara[23]

The Government of India has been emphasizing the need for taking up community based rural water supply programmes, and took a decision to open up the reform initiative in the rural drinking water supply sector throughout the country. This programme has the key elements of a demand–driven and community participation based approach, wherein the Panchayats/communities plan, implement, operate, maintain and manage all drinking water schemes. The cost of the project excluding community contribution is fully met by the Government of India. The Government of India launched Swajaldhara project on 25 December 2002.

[23] Sourced from http://hetv.org/nutritionmission/ accessed on 4 April 2008.

The main tenets of this programme are:

- It is a community led participatory programme which aims to provide drinking water facilities in rural areas with minimum provision of 40 lpcd (litres per capita per day).
- It adopts a demand-responsive, adaptable approach along with community participation based on the empowerment of villagers to ensure their full participation in the project through a decision making role in the choice of the drinking water scheme, planning, design, implementation, control of finances and management arrangements.
- It gives Panchayats/communities the power to plan, implement, operate, maintain and manage their own water supply and sanitation schemes.
- It gives full ownership of drinking water assets to appropriate levels of PRIs.
- The government shares the capital cost either in cash or kind including labour (or both) but 100 per cent responsibility of operation and maintenance (O&M) is to be taken up by the users, thus shifting the role of the government from direct service delivery to that of planning, policy formulation, monitoring and evaluation and partial financial support.
- It takes up water conservation measures through rainwater harvesting and ground water recharge systems for a sustained drinking water supply.

Swajaldhara has some key components which are implemented at the habitation level including Information, Education and Communication (IEC), capacity development, institution building such as VWSC as part of the Gram Panchayat and community participation, water quality control, sustainability of sources and O&M.

### Central Rural Sanitation Programme[24]

The Central Rural Sanitation Programme (CRSP) was launched in 1986 primarily with the objective of improving the quality of life of the rural people and also for providing privacy and dignity to women. The concept of sanitation was earlier limited to disposal of human excreta by cesspools, open ditches, pit latrines and the bucket system etc. Today it connotes a comprehensive concept, which includes liquid and solid waste disposal, food hygiene and personal, domestic as well as environmental hygiene. Hence, CRSP has since been expanded to include personal hygiene, home sanitation, safe water, garbage disposal, excreta disposal and waste water disposal.

The main objectives of the programme are:

- Bring about an improvement in the general quality of life in rural areas.
- Accelerate sanitation coverage in rural areas.
- Generate felt demand for sanitation facilities through awareness creation and health education.
- Cover schools/anganwadis in rural areas with sanitation facilities and promote hygiene education and sanitary habits among students.
- Encourage cost-effective and appropriate technologies in sanitation.

[24] Sourced from ddws.nic.in/NewTSCGuideline.doc (accessed on 31 March 2008).

- Eliminate open defecation to minimise risk of contamination of drinking water sources and food.
- Convert dry latrines to pour flush latrines and eliminate the manual scavenging practice, wherever in existence in rural areas.

The programme is being implemented with focus on community-led and people-centred initiatives. Children play an effective role in absorbing and popularising new ideas and concepts. This programme, therefore, intends to tap their potential as the most persuasive advocates of good sanitation practices in their own households and in schools. The aim is also to provide separate urinals/toilets for boys and girls in all the schools/anganwadis in the rural areas of the country.

In its present format, CRSP moves towards a 'demand driven' approach, and is titled a 'Total Sanitation Campaign (TSC)'. This emphasises more on Information, Education and Communication (IEC), human resource development and capacity development activities to increase awareness among rural people and the generation of demand for sanitary facilities. This will also enhance people's capacity to choose appropriate options through alternate delivery mechanisms as per their economic conditions. Technology improvisations to meet customer preferences and a location specific intensive IEC campaign involving Panchayati Raj Institutions, cooperatives, women's groups, SHGs, NGOs etc. are important components of the programme strategy.

The programme is implemented with a district as a unit. States/UTs are expected to draw up a TSC project for the selected districts to claim GoI assistance with commitment of their support. The number of project districts will be progressively increased to cover the entire rural area of the country. The TSC project cycle in the project districts is expected to take about 4 years or less for implementation. The main programme components and activities are:

- Start-up activities which include conducting preliminary surveys to assess the status of sanitation and hygiene practices, people's attitude and demand for improved sanitation.
- IEC activities to create demand for sanitary facilities in the rural areas for households, schools, anganwadis, balwadis and community sanitary complexes. Funds available under IEC may be used for imparting education on hygiene to the people as well as to children in schools.
- Setting up of Rural Sanitary Marts and Production Centres by NGOs/SHGs/women's organisations/Panchayats with central/state assistance.
- Construction of individual household latrines comprising of a basic low cost unit (without the super structure).
- Construction of community sanitary complexes in such places in the village as are acceptable to women/men/landless families and are accessible to them (when there is lack of space in the village for construction of household toilets). The maintenance of such complexes is with the Gram Panchayat. Maximum unit cost prescribed for a community complex is up to Rs. 2 lakh. The sharing pattern amongst central government, state government and the community (via the Panchayat) is in the ratio of 60:20:20.
- School Sanitation and Hygiene Education: School sanitation forms an integral part of every TSC project. Toilets in all types of government schools i.e., primary, upper primary, secondary and higher secondary and anganwadis are to be constructed. Emphasis is to be given to toilets for girls in schools. Separate toilets for girls and boys should be provided which are treated as two separate units and each unit is entitled to central assistance of up

to Rs. 12,000. In addition to the creation of hardware in schools, education is imparted to the children on all aspects of hygiene. For this purpose, at least one teacher in each school must be trained in hygiene education who in turn should train the children through interesting activities and community projects that emphasise hygienic behaviour.

- Anganwadi toilets: In order to change the behaviour of the children from a very early stage of their lives, it is essential that anganwadis are used as a platform of behaviour change of the children as well as the mothers attending the anganwadis. For this purpose each anganwadi should be provided with a baby friendly toilet. One toilet of unit cost up to Rs. 5,000 can be constructed for each anganwadi or balwadi in the rural areas where GoI will give an incentive of Rs. 3,000. More than 10 per cent of the total government outlay can be utilised for school sanitation and anganwadi toilets.

Implementation of the Total Sanitation Campaign (TSC) at the district level is done by the Zilla Panchayat. However, in case a Zilla Panchayat does not exist, the District Water and Sanitation Mission implements the project. TSC is meant to be implemented by Panchayati Raj Institutions at all levels. They will carry out the social mobilisation for the construction of toilets and also maintain a clean environment by way of safe disposal of wastes. Community complexes constructed under TSC will be maintained by the Panchayats/Voluntary Organisations/Charitable Trusts. Panchayats can also contribute from their own resources for school sanitation over and above the prescribed amount. They will act as the custodian of assets such as community complexes, environmental components and drainage constructed under TSC. Panchayats can also open and operate production centres/Rural Sanitary Marts.

## A Promising Practice that Faded Away

In 2003, the Government of India and the World Bank jointly identified Garhi block of Banswara district for a promising practice. The Educational Resource Unit (ERU) conducted a detailed assessment of why the block performed better than other areas of Rajasthan. On careful scrutiny, we found that there were specific reasons for the relatively better performance of this block:

- ICDS was launched in Garhi on a pilot basis in 1975. Therefore the initial training given to the AWW was holistic.
- The CDPO, Lady Superintendent (LS) and AWWs interviewed were clear about the three objectives of ICDS—nutrition, health and pre-school education. This could be attributed to the quality of training given in the pilot phase of the project. They worked as a team and seemed to be highly motivated.
- VIHAN, an NGO specialising in early childhood development, provided continuous training and resource support in the block, not only in the ICDS programme but also for the Early Childhood Care and Education (ECCE) component of the Lok Jumbish Project.
- Despite the fact that most of the AWWs were barely literate, they visited homes, took nutrition education seriously and elicited the support of the Panchayat to arrange for jaggery/other condiments to make the food palatable to children. Overall cleanliness of the AWCs was impressive and the AWWs were aware of the importance of good hygiene.
- Self-help groups were fairly active and reportedly their uptake of credit was among the best in Rajasthan. The SHG programme also received support from ASEFA, an NGO that specialises in this field. We came across fairly aware and active mothers' groups, who were also a part of SHGs. Women's groups in the villages worked with the AWCs and performed the role of an

aware and active community forum. Grain banks were organised in some villages to promote nutrition security.

- The CDPO was authorised by the Deputy Director to permit AWWs and lady supervisors to purchase pre-school education materials for up to Rs. 600 per annum. As a result the AWCs were bright and colourful.
- We were also informed that the CDPO motivated the administration to use famine relief work and to undertake repairs of the AWCs, a fact borne out by our visit to four centres which were in excellent condition.
- The adult education programme was launched here in the 1980s followed by the total literacy campaign. While this may not have meant total literacy, community leaders admitted that it had led to higher awareness among the poor, especially among women.
- Interface with education was impressive. Garhi was among the first blocks taken up under the Lok Jumbish Project. Micro planning and school mapping carried out in the block also contributed to greater awareness about education, including pre-school education.

Notwithstanding the relatively better performance of ICDS, nutrition education remained a weak area and we found that the overall nutritional status of children under-3 was not significantly different from that of children under-3 in other parts of Rajasthan. Discussions with local persons revealed that changing infant feeding practices and also improving the regularity of feeding remained difficult issues and in the absence of a sustained and intensive effort to bring about behavioural change the nutritional and health status of the children did not improve. This 'promising practice' did not last long and seems to have faded away with the transfer of key officials.

## Special Plan of Action, Rajasthan

The Department of Women and Child Development (DWCD) is implementing the 'Special Plan of Action' (SPOA) strategy, in collaboration with UNICEF Rajasthan, to target child malnutrition in seven districts across the state. This programme was initiated in November 2004 and has been implemented in seven districts across Rajasthan (Jhalawar, Alwar, Tonk, Baran, Rajsamand, Jodhpur and Dholpur). While it is too early to say whether the programme has yielded desired results, a recent rapid assessment study done in Baran district among the Sahariya tribal community found 'an improvement in weighing efficiency at the community level, as a result of training and support provided to ICDS teams. In particular, the role of the *sahyogini* outreach worker, an initiative of the ICDS programme with training support provided by UNICEF, has resulted in higher attendance rates at AWCs… (however) the findings revealed that despite an increased awareness among caregivers of propagated family-based feeding practices, cleanliness and hygiene, and breastfeeding practices… women continue to discard colostrum and to delay breastfeeding from two to as many as eight days… (More importantly) the study also found that Sahariya children are over-represented among malnourished children aged 0-6, with 59 per cent of all cases referred to the Baran district hospital belonging to this community… in Dhikoniya village, a predominantly Sahariya community, the number of children listed as severely malnourished (Grade III/IV) was four times higher than in the other villages. External factors such as poverty and limited access to services were identified as contributing to the disproportionate representation of Sahariya children among the malnourished' (Griffin et al., 2006).

The important learning from this study is that healthcare services alone are not enough. Concerted efforts are essential to bring about sustained change in infant and child feeding practices. Tackling malnutrition requires action on several fronts simultaneously.

## RACHNA—A Joint CARE and USAID Initiative[25]

The Reproductive and Child Health, Nutrition and HIV/AIDS Programme (RACHNA) was a five-year programme of CARE India, supported by USAID, which started on 1 October 2001. CARE implemented RACHNA in partnership with and in support of the ICDS scheme, the Ministry of Health and Family Welfare (MOHFW) Reproductive and Child Health Programme (RCH) and the National AIDS Control Organisation's National AIDS Control Programme (NACP).

Through RACHNA, CARE worked to demonstrate and replicate improved service delivery and behaviour change approaches for a set of interventions of proven clinical efficacy through strengthening GoI systems and programmes and empowering communities. Commensurate with India's incredible size as the second most populous nation in the world and home to more than one billion people, the scale of RACHNA was also enormous, making it the largest programme of its type in the world.

RACHNA was CARE India's umbrella programme consisting of two projects:

1. Integrated Nutrition and Health Project (INHP-II) that targeted pregnant and lactating women and children less than two years old to improve child survival and nutritional status. Interventions included supplementation with food (using Title-II food aid and local food), Vitamin A, iron and folic acid, immunisation, antenatal care and improved practices for safe delivery, newborn care, breastfeeding and complementary feeding. The project strived to strengthen the ICDS scheme and RCH programme and foster convergence between them. It worked in 94,593 catchment areas called anganwadi centres in 747 blocks (this includes 32 urban blocks) in 78 districts in nine states—Andhra Pradesh, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh and West Bengal. Title-II food aid reached 6.6 million pregnant and lactating women and children up to six years, consistent with ICDS guidelines, but the number of women and children reached for other services varied.

2. *Chayan,* a reproductive health and HIV/AIDS prevention project: The rural component of *Chayan* also worked with ICDS and RCH to promote family planning for birth spacing and prevention and management of Reproductive Tract and Sexually Transmitted Infections (RTI/STI) in 36,300 communities in 300 blocks in 29 districts together with INHP-II. All rural activities relied on GoI personnel and district teams of CARE staff to facilitate implementation. Urban *Chayan* supported the National AIDS Control Programme (NACP) of the National AIDS Control Organisation (NACO). It provided information on HIV/AIDS prevention and RTI/STI referrals for youth (in and out of school) and high-risk behaviour groups (truckers, migrants and female sex workers).

Empowering communities by working with Community-based Organisations (CBOs) and Panchayati Raj Institutions (PRIs) and influencing national policy were the key features of RACHNA. The operational model for the rural programme was demonstrating 'best practices' in 10 per cent of the anganwadis with intensive NGO involvement through 138 partnerships, then replicating and scaling these up through government systems. The four 'best practices' that were promoted were:

[25] This section draws heavily on the final evaluation report of the project available at http://ftp.info.usaid.gov/in/Pdfs/Annexure_A_Care_Rachna_ER.pdf (accessed on 31 March 2008).

- Fixed day, fixed site service delivery at monthly Nutrition and Health Days (NHD),
- Community volunteer change agents and reproductive health change agents (in rural *Chayan),*
- Community-based monitoring systems, and
- Block-level resource mapping.

In order to better achieve the intended health and nutrition outcomes, two-thirds through INHP-II, CARE introduced new tools and sharpened its focus on improving supportive supervision and home visits for behaviour change for the most critical life cycle phases and interventions. It accelerated scale-up through ICDS supervisory sector meetings, facilitated by NGOs and CARE district teams across entire blocks. The 'best practices' except nutrition and health day were de-emphasised.

The urban *Chayan* programme also followed a model of testing 'best practices' in demonstration sites through NGO partnerships, namely Peer Educators and Community Stakeholder Groups.

It is important to note that from 2003 through 2004 CARE successfully completed the unanticipated challenge of smoothly transitioning responsibility for all of the ICDS food rations in INHP-II, except Title-II oil, to the state governments, greatly enhancing the states' supply chain management skills.

## Dular: A Promising Practice In Bihar[26]

Dular means love and care in Hindi. The Dular project started in 2001 in selected districts of Bihar and Jharkhand to combat malnutrition, infant mortality and poor maternal health. At its core was the strategy of getting the people to be responsible for their own welfare, where community members, acting as volunteers and 'peer educators' within their locality, brought about a change in their own socio-economic environment, characterised by poverty and lack of education.

Reviewing the ICDS programme in Bihar, N. C. Saxena, in his undated paper on ICDS in Bihar, outlined the following reasons for ICDS having little impact on infant malnutrition:

- It is not reaching enough children,
- It is not reaching children in the poorest families,
- It is not reaching remote areas,
- It is not reaching enough children in the critical under-3 years age group,
- It is focussing too much on supplying supplementary food and pre-school education, and
- It distracts the AWW and mothers from the more important tasks of changing feeding behaviour and control and treatment of infectious diseases.

[26] Sourced from http://www.unicef.org/india/health_963.htm (accessed on 12 March 2008).

**Box 4.1: Salient Features of Project Dular**

- It is low cost and replicable
- It emphasises systematic involvement of the family and community at large,
- It channelises their efforts and resources towards proper development of the child,
- It adopts a life cycle approach for promoting 'care' of children under 3 years,
- It uses advocacy and social mobilisation to empower the community so that there is a demand for the programme from the community itself and community members are motivated to sustain it. Community mobilisation and participation is achieved through organisation of Village Contact Drives (VCDs) which are two-day training and advocacy programmes which present the programme objectives to the community and encourage the formation of mahila mandals and kishori balika mandals,
- During VCDs, information is also collected on local beliefs and traditional practices which are harmful to health (particularly children's health from 0 to 3 years) which are then used for planning project activities to adapt them to local conditions,
- District Mobile Monitoring and Training Teams assist the sector supervisors by working with households,
- Each community identifies a volunteer, designated as a Local Resource Person (LRP) to monitor the childcare behaviours of members of the respective community by maintaining contact with families in his/her locality, collecting information, supporting families in changing some of the harmful basic care practices and behaviours and in addressing problematic cultural beliefs related to nutrition and health in an innovative manner, and
- A family-retained Dular card is used for monitoring the growth of children at the household level; strong monitoring and feedback systems have been designed for different levels.

Source: N C Saxena (available at www.righttofoodindia.org).

In a recent survey conducted by Tufts University, US it was seen that the percentage of children (under 3) with normal weight in Dular Intensive Villages was higher at 58.7, as compared to 50.7 in non-Dular villages. Similarly, the percentage of children below 3 years who had diarrhoea in the past three months was 50 in Dular Intensive Village as compared to 70.3 in non-Dular villages. This shows that Dular is impacting positively on rural communities. A comparison between Dular and non-Dular districts indicates that the percentage of mothers feeding colostrum to their new born children—recognised as extremely vital for the child—had increased from 22 per cent to 82 per cent in the project districts.

## Anchal Se Angan Tak, Rajasthan[27]

In December 2000, the Rajasthan Department for Women and Child Development and UNICEF jointly initiated the Anchal Se Angan Tak (ASAT) strategy as a community-based care model in seven districts of Jodhpur, Tonk, Dholpur, Alwar, Rajsamand, Baran and Jhalawar. Under ASAT, a special plan of action for the management of severe child malnutrition was initiated in 2005 in 14 blocks of these seven districts using WHO standards based on a two-pronged strategy—hospital based and community based. The Department of Medical and Health Services, Department of Women and Child Development, Government of Rajasthan and UNICEF took the lead in addressing acute undernourishment in children by operationalising Malnutrition Treatment Centres (MTCs) as a pilot initiative. Anganwadis have also been trained in adopting WHO protocols. The activities at the anganwadis are (i) ongoing mapping of severely malnourished children in villages, (ii) regular weighing of children with the involvement of mothers, (iii) tracking and listing referral services, home visits by anganwadi helpers, (iv) special visits to the homes of children discharged from

[27] Sourced from http://www.unicef.org/india/health_3348.htm (accessed on 12 March 2008).

MTCs, and (v) involvement of community volunteers. Children falling in Grade-III and IV of malnutrition are monitored for signs and symptoms of infections and referred to PHCs, First Referral Unit (FRU) or CHCs for treatment.

A recent evaluation done by Tufts University (Christine McDonald et al., 2007) highlights the important role of behaviour change strategies in improving the nutritional status of children under the age of three. Provision of medical facilities alone does not make any significant difference.

## Role of Bilateral and Multilateral Agencies

Several multilateral agencies, bilateral agencies, International Non-Governmental Organisations (INGOs) and NGOs also support nutrition support programmes in the country. Since the inception of ICDS, UNICEF (along with the World Bank) has supported GoI in almost all aspects of the programme. It assists GoI to further expand and enhance the quality of ICDS by improving the training of childcare workers and by developing innovative communication approaches with mothers. It also helps in improving monitoring and reporting systems and providing essential supplies. Besides collaborating with GoI to increase the use of iodised salt, UNICEF also supports iron, folic acid and Vitamin A supplementation for adolescents and young children. Like the World Bank, UNICEF's support to ICDS has been both comprehensive and continuous and it has also initiated pilot projects like Anchal Se Angan Tak in Rajasthan, Dular in Bihar and Bal Sanjeevni in Madhya Pradesh (UNICEF http://www.unicef.org/india/nutrition_1556.htm).

World Food Programme (WFP), a UN agency, has been providing supplementary nutrition in some ICDS projects in Madhya Pradesh (19 projects), Orissa (32 projects), Rajasthan (20 projects) and Uttaranchal (16 projects), covering about 0.866 million beneficiaries.

The World Bank has financially supported efforts to improve nutrition in India, in general, since 1990 through five projects. Support to ICDS, in particular, has been provided in overlapping phases during 1990-2006. In addition the World Bank also supported the ICDS Training Programme (1999-2004) UDISHA, a countrywide training programme for all ICDS functionaries that has three main components—regular on the job training, other specific training and IEC.

## *Section V:*
# RECOMMENDATIONS AND WAY FORWARD

**Why are we in this situation?**

Policy makers, donor agencies, non-governmental organisations, administrators and all other development sector workers have known the fact that millions of children in India are undernourished. This is not a new revelation, but what is shocking is that notwithstanding a wide range of interventions at the programmatic level since the early 1970s no breakthrough has been made on the malnutrition front. Where did we go wrong and why are we in this state even after 60 years of independence and 18 years of accelerated economic growth?

The fundamental issue that emerges is that the programmes that were designed to address hunger, malnutrition, abject poverty and a host of other survival issues have not been able to deliver. While there is recognition of the need for a multi-pronged approach, departmental turfs have been impossible to overcome. As a result, at the village level or in an urban slum, the people in charge of water and sanitation, public health, fair price shops, child nutrition, immunisation, treatment of illnesses and so on have not worked together. Local self-government institutions (Panchayats) have not had the mandate to bring all these schemes under one umbrella and monitor them in a holistic manner. Even when two departments do come together, like they have done for the Pulse Polio campaign, their engagement is limited to a specific activity.

High levels of systemic inefficiency to deliver and monitor further compound this problem. Recurrent instances of large-scale corruption, lack of accountability of local level workers and leakages make the situation impossible. Chronic malnutrition among adults and children has never become election issues and as a result the political elite seem to be oblivious to the magnitude of the problem. The hard reality is that development is big business but it is not taken seriously.

On the other hand, in states where child malnutrition was made a political issue, like it was done in Tamil Nadu way back in the 1970s, nutrition and school feeding programmes became politically sensitive. The political leadership closely monitors the child nutrition programme and the mid-day meal schemes and leakages beyond a point are not tolerated. On the other hand let us take Uttar Pradesh. Here the procurement and supply to ICDS has been politicised and is often connected with corruption at high levels in the political and administrative leadership. Orissa comes somewhere in-between. Chronic hunger and malnutrition have routinely made it to national headlines, especially in the KBK area in the state (Koraput, Bolangir and Kalahandi area). Special programmes have been developed from time to time and a large number of NGOs have implemented a grain bank programme to provide household food security during the lean months. May be this is why malnutrition levels in Orissa are not as alarming as in Madhya Pradesh, Uttar Pradesh and Bihar. Orissa is also home to a large tribal population that depends on the forest for survival and also a wide range of food, both vegetarian as well as non-vegetarian.

Further, since India is a land of tremendous diversity one strategy or one programme template cannot work across the country. Given different social and economic situations, the different environmental and ecological terrain and given different political and administrative cultures what India really needs is local level and very context-specific planning. Therefore, while the problem of malnutrition is indeed countrywide, the solution has to be specific.

The recommendations are being made keeping this in mind. SC India needs to think global but has to act local welcoming their NGO partners to develop strategies that are best suited to their area and the local administrative/political situation. The strategy adopted in Orissa may not be of any relevance in Madhya Pradesh and vice-versa.

## Identify SC India focus states for intensive inputs

Given the size of the country and also in view of the SC India's mandate (including the geographical mandate), the first step would be to take a decision on the areas to be covered. Based on secondary data, SC India could plot the states using a few selected parameters (see Box 5.1).

**Box 5.1: Selection of a focus area—an example**

**For example**, if SC India were to take the percentage children under-6 who are malnourished, then the states that emerge as having less than the national average of normal children are Gujarat, Orissa and Rajasthan. However, knowing the overall higher development status of Gujarat, and given the higher poverty levels in other states, SC India could select Orissa, Jharkhand, Bihar, and Chhattisgarh, etc. SC India can then triangulate this with availability of SC India NGO partners who may be best suited to launch a malnutrition management/control programme. This decision would have to be an internal decision of SC India.

| State-wise % Population below poverty line 2004-05 Based on URP Consumption, GoI, 2006 | |
|---|---|
| Orissa | 46.40 |
| Bihar | 41.40 |
| Chhattisgarh | 40.90 |
| Jharkhand | 40.30 |
| Uttarakhand | 39.60 |
| Madhya Pradesh | 38.30 |
| Uttar Pradesh | 32.80 |
| Maharashtra | 30.70 |
| **All-India** | **27.50** |
| Karnataka | 25.00 |
| West Bengal | 24.70 |

Source: dacnet.nic.in, 2004-05.

| % malnourished children under-6 years - gradewise | | | | |
|---|---|---|---|---|
| **State** | **Normal** | **Grade-I** | **Grade-II** | **Grade-III & IV** |
| Gujarat | 36.94% | 39.26% | 22.87% | 0.93% |
| Orissa | 43.27% | 37.74% | 18.14% | 0.85% |
| Rajasthan | 45.39% | 33.71% | 20.60% | 0.30% |
| Karnataka | 45.56% | 36.97% | 17.15% | 0.32% |
| Chhattisgarh | 46.15% | 33.52% | 19.24% | 1.10% |
| Uttar Pradesh | 46.69% | 32.09% | 20.24% | 0.98% |
| Andhra Pradesh | 46.93% | 33.39% | 19.55% | 0.12% |
| West Bengal | 47.58% | 36.23% | 15.50% | 0.69% |
| All India | 50.41% | 33.95% | 15.06% | 0.57% |
| Madhya Pradesh | 50.46% | 30.60% | 17.94% | 1.00% |
| Jharkhand | 51.25% | 30.36% | 16.68% | 1.71% |
| Bihar | Na | Na | Na | na |

Source: DWCD, GoI, (2008).

It is recommended that SC India use (among others) the following criteria to identify the focus states:

1. Percentage of people living below the poverty line (using GoI estimates);
2. States with high levels of child malnutrition (Grades I, II, III and IV malnourished) either using DWCD, GoI ICDS data or NFHS-3 data. It may be useful to remember that while ICDS data is available district-wise, the NFHS-3 data is only available state-wise.
3. Identify those states where there are NGO partners who have the capacity to take on nutrition programmes.

This could be done in a workshop mode along with select SC India personnel.

## Develop a Shared Understanding

SC India has been working with NGO partners in many parts of this diverse country. As a first step, there needs to be a shared understanding on a conceptual framework, one that SC India and its partners can use as a point of departure. As a part of the larger global alliance, the UNICEF Causal Framework could be a good starting point to work out the programmatic implications of adapting it.

A *region-by-region* visioning exercise can be explored to come to a shared understanding of the enormity of the problem, the most vulnerable areas / socio-economic groups which need urgent attention, and what is it that SC India can do along with its NGO partners. Given the wide variations across India, this exercise is essential to secure the commitment of state leadership (of SC India, key NGO partners / alliances (for example the National Nutrition Conclave, convened by the MS Swaminathan Research Foundation, Jan Swasthya Abhiyan, Breastfeeding Promotion Network of India, Mobile Crèches, Public Health Resource Network, Citizen's Initiative for the Rights of Children Under Six - CIRCUS, etc., as well as the local government). It is important to go through with this as the first step in order to make sure that all the key stakeholders in a given area / region are on the same wavelength.

## Assessment of ICDS and NRHM to Identify Critical Gaps and Opportunities

The next step would be to do a localised assessment of the ICDS programme and other child health and nutrition initiatives with a view to not only identifying the gap and flagging opportunities, but also identifying key stakeholders/local groups and leaders who could become partners in tackling child malnutrition. NGO-led social audits are an effective mechanism for information gathering as well as educating people and local leaders about the state of child health and nutrition.[28] This could also link NGO partners to the Right to Food movement, and also draw upon and feed into the national information base of the Commissioners to the Supreme Court of India. For example, a Save the Children (SC) NGO partner could do this in its project area through a detailed social mapping exercise. This will enable them to make a ground level assessment of the situation (this is critical for ensuring the full appreciation of the need for focused intervention), and identify possible partners in the community (PRI leaders, women's groups, local service providers in ICDS and NRHM like ASHA).

## Start Local and Move Upwards

An important lesson that we can draw from the NGO community is that it is important to identify local partners, be it the administration (District Collector, CDPO, CMHO or even a block level supervisor) or local leaders and groups, including the Panchayat. Mind-boggling numbers or

[28] This was suggested by the key informants who we interviewed-Biraj Patnaik, N C Saxena, Jean Dreze, Vandana Prasad, Dipa Sinha and A K Shiva Kumar.

percentages of children who are malnourished at the global level often leave people numb. More importantly, these global numbers do not always convince local stakeholders to act. On the other hand when a group of local people, including key service providers, their supervisors and officials see the situation on the ground for themselves, they may be more willing to act. They may see an opportunity to make a difference.

For example NGOs Prayas of Chittorgarh, Sathi of Pune and other Jana Swasthya Abhiyan associates in Bihar and Maharashtra have been able to negotiate with the district administration to provide ongoing training and support to the ASHAs appointed under NRHM. Similarly, Bodh an NGO working in education in Rajasthan, worked with the district administration and the Panchayat to agree on a Memorandum of Understanding (MoU) whereby the local school is adopted as a community school. MV Foundation's (MVF) work on elimination of child labour started at the community level and they were able to work with children and encourage them to dialogue with their parents. Young boys and girls emerged as child rights activists who were able to make a big difference. Having prepared the ground and having successfully mobilised the people, MVF went on to spearhead a national struggle against child labour. The important learning here is that diktats from above (state government or GoI) mean little unless the people (including NGO leaders and social activists) on the ground are ready and motivated to cooperate. Large INGOs / corporate foundations that began with MoUs with state governments have not always been able to convince the local administration to cooperate.[29]

### Explore and Educate on Myths about Malnutrition

Almost all the key informants we interviewed said that food shortage is not the only reason why children are malnourished. As discussed in Section IV, malnutrition happens because of a range of factors and food availability is just one of the various reasons why children slip into malnourishment. Shanti Ghosh, an eminent child health specialist convincingly argues that a local facilitator has to sit with women, see what resources they have at home and plan a proper nutrition plan and feeding schedule. She rightly points out 'It is not that there is no food in the household (except in extreme conditions of drought or floods). There is, however, no awareness regarding the child's requirements. Besides, many food items (*dal*, banana etc.) are taboo because of folklore and misconceptions. While others in the family eat these items and share what ever there is in the households, the young child is deprived of them. In a study in rural Karnataka in which I was involved, it was shown that in-depth and repeated nutrition education can improve nutrition of the young child significantly… It is important to know that child malnutrition is intimately related to inappropriate infant and child feeding practices and its beginnings set in during the first two years of an infant's life' (Shanti Ghosh, 2006).

### Invest in Local People: Peer Educators / Women Leaders

Bringing about behavioural change is a painstaking process. Given the diversity prevalent at all levels, it is important to engage with people, understand their constraints, mind-sets and habits. For example, during the course of our work in Mahila Samakhya, we found that women's groups working on gender justice and equality were not always open to, or aware of, the grave nutrition and health situation of their children.[30] Similarly SHGs that were purely focused on income generation were not sensitive to issues of infant and child malnutrition. During the course of an action research study (2003) on factors that facilitate or impede the successful primary education of children, especially girls, we found that almost all the children and young girls were underweight,

[29] ERU evaluations on some national programmes initiated by INGOs and corporate foundations reveal that MoUs signed by top officials cut little ice at other levels and programme implementation is delayed because key local officials cite rules/procedures and budget lines as reasons for not being able to facilitate implementation.

[30] This is based on the field experience of Educational Resource Unit's team in 2003.

anaemic and many of them were suffering from easily manageable infections like scabies. Discussions with women revealed that they were not consuming locally available vegetables like spinach (*palak / bathua*) or papaya, and neither were they using *neem* leaves boiled in water to manage scabies and other skin infections. Young mothers admitted that instead they purchased allopathic medicines and skin creams; those who could not afford to buy these, did nothing. Our field-level researchers demonstrated how the use of local fruits and vegetables and *neem* leaves could actually make a difference. It took many weeks of such demonstrations to show women that local remedies (something that their grandmothers probably used) were actually more effective, both in terms of cost as well as sustainable practices. One-shot activities often made little difference but sustained and intensive education through demonstration did make a difference.

Experiences like these are narrated often by people who have worked intensively with communities on women's issues, on child labour, on domestic violence, corporal punishment and HIV/AIDS. Identifying local women or men and providing them with intensive and continuous training and field support will create a core group of people in a village - they will go on to become harbingers of change.

Each NGO partner of SC India needs to be engaged in a dialogue whereby it is able to identify local people who can become child rights activists and change agents. When such a team is available on the ground, then it will become possible to interface with ICDS and the local health delivery system so as to ensure that women have better access to nutrition supplements, are able to feed their children at regular intervals using available food resources in their families and the environment optimally, and are thus able to fulfil the nutrition, as well as micronutrient requirements of the children.

### Enable People to Demand their Entitlement

There are innumerable programmes that have been initiated by the government. The effort should be to empower people to access the resources provided by them. The experience of the Right to Information movement has clearly demonstrated the power of an informed and aware community. Jean Dreze and Amartya Sen point out: 'What the government ends up doing can be deeply influenced by pressures that are put on the government by the public. But much depends on what issues are politicised and which deprivations become widely discussed.' (quoted by Dipa Sinha, 2006). The Supreme Court of India has issued a range of orders directing the government to universalise ICDS, make sure its benefits reach every child below six, every pregnant and nursing mother, and especially focuses on SC and ST habitations.[31] The Court has also issued similar orders on the Mid-Day Meal programme. However, national level coalitions or the Supreme Court cannot enforce compliance unless local civil society organisations initiate action at the local level. Such local action can easily link up with national level initiatives through a network of local NGOs doing social assessments and mobilising people to demand their entitlements. Today, India has the legal and administrative instruments to enforce compliance. The first step is to create an aware and alert population.

Community involvement acquires a totally new meaning when the push is from below. Any number of government orders to create mothers' committees would be meaningless without ground level mobilisation and action. ICDS evaluations and independent studies have shown that mothers'

[31] The Fifth report of the Commissioners notes 'one of the primary reasons for poor coverage of needy groups under the scheme is the location of the AWC. Access to services by deprived communities like the SC & STs, is restricted if the centre is located in upper caste predominated hamlets. Field visits have also shown what appears to be a glaring lack of any proper method to assess the need and requirement as a result of which many of the SC/ST hamlets have been excluded. This not only reinforces the need for implementation of the order calling for a functional Aanganwadi in every habitation, but also suggests that priority must be given to initially cover the SC/ST populated habitations followed by others' (cited in Vimala Ramachandran, 2005).

committees are often comprised of women living in the neighbourhood of the ICDS, that meetings are rarely held, women are not trained, and they are unaware of their rights. Even the AWW is normally not clear about the role of such committees. As Dipa Sinha points out, 'Since there is no public debate and discussion in the community on the anganwadi centre, its function and purpose, mothers' committees become substitutes for meaningful community involvement.'

## Help Civil Society turn ICDS on its Head![32]

Child development programmes need an extraordinary amount of individual attention. Given the size of the problem, and the complexity of the issues involved, the government has to take the lead and make sure that the persistent problem of hunger and malnutrition among children is addressed with care and sensitivity. But civil society organisations also have to do their bit by mobilising their energies to reach out to every single child and every family. The hard reality is that where there is one anganwadi, we probably need four. There is no dearth of people who are ready to work and make a difference in their own environment but it is important that they get out of the typical *sarkari naukri* (government service) mentality, or the typical NGO contractor mentality. Where the parent is unable or unaware how to provide appropriate food and nutrition, the childcare service provider has to assume some surrogate responsibilities. The AWW and ASHA need to have greater empathy, and reach out to children who are in dire need of proper nutrition and healthcare services. They have to transform themselves into 'professional caregivers', working with and giving attention to a fewer number of children. This is especially true for children in poverty situations. All this does not mean simply demanding more resources, but providing a lot more care and attention. Can we not involve young men and women as well as mothers in improving child nutrition? May be this is asking for too much from a system that is so enormous and impersonal. But there are no shortcuts - children need care, love, and above all individualised attention.

The time has come to encourage civil society leaders and local Panchayats to turn ICDS and other child health programme upside down, bending / adapting the exiting programmes and thinking afresh on how best we can reach out to the most vulnerable. We need to plan separately for different sub-groups of children looking at the specific needs of home-based care and outreach services up to 3 years and a centre-based approach for the 3+ group. It may be worthwhile to explore if NGOs could focus on a dedicated home-based programme to promote health and nutrition of children in the 0-3 years age group. This is absolutely essential if we are serious about reaching out to this very important segment of our population. Poor health, malnutrition and frequent bouts of illnesses at this stage have an irreversible impact on the overall health and well-being of children.

Given the enormous diversity in the country, different administrative environments, political leadership and awareness levels among the people, a larger number of people and organisations need to be involved in re-shaping the child health and nutrition programme. We have to engage the political leadership from the Panchayat up to the state in an informed debate on the importance of a child health and nutrition programme in the larger development strategy. Such a process will, hopefully, throw up positive thinking stakeholders who can then be involved in a periodic social audit of the programme. It will also enable greater participation of the corporate and business community, who can be invited to contribute in cash or kind. Appropriate checks and balances are necessary to enforce proper targeting. This is where larger civil society institutions (not just NGOs, but corporate, media and eminent people) have to be involved in monitoring targeting.

[32] Adapted from Vimala Ramachandran, 2005.

## Table 5.1 summarises our views on the way forward

| What | Who | How | Outcome |
|---|---|---|---|
| Dialogue on extent of human and financial resources to invest and period of engagement. | SC India team(s). | Internal consultations. | Clarity on depth, geographical spread and period of project on 'Freedom from Hunger for the Child under Six'; appointment of a project team within SC India. |
| Region by region visioning exercise on the state of child malnutrition and the factors (health, sanitation, safe water, education) that determine outcomes on the ground and what could be done to change the situation | SC India, identified NGO partners- existing or potential. | Regional (possibly club one or two states) workshops. | Identification of geographical areas (states/districts/blocks/Panchayats) most suited for the creation of models and defining of goals at the end of the project period. |
| Localised assessment of ICDS/other child health and nutrition related initiatives; water and sanitation programmes that impact on child health. | Existing NGO partners. | Mandate existing NGO partners to conduct this exercise, where possible in collaboration with the Panchayat. | Social maps of the selected regions: identification of gaps, flagging of opportunities, pinpointing of key stakeholders (local leaders, Panchayats, SHG)/local groups/leaders. |
| Select NGO partners who will be mandated to work on child hunger/malnutrition in selected areas. | SC India 'Freedom from Hunger' project team who will lead the process within SC India. | Request project proposals** from NGO partners; assess, discuss, and approve proposals. Goals/outcomes must be so documented that they can be subjected to periodic reviews. | Kick off of NGO partner projects. |
| Documentation of myths in each project area. | NGO partners. | Facilitate local persons to work with young women, traditional birth attendants and older women in the community with a view to documenting local myths/practices. | Proper plan and feeding schedule (for further dissemination to the community). |
| Identification of local persons who will be transformed into child rights activists/change agents. | NGO partners. | Local persons could be identified through social mapping exercise. | Formation of local activist teams who will (a) engage with ICDS and the health delivery system to ensure that such government programmes are (externally) monitored; (b) enable beneficiaries to demand their entitlements. |
| Building capacities of identified change agents. | SC India team and senior functionaries of NGO partner. | Local workshops followed by on the site support by local NGO partners. | Change agents will comprehend what to advocate. |
| Advocacy for pressurising government to split the ICDS programme into (a) one meant for improving nutrition levels of children 0-3; and (b) the other for looking after the needs of the 3-6 year olds. Also for optimum utilisation of available human resources to fight malnutrition of the 0-3 age group. | SC India team at national/state levels; NGO partners at block and PRI levels. | Arrange for annual/biannual external surveys in intervention areas in order to create evidence. Dissemination of findings/data via national/regional debates. Engage with electronic/print media. | Build pressure on various government functionaries (WCD, MHRD, Finance Ministry, Planning Commission, etc.), as well as state and district political leadership. |

** NGO Partner Proposals to include:

1. Clear goals and proposed outcomes of intervention
2. Provision of SC India funded resource groups at Panchayat/block level
3. Action plan for building capacities of AWWs/AWHs/ANMs/ASHAs
4. Mobilising mothers' groups/SHGs to ensure their participation in the running of AWCs
5. Action plan for building capacities of mothers' groups/SHGs/PRI officials to monitor/assist AWCs
6. Designing and setting up an acceptable monitoring system at Panchayat/block/district level.

## Concluding Recommendation

SC India could initiate an internal dialogue on the extent of human and financial resources that they would be willing to invest in improving child health and nutrition in India. After all right to care, nutrition and education is a fundamental right of every child. There are no shortcuts and no magic project models that can be applied across this diverse country. SC India would start working on childhood nutrition with grassroots partners, evolve context and situation specific strategies and support a community- based child health and nutrition programme. As and when these groups gain experience and confidence they can spearhead change in their respective areas.

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# *Annexures:*
# STATE-WISE TABLES

## Table 1: ICDS Projects, AWCs and Beneficiaries

| as on (month/ yr) | State/UT | ICDS Projects (Blocks) | AWCs | Beneficiaries for Supplementary Nutrition | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Children (6 months - 3 years) | Children (3 - 6 years) | Total Children (6 months - 6 years) | Pregnant & lactating Mothers | TOTAL |
| 06/07 | Andhra Pradesh | 376 | 63,203 | 1,520,487 | 1,918,760 | 3,439,247 | 884,770 | 4,324,017 |
| 06/07 | Arunachal Pradesh | 79 | 3,037 | 86,558 | 64,840 | 151,398 | 21,231 | 172,629 |
| 06/07 | Assam | 206 | 25,329 | 792,361 | 805,792 | 1,598,153 | 269,859 | 1,868,012 |
| 04/07 | Bihar | 394 | 57,767 | 1,786,099 | 1,721,778 | 3,507,877 | 710,378 | 4,218,255 |
| 06/07 | Chhattisgarh | 158 | 28,047 | 946,726 | 736,382 | 1,683,108 | 461,706 | 2,144,814 |
| 03/07 | Goa | 11 | 1,012 | 24,283 | 19,443 | 43,726 | 10,759 | 54,485 |
| 06/07 | Gujarat | 256 | 39,005 | 841,494 | 856,151 | 1,697,645 | 301,963 | 1,999,608 |
| 06/07 | Haryana | 128 | 16,684 | 602,246 | 517,564 | 1,119,810 | 287,757 | 1,407,567 |
| 06/07 | Himachal Pradesh | 76 | 7,686 | 209,501 | 151,861 | 361,362 | 79,811 | 441,173 |
| 05/07 | Jammu & Kashmir | 129 | 16,409 | 262,197 | 211,708 | 473,905 | 113,341 | 587,246 |
| 04/07 | Jharkhand | 204 | 22,304 | 723,949 | 769,628 | 1,493,577 | 441,546 | 1,935,123 |
| 06/07 | Karnataka | 185 | 51,352 | 1,549,816 | 1,500,851 | 3,050,667 | 694,707 | 3,745,374 |
| 06/07 | Kerala | 163 | 28,169 | 489,846 | 494,627 | 984,473 | 176,416 | 1,160,889 |
| 06/07 | Madhya Pradesh | 364 | 58,905 | 2,140,530 | 1,947,126 | 4,087,656 | 888,008 | 4,975,664 |
| 06/07 | Maharashtra | 416 | 74,804 | 2,597,534 | 2,882,370 | 5,479,904 | 887,153 | 6,367,057 |
| 06/07 | Manipur | 37 | 4,605 | 139,579 | 121,572 | 261,151 | 54,973 | 316,124 |
| 06/07 | Meghalaya | 39 | 3,165 | 136,798 | 156,425 | 293,223 | 53,663 | 346,886 |
| 06/07 | Mizoram | 23 | 1,592 | 71,608 | 47,252 | 118,860 | 28,827 | 147,687 |
| 06/07 | Nagaland | 54 | 3,045 | 141,860 | 110,193 | 252,053 | 49,307 | 301,360 |
| 06/07 | Orissa | 326 | 37,752 | 1,924,030 | 1,907,239 | 3,831,269 | 734,630 | 4,565,899 |
| 06/07 | Punjab | 143 | 16,767 | 461,755 | 464,261 | 926,016 | 268,014 | 1,194,030 |
| 06/07 | Rajasthan | 272 | 43,307 | 1,543,317 | 1,088,561 | 2,631,878 | 668,496 | 3,300,374 |
| 05/07 | Sikkim | 11 | 904 | 2,943 | 2,428 | 5,371 | 1,060 | 6,431 |
| 06/07 | Tamil Nadu | 434 | 45,726 | 697,902 | 1,179,450 | 1,862,205 | 517,692 | 2,379,897 |
| 06/07 | Tripura | 53 | 6,131 | 115,867 | 125,664 | 241,531 | 40,940 | 282,471 |
| 06/07 | Uttar Pradesh | 835 | 130,024 | 8,624,086 | 8,100,516 | 16,724,602 | 3,471,769 | 20,196,371 |
| 06/07 | Uttaranchal | 99 | 7,754 | 430,458 | 201,287 | 631,745 | 252,404 | 884,149 |
| 05/07 | West Bengal | 363 | 62,557 | 1,560,906 | 1,582,310 | 3,143,216 | 562,928 | 3,706,144 |
| 06/07 | A & N Islands | 5 | 672 | 11,173 | 9,933 | 21,106 | 4,539 | 25,645 |
| 06/07 | Chandigarh | 3 | 329 | 18,804 | 13,731 | 32,535 | 6,348 | 38,883 |
| 06/07 | Delhi | 34 | 4,427 | 265,250 | 167,633 | 432,883 | 86,248 | 519,131 |
| 03/06 | Dadra & N Haveli | 1 | 138 | 6,120 | 5,815 | 11,935 | 2,020 | 13,955 |
| 04/07 | Daman & Diu | 2 | 97 | 3,605 | 3,089 | 6,694 | 1,698 | 8,392 |
| 06/07 | Lakshadweep | 1 | 79 | 2,874 | 1,467 | 4,341 | 1,743 | 6,084 |
| 06/07 | Pondicherry | 5 | 688 | 22,670 | 6,714 | 29,384 | 9,383 | 38,767 |
| | **All India** | **5,885** | **863,472** | **30,755,232** | **29,894,421** | **60,634,506** | **13,046,087** | **73,680,593** |

Source: http://wcd.nic.in/ (accessed on 31 March 2008).

**Table 2: Malnutrition among Children Classified Grade-wise**

| as on (mth/yr) | State/UT | Normal | Grade-I | Grade-II | Grades-III & IV |
|---|---|---|---|---|---|
| 06/07 | Andhra Pradesh | 46.93% | 33.39% | 19.55% | 0.12% |
| 06/07 | Arunachal Pradesh | 97.05% | 2.51% | 0.43% | 0.01% |
| 06/07 | Assam | 61.31% | 26.97% | 10.47% | 1.25% |
| 04/07 | Bihar | - | - | - | - |
| 06/07 | Chhattisgarh | 46.15% | 33.52% | 19.24% | 1.10% |
| 03/07 | Goa | 58.59% | 33.87% | 7.39% | 0.15% |
| 06/07 | Gujarat | 36.94% | 39.26% | 22.87% | 0.93% |
| 06/07 | Haryana | 54.18% | 34.11% | 11.60% | 0.11% |
| 06/07 | Himachal Pradesh | 60.22% | 29.96% | 9.67% | 0.15% |
| 05/07 | Jammu & Kashmir | 67.17% | 25.62% | 6.43% | 0.78% |
| 04/07 | Jharkhand | 51.25% | 30.36% | 16.68% | 1.71% |
| 06/07 | Karnataka | 45.56% | 36.97% | 17.15% | 0.32% |
| 06/07 | Kerala | 60.23% | 31.44% | 8.25% | 0.09% |
| 06/07 | Madhya Pradesh | 50.46% | 30.60% | 17.94% | 1.00% |
| 06/07 | Maharashtra | 53.33% | 36.79% | 9.62% | 0.25% |
| 06/07 | Manipur | 90.24% | 5.05% | 4.51% | 0.20% |
| 06/07 | Meghalaya | 63.39% | 27.89% | 8.58% | 0.14% |
| 06/07 | Mizoram | 78.43% | 16.68% | 4.68% | 0.20% |
| 06/07 | Nagaland | 91.61% | 6.73% | 1.36% | 0.30% |
| 06/07 | Orissa | 43.27% | 37.74% | 18.14% | 0.85% |
| 06/07 | Punjab | 64.59% | 31.69% | 3.36% | 0.36% |
| 06/07 | Rajasthan | 45.39% | 33.71% | 20.60% | 0.30% |
| 05/07 | Sikkim | 73.46% | 18.97% | 7.28% | 0.30% |
| 06/07 | Tamil Nadu | 61.17% | 36.10% | 2.69% | 0.04% |
| 06/07 | Tripura | 68.76% | 23.20% | 7.65% | 0.39% |
| 06/07 | Uttar Pradesh | 46.69% | 32.09% | 20.24% | 0.98% |
| 06/07 | Uttaranchal | 52.82% | 32.96% | 13.88% | 0.33% |
| 05/07 | West Bengal | 47.58% | 36.23% | 15.50% | 0.69% |
| 06/07 | A & N Islands | 72.94% | 18.70% | 7.73% | 0.63% |
| 06/07 | Chandigarh | 60.97% | 31.86% | 7.13% | 0.03% |
| 06/07 | Delhi | 50.39% | 31.15% | 18.39% | 0.07% |
| 03/06 | Dadra & N Haveli | 19.08% | 51.67% | 28.11% | 1.14% |
| 04/07 | Daman & Diu | 60.20% | 18.97% | 20.84% | 0.00% |
| 06/07 | Lakshadweep | 55.91% | 36.07% | 7.12% | 0.90% |
| 06/07 | Pondicherry | 55.36% | 36.86% | 7.78% | 0.00% |
| | **All India** | **50.41%** | **33.95%** | **15.06%** | **0.57%** |

Source: http://wcd.nic.in/ (accessed on 31 March 2008).

**Table 3: NFHS-3: Key Indicators on Malnutrition**
**2005-06**

| State | Children under 3 years who are stunted (%) | Children under 3 years who are wasted (%) | Children under 3 years who are underweight (%) |
|---|---|---|---|
| Andhra | 33.9 | 12.7 | 36.5 |
| Arunachal | 34.2 | 16.5 | 36.9 |
| Assam | 34.8 | 13.1 | 40.4 |
| Chhattisgarh | 45.4 | 17.9 | 52.1 |
| Delhi | 35.4 | 15.5 | 33.1 |
| Goa | 21.3 | 12.1 | 29.3 |
| Gujarat | 42.4 | 17.0 | 47.4 |
| Haryana | 35.9 | 16.7 | 41.9 |
| Himachal | 26.6 | 18.8 | 36.2 |
| J&K | 27.6 | 15.4 | 29.4 |
| Jharkhand | 41.0 | 31.1 | 59.2 |
| Karnataka | 38.0 | 17.9 | 41.1 |
| Kerala | 21.1 | 16.1 | 28.8 |
| Maharashtra | 37.9 | 14.6 | 39.7 |
| Manipur | 24.7 | 8.3 | 23.8 |
| Meghalaya | 41.7 | 28.2 | 46.3 |
| Mizoram | 30.1 | 9.2 | 21.6 |
| MP | 39.9 | 33.3 | 60.3 |
| Nagaland | 30.3 | 14.6 | 29.7 |
| Orissa | 38.3 | 18.5 | 44.0 |
| Punjab | 27.9 | 9.0 | 27.0 |
| Rajasthan | 33.7 | 19.7 | 44.0 |
| Sikkim | 28.9 | 13.1 | 22.6 |
| Tamil Nadu | 25.1 | 21.5 | 33.2 |
| Tripura | 30.0 | 19.9 | 39.0 |
| Uttar Pradesh | 46.0 | 13.5 | 47.3 |
| Uttaranchal | 31.9 | 16.2 | 38.0 |
| West Bengal | 33.0 | 19.0 | 43.5 |
| **All India** | **38.4** | **19.1** | **45.9** |

Source: http://mohfw.nic.in/nfhsfactsheet.htm (accessed on 31 March 2008).

**Table 4: NFHS-3: Key Indicators of IYCF Practices 2005-06**

| State | Children under 3 years breastfed within one hour of birth (%) | Children age 0-5 months exclusively breastfed (%) | Children age 6-9 months receiving solid or semi-solid food and breast milk (%) |
|---|---|---|---|
| Andhra | 22.4 | 62.7 | 63.7 |
| Arunachal | 55.0 | 60.0 | 77.6 |
| Assam | 50.6 | 63.1 | 59.6 |
| Chhattisgarh | 24.5 | 82.0 | 54.5 |
| Delhi | 19.3 | 34.5 | 59.8 |
| Goa | 59.7 | 17.7 | 69.8 |
| Gujarat | 27.1 | 47.8 | 57.1 |
| Haryana | 22.3 | 16.9 | 44.8 |
| Himachal | 43.4 | 27.1 | 66.0 |
| J&K | 31.9 | 42.3 | 58.3 |
| Jharkhand | 10.9 | 57.8 | 65.3 |
| Karnataka | 35.6 | 58.0 | 72.5 |
| Kerala | 55.4 | 56.2 | 93.6 |
| Maharashtra | 51.8 | 53.0 | 47.8 |
| Manipur | 57.2 | 61.7 | 78.1 |
| Meghalaya | 58.6 | 26.3 | 76.3 |
| Mizoram | 65.4 | 46.1 | 84.6 |
| MP | 14.9 | 21.6 | 51.9 |
| Nagaland | 51.5 | 29.2 | 71.0 |
| Orissa | 54.3 | 50.2 | 67.5 |
| Punjab | 10.3 | 36.0 | 50.0 |
| Rajasthan | 13.3 | 33.2 | 38.7 |
| Sikkim | 43.3 | 37.2 | 89.6 |
| Tamil Nadu | 55.3 | 33.3 | 77.9 |
| Tripura | 33.1 | 36.1 | 59.8 |
| UP | 7.2 | 51.3 | 45.5 |
| Uttaranchal | 32.9 | 31.2 | 51.6 |
| West Bengal | 23.7 | 58.6 | 55.9 |
| **All India** | **23.4** | **46.3** | **55.8** |

Source: http://mohfw.nic.in/nfhsfactsheet.htm (accessed on 31 March 2008).

**Table 5: NFHS-3: Key Indicators on Children and Women's Illnesses 2005-06**

| State | Children with diarrhoea in the last 2 weeks who received Oral Rehydration Salts (ORS) (%) | Children with diarrhoea in the last 2 weeks taken to a health facility (%) | Children with acute respiratory infection or fever in the last 2 weeks taken to a health facility (%) | Children age 6-35 months who are anaemic (%) | Pregnant women age 15-49 who are anaemic (%) |
|---|---|---|---|---|---|
| Andhra Pradesh | 36.0 | 61.4 | 66.6 | 79.0 | 56.4 |
| Arunachal | 33.5 | 37.9 | 43.6 | 66.3 | 49.2 |
| Assam | 13.3 | 30.6 | 35.4 | 76.7 | 72.0 |
| Chhattisgarh | 42.0 | 65.3 | 69.5 | 81.0 | 63.1 |
| Delhi | 34.4 | 75.1 | 93.1 | 63.2 | 29.9 |
| Goa | 51.6 | 71.5 | 83.7 | 49.3 | 36.9 |
| Gujarat | 28.3 | 59.8 | 72.0 | 80.1 | 60.8 |
| Haryana | 24.8 | 82.7 | 88.1 | 82.5 | 69.7 |
| Himachal Pradesh | 52.5 | 67.3 | 80.3 | 58.8 | 37.0 |
| J&K | 42.0 | 69.1 | 77.6 | 68.1 | 54.0 |
| Jharkhand | 17.8 | 32.5 | 46.3 | 77.7 | 68.4 |
| Karnataka | 31.0 | 64.8 | 78.9 | 82.7 | 59.5 |
| Kerala | 34.6 | 67.4 | 81.4 | 55.7 | 33.1 |
| Maharashtra | 37.8 | 77.8 | 83.5 | 71.9 | 57.8 |
| Manipur | 36.8 | 42.2 | 49.1 | 52.8 | 36.4 |
| Meghalaya | 67.7 | 76.6 | 51.6 | 68.7 | 56.1 |
| Mizoram | 51.2 | 28.3 | 50.1 | 51.7 | 49.3 |
| Madhya Pradesh | 28.6 | 60.1 | 68.7 | 82.6 | 57.9 |
| Nagaland | 17.1 | 19.5 | 23.2 | na | na |
| Orissa | 41.3 | 58.6 | 63.4 | 74.2 | 68.1 |
| Punjab | 34.7 | 77.8 | 86.8 | 80.2 | 41.6 |
| Rajasthan | 16.0 | 56.6 | 68.9 | 79.6 | 61.2 |
| Sikkim | 31.9 | 32.8 | 48.9 | 56.9 | 53.1 |
| Tamil Nadu | 29.0 | 60.1 | 80.5 | 72.5 | 53.3 |
| Tripura | 58.3 | 69.4 | 68.6 | 67.9 | 57.6 |
| Uttar Pradesh | 12.0 | 55.9 | 63.6 | 85.1 | 51.6 |
| Uttaranchal | 35.6 | 64.8 | 71.6 | 61.5 | 45.2 |
| West Bengal | 43.7 | 52.7 | 48.0 | 69.4 | 62.6 |
| **All India** | **26.2** | **58.0** | **64.2** | **79.2** | **57.9** |

Source: http://mohfw.nic.in/nfhsfactsheet.htm (accessed on 31 March 2008).

**Table 6: NFHS-3: Key Indicators of Children's Immunisation Levels 2005-06**

| State | Children 12-23 months fully immunized (BCG, measles, and 3 doses each of polio/DPT) (%) | Children 12-23 months who have received BCG (%) | Children 12-23 months who have received 3 doses of polio vaccine (%) | Children 12-23 months who have received 3 doses of DPT vaccine (%) | Children 12-23 months who have received measles vaccine (%) | Children age 12-35 months who received a vitamin A dose in last 6 months (%) |
|---|---|---|---|---|---|---|
| Andhra | 46.0 | 92.9 | 79.2 | 61.4 | 69.4 | 21.4 |
| Arunachal | 28.4 | 57.7 | 55.8 | 39.3 | 38.3 | 17.4 |
| Assam | 31.6 | 62.6 | 59.2 | 45.1 | 37.5 | 16.6 |
| Chhattisgarh | 48.7 | 84.6 | 85.1 | 62.8 | 62.5 | 12.7 |
| Delhi | 63.2 | 87.0 | 79.1 | 71.7 | 78.2 | 17.1 |
| Goa | 78.6 | 96.8 | 87.2 | 87.5 | 91.2 | 37.3 |
| Gujarat | 45.2 | 86.4 | 65.3 | 61.4 | 65.7 | 17.1 |
| Haryana | 65.3 | 84.9 | 82.8 | 74.2 | 75.5 | 13.0 |
| Himachal | 74.2 | 97.2 | 88.6 | 85.1 | 86.3 | 28.9 |
| J&K | 66.7 | 90.9 | 82.2 | 84.5 | 78.3 | 15.2 |
| Jharkhand | 34.5 | 72.9 | 79.6 | 40.3 | 48.0 | 23.3 |
| Karnataka | 55.0 | 87.8 | 73.8 | 74.0 | 72.0 | 17.1 |
| Kerala | 75.3 | 96.3 | 83.1 | 84.0 | 82.1 | 38.2 |
| Maharashtra | 58.8 | 95.3 | 73.4 | 76.1 | 84.7 | 32.0 |
| Manipur | 46.8 | 80.0 | 77.5 | 61.2 | 52.8 | 15.4 |
| Meghalaya | 32.8 | 66.3 | 56.9 | 47.6 | 43.8 | 19.9 |
| Mizoram | 46.4 | 87.4 | 63.2 | 66.6 | 68.7 | 42.2 |
| MP | 40.3 | 80.5 | 75.6 | 49.8 | 61.4 | 16.1 |
| Nagaland | 21.0 | 45.9 | 46.4 | 28.8 | 27.4 | 8.7 |
| Orissa | 51.8 | 83.6 | 65.1 | 67.9 | 66.5 | 25.6 |
| Punjab | 60.1 | 88.0 | 75.9 | 70.5 | 78.0 | 17.0 |
| Rajasthan | 26.5 | 68.5 | 65.2 | 38.7 | 42.7 | 13.2 |
| Sikkim | 69.6 | 95.9 | 85.6 | 84.3 | 83.1 | 21.8 |
| Tamil Nadu | 80.8 | 99.5 | 87.8 | 95.7 | 92.4 | 37.2 |
| Tripura | 49.7 | 81.1 | 65.3 | 60.2 | 59.9 | 38.0 |
| UP | 22.9 | 61.0 | 87.5 | 30.0 | 37.5 | 7.3 |
| Uttaranchal | 60.0 | 83.5 | 80.3 | 67.1 | 71.6 | 15.6 |
| W. Bengal | 64.3 | 90.1 | 80.7 | 71.5 | 74.7 | 41.2 |
| **All India** | **43.5** | **78.2** | **78.2** | **55.3** | **58.8** | **21.0** |

Source: http://mohfw.nic.in/nfhsfactsheet.htm (accessed on 31 March 2008).

**Table 7: State-wise Population Below Poverty Line 2004-05**

Based on URP-Consumption

| States/UTs | Rural | | Urban | | Combined | |
|---|---|---|---|---|---|---|
| | No. of persons (Lakhs) | % Share | No. of persons (Lakhs) | % Share | No. of persons (Lakhs) | % Share |
| Andhra Pradesh | 64.70 | 11.2 | 61.40 | 28.00 | 126.10 | 15.80 |
| Arunachal Pradesh | 1.94 | 22.30 | 0.09 | 3.30 | 2.03 | 17.60 |
| Assam | 54.50 | 22.30 | 1.28 | 3.30 | 55.77 | 19.70 |
| Bihar | 336.72 | 42.10 | 32.42 | 34.60 | 369.15 | 41.40 |
| Chhattisgarh | 71.50 | 40.80 | 19.47 | 41.20 | 90.96 | 40.90 |
| Delhi | 0.63 | 6.90 | 22.30 | 15.20 | 22.93 | 14.70 |
| Goa | 0.36 | 5.40 | 1.64 | 21.30 | 2.01 | 13.80 |
| Gujarat | 63.49 | 19.10 | 27.19 | 13.00 | 90.69 | 16.80 |
| Haryana | 21.49 | 13.60 | 10.60 | 15.10 | 32.10 | 14.00 |
| Himachal Pradesh | 6.14 | 10.70 | 0.22 | 3.40 | 6.36 | 10.00 |
| Jammu & Kashmir | 3.66 | 4.60 | 2.19 | 7.90 | 5.85 | 5.40 |
| Jharkhand | 103.19 | 46.30 | 13.20 | 20.20 | 116.39 | 40.30 |
| Karnataka | 75.05 | 20.80 | 63.83 | 32.60 | 138.89 | 25.00 |
| Kerala | 32.43 | 13.20 | 17.17 | 20.20 | 49.60 | 15.00 |
| Madhya Pradesh | 175.65 | 36.90 | 74.03 | 42.10 | 249.68 | 38.30 |
| Maharashtra | 171.13 | 29.60 | 146.25 | 32.20 | 317.38 | 30.70 |
| Manipur | 3.76 | 22.30 | 0.20 | 3.30 | 3.95 | 17.30 |
| Meghalaya | 4.36 | 22.30 | 0.16 | 3.30 | 4.52 | 18.50 |
| Mizoram | 1.02 | 22.30 | 0.16 | 3.30 | 1.18 | 12.60 |
| Nagaland | 3.87 | 22.30 | 0.12 | 3.30 | 3.99 | 19.00 |
| Orissa | 151.75 | 46.80 | 26.74 | 44.30 | 178.49 | 46.40 |
| Punjab | 15.12 | 9.10 | 6.50 | 7.10 | 21.63 | 8.40 |
| Rajasthan | 87.38 | 18.70 | 47.51 | 32.90 | 134.89 | 22.10 |
| Sikkim | 1.12 | 22.30 | 0.02 | 3.30 | 1.14 | 20.10 |
| Tamil Nadu | 76.50 | 22.80 | 69.13 | 22.20 | 145.62 | 22.50 |
| Tripura | 6.18 | 22.30 | 0.20 | 3.30 | 6.38 | 18.90 |
| Uttar Pradesh | 473.00 | 33.40 | 117.03 | 30.60 | 590.03 | 32.80 |
| Uttarakhand | 27.11 | 40.80 | 8.85 | 36.50 | 35.96 | 39.60 |
| West Bengal | 173.22 | 28.60 | 35.14 | 14.80 | 208.36 | 24.70 |
| A&N Islands | 0.60 | 22.90 | 0.32 | 22.20 | 0.92 | 22.60 |
| Chandigarh | 0.08 | 7.10 | 0.67 | 7.10 | 0.74 | 7.10 |
| Dadra & Nagar Haveli | 0.68 | 39.80 | 0.15 | 19.10 | 0.84 | 33.20 |
| Damn & Diu | 0.07 | 5.40 | 0.14 | 21.20 | 0.21 | 10.50 |
| Lakshadweep | 0.06 | 13.30 | 0.06 | 20.20 | 0.11 | 16.00 |
| Pondicherry | 0.78 | 22.90 | 1.59 | 22.20 | 2.37 | 22.40 |
| All-India | 2209.24 | 28.30 | 807.96 | 25.70 | 3017.20 | 27.50 |

Note: 1 lakh = 0.1 million

Source: Planning Commission, Government of India.

**Save the Children**

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