



INDIA HEALTH REPORT: NUTRITION

2015



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nutrition



ACKNOWLEDGMENTS

The report was prepared by Neha Raykar (Public Health Foundation of India (PHFI)), Moutushi Majumder (PHFI), Ramanan Laxminarayan (PHFI) and Purnima Menon (International Food Policy Research Institute (IFPRI)).

We acknowledge data and editorial inputs from Abhilasha Vaid, Suman Chakrabarti and Nitya George, associated with the POSHAN (*Partnerships and Opportunities to Strengthen and Harmonize Actions for Nutrition in India*) initiative at IFPRI. Stuart Gillespie, Lawrence Haddad and Derek Headey (IFPRI) provided valuable comments. Third Sector Communications designed and produced the Report, with inputs from Kavita Chauhan (PHFI) and Samantha Reddin (Institute for Development Studies, Sussex & *Transform Nutrition*). Kumud Bhansali provided editorial assistance.

We also wish to acknowledge Anil Deolalikar and Sheila Vir for their valuable insights and Paula T. Whitacre for her editorial efforts on earlier versions of the Report. We are most grateful to several experts who contributed to shaping the Report with their perspective pieces. These include R. V. Bhavani, Indira Chakravarty, Rajib Das Gupta, S. Mahendra Dev, Lawrence Haddad, Anuradha Jain, Shweta Khandelwal, Ashi Kohli Kathuria, Kamala Krishnaswamy, Anura Kurpad, M. G. Venkatesh Mannar, John Lincoln Newman, Nira Ramachandran, Usha Ramakrishnan, Shobha Rao, Kiruba Sankar KV, Meera Shekar, Dean Spears, Rajiv Tandon, Tinku Thomas, Vinodhini Umashankar, Sudha Vasudevan, Swarna Sadasivam Vepa, and Melissa Young.

The India Health Report: Nutrition is a product of the research consortium Transform Nutrition, and is funded by the UK Department for International Development (DFID). The views expressed do not necessarily reflect the UK Government's official policies. For further information see www.transformnutrition.org

SUGGESTED CITATION

Raykar N., Majumder M., Laxminarayan R., Menon P. 2015. India Health Report: Nutrition 2015. New Delhi, India: Public Health Foundation of India.

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ABBREVIATIONS

ARI	Acute Respiratory Infection
ASHA	Accredited Social Health Activist
AWC	Anganwadi Centre
AWW	Anganwadi Worker
BDHS	Bangladesh Demographic and Health Survey
BCG	Bacillus Calmette–Guérin
BMI	Body Mass Index
DHS	Demographic and Health Survey
DLHS	District Level Household & Facility Survey
DPT	Diphtheria, Pertussis and Tetanus
EDHS	Ethiopia Demographic and Health Survey
GEM	Gender Empowerment Measure
Gol	Government of India
HAZ	Height-for-Age Z-score
ICDS	Integrated Child Development Services
IFA	Iron Folic Acid
IFPRI	International Food Policy Research Institute
INR	Indian Rupees
IYCF	Infant and Young Child Feeding
MDMS	Mid Day Meal Scheme
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MoSPI	Ministry of Statistics and Programme Implementation
MoWCD	Ministry of Women and Child Development
MUAC	Mid-Upper Arm Circumference
NA	Not Available
NCLP	National Child Labour Policy
NDHS	Nepal Demographic and Health Survey
NFHS	National Family Health Survey
NHM	National Health Mission
NRHM	National Rural Health Mission
NSSO	National Sample Survey Organisation
PDS	Public Distribution System
PHC	Primary Health Centre
PHFI	Public Health Foundation of India
RSoc	Rapid Survey on Children
SC	Scheduled Caste
SD	Standard Deviation
SNP	Supplementary Nutrition Programme
SRS	Sample Registration System
ST	Scheduled Tribe
TSC	Total Sanitation Campaign
TT	Tetanus
UNICEF	United Nations Children's Fund
USD	United States Dollar
WAZ	Weight-for-Age Z-score
WHA	World Health Assembly
WHO	World Health Organization
WHZ	Weight-for-Height Z-score



EXECUTIVE SUMMARY



EXECUTIVE SUMMARY

India is on the move. The past two decades have seen significant improvements in household incomes, agricultural productivity and child survival. Between 1990 and 2014, as the income of the average Indian rose by an average annual rate of 4.7 percent (in constant 2005 USD), crop yields (kilograms/hectare) of all food grains rose by an average annual rate of about 2.3 percent, and 2.5 percent fewer children died in the first five years of their life on average annually.

Child undernutrition rates have been declining, first at a slow rate between 1992 and 2006, and at an accelerated pace since 2006. However, these developments are below the rate needed to meet the World Health Assembly's global nutrition targets that India is signatory to. Between 2006 and 2014 in India, stunting rates for children under five declined from 48 to 39 percent. This decline in stunting prevalence in India translated to 14 million fewer stunted children and declines in wasting translated to more than 7 million fewer wasted children [1]. This, in turn, reflects a 23 percent reduction in the number of stunted children and a 35 percent reduction in the number of underweight children. Despite this progress, child undernutrition rates in India are among the highest in the world, with nearly one-half of all children under three years of age being either underweight or stunted. India is still home to over 40 million stunted children and 17 million wasted children under five.

The decline in stunting in India is slowly aligning with the rates of decline in other countries in the region, but the change in the national average masks massive variability across states. Over the same period, stunting rates in Bangladesh declined from 43 to 36 percent [2] while those in Nepal declined from 49 to 41 percent [3]. The change in nutritional status across India's states, however, has been highly variable. In general, states with the lowest levels of stunting in 2006 achieved the highest proportional increase in the eight years that followed. Some states, including Arunachal Pradesh, Mizoram, and Delhi, had relatively large rates of reduction in stunting, but overall levels of undernutrition remain high because of high baseline rates. Meanwhile, in Uttar Pradesh, Bihar, Jammu & Kashmir, Manipur and Jharkhand, the situation has not undergone significant change.

Global evidence shows that child undernutrition is only weakly correlated with income. This is additionally supported by the fact that in India, a 25 percent of the children from the top income quintile were stunted in 2006. The rate of decline in stunting has also not kept pace with the rate at which other indicators of child health including infant and child mortality have declined during the last two decades. This paradox has been referred to in the past as the 'Indian enigma' where, child undernutrition rates in India were much higher than in some countries in Sub-Saharan Africa, even though infant and child mortality in India were lower. The high level of stunting in India, in particular, has invited much commentary. Is it because of culture or culture-specific dietary habits? Is it the poor nutritional status of mothers and consequently, low weight gain during pregnancy that leads to low-birth-weight babies who become undernourished children? Is it rooted in gender-based power asymmetries? Or is it persistent inequity over generations for certain socioeconomic or geographically distinct groups? The answer perhaps lies in a combination of all these factors which results in "a perfect storm" that compromises the nutritional status of children. Our perspective is that action is needed on several of these fronts, which collectively contribute to the high burden of undernutrition in India.

If India is to continue its economic growth trajectory, the problem of nutrition as a developmental imperative has to be tackled with urgency. Child undernutrition is a primary driver of reduced school attendance, compromised cognitive development and a massive loss of human potential with economic consequences for the individual and for the nation. Global evidence suggests that a one standard deviation decrease in conditional height at age 2 relates to 0.5 years of schooling loss, which is associated with a 5 percent annual decrease in income [4]. If the population of stunted children in India were a single country, it would be the ninth largest country in the world. Even with recent improvements, India's stunting problem represents the largest loss of human potential in any country in human history.

The continuing problem of undernutrition in India now coexists with the problem of overweight and obesity and associated non-communicable diseases for a different segment of the population. Recent science suggests that children who are underweight and undernourished are more likely to develop chronic illnesses, such as diabetes, later in

life. India has the largest number of adults with Type 2 diabetes, and their number is growing rapidly, having doubled over the past 10 years. Indeed, India has a higher rate of diabetes than many western countries with much higher economic prosperity.

This India Health Report: Nutrition 2015 surveys the trends in maternal and child undernutrition in India. It looks at trends and disparities in these outcomes across geographical regions, socio-economic classes, and demographic groups. Tackling undernutrition and enabling improvements in the determinants of poor nutrition requires actions from multiple actors and sectors, and at multiple levels. In order to develop a contextually relevant, high impact and pragmatic strategy to tackle undernutrition, decision-makers need to be able to understand the extent of the problem and its determinants, and identify the most important areas for intervention. At present, despite broad agreement that nutrition is fundamentally driven by challenges in multiple sectors, there is no single data dashboard that enables a comprehensive view of nutrition and its determinants to enable strategic choices for policy-making at the state-level.

The India Health Report: Nutrition 2015 aims to provide its readers with a comprehensive state-level overview of the current nutritional status of under-five children in India, its multiple determinants, and the status of the country's key nutrition-relevant interventions. Data from multiple surveys, databases, and official reports in the public domain have been compiled to create informative dashboards that will help benchmark progress against undernutrition and identify key areas for action at the state level. The Report's objectives are to raise awareness about the multisectoral nature of undernutrition and to facilitate evidence-based discussions on future actions by bringing the focus to data, statistics and objective information.

The Report begins with a set of core indicators of nutrition outcomes and their determinants at the national level (called "Fast Facts on Nutrition and Its Determinants"). These 18 core indicators include five global nutrition targets for improving maternal, infant and young child nutrition as declared by the World Health Assembly. India, as a Member State of the World Health Organization has also endorsed these targets. In a subsequent section titled "Comparing States on Nutrition and Its Determinants", we then compare all states in India on these core indicators, highlighting the significant inter-state variability both in outcomes and their determinants. This is intended to help to identify and compare priority areas for actions within and across states. The report then presents, in alphabetical order, a full set of dashboard indicators for India and for all states, in the "Nutrition Dashboards" section. The dashboards lead off with the 18 core indicators to enable benchmarking of progress before going on to provide detailed information on child nutrition and its multiple determinants in the context of demographic and socioeconomic profile of each state. The indicators are aligned with UNICEF's conceptual framework on causes of undernutrition and the actions necessary for optimal fetal and child nutrition and development. Finally, the dashboards provide information on coverage, capacity and financial resources for supporting major centrally funded nutrition-relevant schemes for each state. Detailed source notes and definitions for all the indicators presented in the Report are available in the Appendix A.

The India Health Report: Nutrition 2015 covers 28 states and Delhi for which data on anthropometric outcomes of children below five years of age was available from the Rapid Survey on Children (RSOC) 2013-14 factsheets released by the Ministry of Women and Child Development (MoWCD). The dashboards cover over 120 indicators and draw on multiple sources of nationally representative surveys, databases, and reports with most recent data available.

Our approach to the report and the data dashboards were informed by perspective papers written by leading experts both within and outside the country (see Appendix B for the list of papers). The report's ultimate goal is to deepen and focus the policy dialogue in India, highlight areas for action, especially at the state-level, and lead to actions that can accelerate improvement in the nutritional status and development of India's children.



KEY MESSAGES

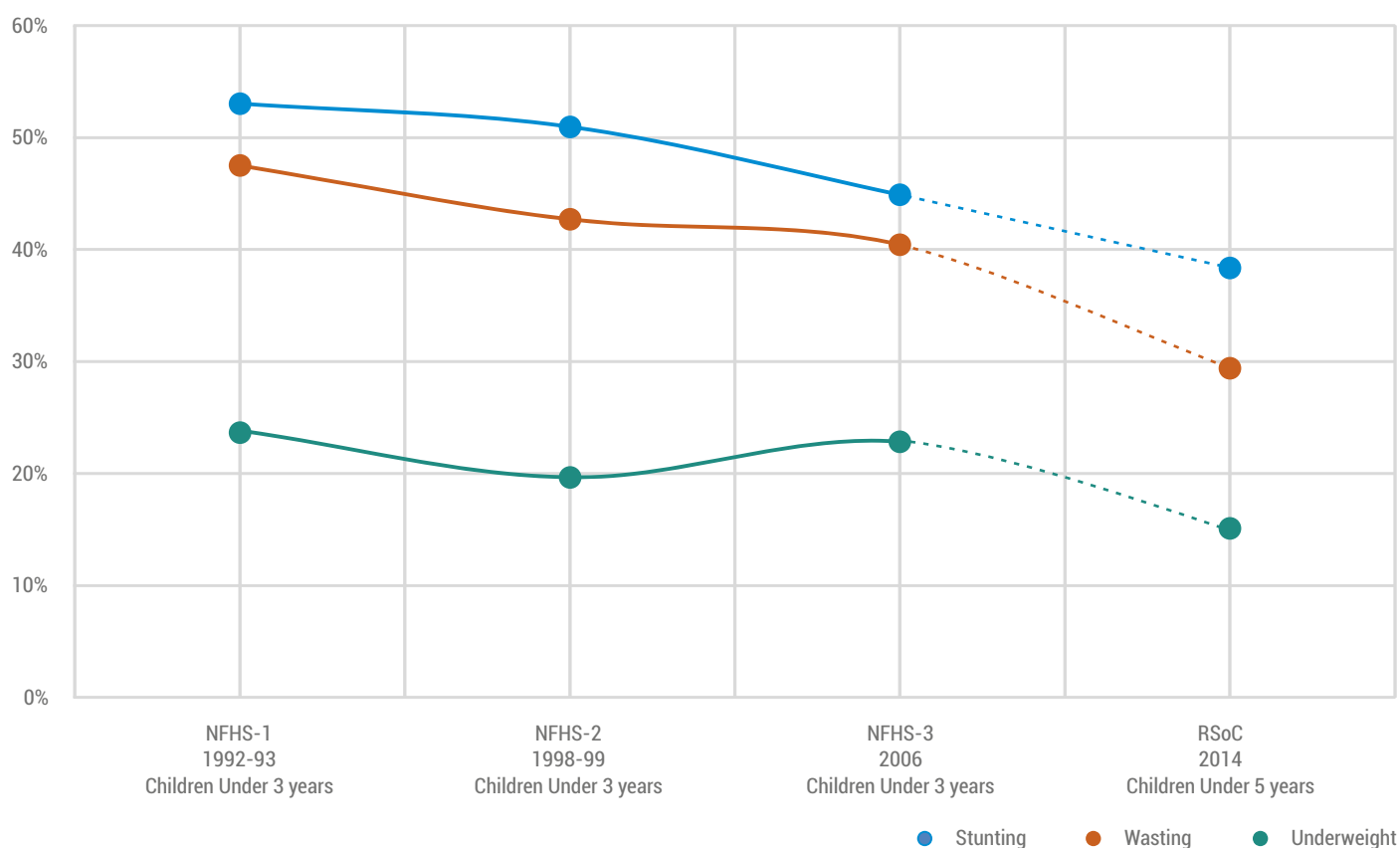


1 *Stunting, wasting and underweight rates of India's children have declined, especially during the last decade, but still exceed levels observed in countries at similar income levels.*

Despite India's commitment to improving the lives of its people and gains made in economic growth, agricultural production and child survival, the country lags behind the world and its neighbors on the nutritional status of its children. According to recent data from the RSoC (2014), 38.7 percent of Indian children under the age of five are stunted, 19.8 percent are wasted, and 42.5 percent are underweight. Stunting is a measure of chronic undernutrition; wasting indicates acute undernutrition; and underweight is a composite of these two conditions.

Nationwide, progress was slow over the first of the past two decades, as reflected in the prevalence rates of stunting, wasting, and underweight among under-three children over time, as measured in the three waves of the National Family Health Survey (NFHS). Stunting rates in under-three children declined by only 8 percentage points in more than a decade in this age group – from 53 percent in 1992–93 to 45 percent in 2006 – reflecting an average annual rate of decline of 1.2 percent. During this period, while wasting declined by 1 percentage point and underweight by 8 percentage points [5](Figure 1). However, the rate of progress accelerated since NFHS-3, and India's average annual rate of under-five stunting decline between 2006 and 2014 has been 2.3 percent per year, compared with a rate of decline of 1.2 percent per year between 1992 and 2006.

FIGURE 1. TRENDS IN NUTRITIONAL STATUS IN INDIA, 1993 to 2014



Source: Authors' estimates based on data from NFHS-1, 1992-93, NFHS-2, 1998-99, and NFHS-3, 2006 [5]; RSoC, 2014

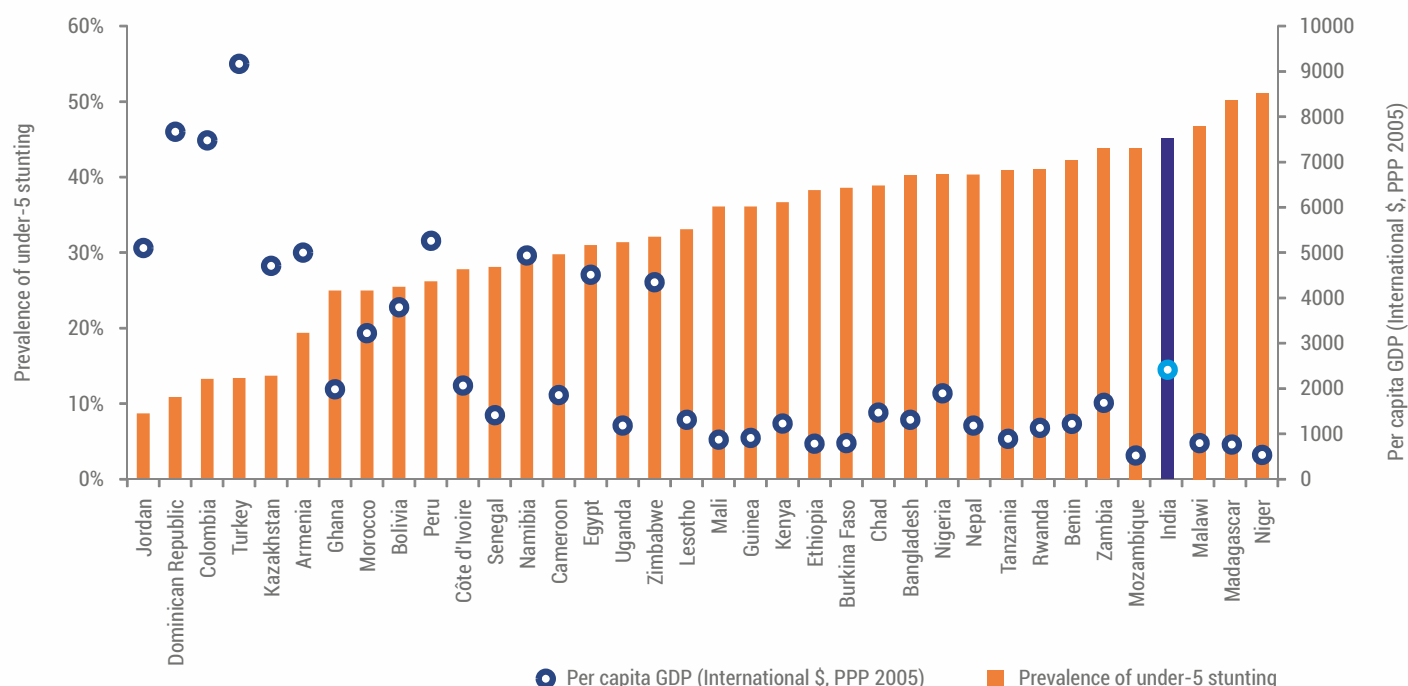
A less visible but equally important measure of nutritional wellbeing is micronutrient status. Unfortunately, deficiencies of essential vitamins and minerals are highly prevalent in India. With little change over time, 75 percent among children under five and over half of women of child-bearing age are anemic. Prevalence of vitamin A deficiency is 57 percent among children under five. Goiter (caused by iodine deficiency) affects 26 percent of the population, overall, and 19 percent in school-aged children. These are significant challenges in the way of ensuring a healthy and productive population.

The problem of undernutrition is now supplemented by the challenge of a growing population of overweight and obese children. Recent national-level data on the burden of overweight and obesity among children and adults are not available, but available estimates range between 4.3 and 15.3 percent in urban areas [6-10].

And India lags behind many countries in Sub-Saharan countries (Figure 2); indeed, some states in India compare unfavorably to the poorest countries in Africa. A comparison with countries in South Asia also causes concern. Despite India's economic dominance in the subcontinent in terms of per capita income, nutritional outcomes remain poor, and indicators for access to improved sanitation and immunizations are the lowest in the region.

Debates about whether the growth of Indian children should be assessed differently have been shown to be without merit [11-14]. Studies have shown that affluent Indian children grow at the same rates as children in developed countries [15], as do children of Indian immigrants living in countries like the United Kingdom [16]. Indeed, studies of adopted children who migrated to industrial countries have shown that children can achieve significant height catch-up.

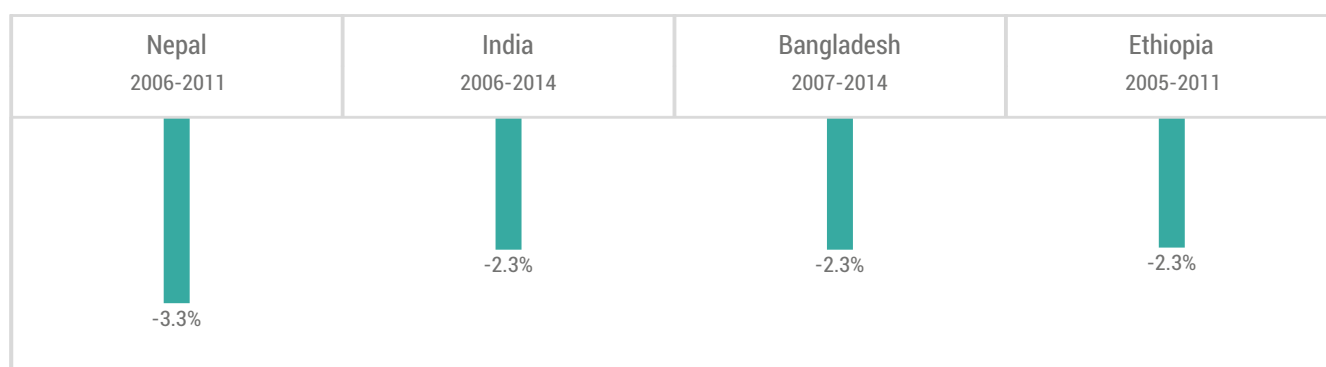
FIGURE 2. PREVALENCE OF UNDER-5 STUNTING AND LEVEL OF ECONOMIC DEVELOPMENT, BY COUNTRY



Source: Authors' compilation from most recent Demographic Health Surveys and Penn World Tables 8.0 [17]

The faster annual rate of reduction in stunting since 2006, i.e., 2.3 percent per year, means that the rate of decline in India is finally approaching the rate of decline in other countries with similar levels of stunting, but this is not enough. Between 2011 and 2014, for instance, Nepal had a 3.3 percent average annual rate of reduction in stunting rates compared to 2.3 percent in India (Figure 3). However, the rate of reduction in India is now similar to that of Bangladesh, and Ethiopia (2.3 percent annual rate of decline in both countries). At this rate, India will achieve the current stunting rate of Ghana or Togo only by 2030, and the current stunting rate of China (10 percent) only in 2055.

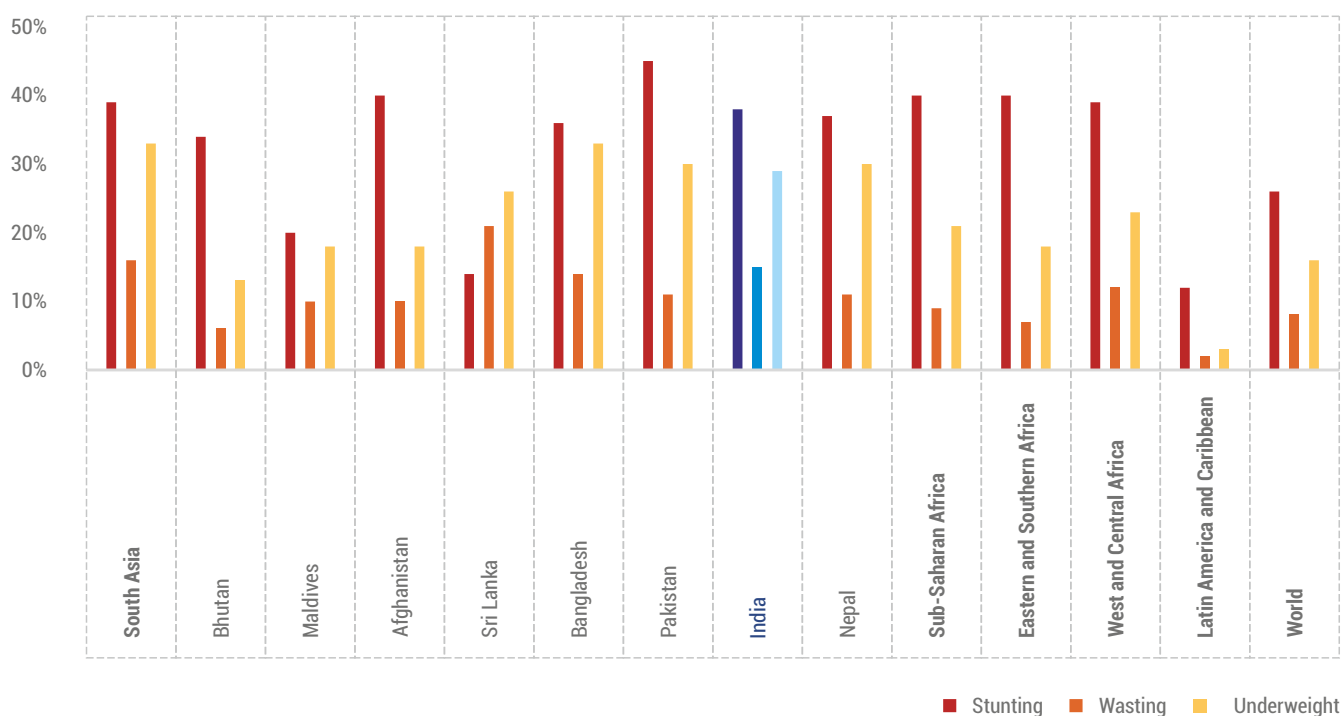
FIGURE 3. AVERAGE ANNUAL RATE OF REDUCTION IN UNDER-5 STUNTING, 2005 to 2014, BY COUNTRY



Source : Nepal - DHS, 2011 | India - NFHS-3, 2006; RSoC, 2014 | Bangladesh - DHS, 2014 | Ethiopia - DHS, 2011

Figure 4 shows the proportion of underweight, stunting, and wasting among under-five children by global regions. Figures for India are now the same as for all of sub-Saharan Africa, but children in Latin America and the Caribbean also fare better than children in India, as do many children in other South Asian countries.

FIGURE 4. STUNTING, WASTING AND UNDERWEIGHT PREVALENCE IN UNDER-5 CHILDREN, BY GLOBAL REGIONS



Source: Regional figures drawn from: http://www.unicef.org/gambia/Improving_Child_Nutrition_-_the_achievable_imperative_for_global_progress.pdf;
India figures drawn from http://www.unicef.org/media/files/UNICEF_Key_facts_and_figures_on_Nutrition.docx

The rate of improvement in nutritional status has not kept pace with India's significant gains in economic prosperity and agricultural productivity during recent decades. Stunting rates are likely to decline with economic progress, but economic growth cannot, by itself, reduce undernutrition and may contribute to overweight and obesity.

Recent analyses have indicated an association between national economic prosperity and levels of stunting, but this relationship is weak. In a global analysis, it is estimated that in the long run, a 10 percent increase in GDP can lead to a 6 percent decline in stunting [18]. Figure 5 shows the correlation between stunting rates among children under five and per capita net state domestic product (at constant prices) in 2013-14 for 29 states. Overall, even though stunting is lower in higher income states, there is significant variability in this relationship, such that even for the same level of state NSDP, stunting levels varied tremendously. In 2013-14, the average national per capita net state domestic product at constant (2004-2005) prices was INR 48,753. In Punjab, which best represents the national average per capita income at INR 49,529, the prevalence of stunting among children under five is 30.5 percent (lower than the national average of 39 percent). Interestingly, although Tamil Nadu and Gujarat have similar levels of income, Tamil Nadu has a much lower stunting rate of 23.3 percent, while it is 41.8 percent in Gujarat. Similarly, Uttarakhand and Kerala have similar levels of income but very different prevalence rates of stunting. Conversely, Kerala and Goa have the lowest stunting rates in the country, 19.5 and 21.3 percent, respectively, yet Kerala's per capita net state domestic product is less than half of Goa. These disparities indicate that levels of income do not automatically translate to lower stunting, and warrants a closer look at other known developmental drivers of stunting.

FIGURE 5. PER CAPITA INCOME AND PREVALENCE OF STUNTING IN UNDER-5 CHILDREN, BY STATE



Source: NSDP : MoSPI, 2014 | Stunting Rate : RSoC, 2014

Most analyses of stunting declines confirm that economic progress alone is not sufficient to achieve significant nutritional gains [18-20]. From 1998-99 to 2005-2006, GDP per capita in India expanded by 40 percent in real terms. Despite the rising levels of prosperity and reduced levels of poverty among millions of Indians, the proportion of stunted children under age three declined by only 6.1 percentage points in that seven-year period, from 51 to 44.9 percent. Since then growth rates have dropped but the rate of progress on nutrition has increased, possibly reflecting lagged effects.

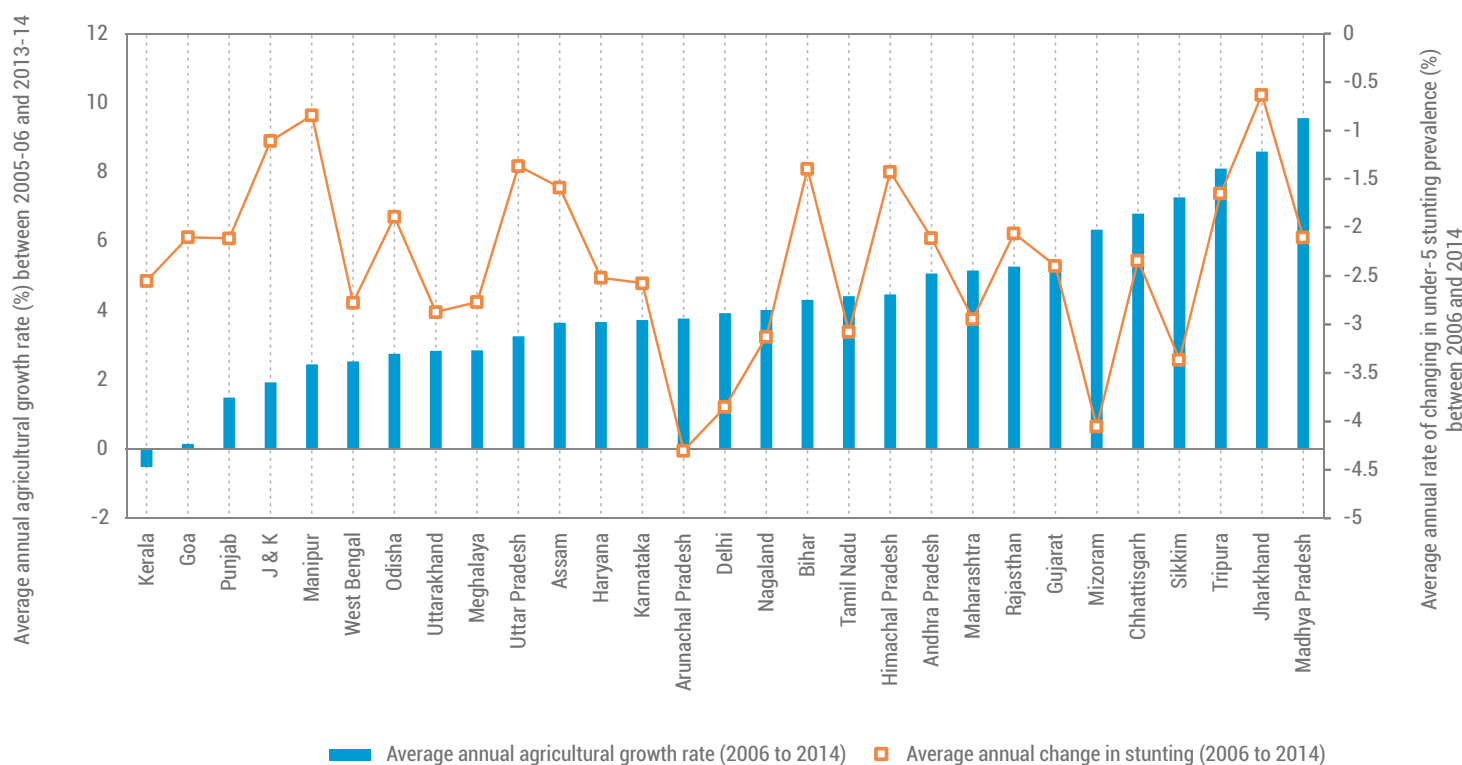
A study of 63 countries, including India, sought to understand the importance of economic growth in reducing undernutrition by analyzing the relationship between child nutrition and variables related to economic growth, food availability, women's education, women's status, and access to safe water [21]. The study found that increases in per capita national income translated into improvements in child nutritional

status only if the economic gains facilitated public and private investments that could improve conditions related to diet and disease. Indeed, there is evidence that the relationship between economic growth and stunting reduction in India is not as strong as in many other countries. It could be stronger, with accompanying commensurate investments in known developmental drivers of nutrition and strengthened health and nutrition programs.

Although the share of agriculture in India's GDP has declined during recent years over half of all Indians still earn their livelihoods from agriculture. Agricultural growth in India has fluctuated over time, with long-term growth at about 2.5 percent per year although it varies considerably across sectors. The output of cereal crops has declined, while maize, cotton, horticulture (fruits and vegetables), and livestock production have expanded in terms of both quantity and value.

Agricultural growth can affect nutritional outcomes through changes in diets and food consumption and through changes in maternal labor and time usage in agricultural production [22]. There is no consistent statistical association between agricultural growth and changes in child undernutrition in India [19]. Given the importance of agriculture as a source of employment and economic growth in rural areas, this is an enormous missed opportunity. The agriculture sector could improve nutrition through multiple pathways: increasing incomes of farming households, diversifying production of crops, empowering women, conducting nutrition education campaigns, strengthening agricultural diversity and productivity, and designing careful price and subsidy policies that do not discourage the production and consumption of nutrient-rich crops.

FIGURE 6. AGRICULTURAL PRODUCTIVITY AND PREVALENCE OF STUNTING IN UNDER-5 CHILDREN IN INDIA



Source : Average annual agricultural growth rate : Central Statistical Organisation (CSO) ; Ministry of Agriculture, Govt. of India. (as on 31-10-2014)
Average annual change in stunting (2006 to 2014) : RSoC, 2014

Improvements in economic and agricultural performance have not directly translated into improved nutrition because of other factors that include inappropriate feeding and care practices, disease burdens, traditions, biases against girl children and cultural norms and preferences. Because nutritional outcomes are determined by food as well as nonfood conditions, improvements in nutrition requires changes on multiple fronts besides better diets. In the Indian context, these could include improvements in healthcare services, women's empowerment, social protection, and water and sanitation infrastructure [23].

Nutritional status and progress on reducing stunting vary markedly across India's states indicating that state-specific approaches are necessary to achieve further gains in reducing stunting.

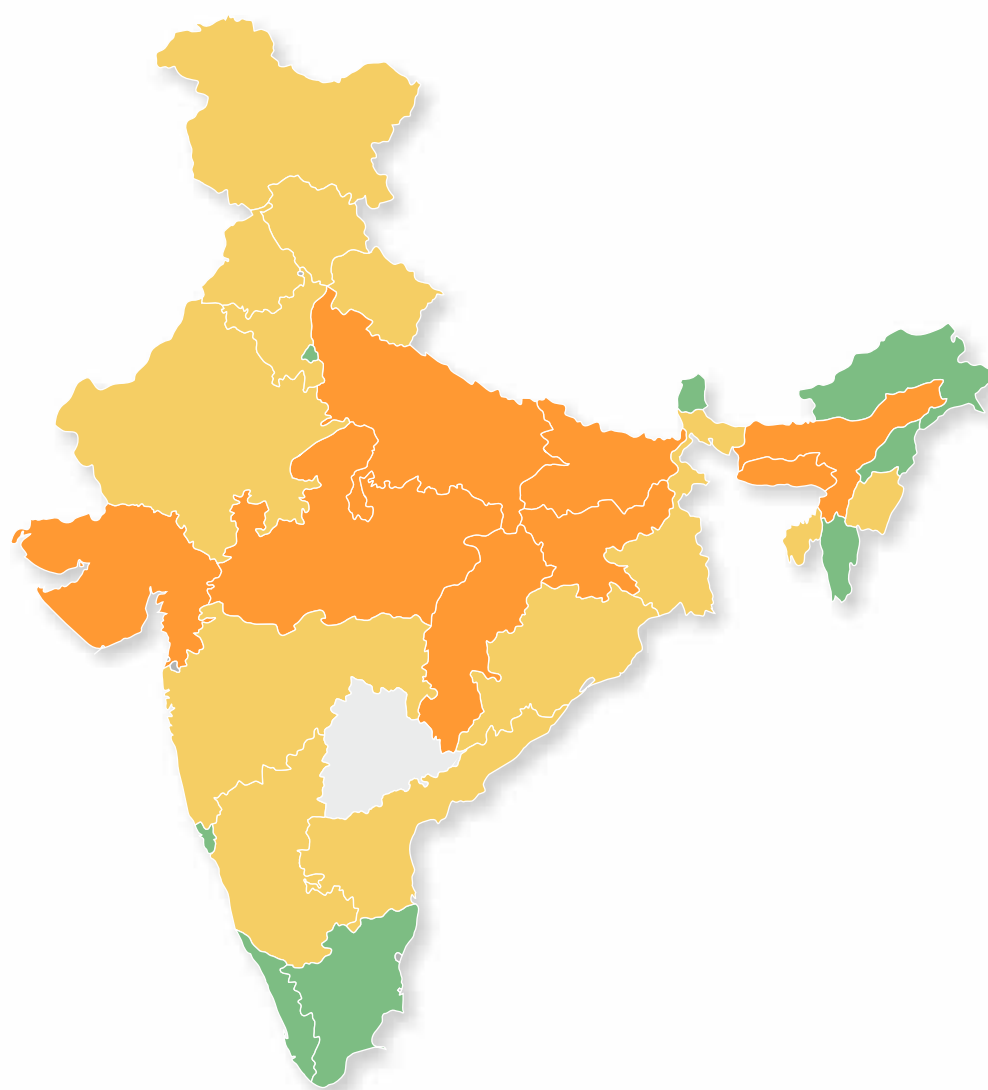
There is significant variation in nutritional status of children across states indicating variation not just in the effectiveness of programs that deliver nutrition-specific interventions but also in the underlying developmental drivers of poor nutrition.

Stunting

Eight states in India have under-five stunting rates that exceed the national average: Uttar Pradesh, Bihar, and Jharkhand have stunting rates close to 50 percent, while Chhattisgarh, Meghalaya, Gujarat, Madhya Pradesh and Assam have stunting rates between 40 and 45 percent (Figure 7). Stunting rates in Kerala and Goa, which are 19.4 percent and 21.3 percent, respectively, are among the lowest in the country. All other states range between 20 and 40 percent.

FIGURE 7. PREVALENCE OF STUNTING IN UNDER-5 CHILDREN, BY STATE

(RSOC, 2014)



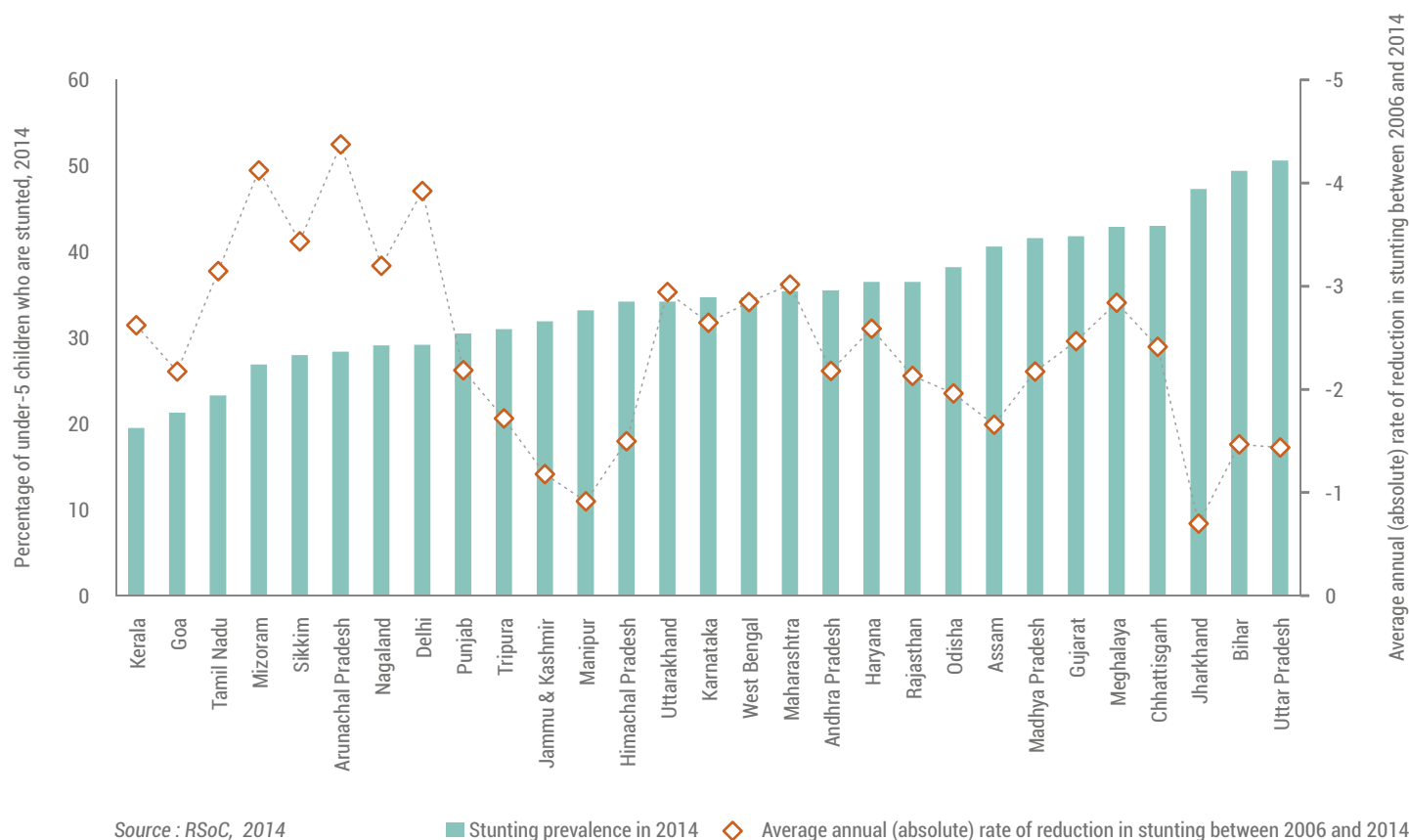
Stunted Children

More than 40% Between 40% - 30% Less than 30% Data not available

States	Numbers in Percentage
Uttar Pradesh	50.4
Bihar	49.4
Jharkhand	47.4
Chhattisgarh	43.0
Meghalaya	42.9
Gujarat	41.6
Madhya Pradesh	41.5
Assam	40.6
India	38.7
Odisha	38.2
Haryana	36.5
Rajasthan	36.4
Maharashtra	35.4
Andhra Pradesh	35.4
West Bengal	34.7
Karnataka	34.2
Himachal Pradesh	34.2
Uttarakhand	34.0
Manipur	33.2
Jammu & Kashmir	31.7
Tripura	31.0
Punjab	30.5
Delhi	29.1
Nagaland	29.1
Arunachal Pradesh	28.4
Sikkim	28.0
Mizoram	26.9
Tamil Nadu	23.3
Goa	21.3
Kerala	19.4

Figure 8 shows the proportion of stunting, by state, in 2014 among under-five children along with the annual rate of decline in stunting between NFHS-3 and RSoC. All 29 states covered by the NFHS-3 and RSoC showed a reduction in stunting between 2006 and 2014. However, rates of progress vary tremendously [24]. Six states, mainly in the northern and northeastern regions of India (Tamil Nadu, Mizoram, Sikkim, Arunachal Pradesh, Nagaland, and Delhi) achieved an average annual rate of reduction of more than 3 percent between 2006 and 2014 while Jharkhand, Manipur, and Jammu & Kashmir, along with Uttar Pradesh and Bihar, showed slow rates of decline during this period.

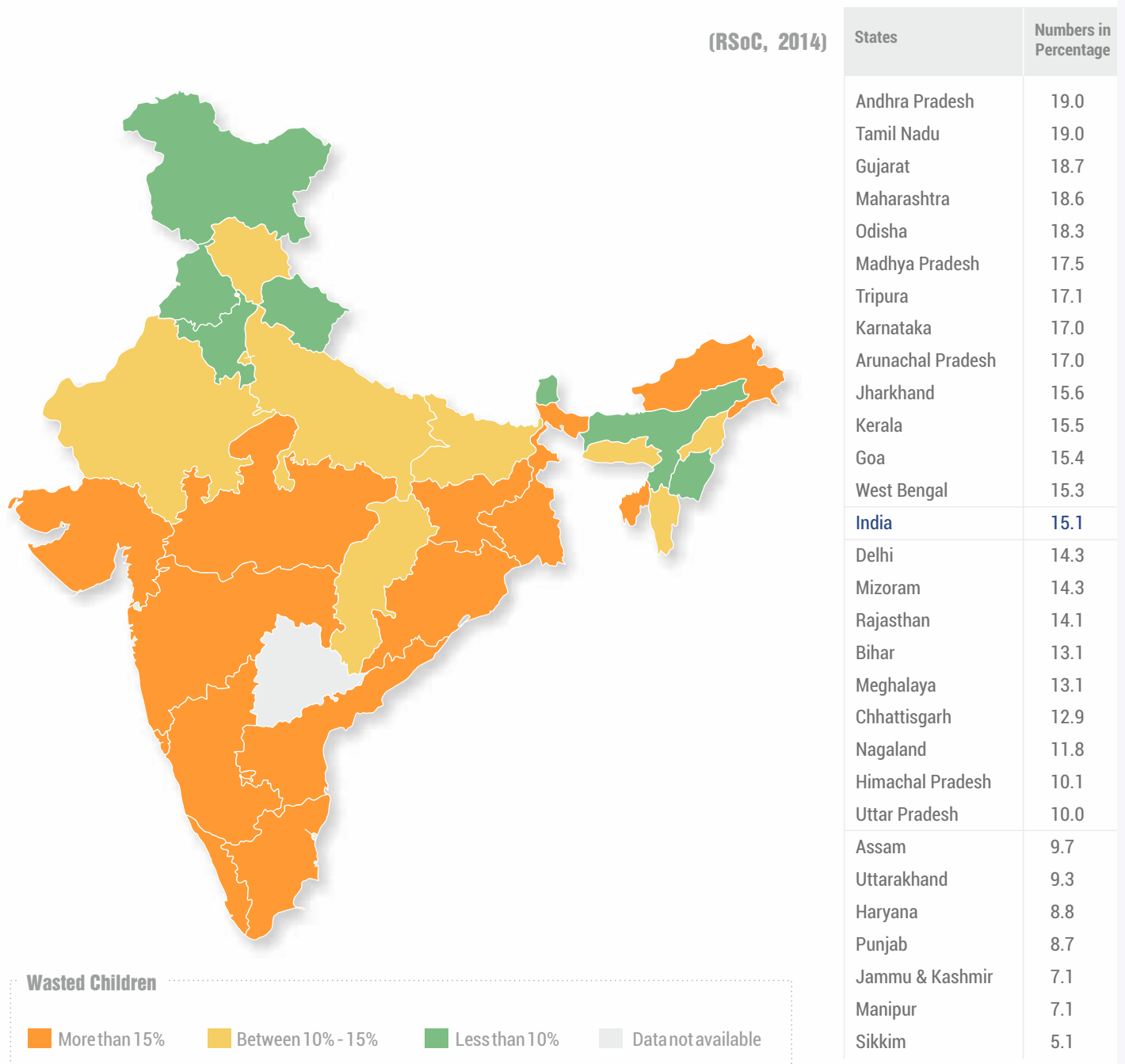
FIGURE 8. PREVALENCE OF STUNTING IN UNDER-5 CHILDREN IN 2014 AND ANNUAL RATE OF REDUCTION, 2006 TO 2014, BY STATE



Wasting

The national prevalence of children under age five who are wasted is 15.1 percent according to RSoC, 2014. As shown in Figure 9, thirteen states have wasting levels higher than the national average: West Bengal, Goa, Kerala, Jharkhand, Arunachal Pradesh, Tripura, Madhya Pradesh, Karnataka, Odisha, Maharashtra, Gujarat, Andhra Pradesh, and Tamil Nadu. Arunachal Pradesh has the highest percentage of severely wasted children, whereas Sikkim has the lowest percentage of wasted as well as severely wasted children.

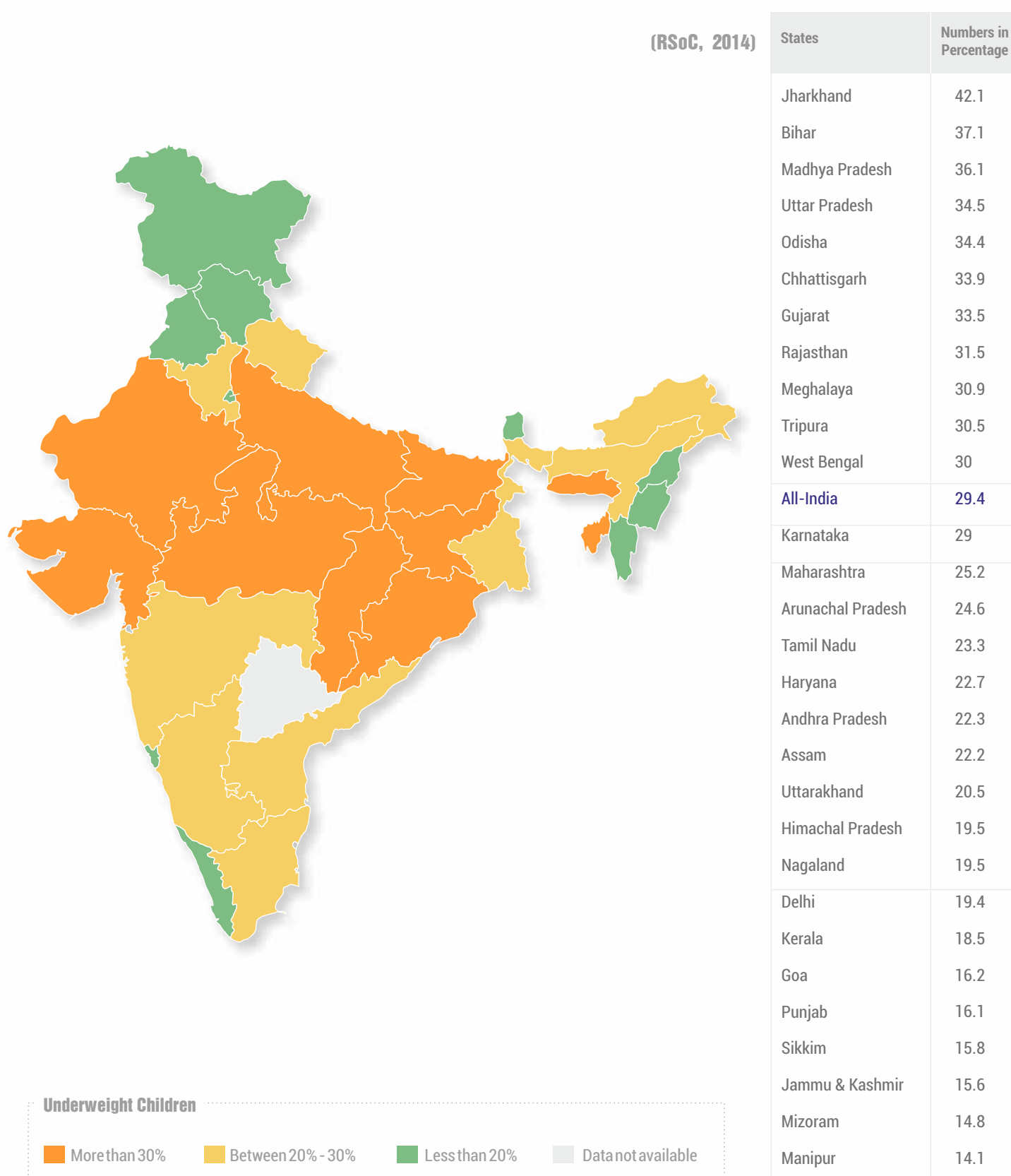
FIGURE 9. PREVALENCE OF WASTING IN UNDER-5 CHILDREN, BY STATE



Underweight

As illustrated in Figure 10, the proportion of underweight children under age five ranges from 14.1 percent in Manipur to 42.1 percent in Jharkhand. Severe underweight prevalence varies between 2 percent in Goa and 16.8 percent in Tripura.

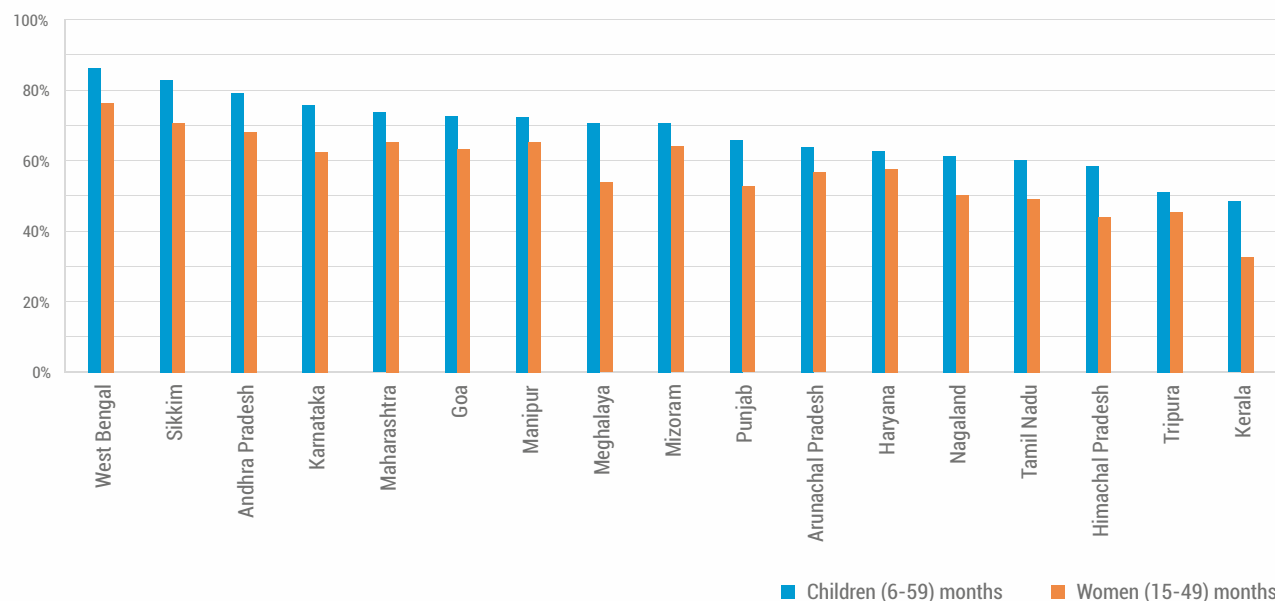
FIGURE 10. PREVALENCE OF UNDERWEIGHT IN UNDER-5 CHILDREN, BY STATE



Anemia

Anemia is an important indicator of micronutrient deficiencies and an important risk factor for poor child development. In eight out of the seventeen states covered by DLHS-4, more than 70 percent of children aged 6-59 months have anemia. Similarly, more than half of Indian women in their child-bearing years, aged 15-49 years, in 13 states have anemia. Anemia prevalence ranges from 76.3 percent in West Bengal to 32.7 percent in Kerala (Figure 11).

FIGURE 11. PREVALENCE OF ANEMIA IN CHILDREN (6-59 MONTHS) AND WOMEN (15-49 YEARS), BY STATE

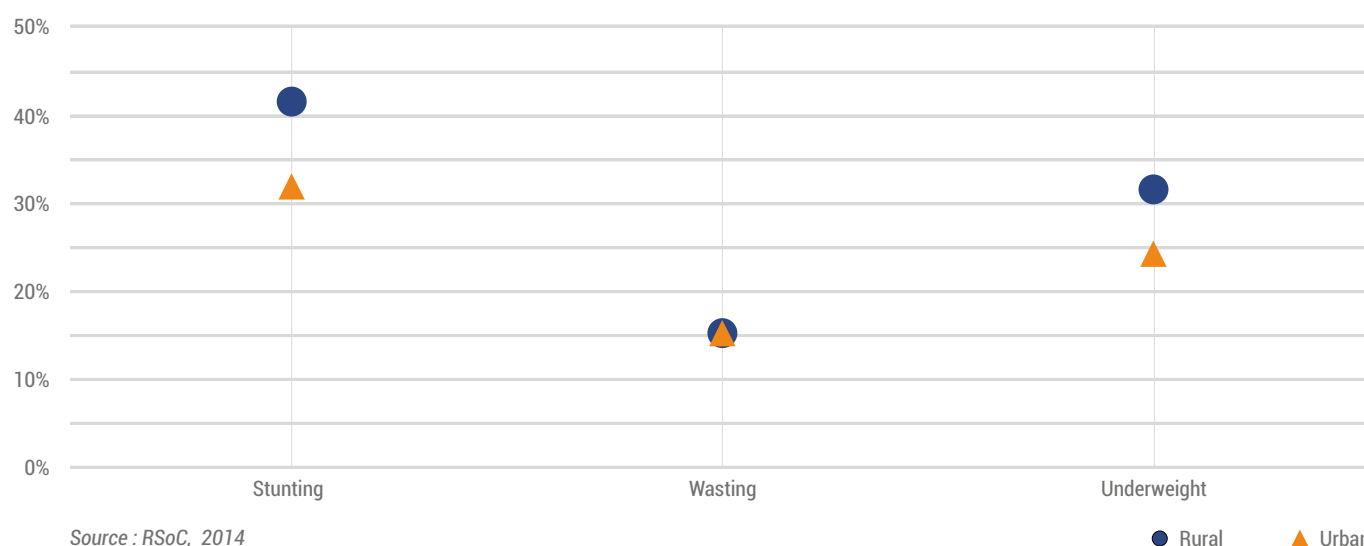


Source : DLHS-4, 2012-13 | Data not available for : Assam, Bihar, Chhattisgarh, Delhi, Gujarat, Jammu & Kashmir, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Uttarakhand, Uttar Pradesh

India's urbanization rates are rising faster than the overall population rate. About 28 percent of Indians live in urban areas and by 2030, this number is expected to reach 41 percent or 575 million people. Though the prevalence of undernutrition is lower in urban India than in rural regions, there are wide differences within the urban population. Measured by severe wasting in children under five, the urban poor (urban populations not residing in slums or in areas covered under Municipal Corporation facilities) are in fact nutritionally worse off compared with people in rural India or even those living in urban slums.

Urban living is also associated with higher overweight rates across all age groups for males and females. Sedentary urban lifestyles related to high energy intake and low energy expenditure coupled with easy access to and wide availability of high-calorie low-nutrient quality foods exacerbate the challenge.

FIGURE 12. PREVALENCE OF STUNTING, WASTING AND UNDERWEIGHT IN UNDER-5 CHILDREN, BY PLACE OF RESIDENCE



Source : RSoC, 2014

4 *The underlying reasons for India's high rates of stunting and variability in progress are complex and intertwined.*

There are multiple reasons for lack of significant progress in reducing stunting and improving child development that also explain the significant variation in levels and trends in stunting between and within states. Several analyses in recent years have pointed to the role of immediate and underlying drivers of poor nutrition [20, 25-28]. We summarize the most important of these below, noting with concern, based on our examination of state-level data, that some of the drivers, such as complementary feeding, women's status and health, sanitation and social/caste inequality, are major challenges in a majority of the states.

Breastfeeding and complementary feeding

As seen elsewhere, poor infant and young child feeding (IYCF) practices are associated with poor nutrition outcomes in India [29]. The state of IYCF practices across India is poor, although rates of exclusive breastfeeding have improved over time. Recent RSoC data indicate that 45 percent children were breastfed within 24 hours after birth (compared to 25 percent in NFHS-3) and 65 percent of children aged 0-5 months were exclusively breastfed (compared to 47 percent in NFHS-3). Rates of timely initiation of complementary feeding between 6 and 8 months of age appears to have declined slightly between NFHS-3 and RSoC, with only about half of children aged 6-8 months were being fed complementary foods in 2014, compared to 56 percent in 2006. Diet quality, often related to child growth outcomes, also appears to have declined over time; only 20 percent children age 6 – 23 months met minimum dietary diversity compared to 35 percent in NFHS-3. Challenges to appropriate feeding are numerous and range from cultural perceptions to food availability at the household level. As women's participation in the labor force increases and takes different shapes, these challenges become dynamic across India. Improving IYCF practices requires investments in addressing personal, societal, economic, and policy barriers.

The ICDS includes key interventions to improve IYCF practices, however, according to RSoC data, only 49 percent children under three years were provided supplementary nutrition under ICDS compared to 32.5 percent in NFHS-3, indicating limited uptake, especially since close to 95 percent of centers surveyed reported providing supplementary food. The corresponding figures for children in age group of 3-6 years were 44 percent and 33 percent respectively. The RSoC also highlights the limited awareness of families regarding health and nutrition education services available at the Anganwadi centers.

Child health

Poor child health, especially manifested in infectious diseases, is a significant constraint to improving nutrition. Even as the health system gears up to address the provision of preventive, promotive and curative health, India's weak and underfunded public health system remains a significant challenge to improving nutrition and preventing diseases. A large amount of health spending in India is out-of-pocket and of varying quality, and government spending on the public health system is less than 1 percent of GDP [10]. Although there have been recent investments in improving the quality and coverage of the routine immunization program through Mission Indradhanush, much remains to be done to improve primary care and prevent childhood illnesses. New vaccines, including the rotavirus and pneumococcal vaccines are needed to prevent the large avertable burden of rotavirus-related diarrheal disease and pneumonia.

More can be done to strengthen the health system's role in improving nutrition in India through stronger efforts to ensure delivery of nutrition interventions such as provision of iron-folic acid supplements during pregnancy, counseling for early breastfeeding, vitamin A supplements, and zinc-oral rehydration solution treatments for diarrhea can significantly contribute to better nutrition. The health system also plays a critical role in the management of treatment for children with severe acute malnutrition, and must continue to strengthen these efforts.

Income inequality

Although rates of undernutrition are higher than expected even among wealthier groups, it is well-established that poverty exacerbates undernutrition, and proportions of stunting, wasting, and underweight are certainly highest in the lowest quintile of wealth across India. The state dashboards in this Report highlight income inequalities within state, while suggesting that, on a state-by-state basis, the issue of income equality will continue to challenge progress on nutrition. At the most fundamental level, if current and future economic progress and a higher GDP do not lead to greater equality in terms of income and wealth, undernutrition will persist.

Food security and diet quality

Food insecurity and poor diet quality, both widely prevalent in India, are associated with poor nutrition outcomes for women and children. Changes in relative prices, demographic patterns, food habits, and calorie requirements all affect dietary diversity, as shown in the

Household Food Consumption Surveys collected by the National Statistical Office [13]. Although different data sources report different trends related to overall caloric consumption in India, all find that consumption of fats by Indians has increased [5]. Recent evidence suggests that programs like the Public Distribution System, that aim to improve access to food, can also improve the diversity of diets of households [30]. Poor household food security and diet diversity often translates to poor diet diversity for children and for women, indicating that efforts to improve household food security have to be an important component of efforts to improve maternal and child nutrition.

Caste and class

Undernutrition is worse among children in scheduled castes (SC) and scheduled tribes (STs). The RSoC highlights that stunting is about 9 percentage point higher in these groups, compared to higher caste groups (42 percent versus 33 percent). Underweight is highest among ST groups, with almost a 15 percentage point difference between ST children and children from “other” castes (37 percent versus 23 percent). Similarly, wasting is about five percentage point higher for ST groups (19 percent versus 14 percent). Analyses using the NFHS-3 surveys suggest that nutritional status of SC and ST children is lower than of children in “other” caste groups at similar levels of wealth and mother’s education [31]. Addressing such disparities and ensuring equal access to public services, education, sanitation, markets, and opportunities could help to accelerate improvements in nutrition.

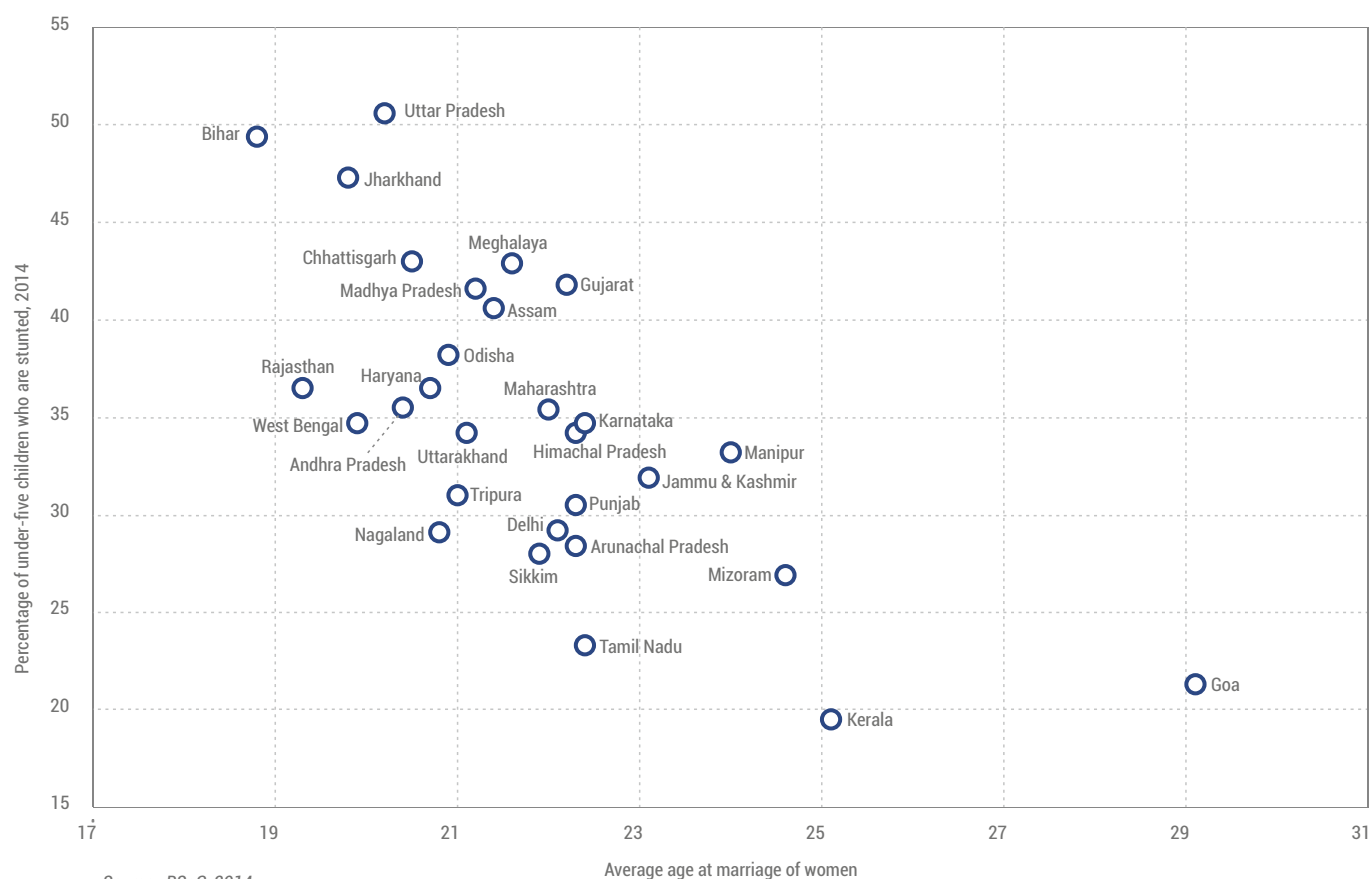
Water, sanitation, and hygiene, including open defecation

India’s progress in providing clean drinking water is significant, with as many as 522 million people gaining access to improved drinking sources from 1990 to 2010. Improved sanitation has not seen similar progress, and diarrheal and other diseases carried in unsafe water can contribute to undernutrition. Open defecation and inadequate hand-washing have widespread environmental consequences and has implications for poor child growth in lower and middle-income countries, including India [32]. The government’s emphasis on improving sanitation, through the Swachh Bharat Abhiyan could support nutritional progress, but progress will be limited if sanitation-focused action does not translate into change on the ground – in availability and use of toilets - in the most challenging states.

Health and status of women

Several global and India-specific analyses have honed in the poor status and health of women in India as important drivers of health and nutrition outcomes, both for women and for children [18, 25]. Maternal literacy and education are associated with age at marriage, age at first conception, antenatal care, birth spacing, and utilization of maternal and child health services. In India, the age at marriage is a particularly relevant driver of poor nutrition because of the prevalence of early marriage across several states in India according to RSoC 2014. Figure 13 shows the strong and negative relationship between the age of marriage of girls and stunting rates across states in India (Figure 13). Maternal education, as one component of a set of women’s status indicators, has also been associated with declines in stunting and underweight among children [18]. The state of women’s education varies remarkably across India and needs substantial attention, particularly in states with high prevalence of undernutrition. Finally, women’s nutrition in India is exceptionally poor, translating into a major risk factor for poor child nutrition as well. With high prevalence of low maternal height, low body mass index, and anemia, India’s women are at great peril of having small babies and of remaining malnourished themselves.

FIGURE 13. STUNTING PREVALENCE IN UNDER-5 CHILDREN AND AVERAGE AGE OF MARRIAGE OF WOMEN



In summary, several of these known drivers of poor nutrition outcomes, especially stunting, remain major challenges in the Indian context. Although these drivers vary substantially by state, an all-out effort is needed to close the gap in access to health services, to improve implementation of key services within the ICDS, and to improve the social factors that create enabling conditions for better child growth by reducing income inequality, improving the health and social status of women, scaling up water and sanitation services, addressing food insecurity. India's birth cohort of 26 million babies each year deserves better life conditions than those that await them at present.

India ignores the problem of undernutrition and its impact on child development at its peril and risks large economic, health and social consequences for future generations.

Programs in India and elsewhere have historically focused on the measure of underweight. However, research that has followed children over time has revealed a strong association between stunting before age two and long-term health and well-being. More importantly, nutritional improvements produce little catch-up in linear growth if they come later in childhood, rather than during the first 1,000 days.

Longitudinal studies that have tracked children over many years explain this concern. The development of the brain and nervous system begins in early pregnancy and is largely completed by age two. When stunting occurs in the first two years of life, humans cannot catch up from the compromises to their skeletal and neurological development without significant investments in early childhood development programs.

Early childhood represents the peak period for growth velocity, at the same time as infection episodes may be more frequent and severe than later in life. In addition, young children depend on an adult or older child for feeding, unable to procure food on their own or even articulate in words their needs [34].

In keeping with the strong evidence on the impact of a focus in the first 1,000 days, we underscore the importance of targeting stunting-reduction interventions to infants and children in this age range. Keeping in mind the critical role of women's health, nutrition and social status, interventions to improve nutrition in India must start with strengthening the health, wellbeing and social status of girls and women.

Health Impacts

Worldwide, undernutrition is responsible for 45 percent of child deaths, directly or through diseases made more severe because of it [35]. Even mildly underweight children face nearly twice the risk of death as compared to well-nourished children, including deaths from treatable diseases such as diarrhea, malaria, and acute respiratory infections. Low birth weight infants (less than 2.5 kilograms) are faced with 2 to 10 times the risk of death compared with normal birth weight infants, and are also at higher risk of non-communicable diseases in adulthood. There is increasing evidence that low birth weight and early-life undernutrition increases the risk of chronic diseases, such as diabetes and heart disease.

Among micronutrients, vitamin A deficiency comprises the immune system and leads to deaths of approximately 1 million children worldwide each year. Globally, severe iron deficiency is the cause of more than 60,000 deaths per year of women during pregnancy. Similarly, maternal folate deficiency leads to 250,000 severe birth defects and iodine deficiency in pregnancy causes mental impairment of almost 18 million infants per year and a lowering of 10 to 15 IQ points in school children.

Child undernutrition not only has adverse short-term and long-term consequences for affected children and the economy in which they live and work as adults, but also for future generations of individuals who are born to undernourished adults, especially women. Growth failure in the first two years of life of females is strongly associated with reduced offspring birth weight decades later [34, 36]. Every 1 kg of maternal birth weight has been found to be associated with a 208g increase in offspring birth weight [4]. Interventions targeted at the current generation of undernourished children can permanently break this intergenerational cycle of undernutrition, bringing massive gains in terms of reduced morbidity, reduced health-care costs, and increased productivity.

The health impacts of poor nutrition are not restricted to impacts of stunting or anemia. The Global Burden of Disease Study 2010 found overweight or obesity is the fifth leading cause of adult deaths globally [37]. Overweight is defined as weight-for-height +2 standard deviations from the median weight-for-height of the WHO Child Growth Standards. Obesity is defined as weight-for-height +3 standard deviations from the standards. The "overweight/obesity epidemic" may have begun in high-income countries a few decades ago, but the rest of the world, including India, is catching up as urbanization and affluence change dietary patterns and reduce physical activity. A by-product of economic growth in developed and developing countries has been higher intake of fats and sugars, often in the form of processed food, and less physical activity. These changes create conditions of overnutrition and lead to overweight or obesity and subsequently, non-communicable diseases including heart disease and cancer.

Poor nutrition contributes to serious, non-communicable diseases (NCDs), including coronary vascular disease, diabetes, and some cancers. But it is not just a condition of the urban or of higher income households. Paradoxically, even low birth weight may lead to NCDs in adulthood [38]. Fetal programming may even endow risk of overweight in later years. In other words, nutrient deficiencies in early childhood

¹Although the main analysis in this study includes a prospective cohort of children from five countries of Brazil, Guatemala, India, Philippines, and South Africa, data for birth weight of firstborn children was missing for South Africa and hence had to be omitted from the analysis of intergenerational outcomes.

make the body respond to nutrient constraints through permanent metabolic and physiological adaptations. Consequently, this leads to obesity in adulthood despite sufficient energy availability later [39]. There is also evidence that impaired linear growth or stunting in early childhood generally leads to short adult stature, which in turn is associated with increased risk of chronic diseases such as hypertension and diabetes [4]. India's more than 65 million diabetics account for 17 percent of all diabetics in the world, and diabetes in India continues to rise [40].

Economic and Social Impacts

Undernutrition hinders the economy through direct losses to adult productivity, either through fewer years of schooling or less learning per year in school due to poor cognitive development. Numerous studies have documented the consequences of stunting (low height for age at age 2). Conditional height at 2 years strongly predicts an increase in adult height (3.2cms per SD increase in conditional height at 2) [4]. A one SD increase in conditional height (how much is this in cm) at 2 years relates to 0.5 year increase in schooling, which is associated with a 5 percent annual return of income [4]. Conditional height at 2 is positively associated with fat-free mass and systolic blood pressure, and unrelated to adult plasma glucose concentration and dysglycemia. Estimates combining both pathways of stunting deficits through losses in schooling and cognitive development, suggest that the loss in adult income from being stunted is 22.2 percent, assuming that every additional year of schooling increases adult annual income by 9 percent [41, 42].

A recent long term study that relied on randomization in ICDS implementation in the 1980s found that children exposed to the ICDS program were 7.8 percent more likely to be enrolled in school and completed 0.84 more grades of schooling at time of adolescence than children born in control villages [43]. Applying the estimates from the recent ICDS analysis to the roughly 50 million stunted children under the age of five in India would indicate roughly 40 million years of lost schooling. This would translate to an average annual income loss of INR 14,400 per stunted child and INR 313 billion (roughly \$4.8 billion or roughly 2 percent of GDP) lost in future earnings each year.

Undernutrition also leads to greater needs for health care and thereby higher health care costs. According to the Micronutrient Initiative and UNICEF (2004), micronutrient deficiencies are estimated to cost India about \$2.5 billion each year [44]. In contrast, nutrition investments, particularly related to micronutrient interventions, are some of the most cost-effective health interventions in developing countries, costing less than \$25 per Disability Adjusted Life Year saved. A recent incidence study for iron fortification estimates a median benefit-to-cost ratio of 6:1 for effects of fortification on physical productivity, which rises to 36:1 if cognitive benefits of fortification are included [45]. The effective provision of micronutrients had the highest rate of return of any social intervention according to the Copenhagen Consensus Project [46].

Policies that promote income redistribution and reduce inequality can have a positive impact on undernutrition [47]. While inequality and instability exacerbate undernutrition, the converse is also true since a well-nourished, healthy workforce is a pre-condition for sustainable development. Investments in nutrition and child development are central to achieving better health and better economic and social wellbeing for any nation. India is no exception.

India's undernutrition problem is a serious threat to child development. Accelerating action at the state-level is essential to change the course of the future for India's children.

India is undergoing one of the most significant demographic transitions that have ever taken place. Nearly thirty percent of its total population of 1.23 billion people is under the age of fifteen and nearly half is under the age of 24. Roughly 40 percent of the children under 15, a total of 149 million individuals are stunted and will not reach their full growth potential. If the population of stunted children in India were a single country, they would be the ninth largest country in the world. Anemia rates, also a critical driver of poor child development, are shockingly high and need urgent attention. India's undernutrition problem, thus, represents the largest loss of human potential in any country in human history. More worryingly, it represents a squandering of the demographic dividend that is needed to power India to sustained economic growth.

India has done exceptionally well on the child survival agenda. Although the Millennium Development Goals have not been met, India's under-five mortality declined over forty percent since 1992-93. However India has done much worse on nutrition, a primary driver of child development. The rate of stunting has decreased only by 24 percent over the same period since 1992-93 and anemia has not budged.

The India Health Report: Nutrition 2015 identifies state-level action, with leadership, financial and policy support from the national and state government, as the key step in improving the development of children in India. The basic policy framework for nutrition action is already in place and does not need to be reinvented dramatically [48]. What is needed is political commitment, adequate financing, national- and state-level accountability for action to deliver health and nutrition interventions via existing large-scale programs and to improve the underlying social conditions that enable better nutrition. Our comparative analysis of the RSoC data, using fact sheets released by the government, highlights tremendous variability across states on key indicators that reflect program and policy actions. Preventive health services like antenatal care and immunization, use of ICDS services, sanitation, age at marriage and levels of education of girls, all vary tremendously across states, and closing these gaps is crucial for progress. Similarly, economic growth rates also vary significantly by state, as do within-state inequities.

As India, and the states, look ahead to transforming and accelerating economic growth, attention must also turn to translating growth into more income for the poorest, and to delivering better public services. Large states, specifically Uttar Pradesh, Bihar and Jharkhand have to act urgently, both to accelerate national gains in child development and to power their own states' aspirations of a better living standard for their people. Smaller states, with lower undernutrition, will still need to pay attention to the problem, and identify specific areas where undernutrition persists.

Action at the state level will have to focus not just on implementation of direct programs like ICDS, and efforts to promote exclusive breastfeeding and complementary feeding, and improved immunization and health, but will also have to pay closer attention to social drivers of nutrition and work towards increasing girl's education and the age of marriage of girls, improving access to, and utilization of, toilets, and improving vaccination coverage and overall public health.

Nutrition can no longer be a stand-alone agenda and separated from health and social progress. As an economic imperative, nutrition and child development deserve a central place of recognition as a key investment in the nation's most valuable asset, its future citizens, and as a driver of India's economy in coming decades. As a moral imperative, the 26 million Indian babies born each year deserve better.

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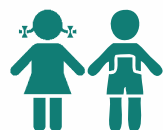
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**FAST FACTS ON NUTRITION
AND ITS DETERMINANTS
IN INDIA**

FAST FACTS ON NUTRITION AND ITS DETERMINANTS IN INDIA

World Health Assembly Nutrition Targets



CHILDREN UNDER 5 YEARS

38.7%
Stunted¹

15.1%
Wasted¹



64.9%

Infants 0-5 months old who are exclusively breastfed¹



18.6%

Children under 3 years who have low birth weight (<2.5 kgs)¹



55.3%

Women 15-49 years old with anemia^{2 *1}

World Health Assembly Nutrition Targets

Immediate Determinants



50.5%

Infants 6-8 months old who receive solid, semi-solid or soft foods¹

19.9%

Infants & young children 6-23 months old who achieve minimal diet diversity in complementary feeding¹



69.5%

Children 6-59 months old with anemia^{2 *1}



6.5%

Children 6-59 months old who had diarrhea in 15 days prior to survey¹

Immediate Determinants

Underlying Determinants



21.4%

Currently married women with 10 or more years of schooling³



30.3%

Women aged 20-24 years who were married before the age of 18¹



44.7%

Adolescent girls 15-18 years old with low BMI (<18.5)¹



45.5%

Households practicing open defecation¹



21.9%

Population below state-specific poverty line⁴

Underlying Determinants

¹ Source : RSoC, 2014

² Source : NFHS-3, 2006

³ Source : DLHS-3, 2007-08

⁴ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Govt. of India

* excludes Nagaland



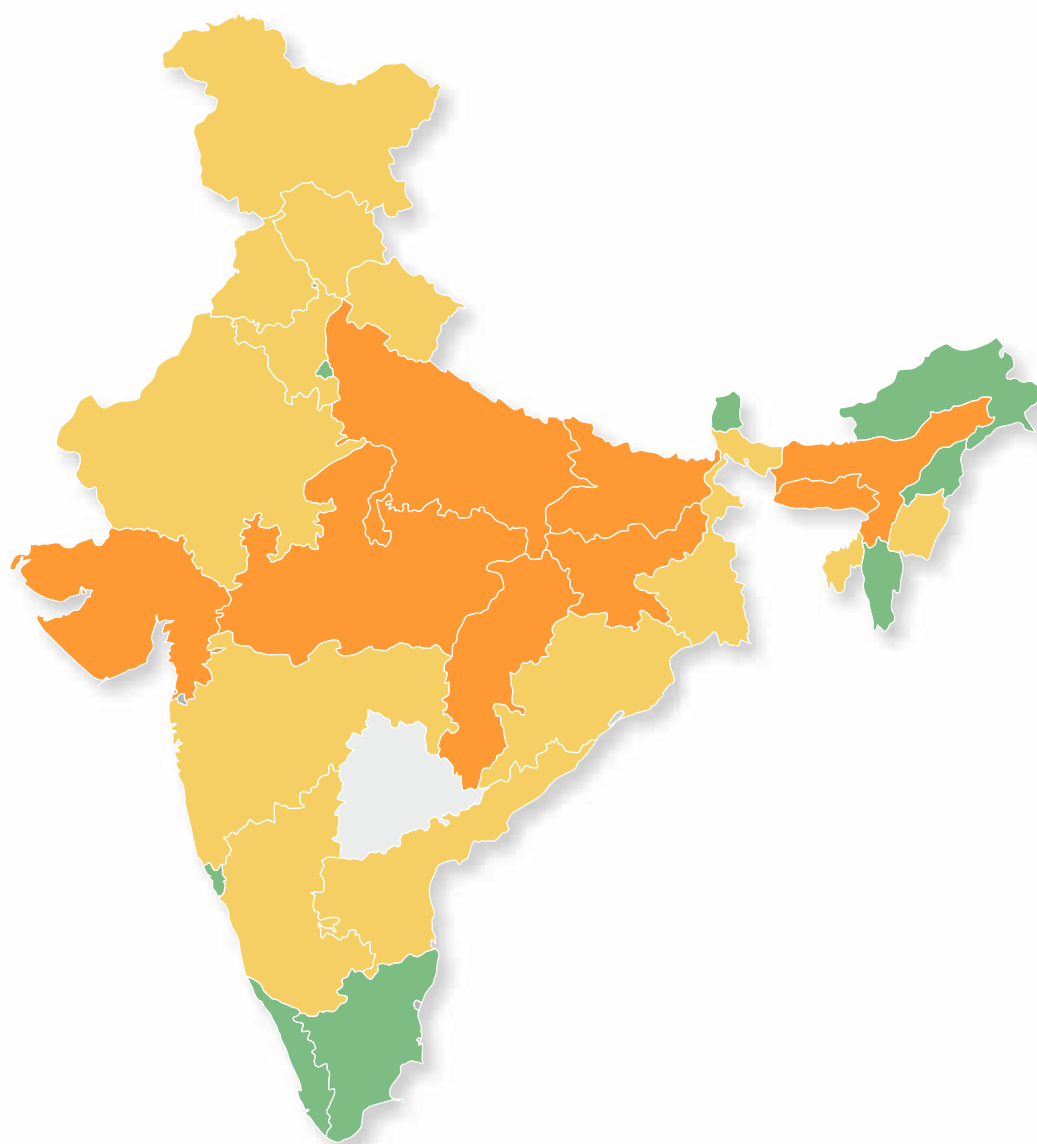
COMPARING STATES ON NUTRITION AND ITS DETERMINANTS



1. CHILDREN UNDER 5 YEARS WHO ARE STUNTED



(RSOC, 2014)



Stunted Children

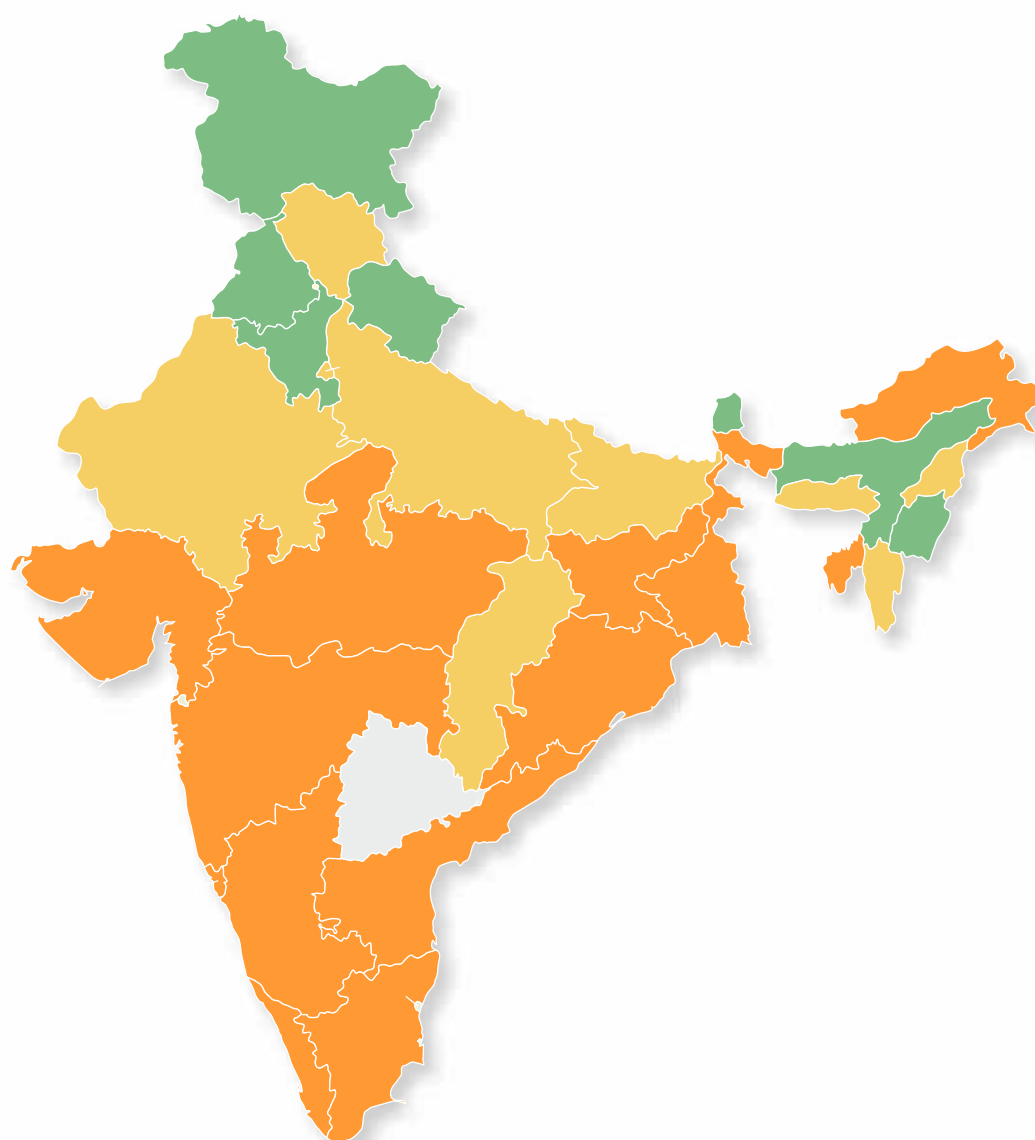
More than 40% Between 40% - 30% Less than 30% Data not available

States	Numbers in Percentage
Uttar Pradesh	50.4
Bihar	49.4
Jharkhand	47.4
Chhattisgarh	43.0
Meghalaya	42.9
Gujarat	41.6
Madhya Pradesh	41.5
Assam	40.6
India	38.7
Odisha	38.2
Haryana	36.5
Rajasthan	36.4
Maharashtra	35.4
Andhra Pradesh	35.4
West Bengal	34.7
Karnataka	34.2
Himachal Pradesh	34.2
Uttarakhand	34.0
Manipur	33.2
Jammu & Kashmir	31.7
Tripura	31.0
Punjab	30.5
Delhi	29.1
Nagaland	29.1
Arunachal Pradesh	28.4
Sikkim	28.0
Mizoram	26.9
Tamil Nadu	23.3
Goa	21.3
Kerala	19.4

2. CHILDREN UNDER 5 YEARS WHO ARE WASTED



(RSOC, 2014)



Wasted Children

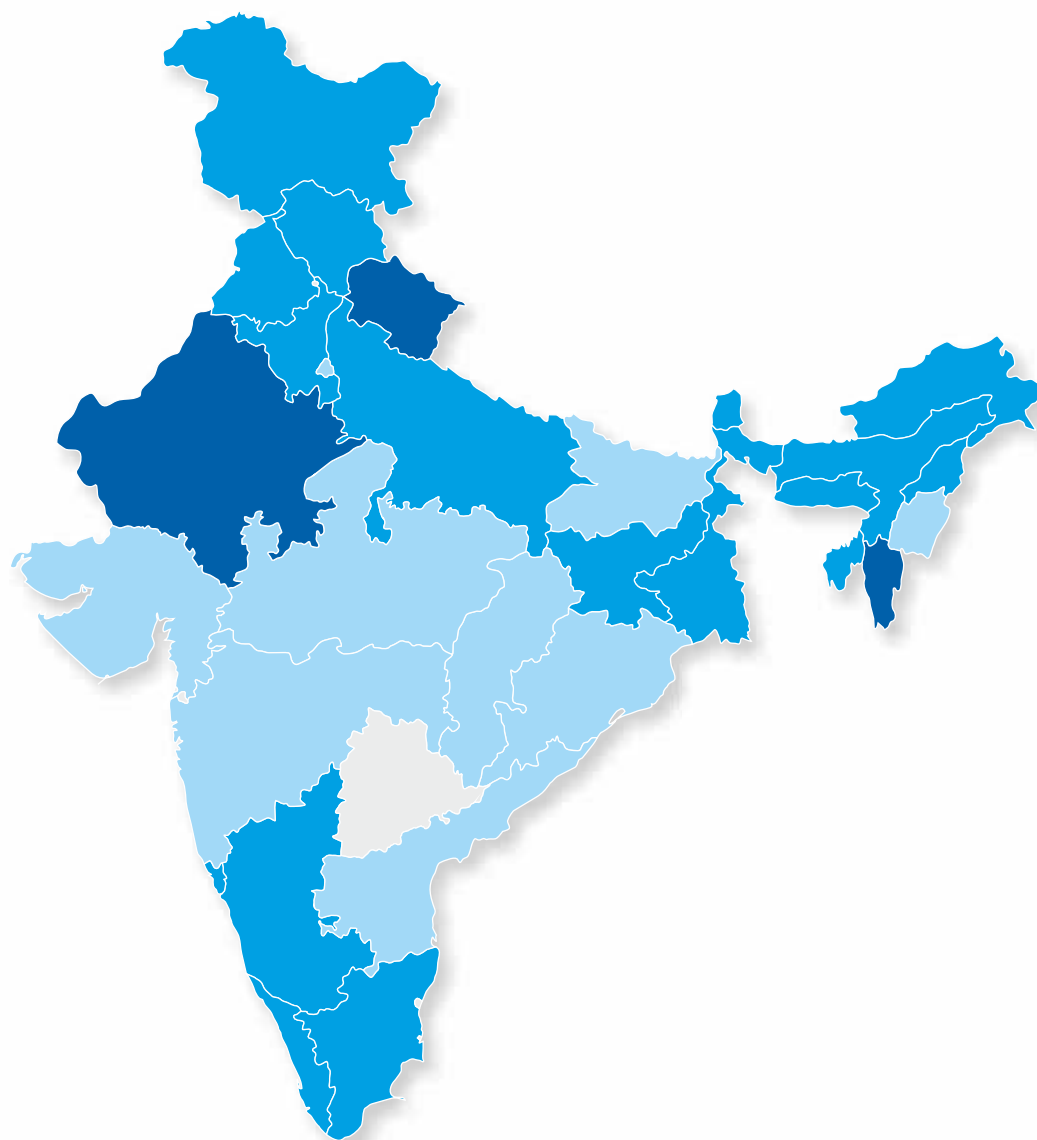
More than 15% Between 10% - 15% Less than 10% Data not available

States	Numbers in Percentage
Andhra Pradesh	19.0
Tamil Nadu	19.0
Gujarat	18.7
Maharashtra	18.6
Odisha	18.3
Madhya Pradesh	17.5
Tripura	17.1
Karnataka	17.0
Arunachal Pradesh	17.0
Jharkhand	15.6
Kerala	15.5
Goa	15.4
West Bengal	15.3
India	15.1
Delhi	14.3
Mizoram	14.3
Rajasthan	14.1
Bihar	13.1
Meghalaya	13.1
Chhattisgarh	12.9
Nagaland	11.8
Himachal Pradesh	10.1
Uttar Pradesh	10.0
Assam	9.7
Uttarakhand	9.3
Haryana	8.8
Punjab	8.7
Jammu & Kashmir	7.1
Manipur	7.1
Sikkim	5.1

3. INFANTS 0-5 MONTHS OLD WHO ARE EXCLUSIVELY BREASTFED



(RSoc, 2014)



Exclusive Breastfeeding

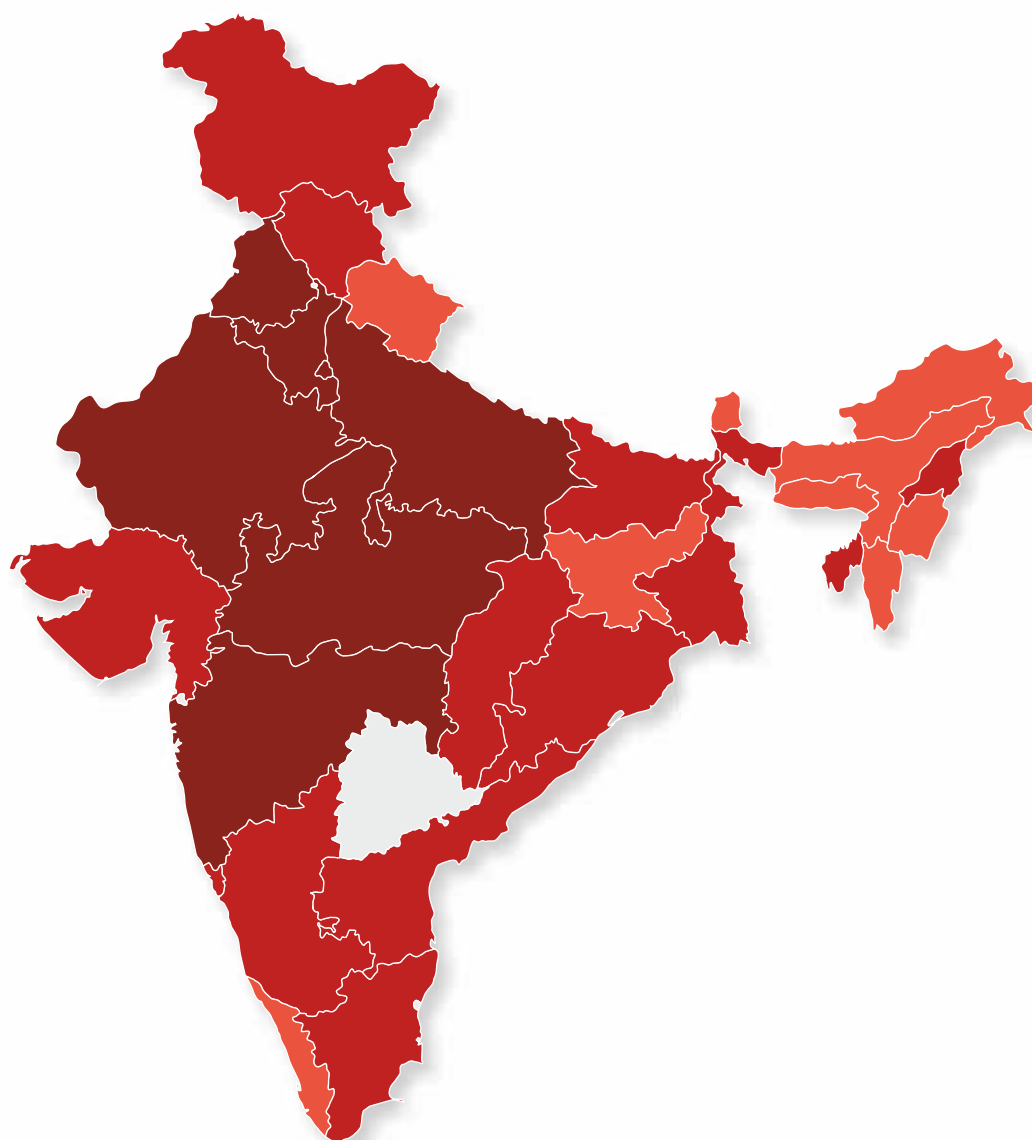
■ Less than 50% ■ Between 50% - 65% ■ More than 65% ■ Data not available

States	Numbers in Percentage
Mizoram	44.5
Uttarakhand	48.1
Rajasthan	49.9
Haryana	53.6
Meghalaya	54.9
Karnataka	55.1
Himachal Pradesh	55.2
Tamil Nadu	57.0
Tripura	57.7
Nagaland	58.1
Kerala	58.6
West Bengal	59.4
Arunachal Pradesh	59.8
Punjab	60.2
Jammu & Kashmir	60.4
Uttar Pradesh	62.2
Goa	62.6
Sikkim	63.0
Jharkhand	64.3
Assam	64.7
India	64.9
Manipur	66.8
Delhi	67.8
Odisha	68.5
Andhra Pradesh	69.2
Bihar	70.8
Maharashtra	73.4
Gujarat	74.4
Madhya Pradesh	74.8
Chhattisgarh	82.3

4. CHILDREN UNDER 3 YEARS WHO WERE LOW BIRTH WEIGHT



(RSoc, 2014)



Low Birth Weight

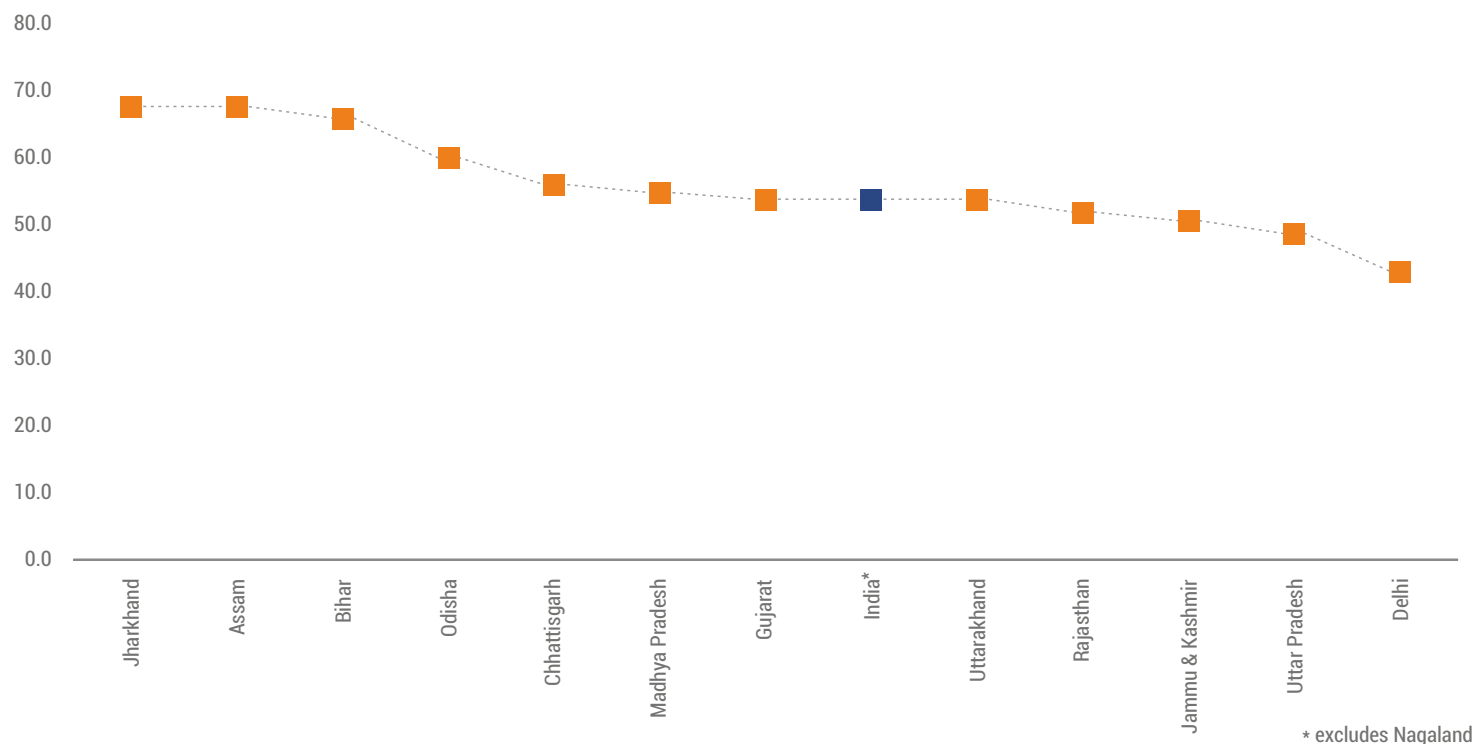
More than 20% Between 20% - 15% Less than 15% Data not available

States	Numbers in Percentage
Rajasthan	23.2
Madhya Pradesh	23.1
Uttar Pradesh	22.5
Delhi	21.9
Haryana	20.9
Punjab	20.7
Maharashtra	20.6
Gujarat	19.5
Odisha	18.9
Nagaland	18.9
India	18.6
Tripura	18.5
Andhra Pradesh	18.4
Himachal Pradesh	17.7
Karnataka	17.2
Chhattisgarh	16.9
West Bengal	16.9
Tamil Nadu	16.7
Goa	16.7
Jammu & Kashmir	16.2
Bihar	15.0
Jharkhand	14.7
Uttarakhand	14.2
Assam	13.6
Kerala	13.0
Arunachal Pradesh	11.5
Meghalaya	10.4
Sikkim	10.0
Manipur	7.3
Mizoram	2.2

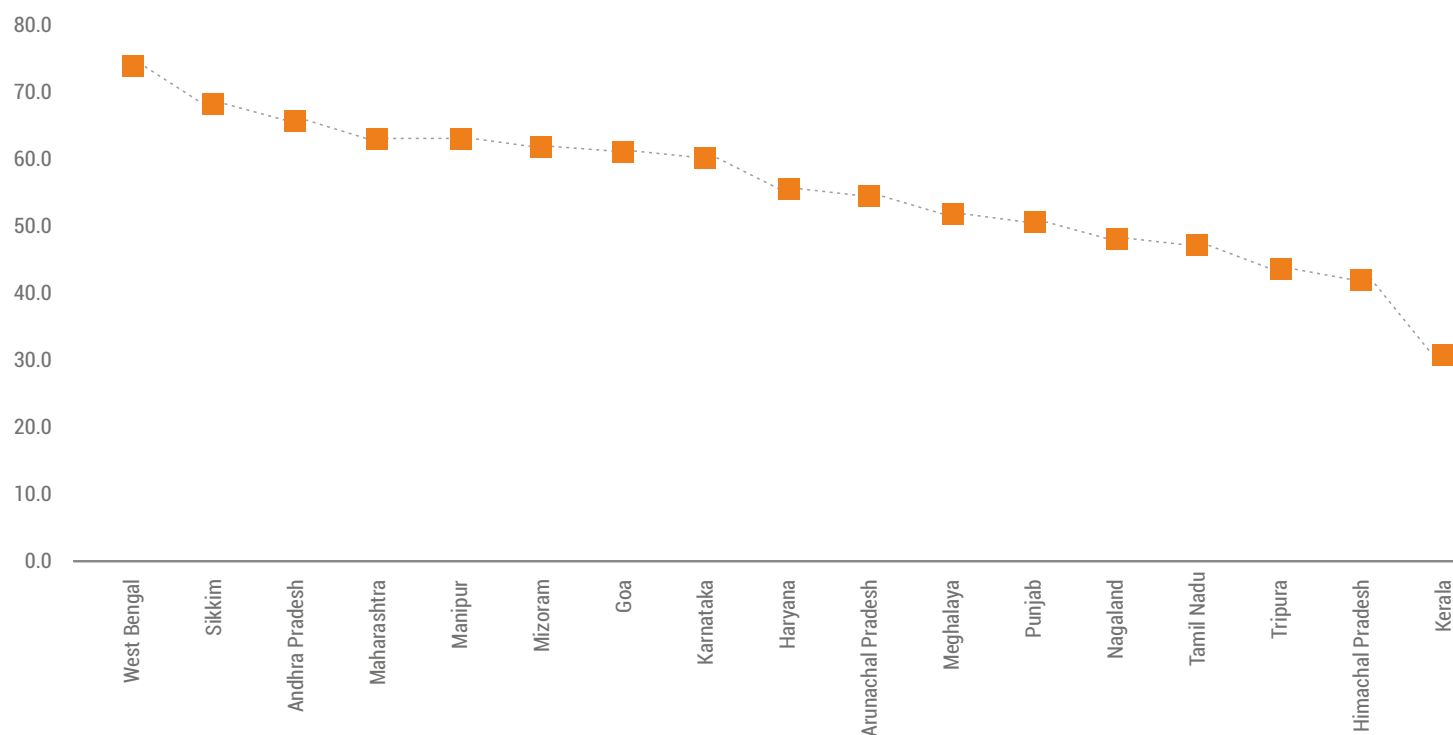
5. WOMEN 15-49 YEARS OLD WITH ANEMIA



(NFHS-3, 2006)



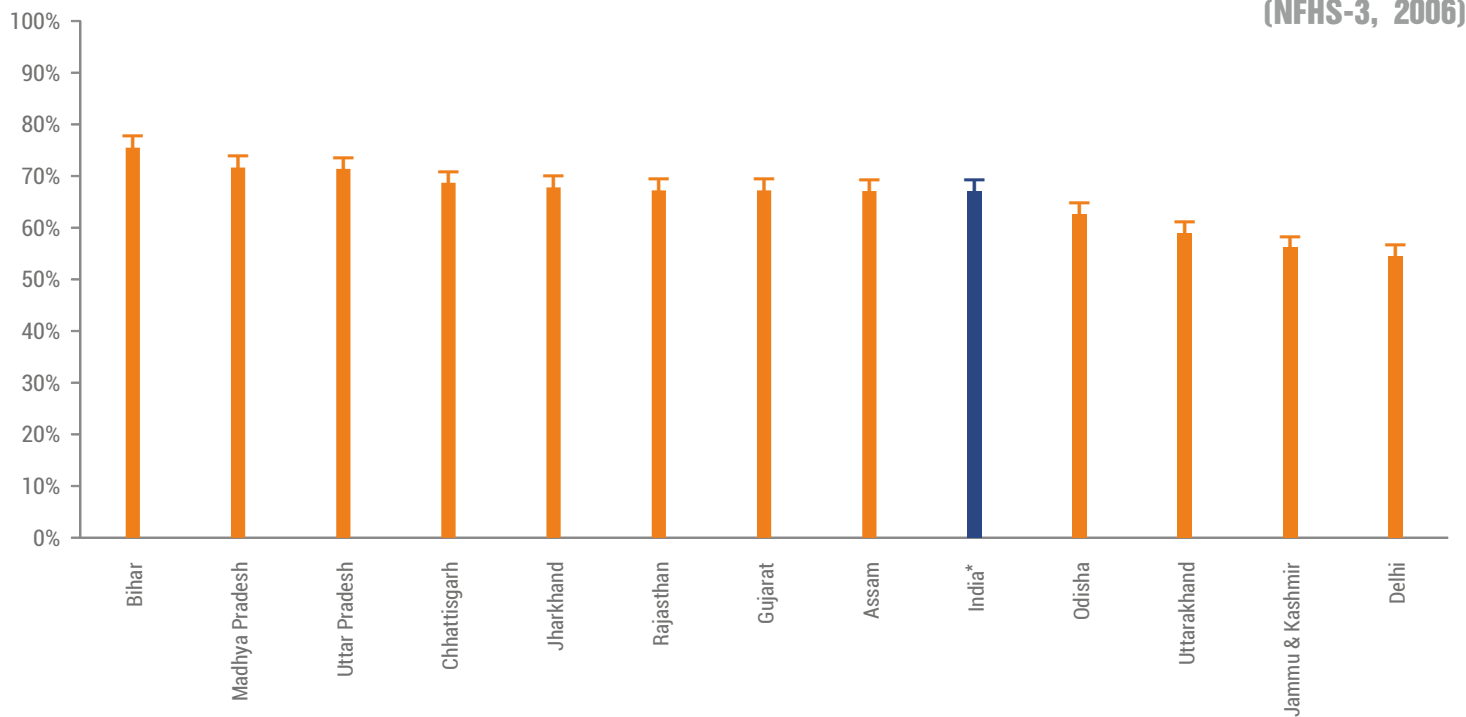
(DLHS-4, 2012-13)





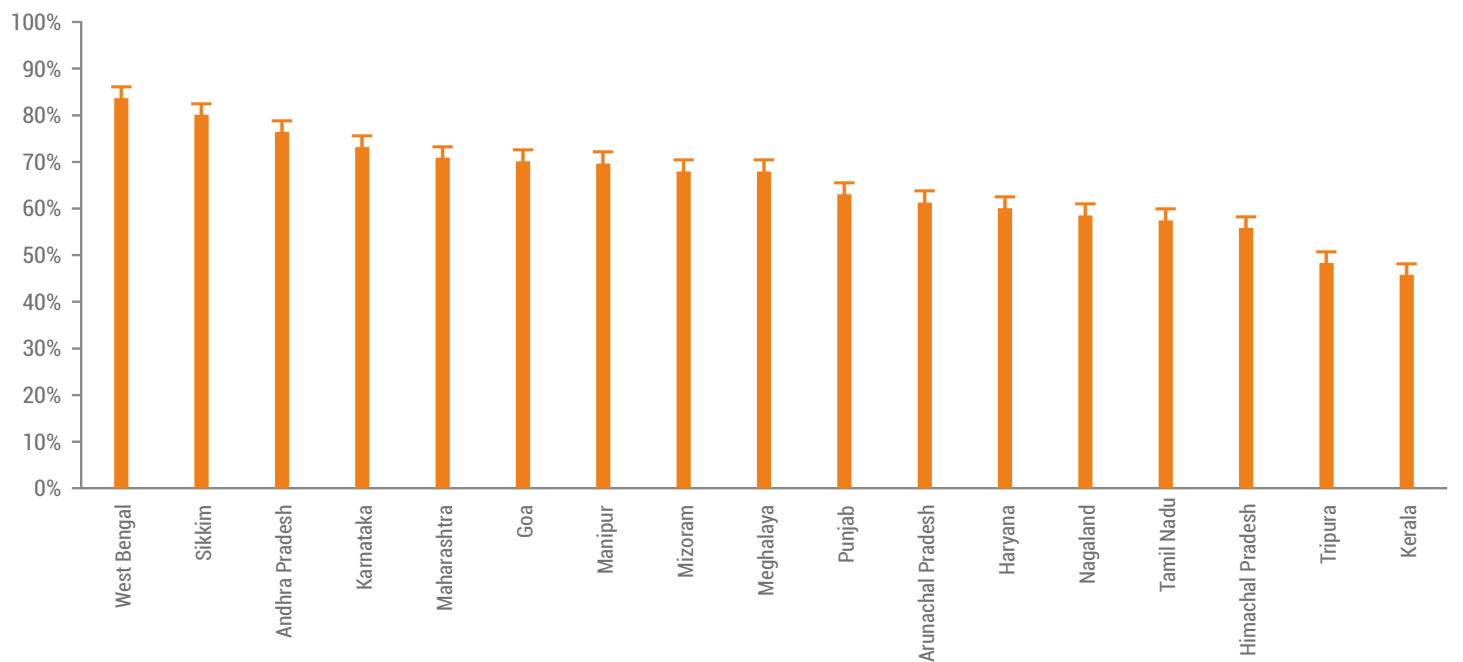
6. CHILDREN 6-59 MONTHS OLD WITH ANEMIA

(NFHS-3, 2006)



* excludes Nagaland

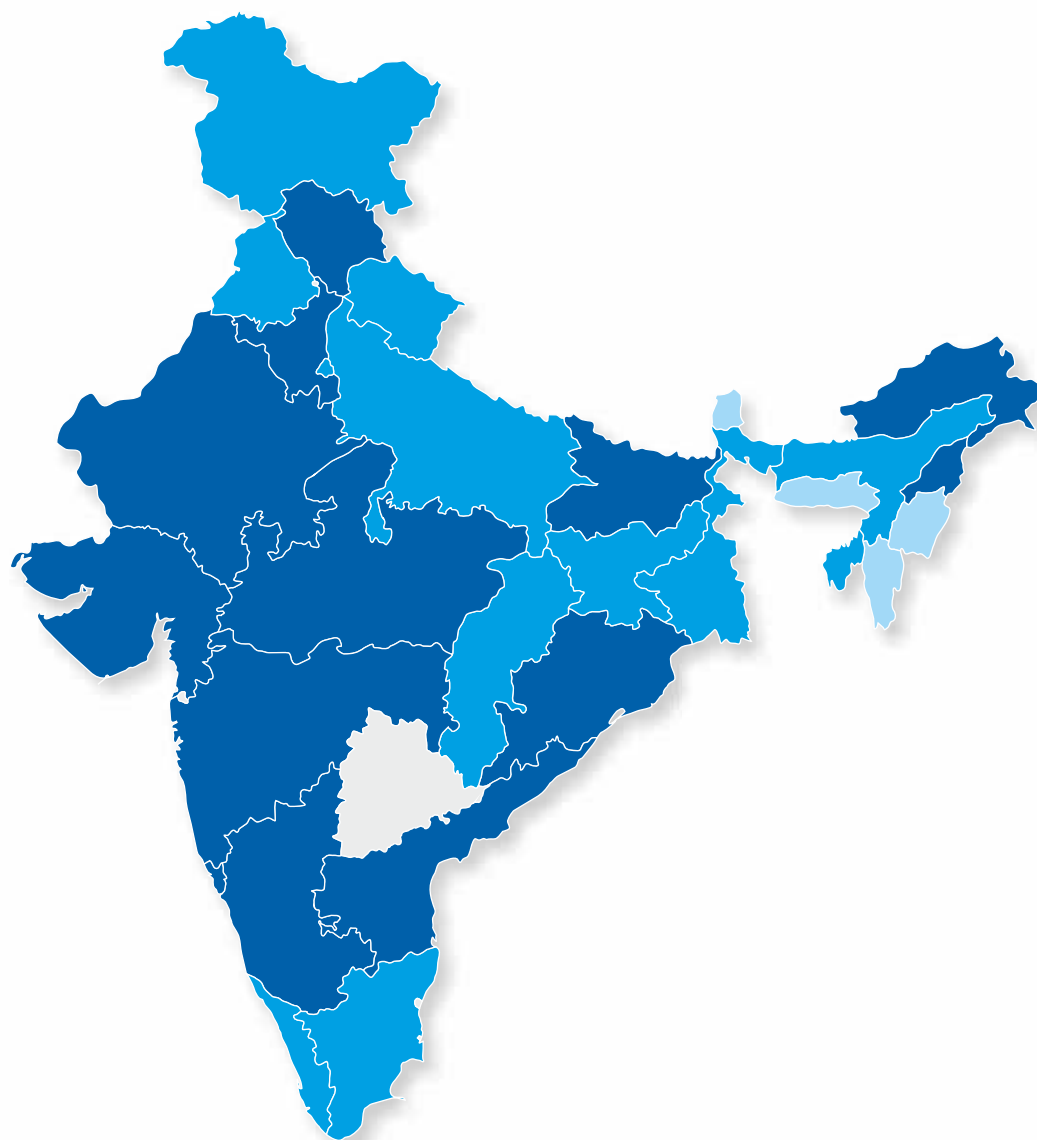
(DLHS-4, 2012-13)



7. ADOLESCENT GIRLS 15-18 YEARS OLD WITH LOW BODY MASS INDEX



(RSOC, 2014)



Low BMI

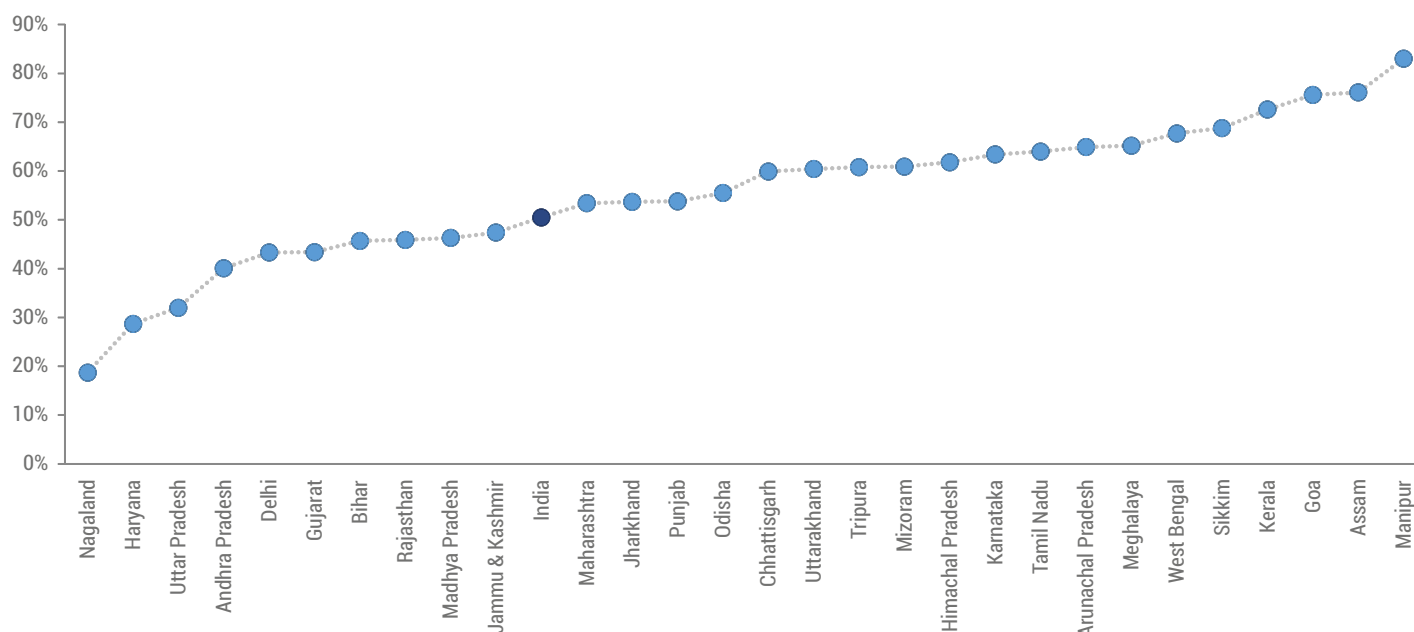
More than 45% Between 45% - 30% Less than 30% Data not available

States	Numbers in Percentage
Rajasthan	60.2
Karnataka	58.0
Goa	55.9
Andhra Pradesh	54.8
Maharashtra	54.2
Gujarat	52.6
Odisha	51.8
Himachal Pradesh	51.6
Nagaland	50.9
Arunachal Pradesh	50.3
Haryana	49.3
Madhya Pradesh	45.8
Bihar	45.2
India	44.7
Delhi	43.7
Jharkhand	43.3
Chhattisgarh	43.0
Assam	40.8
Punjab	38.8
Uttar Pradesh	36.7
Tamil Nadu	35.2
Kerala	34.8
West Bengal	34.5
Uttarakhand	32.0
Tripura	31.8
Jammu & Kashmir	30.5
Mizoram	24.8
Manipur	21.9
Meghalaya	19.7
Sikkim	10.5

8. INFANTS 6-8 MONTHS OLD WHO RECEIVE SOLID, SEMI-SOLID OR SOFT FOODS



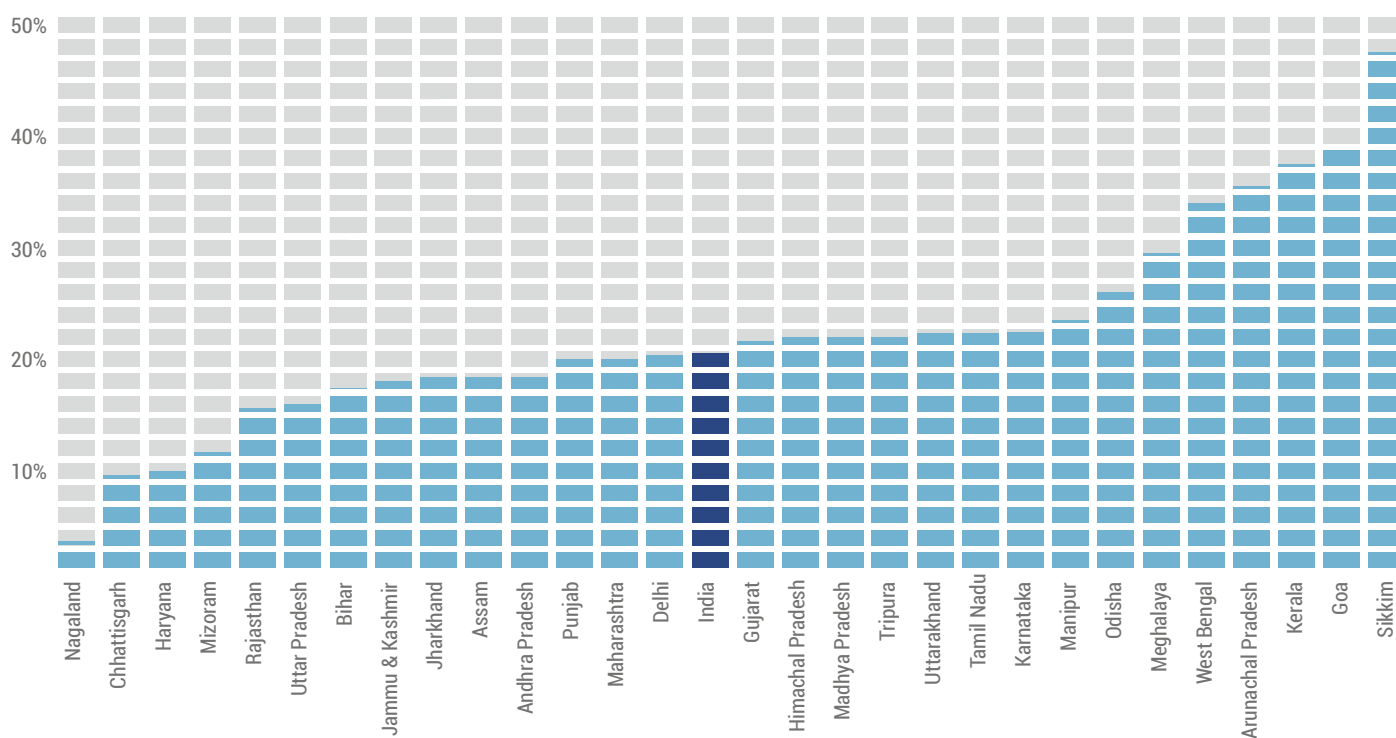
(RSOC, 2014)



9. MINIMUM DIET DIVERSITY DURING COMPLEMENTARY FEEDING (FOR INFANTS AND YOUNG CHILDREN 6-23 MONTHS OLD)



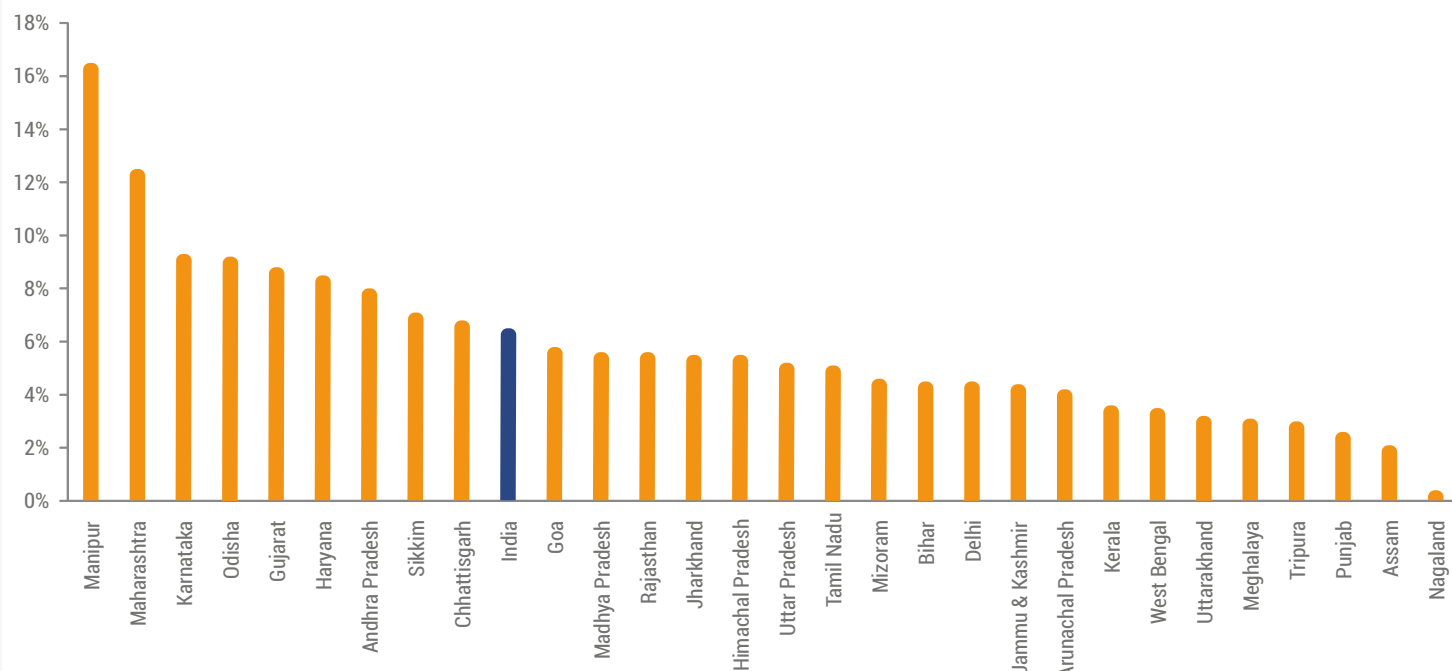
(RSOC, 2014)



10. CHILDREN UNDER 5 YEARS WITH DIARRHEA IN 15 DAYS PRIOR TO SURVEY



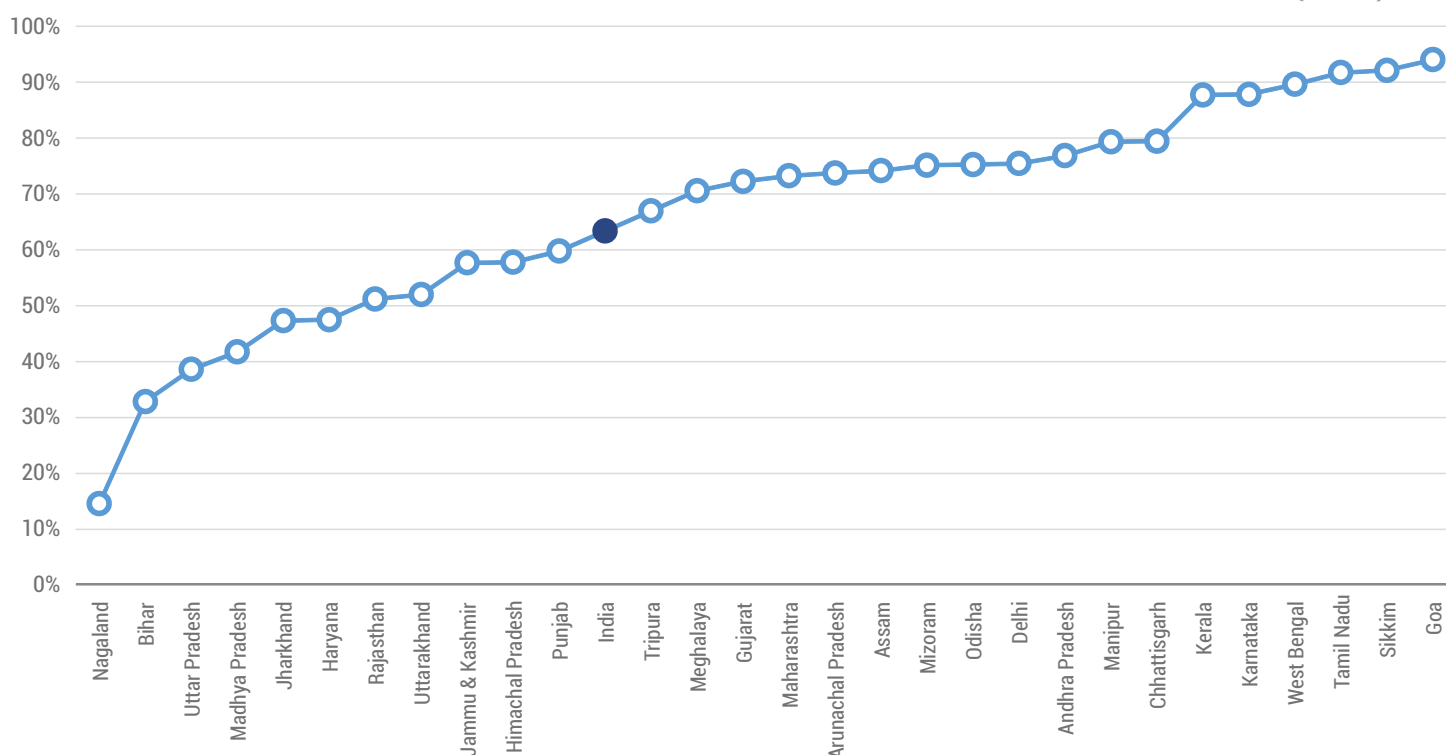
(RSoc, 2014)



11. MOTHERS OF CHILDREN UNDER 3 YEARS OLD WHO RECEIVED THREE OR MORE ANTENATAL CHECKUPS



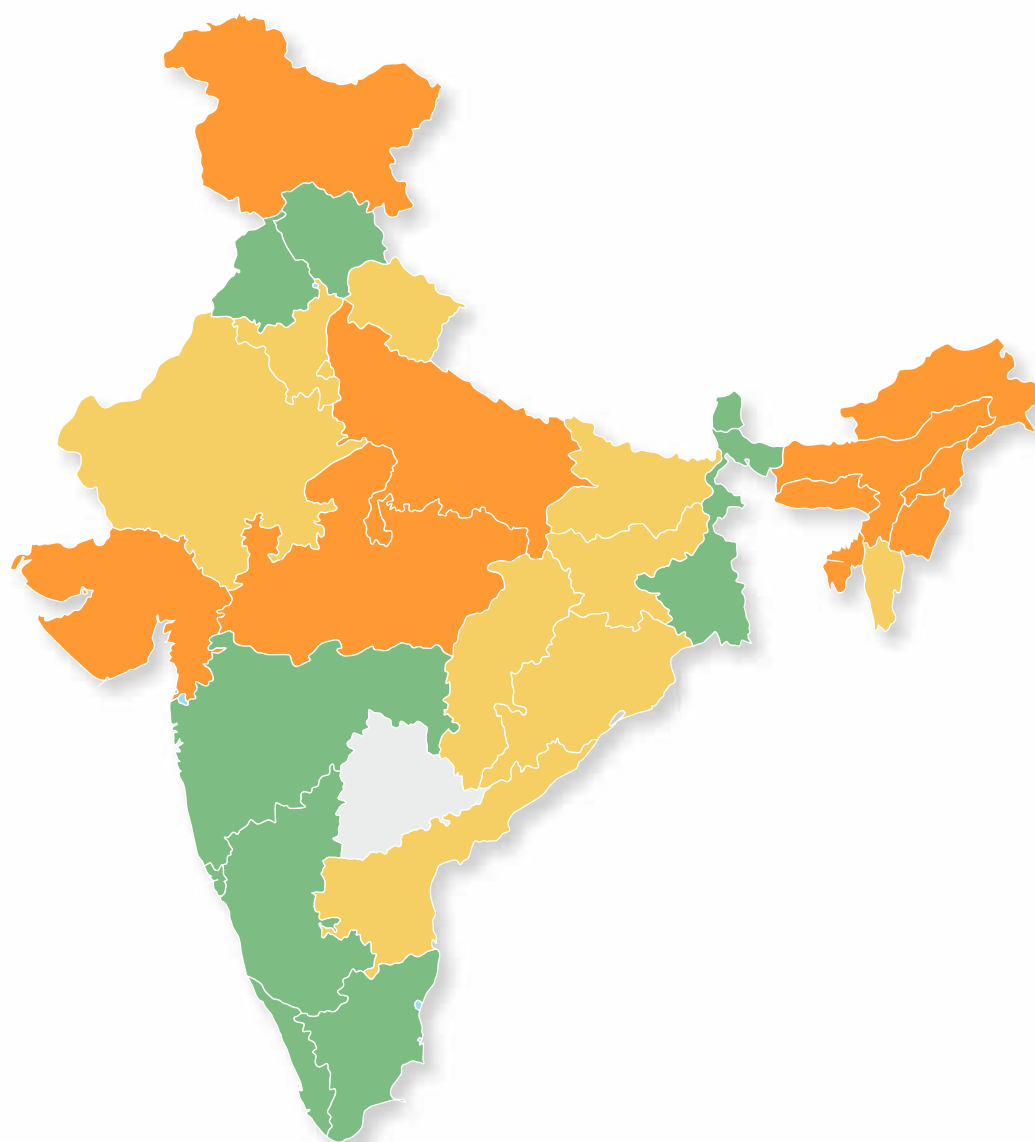
(RSoc, 2014)



12. CHILDREN 12-23 MONTHS OLD WHO ARE FULLY IMMUNIZED



(RSOC, 2014)



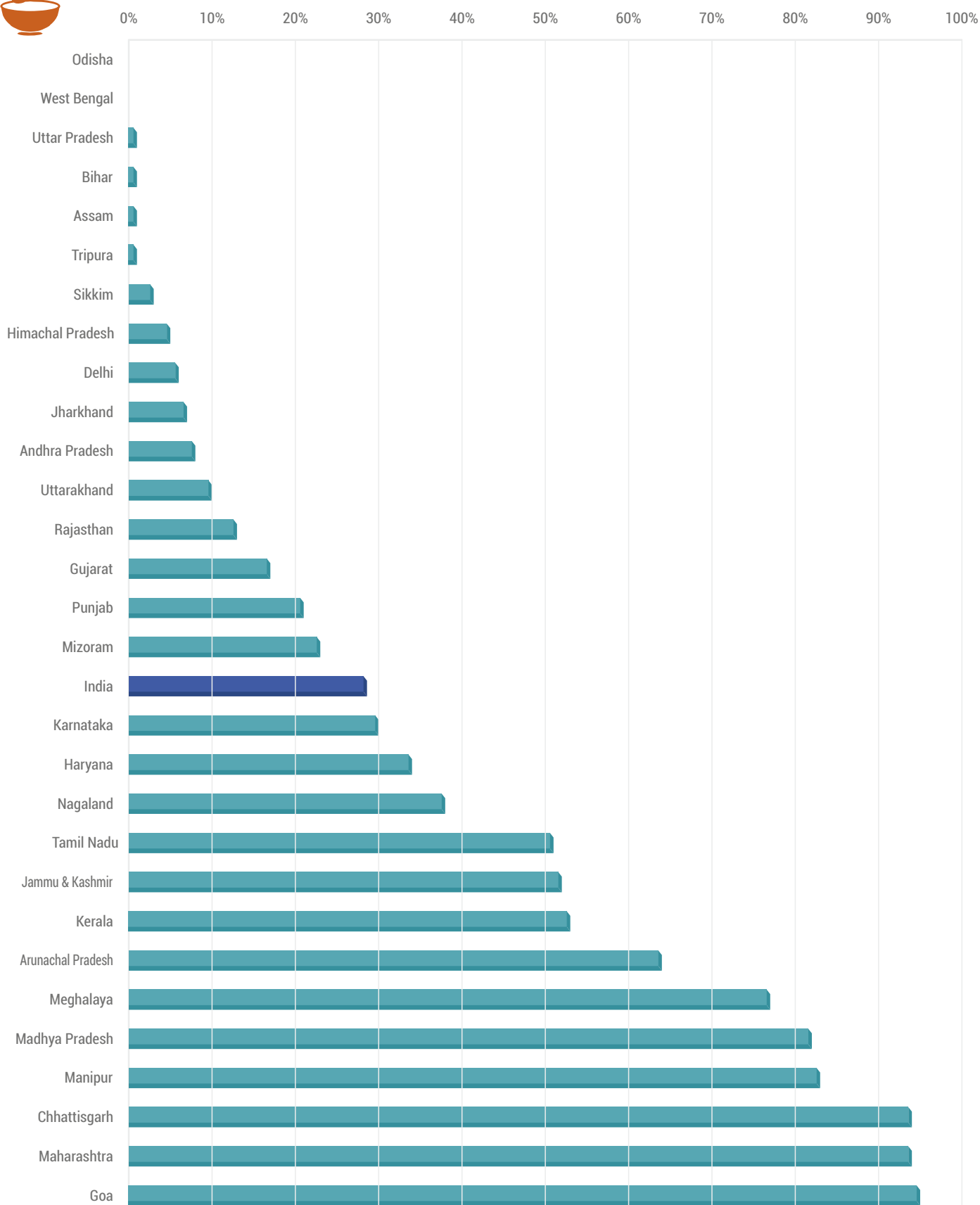
Fully Immunized Children

■ More than 40%
 ■ Between 40% - 30%
 ■ Less than 30%
 ■ Data not available

States	Numbers in Percentage
Nagaland	33.2
Meghalaya	44.6
Uttar Pradesh	47.0
Arunachal Pradesh	50.5
Madhya Pradesh	53.5
Manipur	55.2
Assam	55.3
Gujarat	56.2
Jammu & Kashmir	59.0
Tripura	59.2
Bihar	60.4
Rajasthan	60.7
Odisha	62.0
Jharkhand	64.9
India	65.3
Chhattisgarh	67.2
Uttarakhand	68.6
Mizoram	68.6
Delhi	69.7
Haryana	70.7
Andhra Pradesh	74.1
West Bengal	75.2
Tamil Nadu	76.3
Maharashtra	77.4
Sikkim	77.8
Punjab	78.6
Karnataka	79.4
Himachal Pradesh	80.2
Kerala	83.0
Goa	91.9

13. CHILDREN 6-35 MONTHS OLD WHO RECEIVED SUPPLEMENTARY FOOD UNDER ICDS FOR AT LEAST 21 DAYS IN THE MONTH PRIOR TO THE SURVEY

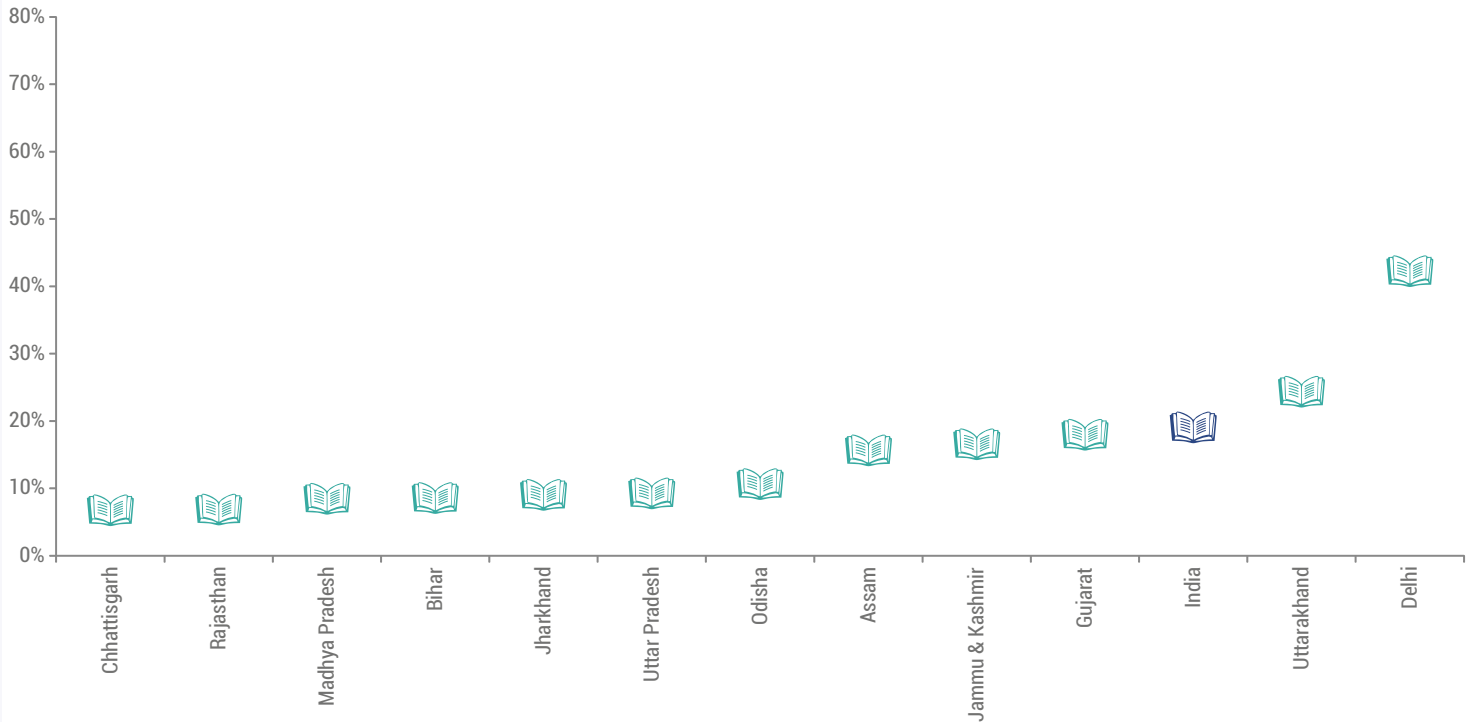
(RSoc, 2014)



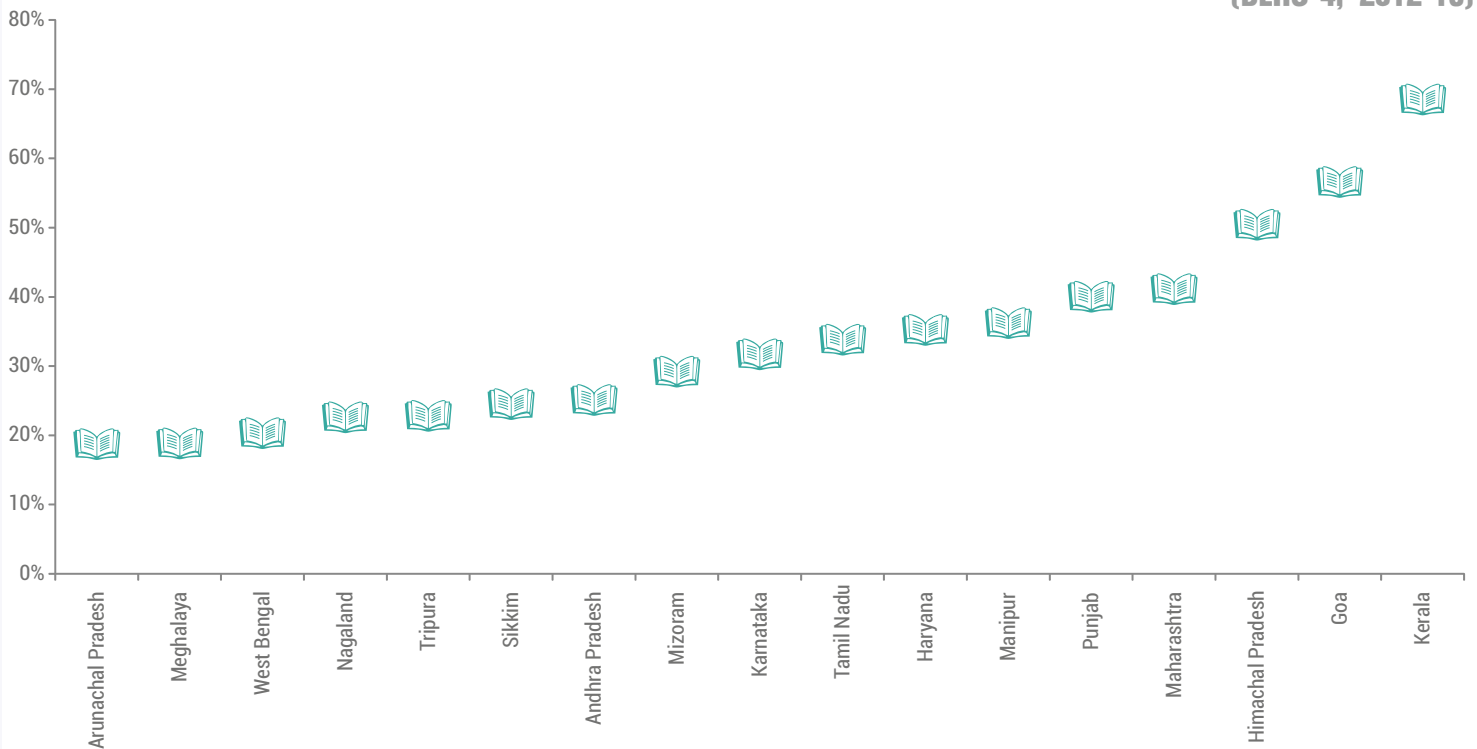


14. CURRENTLY MARRIED WOMEN WITH 10 OR MORE YEARS OF SCHOOLING

(DLHS-3, 2007-08)



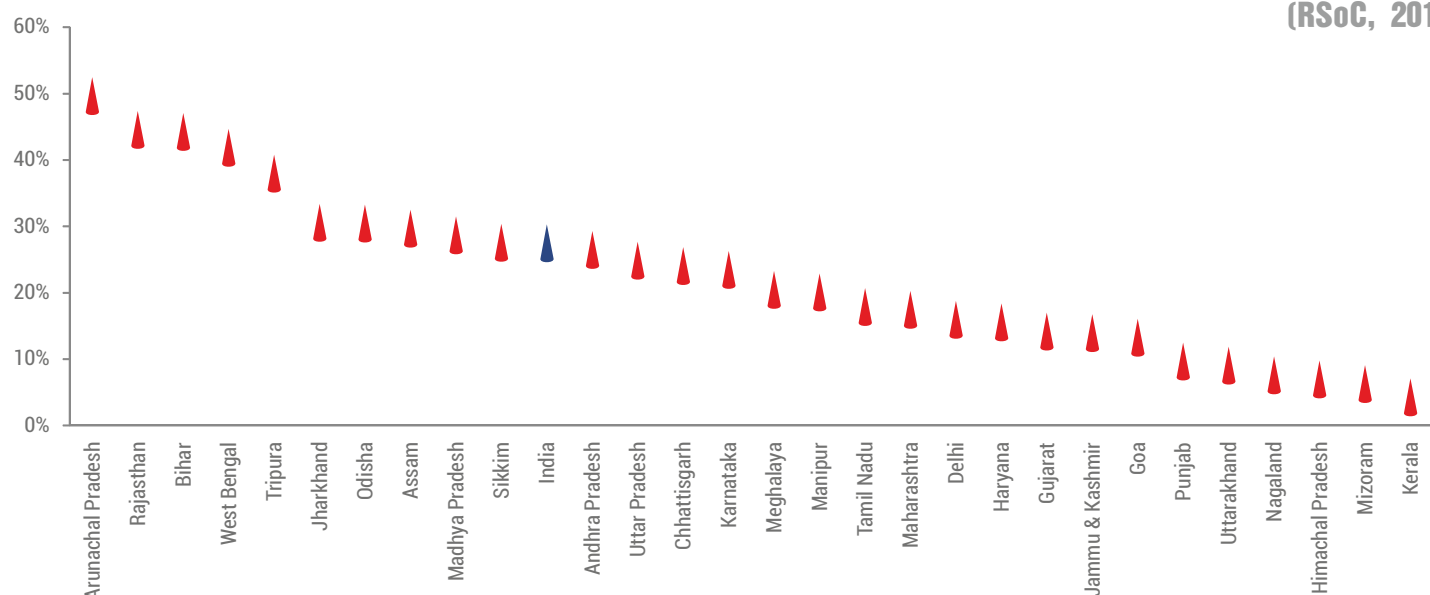
(DLHS-4, 2012-13)





15. WOMEN AGED 20-24 YEARS WHO WERE MARRIED BEFORE THE AGE OF 18

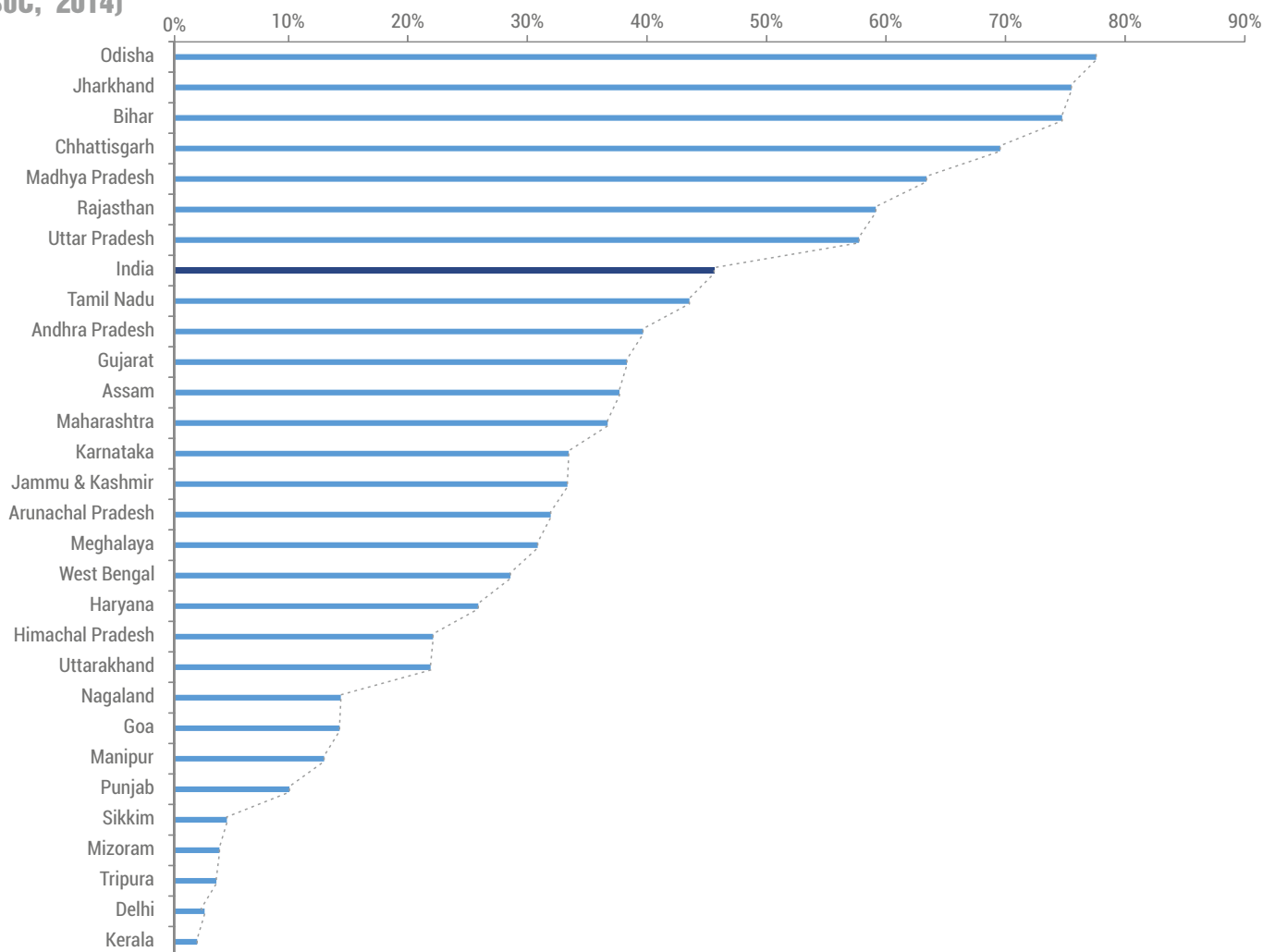
(RSOC, 2014)



16. OPEN DEFECATION



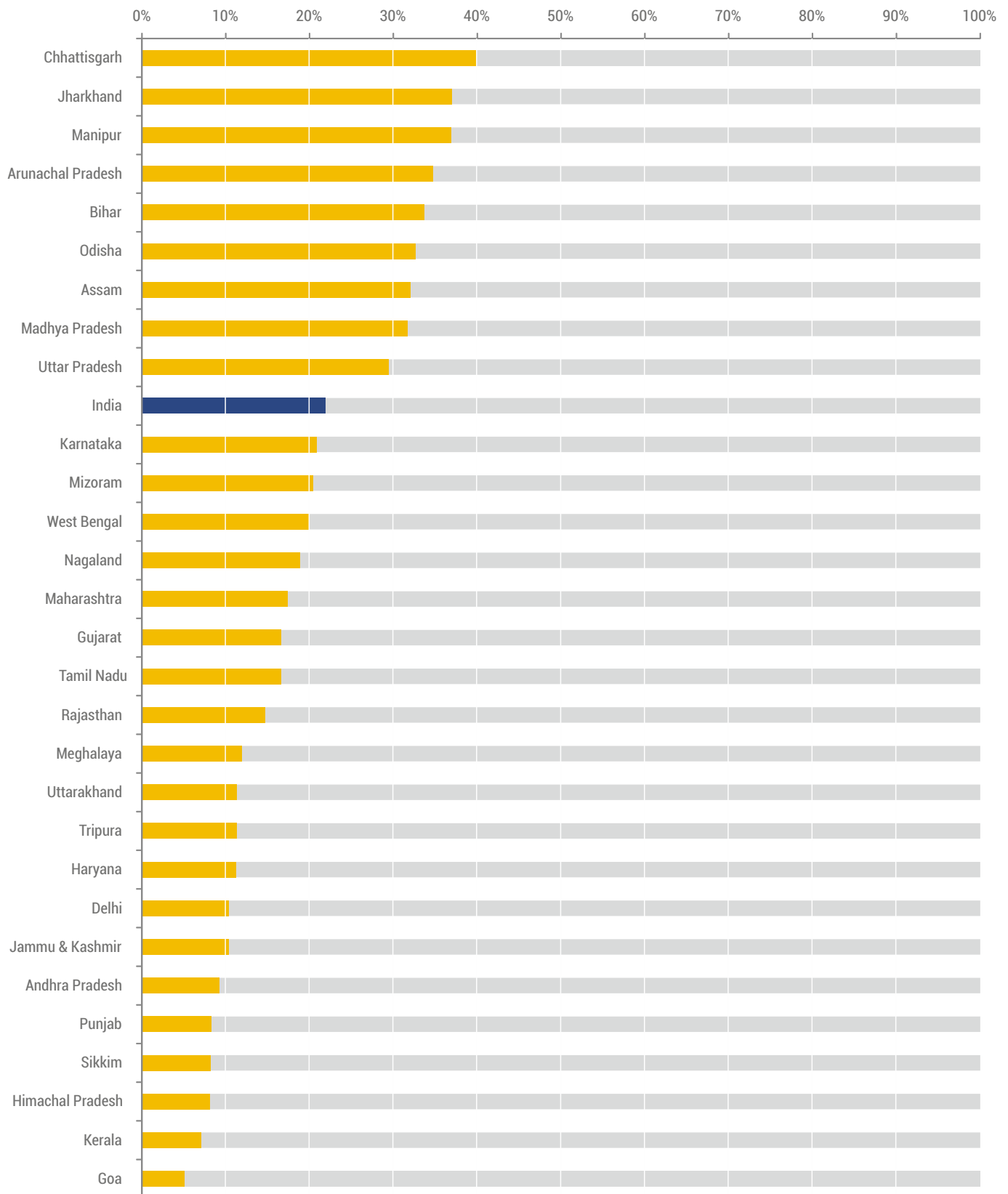
(RSOC, 2014)



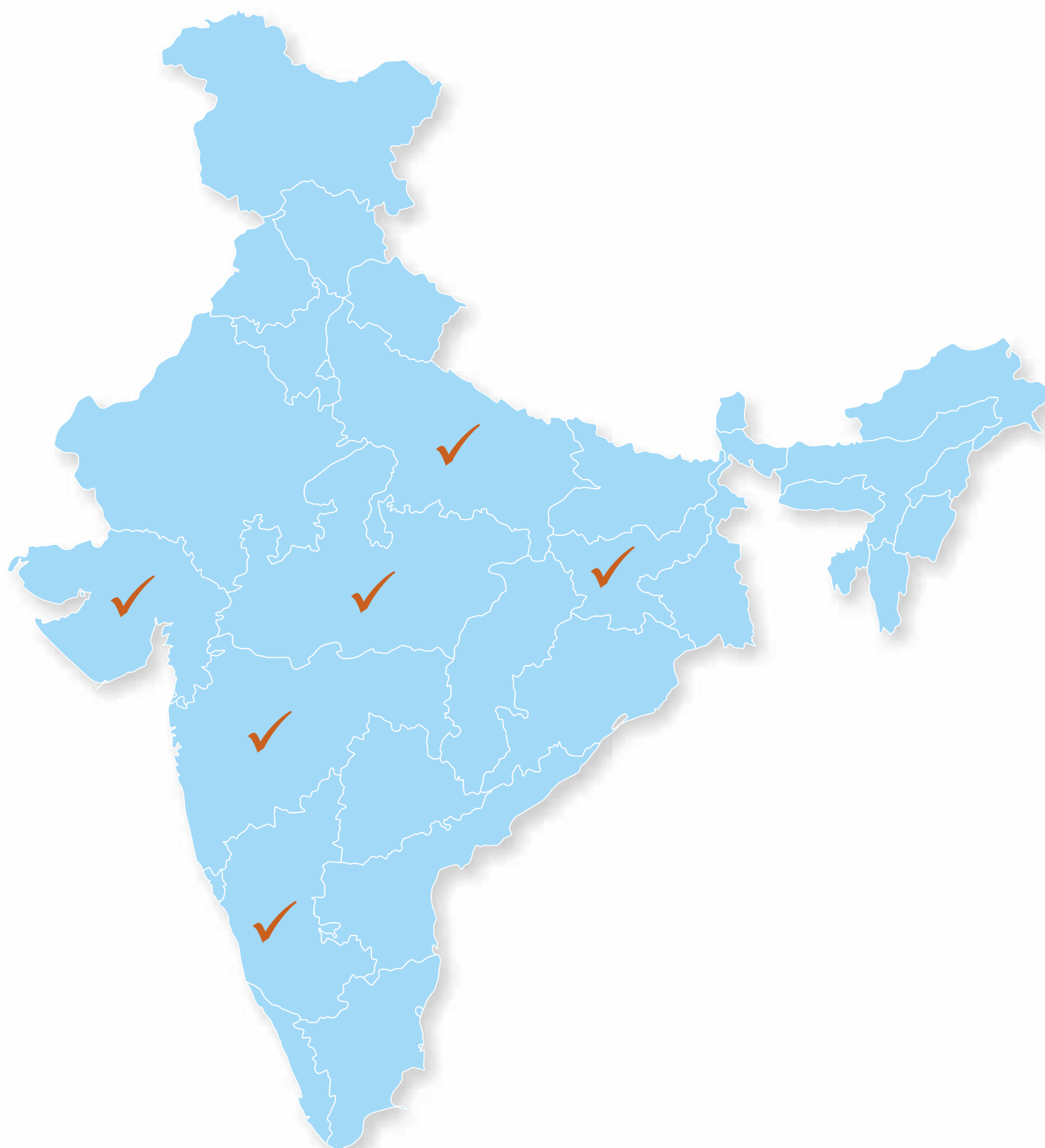


17. POPULATION BELOW STATE-SPECIFIC POVERTY LINE

(PLANNING COMMISSION, 2011-12)



18. STATES THAT HAVE A NUTRITION MISSION







ABOUT THE NUTRITION DASHBOARDS





ABOUT THE NUTRITION DASHBOARDS

These nutrition dashboards, constructed using multiple data sources, are aligned with the UNICEF framework of actions necessary to achieve optimal fetal and child nutrition and development (Black, Victora et al. 2013). They close a critical data gap for nutrition by bringing together data in ways that can help to facilitate greater understanding of the factors that are known to lead to poor nutrition. They are designed, therefore, to support decisions about actions to support nutrition across multiple sectors, and in the larger demographic and socioeconomic context of the state.

ORGANIZATION OF THE DASHBOARD

Context: Each dashboard begins with a brief demographic and socioeconomic profile of the state (1A). This is followed by trends in indicators of child mortality over time to facilitate comparisons between child survival trends and child undernutrition trends within the state (1B). Despite the gains in child survival rates in the last decade, progress in improving child health and nutrition in India has been rather slow.

Nutrition outcomes: The dashboard first describes key health outcomes for children less than five years of age – anthropometric measures (2A, 2B, 2C) and anemia prevalence (2D).

Since undernutrition among children is also affected by social and economic conditions, in Section 2B, we depict how the three anthropometric measures of stunting, wasting, and underweight among children under five years of age vary by maternal and socioeconomic factors.

Having described nutrition outcomes and trends in each state, the dashboard then proceeds to describe the status of the determinants of undernutrition and of interventions that can improve nutrition. We present a series of indicators on immediate determinants, underlying determinants, and aspects of the enabling environment for nutrition.

Immediate determinants: Child nutrition is closely linked with infant feeding, childhood illnesses and poor maternal health. Section 3A focuses on infant and young child feeding practices, 3B on child health, and 3C on key nutritional indicators for women and adolescents. Section 3C covers aspects of maternal and adolescent health and nutrition which relate to the potential for intergenerational transmission of poor nutrition.

Underlying determinants: The role of social determinants that affect nutrition is covered in this section. Women's educational and socioeconomic status is included in Section 4A, water, sanitation and hygiene practices in Section 4B and agriculture and food security in Section 4C. The role of poverty, caste and other drivers is laid out in Section 2B.

Status of nutrition-relevant interventions: This section covers issues related to capacity and financial resources that go towards various nutrition related schemes and initiatives at the state level. Indicators of the use and coverage of national schemes reflect a combination of performance and demand for services. Therefore this section includes information on coverage of and expenditure on key centrally funded schemes that directly or indirectly affect maternal and child nutrition. Section 5A focuses on coverage, human resource capacity, and expenditure on schemes delivering nutrition-specific interventions. Section 5B includes coverage and expenditure information on schemes delivering nutrition-sensitive interventions.

WHAT DATA ARE USED IN THIS DASHBOARDS?

Data featured in these dashboards are obtained from multiple sources, because data needed to understand nutrition outcomes, determinants of nutritional outcomes, are not available from a single data source. The following sources are used in these dashboards:

Surveys and databases

- Rapid Survey on Children (RSOC) Fact Sheets, Ministry of Women and Child Development, 2013-2014
- National Family Health Survey (NFHS) 3, Ministry of Health and Family Welfare, 2005-2006
- District Level Household and Facility Survey (DLHS) 3 and 4, Ministry of Health and Family Welfare, 2007-2008 and 2012-2013
- National Sample Survey Organization (NSSO) 66th and 68th rounds, Ministry of Statistics and Program Implementation, 2009-2010 and 2011-2012
- Census of India, Registrar General & Census Commissioner, 2011
- Sample Registration System, Registrar General India, 1990-2013
- Indiatat, Ministry of Agriculture, 2011-12
- Indiatat, Ministry of Health and Family Welfare, 2012
- ICDS Data Tables, Ministry of Women and Child Development, 2012

Reports and other data sources

- India State Hunger Index, International Food Policy Research Institute, 2008.
- Gender Human Development Indices: Recasting the Gender Development Index and Gender Empowerment Measure for India, Ministry of Women and Child Development, 2009
- Women and Men in India, 16th Issue. Social Statistics Division, CSO, MoSPI, GoI, 2014
- Press Note on Poverty Estimates, 2011-12, Planning Commission, Government of India Rajya Sabha and Lok Sabha Unstarred Questions, Indiatat, 2011-2012
- Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14
- Food Corporation of India, 2013
- Update on ASHA program, Ministry of Health and Family Welfare, 2013
- Development Research Group World Development Indicators, World Bank, World Databank 2014

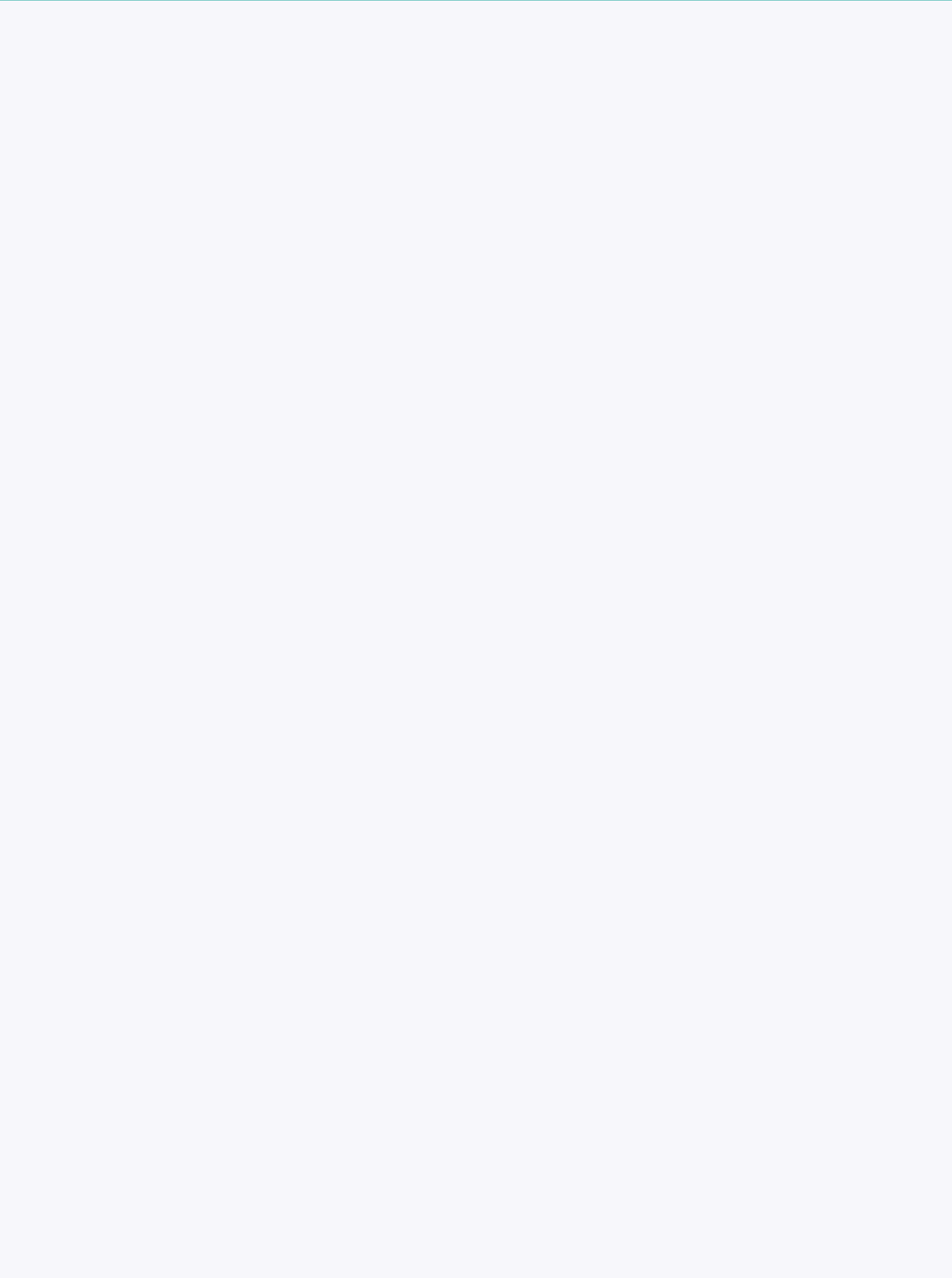
HOW CAN THE NUTRITION DASHBOARDS BE USED?

These dashboards are intended to facilitate dialogue, support decision-making and benchmark progress towards improvements in nutrition and in nutrition-relevant actions at the state-level. The intended users of this dashboard are national and state-level policymakers, development partners, implementers of government and non-governmental plans, civil society, researchers and the media.



INDIA DASHBOARD

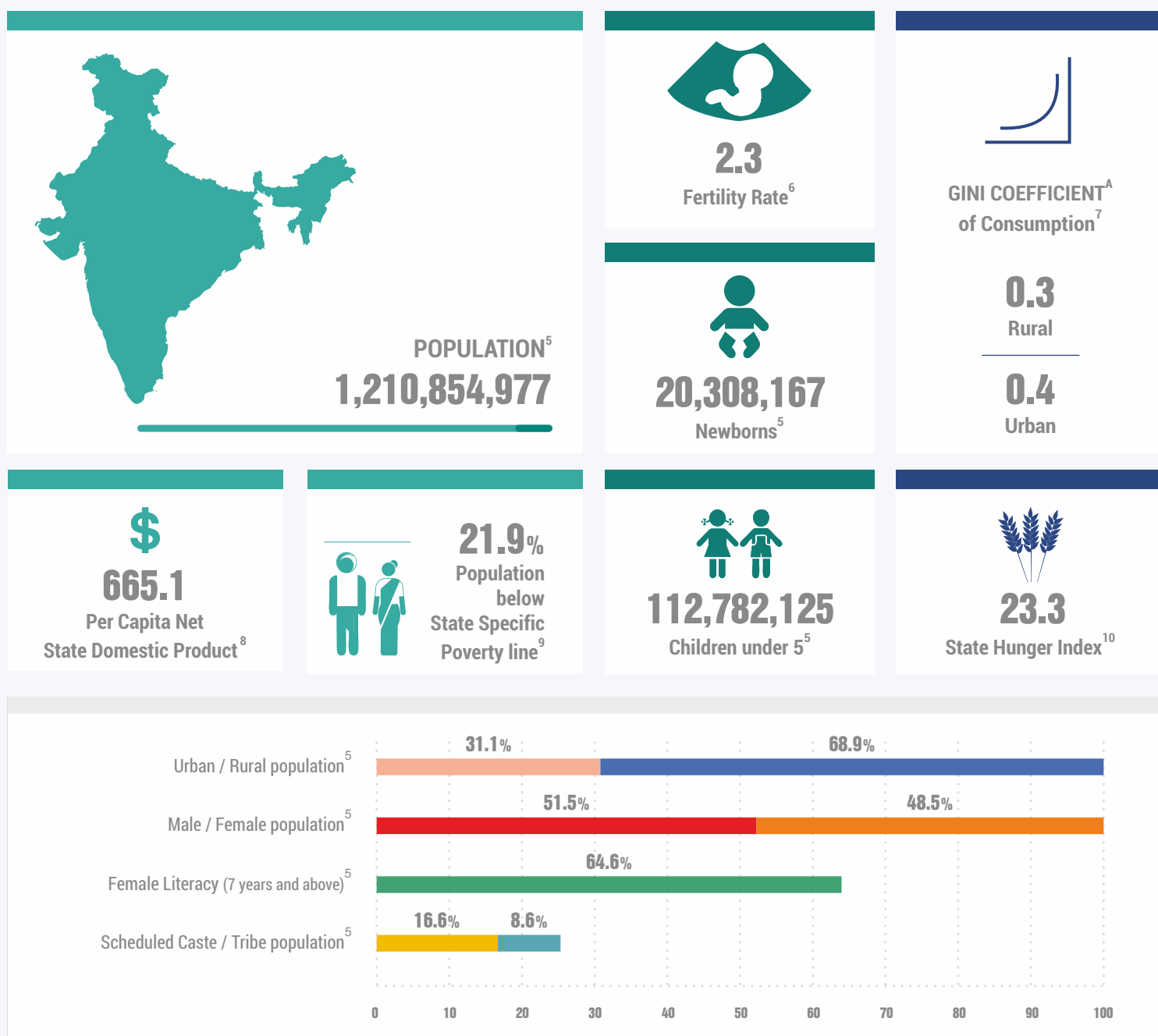




I. CONTEXT

A. DEMOGRAPHIC CONTEXT

This section highlights the demographic composition of the state in terms of male-female, rural-urban, and SC-ST ratios, literacy and fertility rates. In addition, it also includes the size of the population of newborns and children less than five years of age (as of the Census of India, 2011) to illustrate the size of the target population for nutrition-related interventions that need to reach this vulnerable population.



A : Gini coefficient is a measure of inequality of distribution. A Gini coefficient of 0 represents perfect equality, while a value of 100 implies perfect inequality. (See Appendix A for more information)

⁵ Source : Primary Census Abstract, Census, 2011

⁶ Source : SRS, 2013

⁷ Source : Planning Commission Estimates: NSSO 66th round-Employment and Unemployment Survey, 2009-10

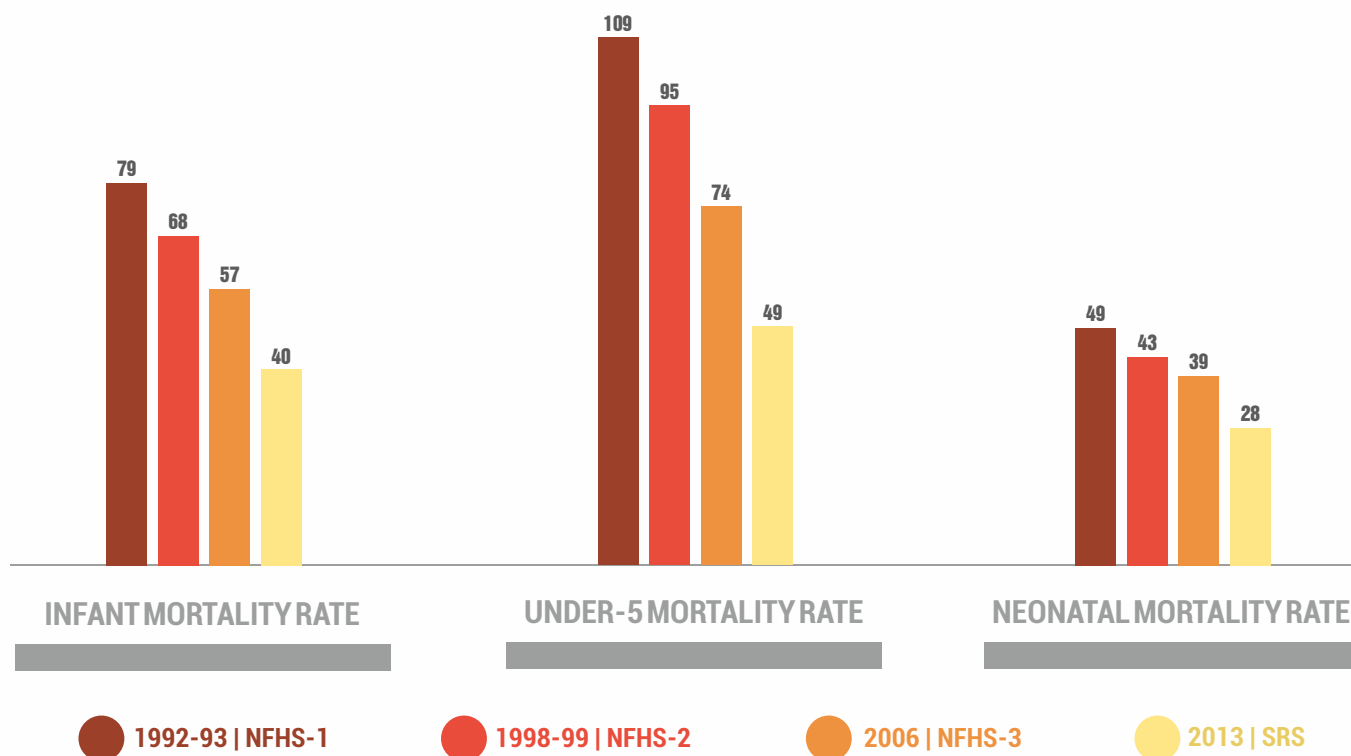
⁸ Source : Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14; http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82

⁹ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Government of India, 2011-12 : http://planningcommission.nic.in/news/pre_pov2307.pdf

¹⁰ Source : IFPRI, India State Hunger Index, 2009

B. CHILD MORTALITY PER THOUSAND LIVE BIRTHS

This section illustrates trends in mortality in neonates, infants and children under 5 years, since 1992. The purpose of this is to highlight the success achieved by individual states in averting deaths of children since the economic growth of the 1990s.



II. NUTRITIONAL STATUS AMONG CHILDREN

This section presents data on nutrition outcome indicators (stunting, wasting, and underweight) and anemia prevalence. Anthropometric measures for children under 5 (stunting, wasting, and underweight) are presented over time periods, by age groups and by background characteristics. This data aims to convey the prevalence and severity of undernutrition in the state.

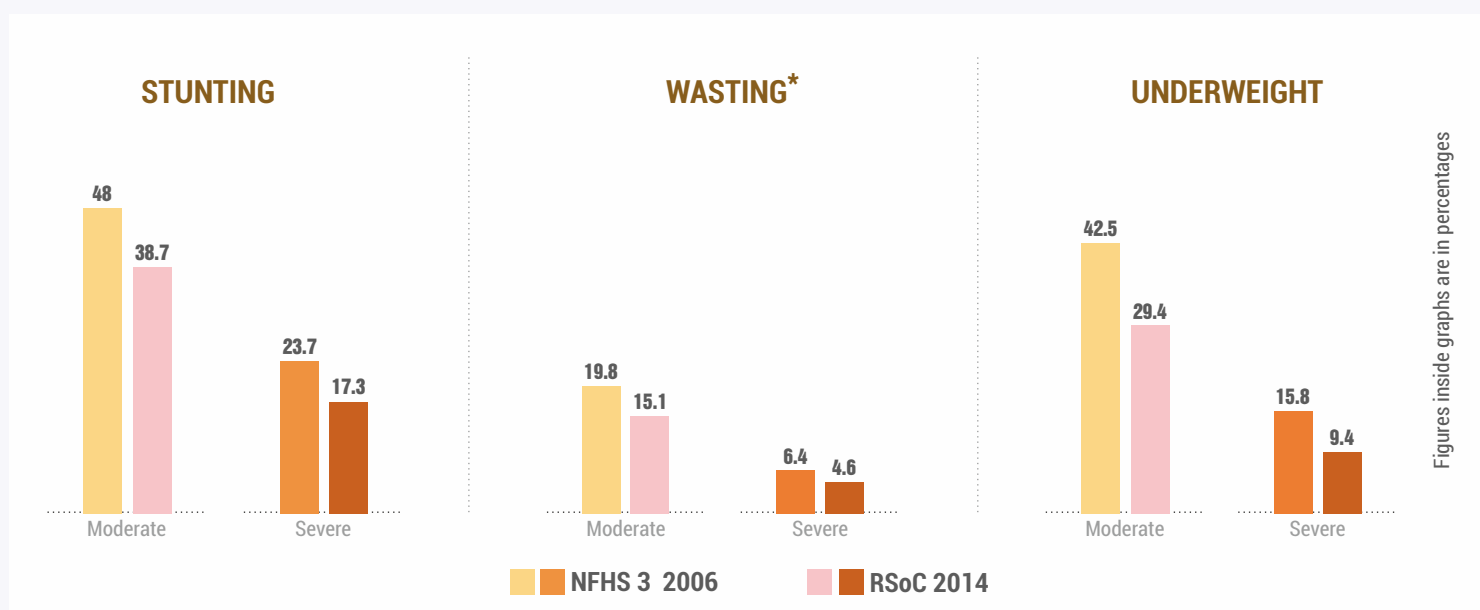
A. CHILD UNDERNUTRITION, BY TIME PERIOD

ANTHROPOMETRIC MEASURES

Stunting is inadequate height for age, which is indicative of chronic or cumulative nutritional deprivation in early childhood. A stunted child's height-for-age is below -2 standard deviations from the median height-for-age (termed HAZ) of the WHO Child Growth Standards, while a severely stunted child is below -3 standard deviations.

Wasting is inadequate weight for height, which points to acute or short-term undernutrition. A wasted child's weight-for-height (WHZ) is below -2 standard deviations from the WHO Child Growth Standards; a severely wasted child is below -3 standard deviations. (Another way to determine severe wasting or severe acute malnutrition is through a measurement of a child's mid-upper arm circumference (MUAC).

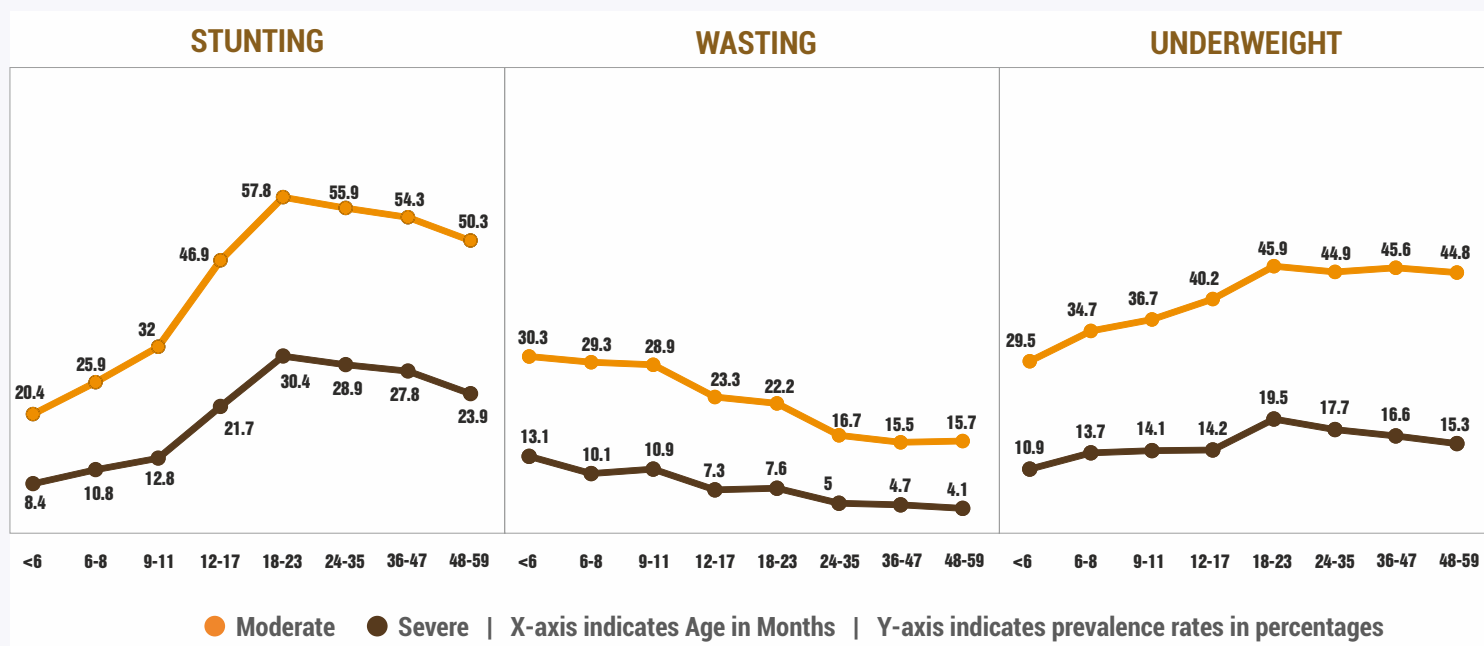
Underweight is inadequate weight for age, a composite indicator that encompasses stunting and wasting. An underweight child's weight-for-age (WAZ) is below -2 standard deviations from the WHO Child Growth Standards; again, a severely underweight child is below -3 standard deviations.



*Wasting is subject to seasonal variations either in food supply or disease prevalence and hence may not be comparable across groups of children measured at different times of the year within a survey round as well as between different survey rounds.

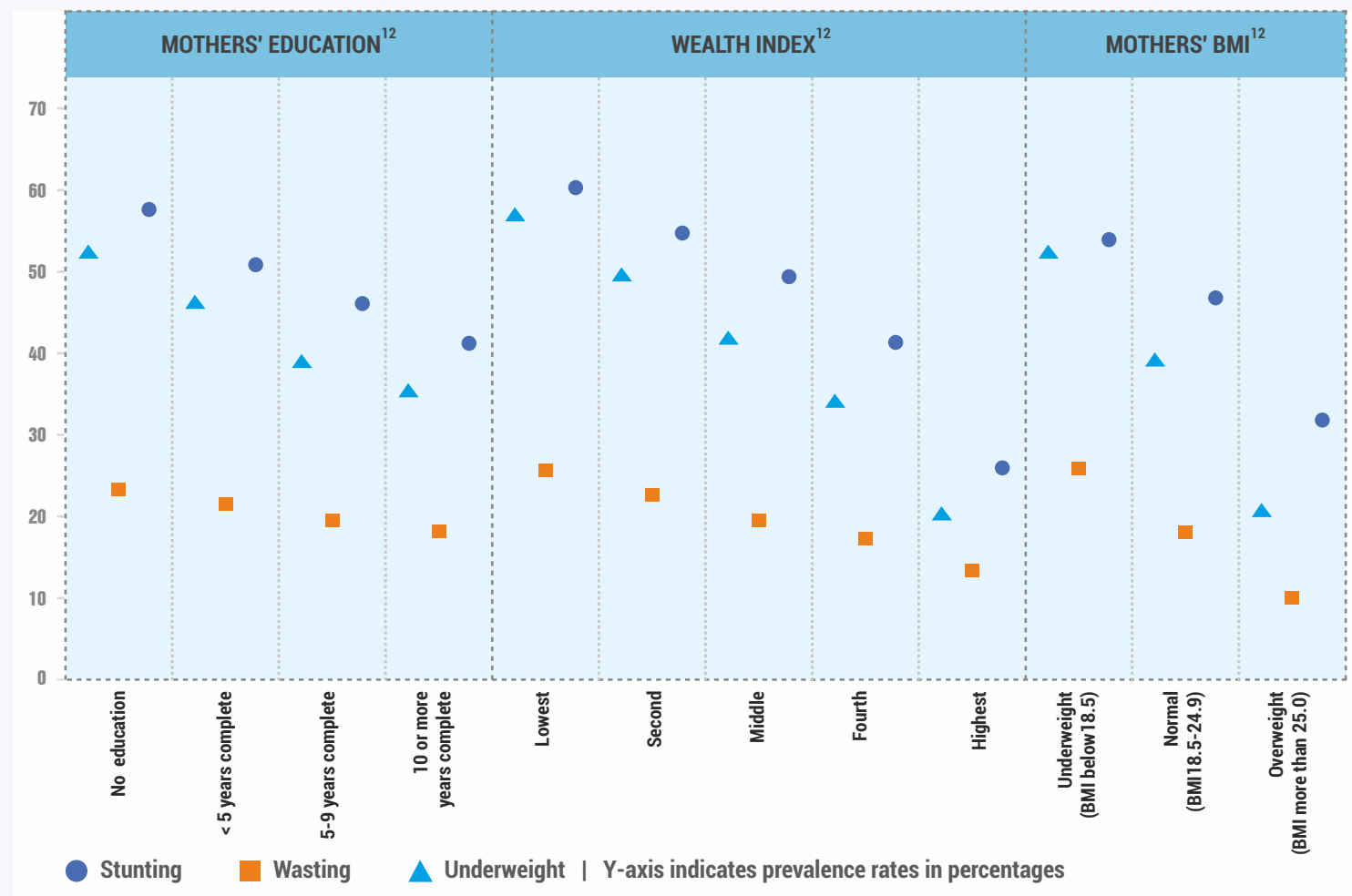
B. CHILD UNDERNUTRITION, BY AGE GROUPS¹²

Percentage of moderate (below -2 SD from the WHO growth standards) and severe (below -3 SD) stunting, wasting and underweight are available for 6 age groups among children under 5.



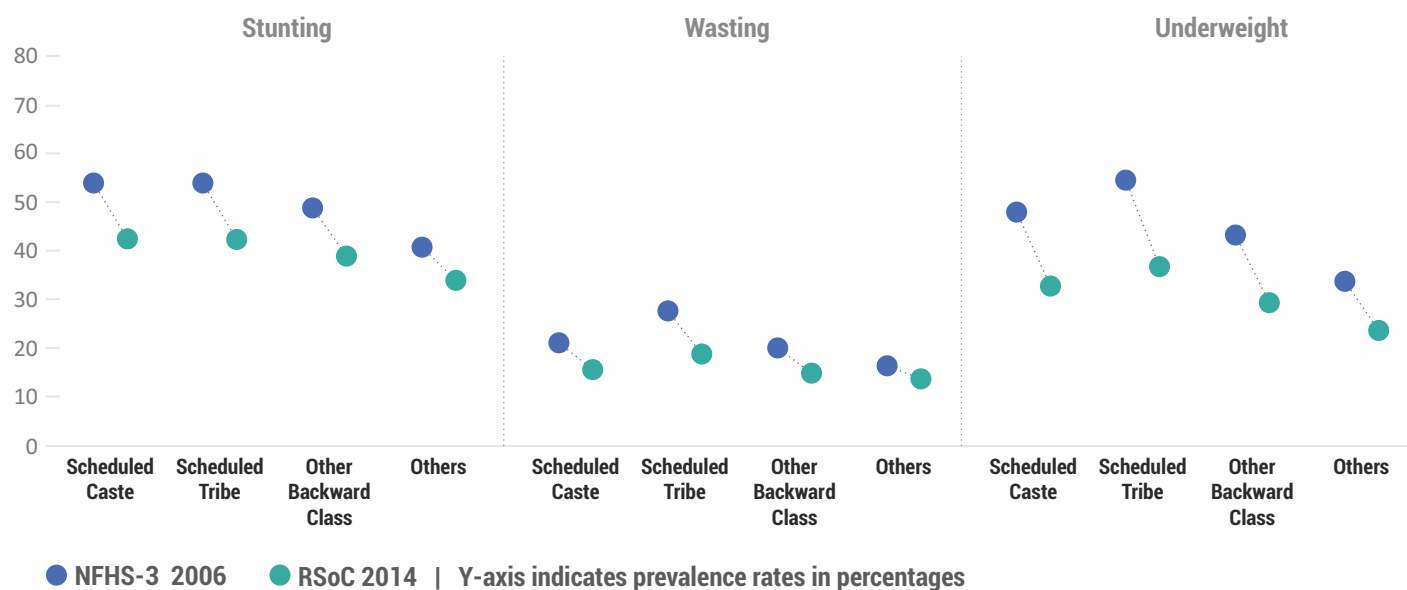
C. PREVALENCE OF CHILD UNDERNUTRITION, BY BACKGROUND CHARACTERISTICS

In this section, child undernutrition outcomes are presented, along with key socioeconomic drivers that are known to be associated with child nutrition, such as caste, residence, mother's health and education, and household income.

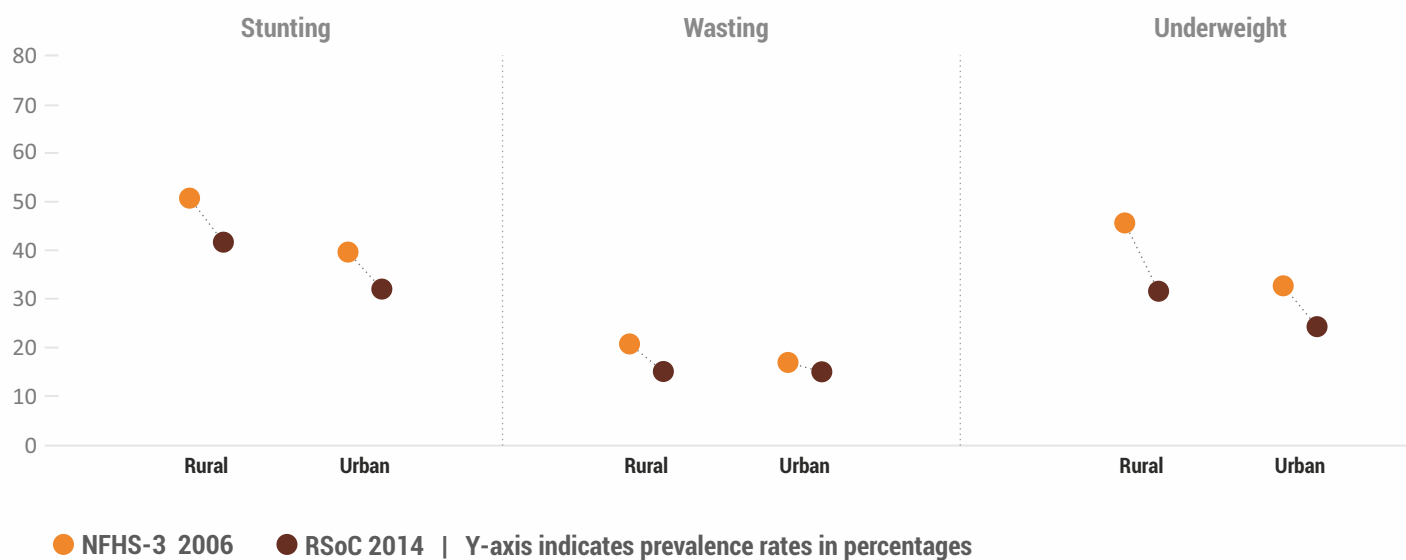


¹² Source : NFHS-3, 2006

CASTE



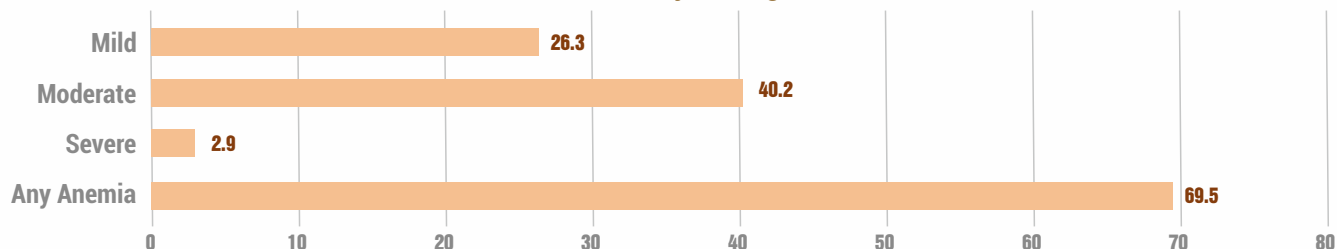
RESIDENCE



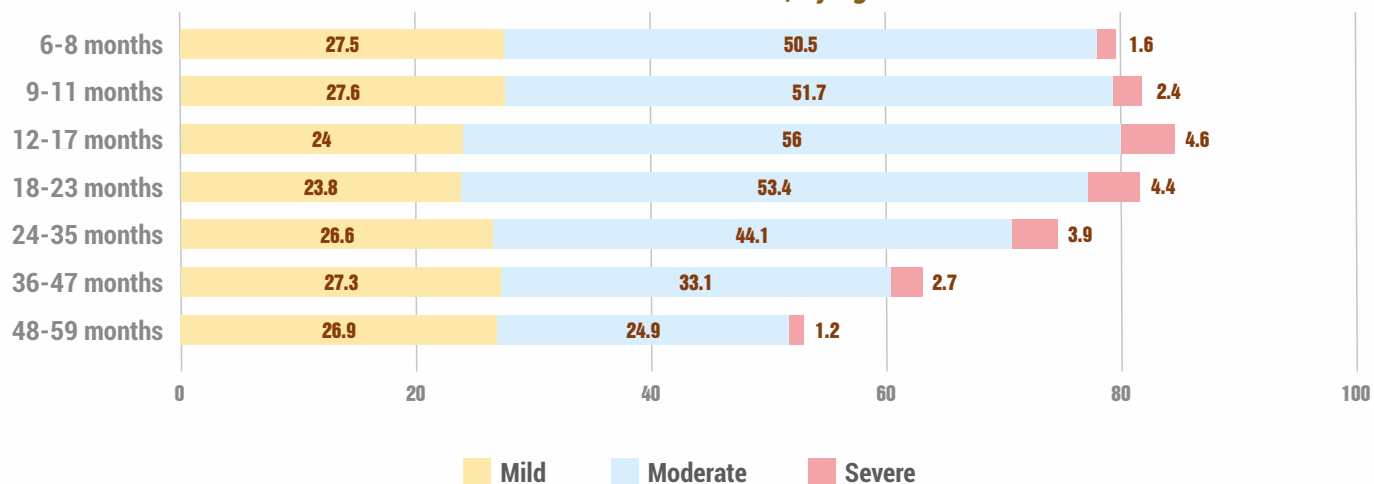
D. ANEMIA PREVALENCE

Anemia can impair physical and cognitive development among children and create long term impacts on productivity and wellbeing. This section features data on anemia prevalence by severity and age groups for children under 5.

Anemia Status, by hemoglobin level¹⁴



Anemia Prevalence, by age¹⁴



¹⁴ Source : NFHS-3, 2006

III. IMMEDIATE DETERMINANTS

A. INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES¹⁵

This section presents indicators for assessing IYCF practices as recommended by the WHO and revised in 2008. Following optimal IYCF practices during the first 1,000 days is crucial for early child survival and growth as well as long-term health and wellbeing.

Children aged 0-23 months breastfed immediately/within an hour of birth		44.6%
	Children aged 0-5 months who were exclusively breastfed	64.9%
	Children aged 6-8 months who were fed complementary foods	50.5%
	For breastfed children (6-23 months)- A. Fed minimum number of times.	36.3%
Note : At least twice a day for breastfed infants 6-8 months old and at least three times a day for breastfed children 9-23 months old		
B. Had minimum dietary diversity Note : Minimum dietary diversity refers to four or more food groups^B fed to children aged 6-23 months		19.9%

B. CHILD HEALTH¹⁵

Prevalence of childhood illnesses (in children aged 0-59 months)

Had diarrhea in 15 days prior to survey	6.5%
Had fever in 15 days prior to survey	13.6%
Had symptoms of Acute Respiratory Infection (ARI) in 15 days prior to survey	8.6%

^B The 7 food groups include the following: i. grains, roots and tubers ii. legumes and nuts iii. dairy products (milk, yoghurt, cheese) iv. Flesh foods (meat, fish, poultry, and liver/organ meats) v. eggs vi. Vitamin-A rich fruits and vegetables vii. other fruits and vegetables.

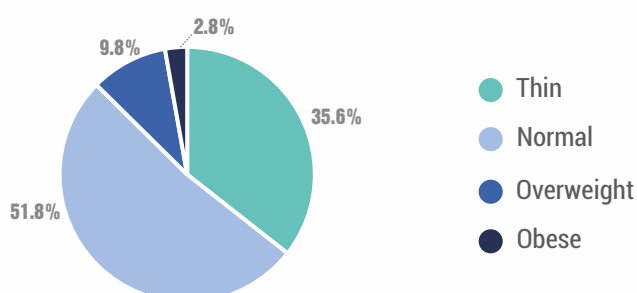
¹⁵ Source : RSoC, 2014

C. NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

Maternal health and nutrition, as well as adolescent nutrition, have important consequences for intergenerational transmission of undernutrition. Data on Body Mass Index (BMI), anemia prevalence and height among women of reproductive age are presented in this section, as are data on adolescent BMI and anemia.

C.1. WOMEN 15-49 YEARS OLD¹⁶

BMI^c levels of women aged 15-49 years



^cBody Mass Index (BMI) is defined as the weight in kilograms by the square of the height in metres (kg/m²). It is a simple index of weight-for-height which is commonly used to classify underweight, overweight and obesity in adults. Range: BMI < 18.5 = total thin, BMI 18.5-24.9 = normal, BMI 25.0-29.9 = Overweight, BMI > 30.0 = Obese [per WHO Standards]



55.3%

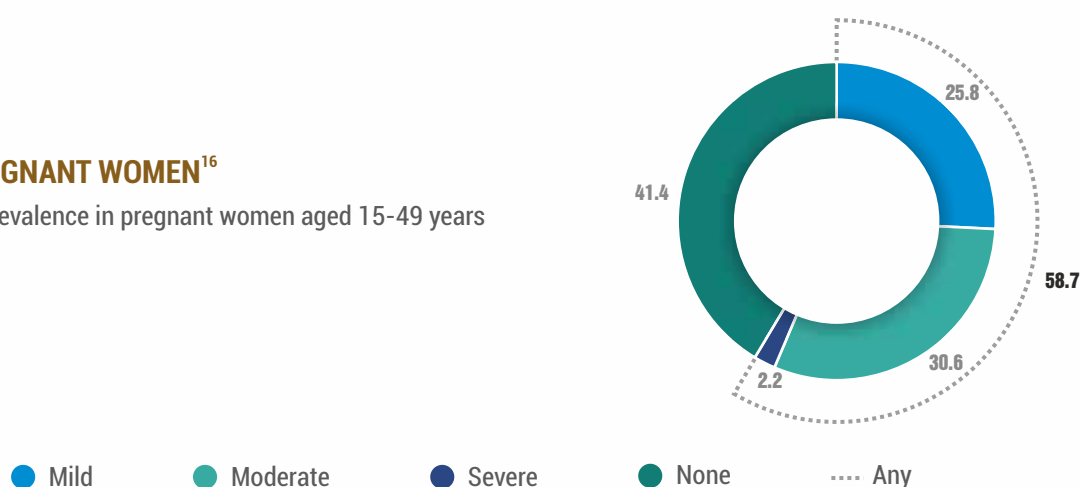
Women aged 15-49 years are anemic

1.8%

Women aged 15-49 years are severely anemic

C.2. PREGNANT WOMEN¹⁶

Anemia prevalence in pregnant women aged 15-49 years



● Mild

● Moderate

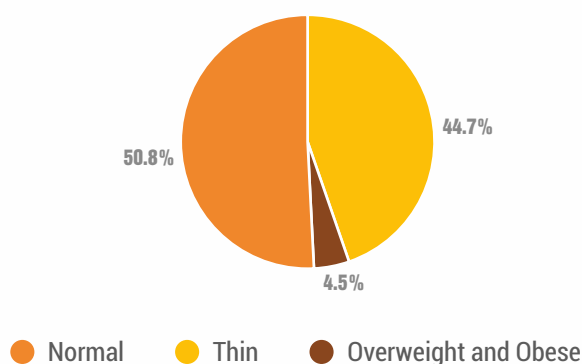
● Severe

● None

--- Any

C.3. ADOLESCENT GIRLS

BMI levels of adolescent girls aged 15-18 years¹⁷



55.8%

Adolescent girls aged 15-19 years are anemic¹⁶

1.7%

Adolescent girls aged 15-19 years are severely anemic¹⁶

¹⁶ Source : NFHS-3, 2006

¹⁷ Source : RSoC, 2014

IV. UNDERLYING DETERMINANTS

A. SOCIAL STATUS OF WOMEN

Women's status is recognized to contribute in significant ways to improving nutrition. This section presents indicators that are representative of women's social status, including measures of education, age at marriage and first birth, employment, decision making and domestic violence. It also includes the Gender Empowerment Measure that captures gender inequality along three dimensions: political participation and decision-making power, economic participation and decision-making power, and power over economic resources.



Currently married women who have 10 or more years of schooling¹⁸ **21.4%**



30.3% Women aged 20-24 years who were married before the age of 18¹⁹

21.1 Average age at marriage¹⁹

Gender Empowerment Measure^{D,20} **0.5** National Average



Female workforce participation rate²² **25.5%**

Currently married women who make decisions about²³:



27.1% Own healthcare



8.5% Major household purchase



32.4% Purchases for daily household needs



10.7% Visits to her family/friends/relatives



39.7% Women who have experienced any form of physical/sexual/emotional violence²³

54.4% Ever married women who justify hitting/wife-beating (for either of the reasons mentioned)²³

^D The Gender Empowerment Measure is a weighted average index based on indicators that are classified into three dimensions: a. political participation and decision-making power b. economic participation and decision-making power and c. power over economic resources. The index ranges from a minimum of 0 to a maximum of 1, with a higher score indicating greater empowerment of women. (More information available at <http://wcd.nic.in/publication/GDIGEReport/Part3.pdf>.)

¹⁸ Source : DLHS-3, 2007-08

¹⁹ Source : RSoC, 2014

²⁰ Source : MoWCD, 2006

²² Source : Women and Men in India, 16th Issue MoSPI, 2014

²³ Source : NFHS-3, 2006

B. WATER AND SANITATION

Poor hygiene and sanitation are associated with undernutrition among children, by directly increasing exposure and susceptibility to infections. This section covers key indicators on access to safe drinking water and availability of sanitation facilities at the state level. It also includes the expenditure on toilet construction under the Total Sanitation Campaign.



91%

Households with access to improved sources of drinking water^{E, 24}

41.8%

Households using improved sanitation facility^{F, 24}



45.5%

Households practicing open defecation²⁴



1,065 M

Expenditure on toilets under Total Sanitation Campaign (TSC) National Average^{G, 25}

C. AGRICULTURE AND FOOD SECURITY

Agriculture productivity and food security can affect household access to foods necessary for a healthy diet. Thus, this section presents indicators related to agricultural growth and food consumption patterns in the state, indicating the level of food security in the state relative to the national situation.



4%

Growth rate of agriculture from 2007-2012²⁶

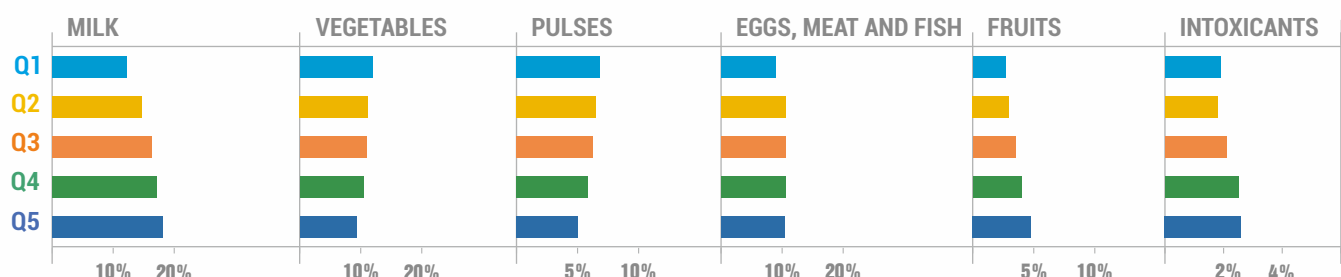


Mean Calorie intake per person per day (in Kcal)²⁸

RURAL
2233

URBAN
2206

Expenditure on food items by income quintiles²⁸



^E Improved sources of drinking water include: piped water into dwelling, piped water to yard/plot, public tap or standpipe, tubewell or borehole, protected dug well, protected spring, and rainwater (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>).

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^G Besides toilet construction subsidies, this expenditure also includes funding other activities such as solid and liquid waste management, IEC activities for sustainable demand generation for sanitation facilities, assistance to production centers of sanitary materials and rural sanitary marts, provision of construction of community sanitary complexes, provision of sanitation facilities in govt. schools and Anganwadis in govt. buildings etc.

²⁴ Source : RSoC, 2014

²⁵ Source : Indiatat, Rajya Sabha Unstarred Question No. 2950, dated on 30.08.2011, 2011-12

²⁶ Source : Indiatat, compiled by datanet from Rajyasabha & Lok Sabha unstarred questions no. 3039, 4535. 2007-12

²⁸ Source : NSSO, 68th round-Nutritional Intake in India, 2011-12

V. STATUS OF NUTRITION-RELEVANT INTERVENTIONS

A. NUTRITION-SPECIFIC INTERVENTIONS

The financial resources allocated to, and spent on direct nutrition-specific interventions can determine the scale, coverage and quality of interventions to reach vulnerable target populations. These services, in India, are delivered both by the Integrated Child Development Scheme (ICDS) and the National Health Mission (NHM). This section includes data on the coverage of interventions delivered by these two key centrally-sponsored schemes that directly impact maternal and child nutrition and health. We also include here information on the human resources and service availability of these schemes and expenditures.

A.1. COVERAGE OF ICDS AND NHM:

The Integrated Child Development Services (ICDS) aims to improve the nutrition and health status of children under-six through a package of services (supplementary nutrition, immunization, health check-up, referral services, etc.) delivered through frontline workers at the Anganwadi Centres (AWCs). This section provides information on expenditure on ICDS and coverage of its supplementary nutrition programme (SNP). This section also covers critical services provided by the health system, including provision of care for pregnant women and child immunization. Immunization plays a crucial role in complementing actions to improve nutrition. The link between undernutrition and infectious diseases is cyclical, poor nutrition increases vulnerability to infections, which in turn worsen nutrition status. Data on immunization among children are presented by residence. Here, full immunization refers to children covered with BCG, measles and 3 doses each of DPT and polio.

Beneficiaries who availed supplementary food under ICDS²⁹

Children 6-35 months	49.2%
Children 36-71 months	44.2%
Pregnant women	40.7%
Lactating mothers	42.4%

Beneficiaries who received supplementary food for at least 21 days in the month prior to the survey

Children aged 6-35 months	21.3%
Children aged 36-71 months	31%
Pregnant women	27.8%
Lactating women	20.3%

²⁹ Source : RSoC, 2014

SERVICES PROVIDED TO WOMEN WHO HAD A LIVE BIRTH IN LAST 35 MONTHS³⁰



63.4%

Received 3 or more antenatal checkups prior to delivery



89.8%

Received 2 or more TT injections prior to delivery



23.6%

Consumed 100 or more IFA tablets/syrup during pregnancy



78.7%

Had Institutional delivery



81.1%

Women who had live birth in 35 months where delivery was assisted by skilled health provider³⁰



62.4%

Rural

72%

Urban

Children aged 12-23 months who are fully immunised³⁰



6.6%

Children aged 12-23 months who have not received any immunisation³⁰

WOMEN GIVEN ADVICE ON³¹:



59.6%

Breastfeeding



56.6%

Nutrition



47.7%

Institutional delivery

A.2. PERSONNEL CAPACITY OF ICDS AND NRHM:

This section features data on availability of healthcare personnel and services available to women of reproductive age (antenatal care, tetanus toxoid coverage, iron-folic acid supplementation coverage, institutional delivery and counseling). Household and individual access to health services can directly impact children's nutrition and welfare during the crucial first 1,000 days of life.

Availability of Anganwadi Centres and Workers (AWCs and AWWs) ^{H, 30}	Value
Pending or vacant Anganwadi workers to sanctioned number of workers ^{30a}	7.9%
AWWs living in the AWC village/ward	74.1%
AWWs having 10 or more years of schooling	84.8%
Median age of AWWs	38 years
AWCs serving to population more than the stipulated norm	56.9%

Growth Monitoring ³⁰	Value
AWCs having functional baby weighing scale	72.4%
AWCs having functional adult weighing scale	51.6%
Available WHO growth chart at AWCs	89.7%

^H Number of AWCs surveyed for India as per RSoC 2014 is 5630.

³⁰ Source : RSoC, 2014

^{30a} Source : MoWCD, 2012

³¹ Source : DLHS 3, 2007-08

Training and Comprehensive Knowledge ³²	Value
AWWs having correct knowledge of intake of food by pregnant women	91.4%
AWWs having correct knowledge of normal birth weight of children	80.4%
AWWs having correct knowledge of initiation of breastfeeding within one hour	96%
AWWs having correct knowledge of exclusive breastfeeding for the first six months	92.9%
AWWs having correct knowledge of appropriate age of child for complementary feeding	63.8%

Health Service Delivery Personnel	Value
ASHAs selected ³³	93.3%
Current density of ASHA as per Census 2011 rural population ³³	NA
Pending or vacant ANM positions sub centres & PHCs ³⁴	NA

A.3. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SPECIFIC INTERVENTIONS

Expenditure on Schemes (in million dollars)	Value
ICDS (ICDS general + SNP + training) (women and children) ³⁵	75
NRHM expenditure (Central Government) ³⁶	68.8
NRHM expenditure (State Government) ³⁶	9.3

B. NUTRITION-SENSITIVE INTERVENTIONS

This section includes information on expenditure and coverage of key centrally-sponsored schemes that indirectly impact maternal and child nutrition. These are: the Mid Day Meal Scheme (MDMS), Public Distribution System (PDS), and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

B.1. COVERAGE OF SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS

Coverage of Schemes	Value
MDMS (base: eligible children*) ³⁷	37.4%
PDS (base: rural and urban households reporting consumption) ³⁸	48.2%
MGNREGA (base: rural persons 18 years and above registered in MGNREG job card and demanded work during last 365 days) ³⁹	73.9%

* All children studying in primary & upper primary classes in schools supported under Sarva Shiksha Abhiyan and NCLP (National Child Labour Project) run by Ministry of Labour.

B.2. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS:

Expenditure on Schemes (in million dollars)	Value
MDMS ⁴⁰	47
PDS ⁴¹	475.3
MGNREGA ⁴²	214

³² Source : RSoC, 2014

³³ Source : NRHM, 2013

³⁴ Source : MoHFW, 2013

³⁵ Source : Lok Sabha Unstarred Question # 846 dated 27.02.2015, 2012-13

³⁶ Source : Lok Sabha Annexured Unstarred Question # 409 dated 6.12.2013, 2012-13

³⁷ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/lsq15/15/as216.htm 2011-12

³⁸ Source : Report No. 558, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

³⁹ Source : Report No. 554, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

⁴⁰ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014, 2012-13

⁴¹ Source : Food Corporation of India 2013, 2012-13

⁴² Source : Lok Sabha Annexured Unstarred Question # 3835 dated 19.03.2015, 2012-13



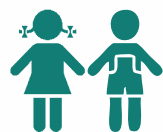


STATE DASHBOARDS



FAST FACTS ON NUTRITION AND ITS DETERMINANTS IN ANDHRA PRADESH

World Health Assembly Nutrition Targets



CHILDREN UNDER 5 YEARS

35.4%
Stunted¹
19%
Wasted¹

World Health Assembly Nutrition Targets


69.2%

 Infants 0-5 months old who are exclusively breastfed¹

18.4%

 Children under 3 years who have low birth weight (<2.5 kgs)¹

68.1%

 Women 15-49 years old with anemia²

Immediate Determinants


40.1%

 Infants 6-8 months old who receive solid, semi-solid or soft foods¹
17.8%

 Infants & young children 6-23 months old who achieve minimal diet diversity in complementary feeding¹

79.2%

 Children 6-59 months old with anemia²

8%

 Children 6-59 months who had diarrhea in 15 days prior to survey¹

Immediate Determinants


24.6%

 Children 6-35 months old who received supplementary food under ICDS for 21 days in the month prior to survey¹

74.1%

 Children 12-23 months old who are fully immunized¹

76.9%

 Mothers of children under 36 months old who received three or more antenatal checkups¹

Underlying Determinants


27.4%

 Currently married women with 10 or more years of schooling²

29.3%

 Women aged 20-24 years who were married before the age of 18¹

54.8%

 Adolescent girls 15-18 years old with low BMI (<18.5)¹

Underlying Determinants


39.5%

 Households practicing open defecation¹

9.2%

 Population below state-specific poverty line³

Does state have a high-level nutrition mission?

NO
¹ Source : RSoC, 2014

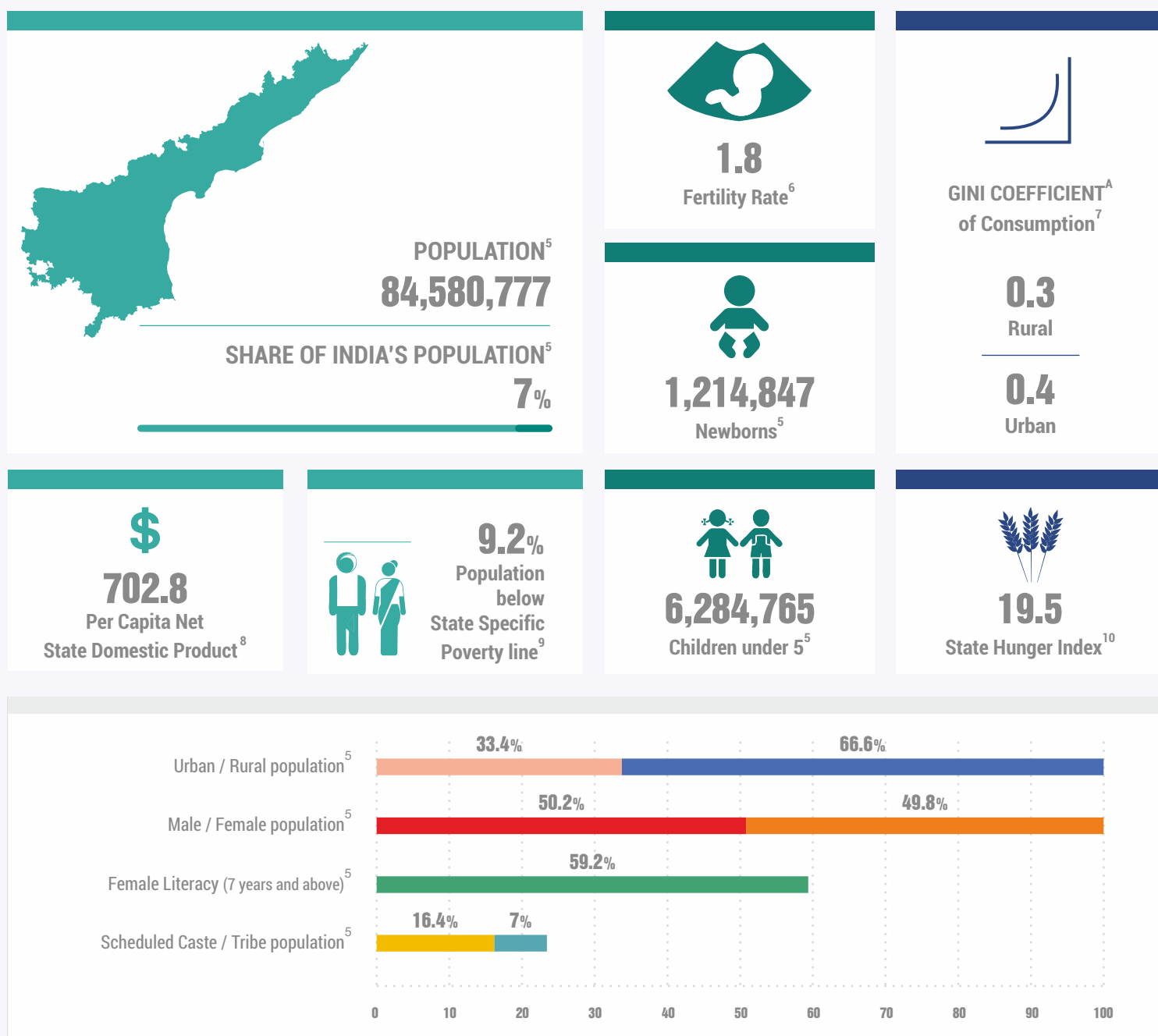
² Source : DLHS4, 2012-13

³ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Govt. of India

I. CONTEXT

A. DEMOGRAPHIC CONTEXT

This section highlights the demographic composition of the state in terms of male-female, rural-urban, and SC-ST ratios, literacy and fertility rates. In addition, it also includes the size of the population of newborns and children less than five years of age (as of the Census of India, 2011) to illustrate the size of the target population for nutrition-related interventions that need to reach this vulnerable population.



A : Gini coefficient is a measure of inequality of distribution. A Gini coefficient of 0 represents perfect equality, while a value of 100 implies perfect inequality. (See Appendix A for more information)

⁵ Source : Primary Census Abstract, Census, 2011

⁶ Source : SRS, 2013

⁷ Source : Planning Commission Estimates: NSSO 66th round-Employment and Unemployment Survey, 2009-10

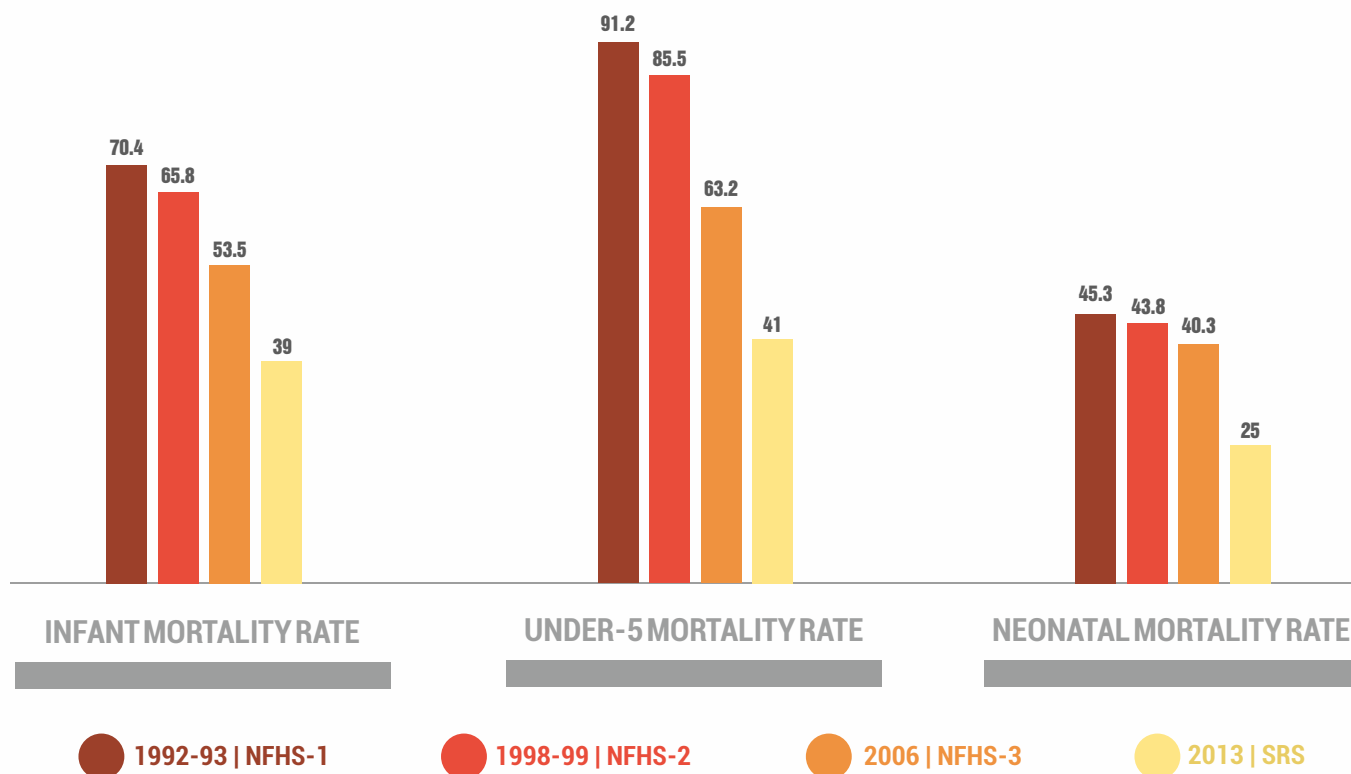
⁸ Source : Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14 : http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82

⁹ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Government of India, 2011-12 : http://planningcommission.nic.in/news/pre_pov2307.pdf

¹⁰ Source : IFPRI, India state hunger index, comparisons of hunger across states, 2009

B. CHILD MORTALITY PER THOUSAND LIVE BIRTHS

This section illustrates trends in mortality in neonates, infants and children under 5 years, since 1992. The purpose of this is to highlight the success achieved by individual states in averting deaths of children since the economic growth of the 1990s.



II. NUTRITIONAL STATUS AMONG CHILDREN

This section presents data on nutrition outcome indicators (stunting, wasting, and underweight) and anemia prevalence. Anthropometric measures for children under 5 (stunting, wasting, and underweight) are presented over time periods, by age groups and by background characteristics. This data aims to convey the prevalence and severity of undernutrition in the state.

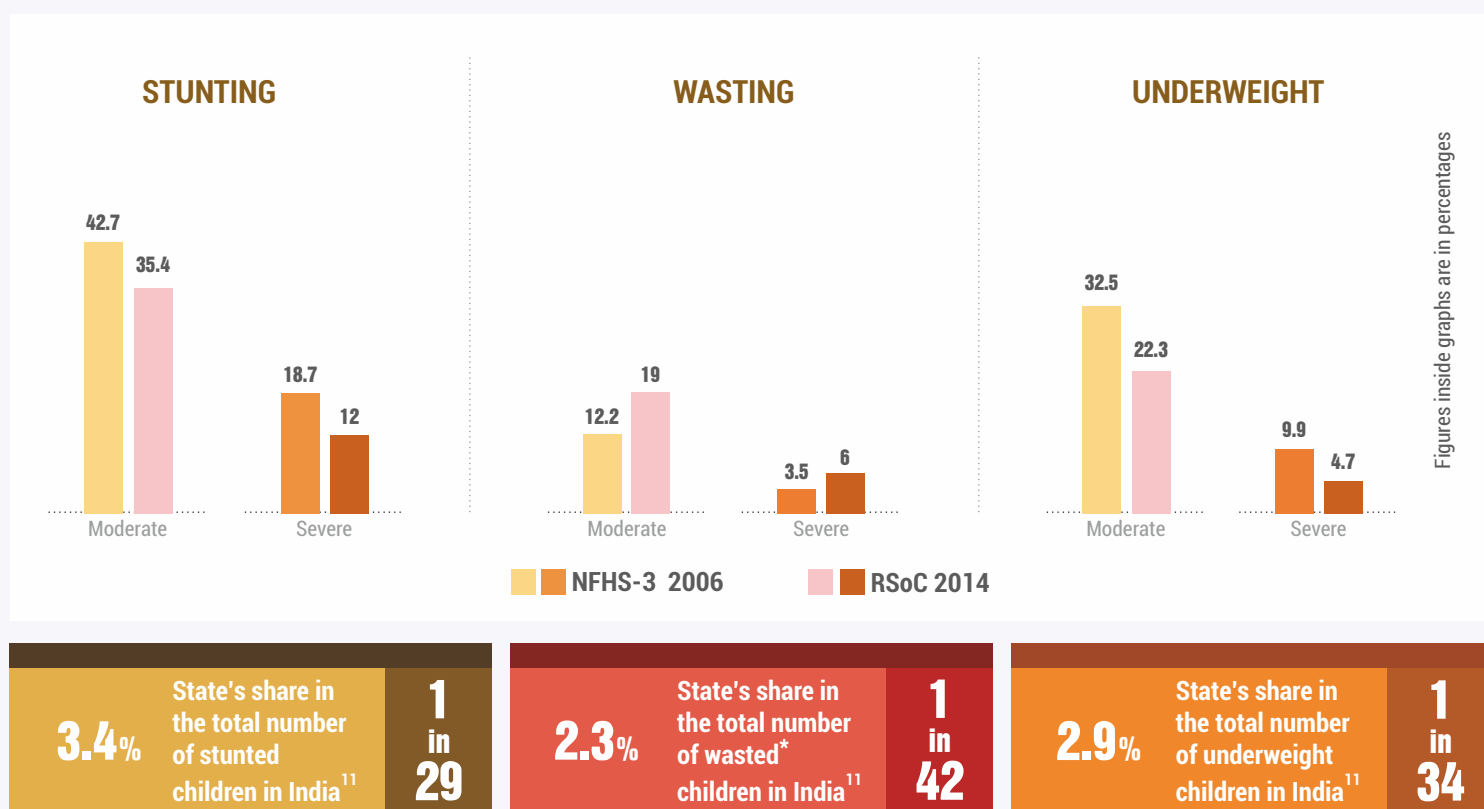
A. CHILD UNDERNUTRITION, BY TIME PERIOD

ANTHROPOMETRIC MEASURES

Stunting is inadequate height for age, which is indicative of chronic or cumulative nutritional deprivation in early childhood. A stunted child's height-for-age is below -2 standard deviations from the median height-for-age (termed HAZ) of the WHO Child Growth Standards, while a severely stunted child is below -3 standard deviations.

Wasting is inadequate weight for height, which points to acute or short-term undernutrition. A wasted child's weight-for-height (WHZ) is below -2 standard deviations from the WHO Child Growth Standards; a severely wasted child is below -3 standard deviations. (Another way to determine severe wasting or severe acute malnutrition is through a measurement of a child's mid-upper arm circumference (MUAC).

Underweight is inadequate weight for age, a composite indicator that encompasses stunting and wasting. An underweight child's weight-for-age (WAZ) is below -2 standard deviations from the WHO Child Growth Standards; again, a severely underweight child is below -3 standard deviations.

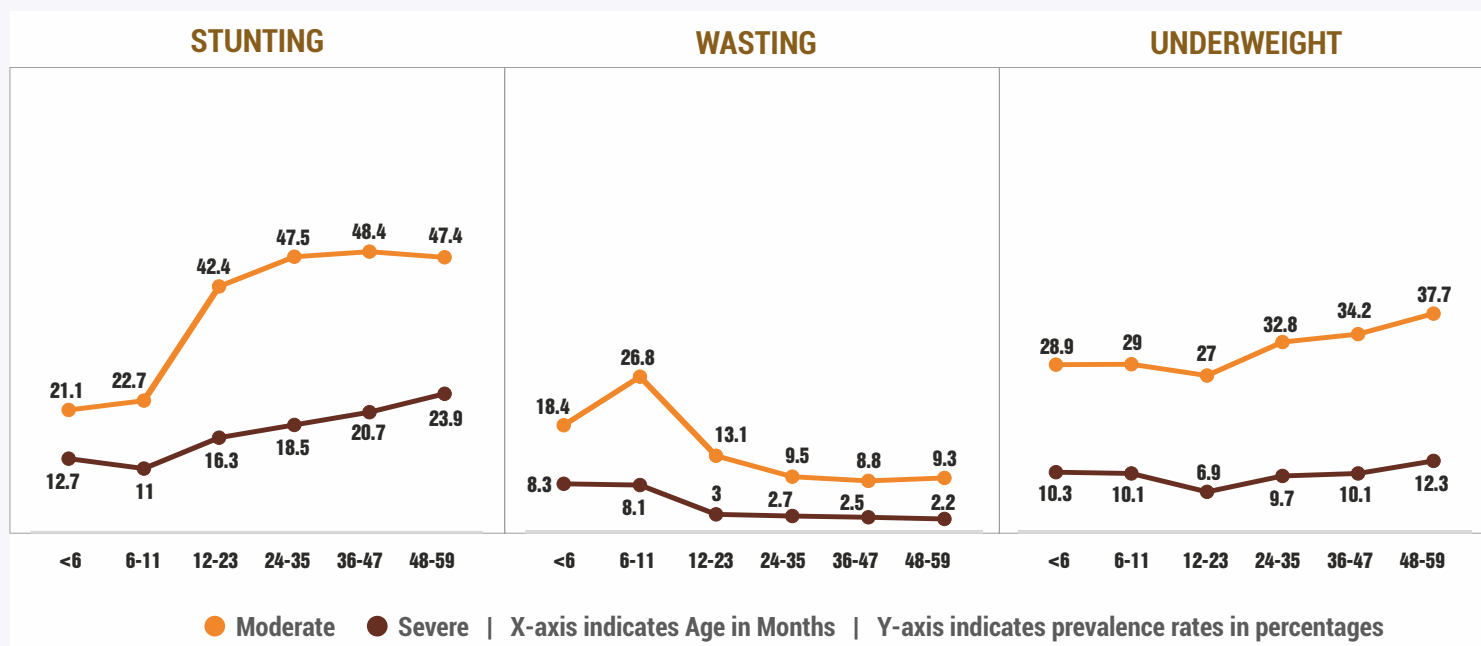


*Wasting is subject to seasonal variations either in food supply or disease prevalence and hence may not be comparable across groups of children measured at different times of the year within a survey round as well as between different survey rounds.

¹¹ Source : NFHS-3, 2006

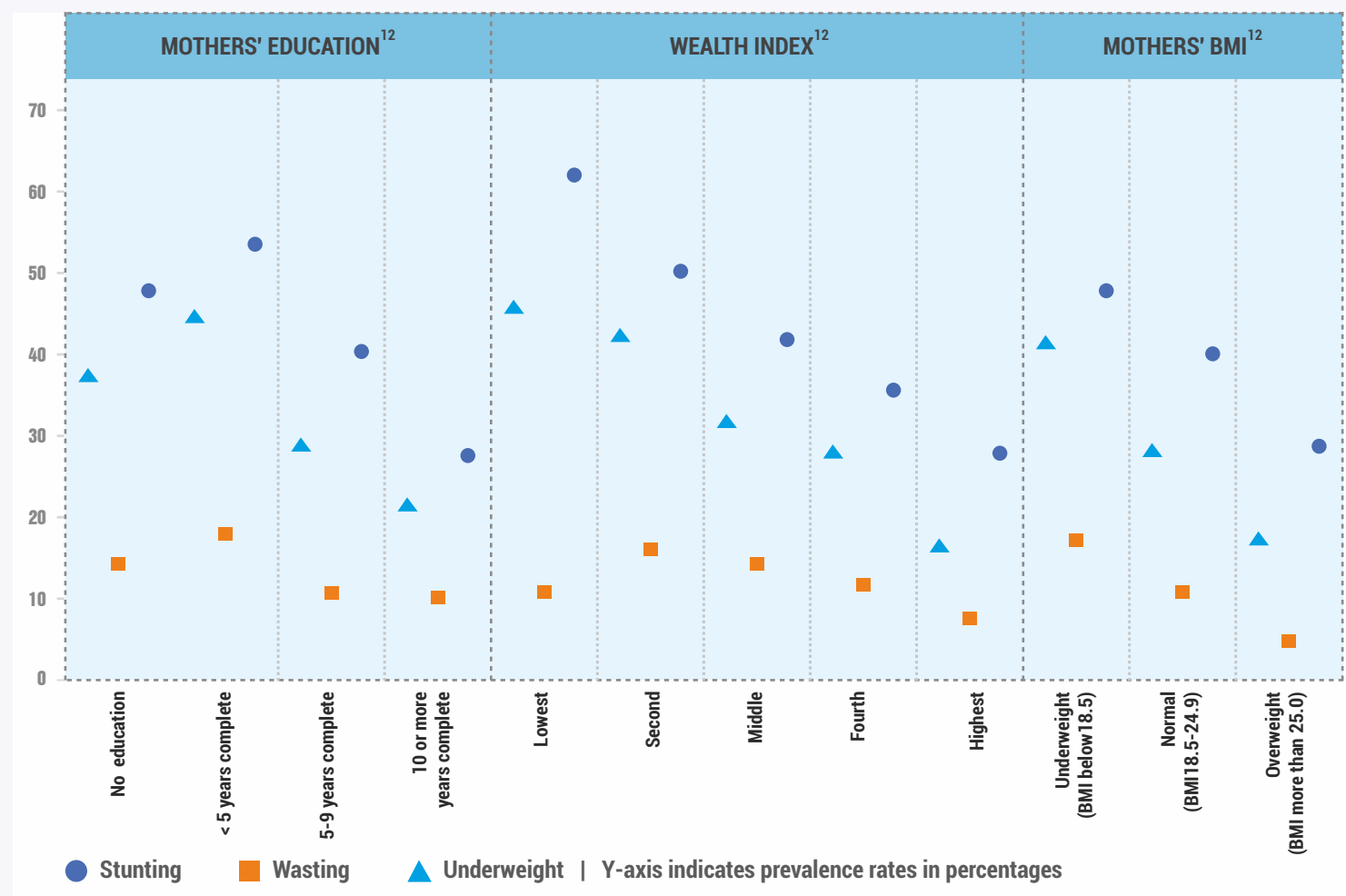
B. CHILD UNDERNUTRITION, BY AGE GROUPS¹²

Percentage of moderate (below -2 SD from the WHO growth standards) and severe (below -3 SD) stunting, wasting and underweight are available for 6 age groups among children under 5.



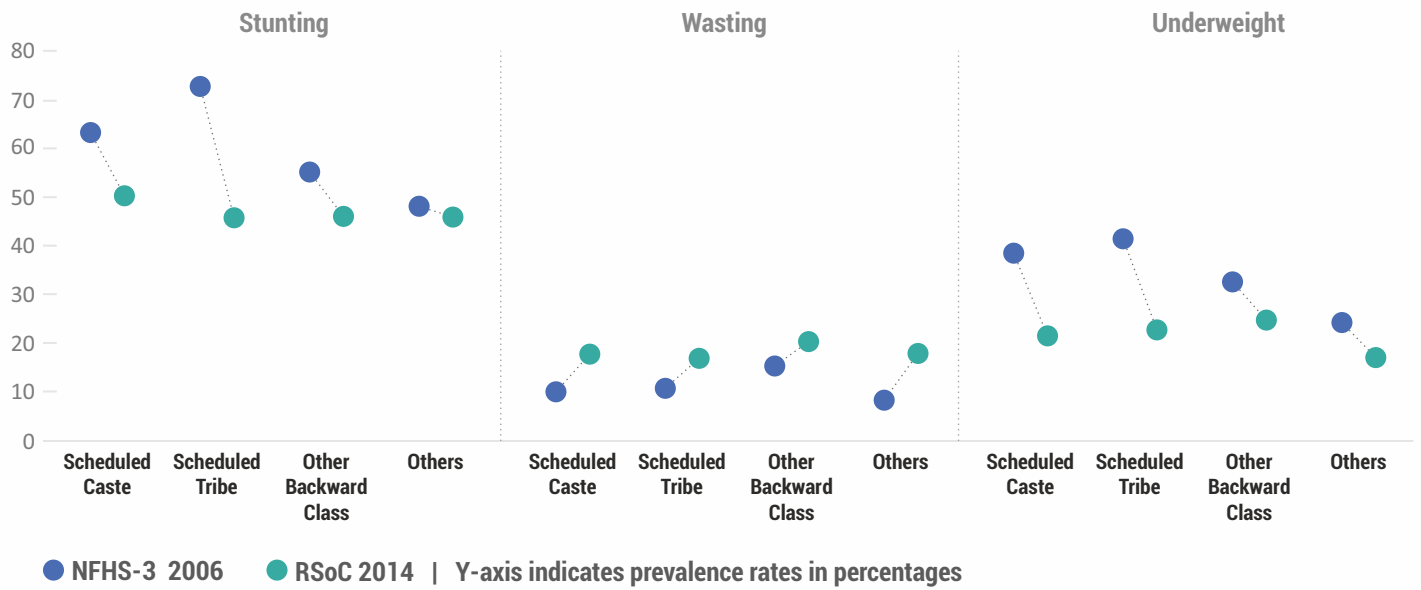
C. PREVALENCE OF CHILD UNDERNUTRITION, BY BACKGROUND CHARACTERISTICS

In this section, child undernutrition outcomes are presented, along with key socioeconomic drivers that are known to be associated with child nutrition, such as caste, residence, mother's health and education, and household income.

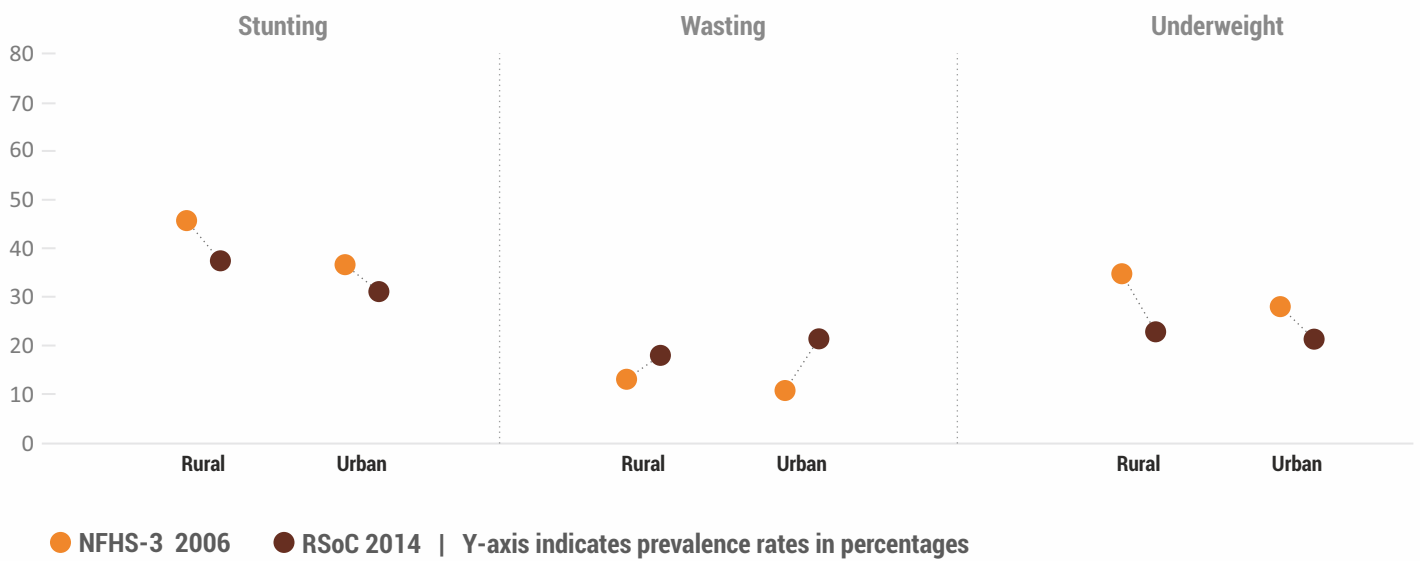


¹² Source : NFHS-3, 2006

CASTE

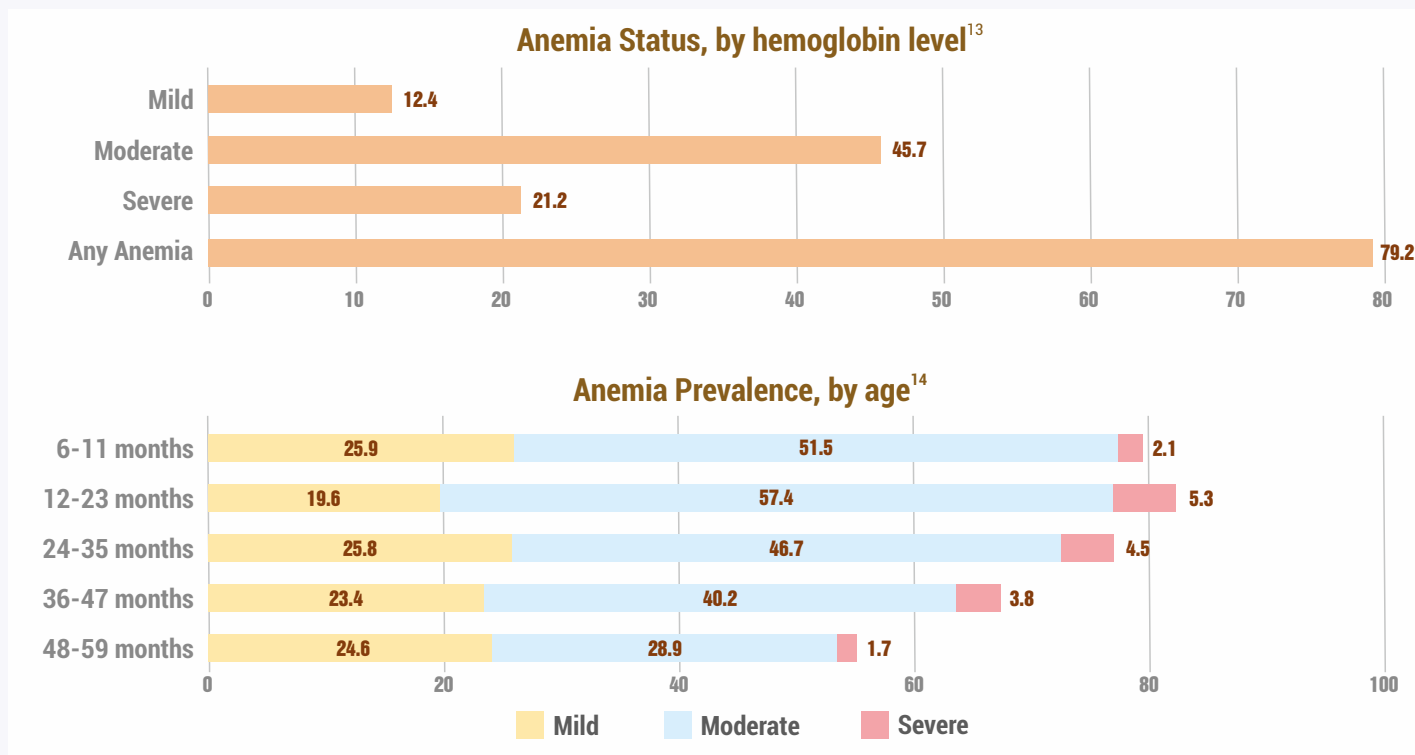


RESIDENCE



D. ANEMIA PREVALENCE

Anemia can impair physical and cognitive development among children and create long term impacts on productivity and wellbeing. This section features data on anemia prevalence by severity and age groups for children under 5.



¹³ Source : DLHS-4, 2012-13

¹⁴ Source : NFHS-3, 2006

III. IMMEDIATE DETERMINANTS

A. INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES¹⁵

This section presents indicators for assessing IYCF practices as recommended by the WHO and revised in 2008. Following optimal IYCF practices during the first 1,000 days is crucial for early child survival and growth as well as long-term health and wellbeing.

Children aged 0-23 months breastfed immediately/within an hour of birth		49.8%
	Children aged 0-5 months who were exclusively breastfed	69.2%
	Children aged 6-8 months who were fed complementary foods	40.1%
	For breastfed children (6-23 months)- A. Fed minimum number of times. Note : At least twice a day for breastfed infants 6-8 months old and at least three times a day for breastfed children 9-23 months old B. Had minimum dietary diversity Note : Minimum dietary diversity refers to four or more food groups^B fed to children aged 6-23 months	24.1% 17.8%

B. CHILD HEALTH¹⁵

Prevalence of childhood illnesses (in children aged 0-59 months)

Had diarrhea in 15 days prior to survey	8%
Had fever in 15 days prior to survey	13.6%
Had symptoms of Acute Respiratory Infection (ARI) in 15 days prior to survey	6.9%

^B The 7 food groups include the following: i. grains, roots and tubers ii. legumes and nuts iii. dairy products (milk, yoghurt, cheese) iv. Flesh foods (meat, fish, poultry, and liver/organ meats) v. eggs vi. Vitamin-A rich fruits and vegetables vii. other fruits and vegetables.

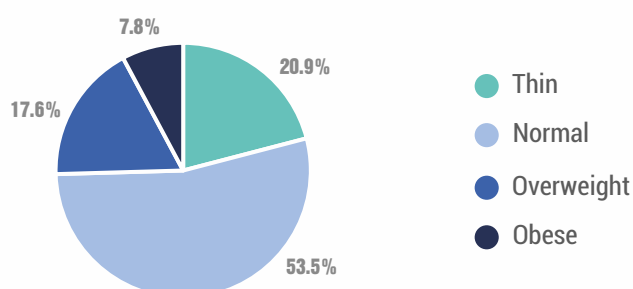
¹⁵ Source : RSoC, 2014

C. NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

Maternal health and nutrition, as well as adolescent nutrition, have important consequences for intergenerational transmission of undernutrition. Data on Body Mass Index (BMI), anemia prevalence and height among women of reproductive age are presented in this section, as are data on adolescent BMI and anemia.

C.1. WOMEN 15-49 YEARS OLD¹⁶

BMI^c levels of women aged 15-49 years



^cBody Mass Index (BMI) is defined as the weight in kilograms by the square of the height in metres (kg/m²). It is a simple index of weight-for-height which is commonly used to classify underweight, overweight and obesity in adults. Range: BMI < 18.5 = total thin, BMI 18.5-24.9 = normal, BMI 25.0-29.9 = Overweight, BMI > 30.0 = Obese [per WHO Standards]



64%

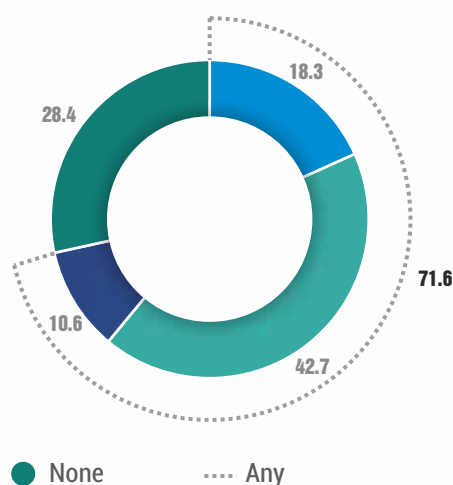
Women aged 15-49 years are anemic

8.1%

Women aged 15-49 years are severely anemic

C.2. PREGNANT WOMEN¹⁶

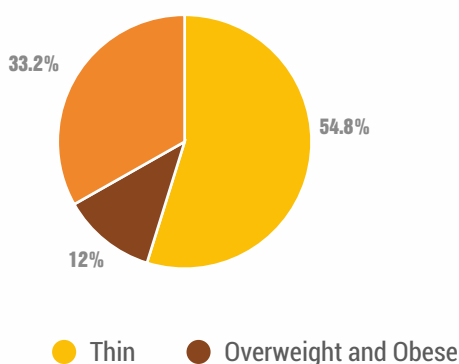
Anemia prevalence in pregnant women aged 15-49 years



● Mild ● Moderate ● Severe ● None ---- Any

C.3. ADOLESCENT GIRLS

BMI levels of adolescent girls aged 15-18 years¹⁷



68.3%

Adolescent girls aged 15-19 years are anemic^{17a}

3.1%

Adolescent girls aged 15-19 years are severely anemic^{17a}

¹⁶ Source : DLHS-4, 2012-13

¹⁷ Source : RSoC, 2014

^{17a} Source : NFHS-3, 2006

IV. UNDERLYING DETERMINANTS

A. SOCIAL STATUS OF WOMEN

Women's status is recognized to contribute in significant ways to improving nutrition. This section presents indicators that are representative of women's social status, including measures of education, age at marriage and first birth, employment, decision making and domestic violence. It also includes the Gender Empowerment Measure that captures gender inequality along three dimensions: political participation and decision-making power, economic participation and decision-making power, and power over economic resources.



Currently married women who have 10 or more years of schooling¹⁸ **28.9%**



29.3% Women aged 20-24 years who were married before the age of 18¹⁹

20.4 Average age at marriage¹⁹

Gender Empowerment Measure^{D,20}

0.5

0.5

National Average²⁰



Female workforce participation rate²² **36.2%**

Currently married women who make decisions about²³:



19.7% Own healthcare



13.6% Major household purchase



29.2% Purchases for daily household needs



10.2% Visits to her family/friends/relatives



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85.2%

Households with access to improved sources of drinking water^{E, 24}

52.2%

Households using improved sanitation facility^{F, 24}



39.5%

Households practicing open defecation²⁴

90.1 M

Expenditure on toilets under Total Sanitation Campaign (TSC)^{G, 25}



1,065 M

National Average²⁵

C. AGRICULTURE AND FOOD SECURITY

Agriculture productivity and food security can affect household access to foods necessary for a healthy diet. Thus, this section presents indicators related to agricultural growth and food consumption patterns in the state, indicating the level of food security in the state relative to the national situation.



4%

Growth rate of agriculture from 2007-2012²⁶



7.1%

Share in India's total foodgrain production²⁷



Mean Calorie intake per person per day (in Kcal)²⁸

RURAL

URBAN

2365

2233

2281

2206

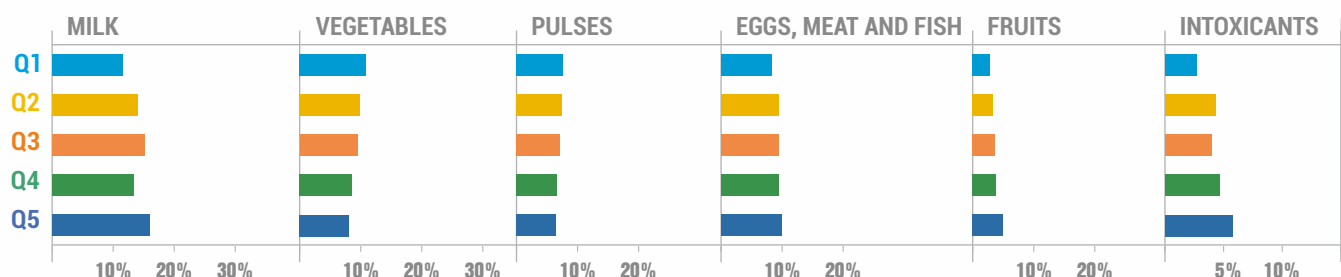
ANDHRA PRADESH

INDIA AVG

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Expenditure on food items by income quintiles²⁸



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Pregnant women	78.3%
Lactating mothers	60.1%

Beneficiaries who received supplementary food for at least 21 days in the month prior to the survey

Children aged 6-35 months	24.6%
Children aged 36-71 months	28.7%
Pregnant women	29.9%
Lactating women	22.3%

²⁹ Source : RSoC, 2014

SERVICES PROVIDED TO WOMEN WHO HAD A LIVE BIRTH IN LAST 35 MONTHS³⁰



76.9%

Received 3 or more antenatal checkups prior to delivery



97.1%

Received 2 or more TT injections prior to delivery



47%

Consumed 100 or more IFA tablets/syrup during pregnancy



91.1%

Had Institutional delivery



93.3%

Women who had live birth in 35 months where delivery was assisted by skilled health provider³⁰



74.8%

Rural

72.2%

Urban

Children aged 12-23 months who are fully immunised³⁰



2.3%

Children aged 12-23 months who have not received any immunisation³⁰

WOMEN GIVEN ADVICE ON³¹:



71.6%

Breastfeeding



58.4%

Nutrition of mother and child



47.2%

Institutional delivery

A.2. PERSONNEL CAPACITY OF ICDS AND NRHM:

This section features data on availability of healthcare personnel and services available to women of reproductive age (antenatal care, tetanus toxoid coverage, iron-folic acid supplementation coverage, institutional delivery and counseling). Household and individual access to health services can directly impact children's nutrition and welfare during the crucial first 1,000 days of life.

Availability of Anganwadi Centres and Workers (AWCs and AWWs) ^{H, 30}	Value
Pending or vacant Anganwadi workers to sanctioned number of workers ^{30a}	9.5%
AWWs living in the AWC village/ward	86.4%
AWWs having 10 or more years of schooling	92.2%
Median age of AWWs	36 years
AWCs serving to population more than the stipulated norm	57.1%

Growth Monitoring ³⁰	Value
AWCs having functional baby weighing scale	79.2%
AWCs having functional adult weighing scale	72.1%
Available WHO growth chart at AWCs	92.7%

^H Number of AWCs surveyed for Andhra Pradesh as per RSoC 2014 is 212.

³⁰ Source : RSoC, 2014

^{30a} Source : MoWCD, 2012

³¹ Source : DLHS-4, 2012-13

Training and Comprehensive Knowledge ³²	Value
AWWs having correct knowledge of intake of food by pregnant women	98%
AWWs having correct knowledge of normal birth weight of children	75%
AWWs having correct knowledge of initiation of breastfeeding within one hour	99.5%
AWWs having correct knowledge of exclusive breastfeeding for the first six months	100%
AWWs having correct knowledge of appropriate age of child for complementary feeding	54.6%

Health Service Delivery Personnel	Value
ASHAs selected ³³	100%
Current density of ASHA as per Census 2011 rural population ³³	1 per 796 persons
Pending or vacant ANM positions sub centres & PHCs ³⁴	0%

A.3. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SPECIFIC INTERVENTIONS

Expenditure on Schemes (in million dollars)	In million USD	National Average
ICDS (ICDS general + SNP + training) (women and children) ³⁵	183	75
NRHM expenditure (Central Government) ³⁶	135.1	68.8
NRHM expenditure (State Government) ³⁶	18.2	9.3

B. NUTRITION-SENSITIVE INTERVENTIONS

This section includes information on expenditure and coverage of key centrally-sponsored schemes that indirectly impact maternal and child nutrition. These are: the Mid Day Meal Scheme (MDMS), Public Distribution System (PDS), and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

B.1. COVERAGE OF SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS

Coverage of Schemes	Value
MDMS (base: eligible children*) ³⁷	33.3%
PDS (base: rural and urban households reporting consumption) ³⁸	71.4%
MGNREGA (base: rural persons 18 years and above registered in MGNREG job card and demanded work during last 365 days) ³⁹	83.5%

* All children studying in primary & upper primary classes in schools supported under Sarva Shiksha Abhiyan and NCLP (National Child Labour Project) run by Ministry of Labour.

B.2. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS:

Expenditure on Schemes (in million dollars)	In million USD	National Average
MDMS ⁴⁰	90	47
PDS ⁴¹	1186.1	475.3
MGNREGA ⁴²	854	214

³² Source : RSoC, 2014

³³ Source : NRHM, 2013

³⁴ Source : MoHFW, 2013

³⁵ Source : Lok Sabha Unstarred Question # 846 dated 27.02.2015, 2012-13

³⁶ Source : Lok Sabha Annexured Unstarred Question # 409 dated 6.12.2013, 2012-13

³⁷ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/lsq15/15/as216.htm 2011-12

³⁸ Source : Report No. 558, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

³⁹ Source : Report No. 554, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

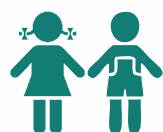
⁴⁰ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014, 2012-13

⁴¹ Source : Food Corporation of India 2013, 2012-13

⁴² Source : Lok Sabha Annexured Unstarred Question # 3835 dated 19.03.2015, 2012-13

FAST FACTS ON NUTRITION AND ITS DETERMINANTS IN ARUNACHAL PRADESH

World Health Assembly Nutrition Targets



CHILDREN UNDER 5 YEARS

28.4%
Stunted¹
17%
Wasted¹

World Health Assembly Nutrition Targets


59.8%

 Infants 0-5
months old who are
exclusively breastfed¹

11.5%

 Children under
3 years who have low
birth weight (<2.5 kgs)¹

56.7%

 Women
15-49 years old
with anemia²

Immediate Determinants


64.9%

 Infants 6-8 months old who receive solid, semi-solid or soft foods¹
34.7%

 Infants & young children 6-23 months old who achieve minimal diet diversity in
complementary feeding¹

64%

 Children 6-59 months
old with anemia²

4.2%

 Children 6-59 months old who
had diarrhea in 15 days prior
to survey¹

Immediate Determinants


0.4%

 Children 6-35 months old
who received supplementary
food under ICDS for 21 days
in the month prior to survey¹

50.5%

 Children 12-23
months old who are
fully immunized¹

73.8%

 Mothers of
children under 36 months
old who received three
or more antenatal checkups¹

Underlying Determinants


21%

 Currently
married women with 10
or more years of schooling²

52.5%

 Women aged 20-24
years who were
married before the age of 18¹

50.3%

 Adolescent girls
15-18 years old
with low BMI (<18.5)¹

Underlying Determinants


31.7%

 Households
practicing
open defecation¹

34.7%

 Population
below
state-specific poverty line³

 Does state have a
high-level nutrition mission?

NO
¹ Source : RSoC, 2014

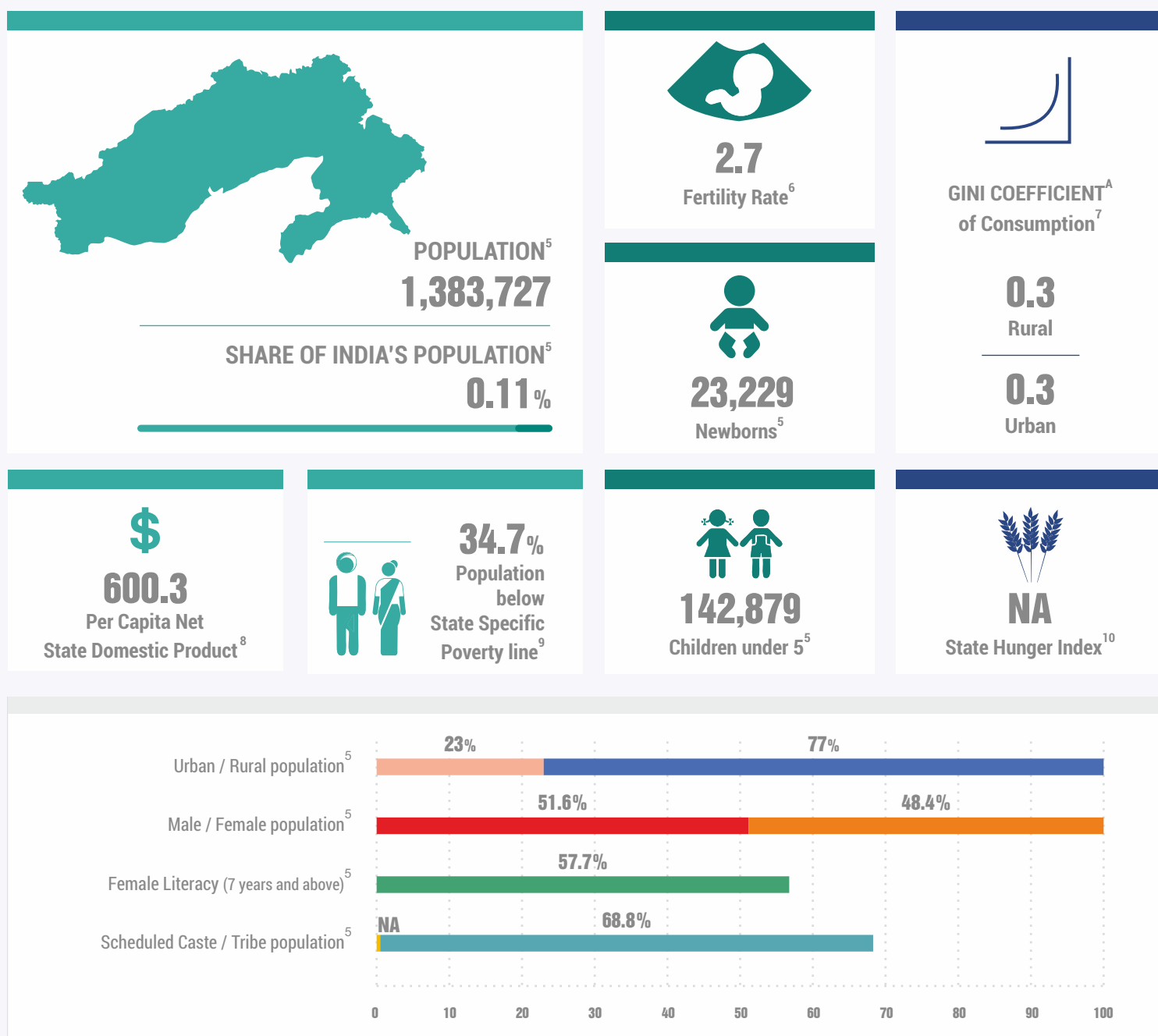
² Source : DLHS4, 2012-13

³ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Govt. of India

I. CONTEXT

A. DEMOGRAPHIC CONTEXT

This section highlights the demographic composition of the state in terms of male-female, rural-urban, and SC-ST ratios, literacy and fertility rates. In addition, it also includes the size of the population of newborns and children less than five years of age (as of the Census of India, 2011) to illustrate the size of the target population for nutrition-related interventions that need to reach this vulnerable population.



A : Gini coefficient is a measure of inequality of distribution. A Gini coefficient of 0 represents perfect equality, while a value of 100 implies perfect inequality. (See Appendix A for more information)

⁵ Source : Primary Census Abstract, Census, 2011

⁶ Source : SRS, 2009

⁷ Source : Planning Commission Estimates: NSSO 66th round-Employment and Unemployment Survey, 2009-10

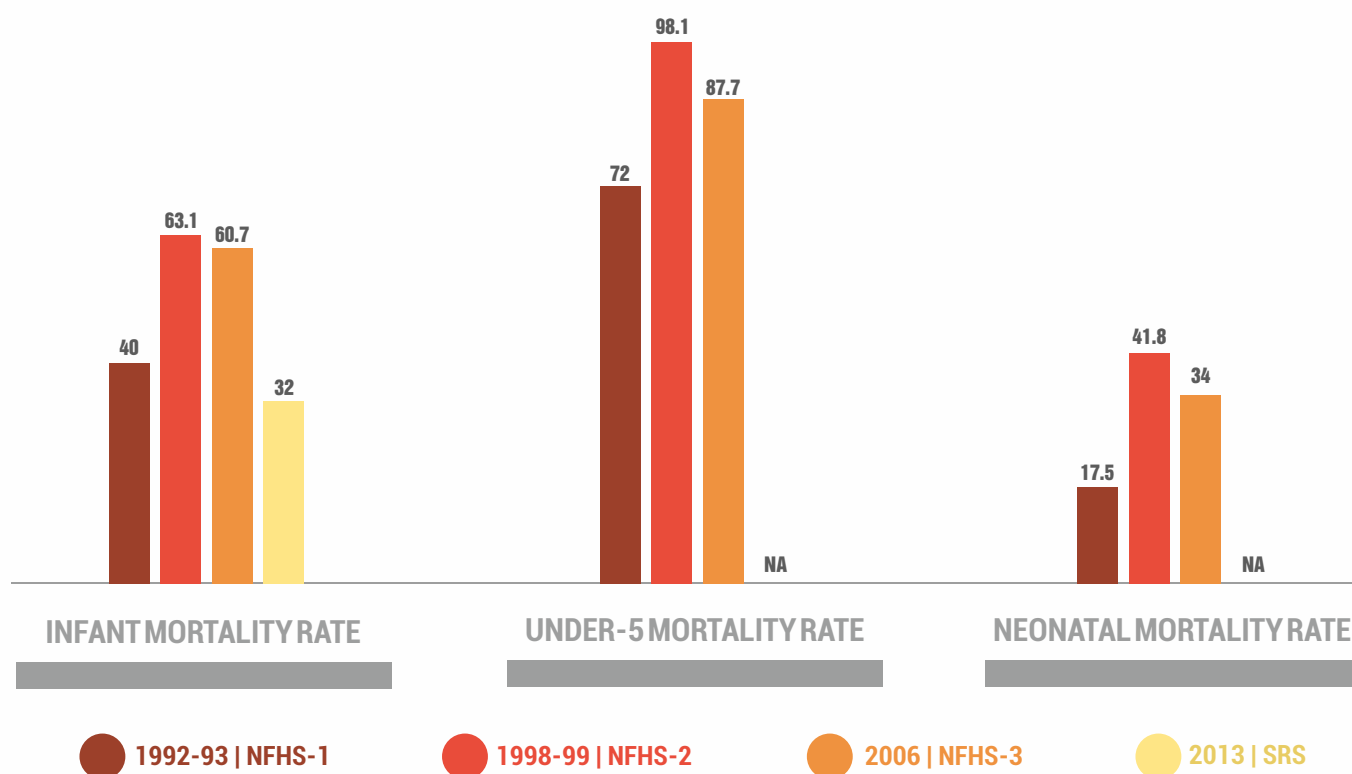
⁸ Source : Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14 : http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82

⁹ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Government of India, 2011-12 : http://planningcommission.nic.in/news/pre_pov2307.pdf

¹⁰ Source : IFPRI, India state hunger index, comparisons of hunger across states, 2009

B. CHILD MORTALITY PER THOUSAND LIVE BIRTHS

This section illustrates trends in mortality in neonates, infants and children under 5 years, since 1992. The purpose of this is to highlight the success achieved by individual states in averting deaths of children since the economic growth of the 1990s.



II. NUTRITIONAL STATUS AMONG CHILDREN

This section presents data on nutrition outcome indicators (stunting, wasting, and underweight) and anemia prevalence. Anthropometric measures for children under 5 (stunting, wasting, and underweight) are presented over time periods, by age groups and by background characteristics. This data aims to convey the prevalence and severity of undernutrition in the state.

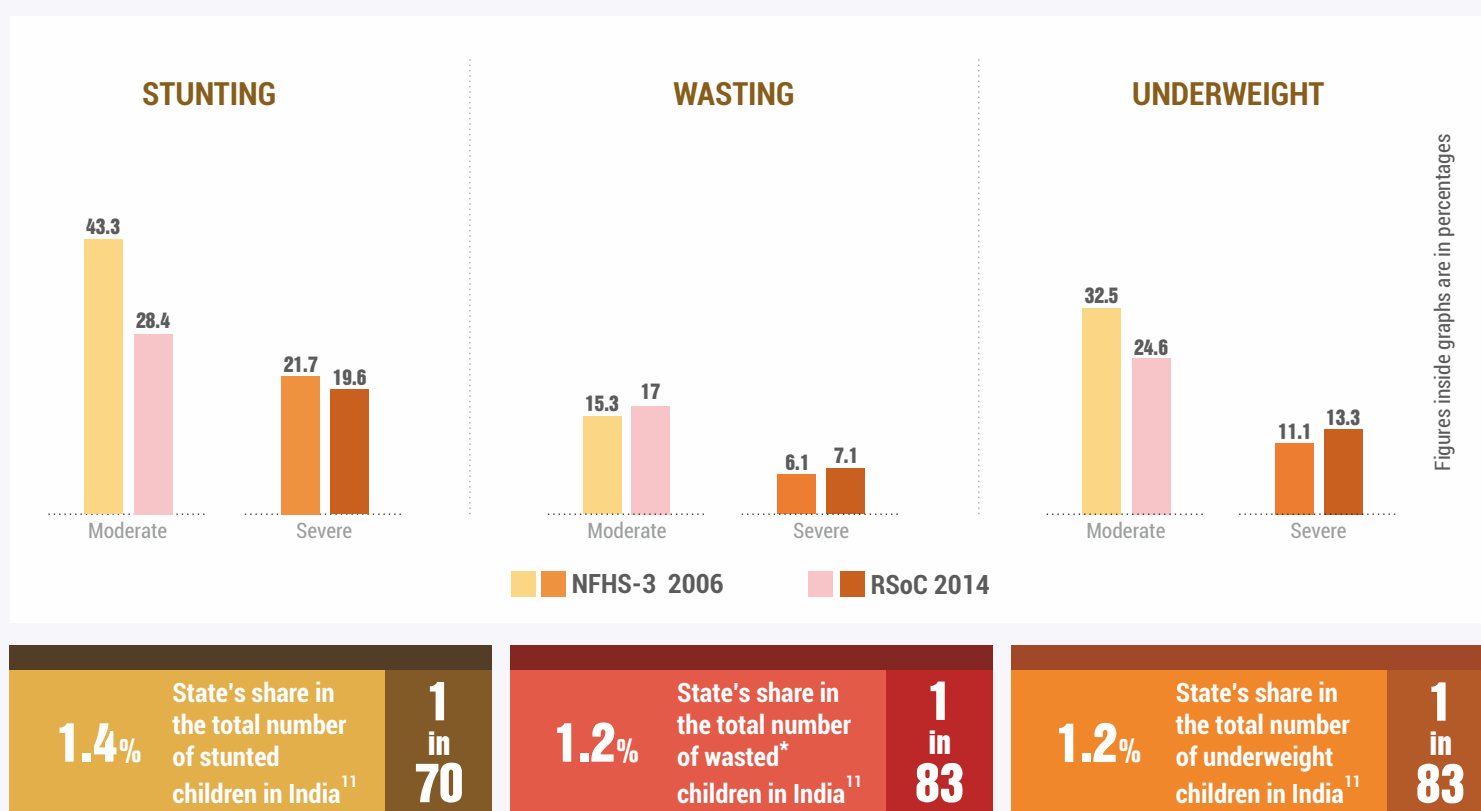
A. CHILD UNDERNUTRITION, BY TIME PERIOD

ANTHROPOMETRIC MEASURES

Stunting is inadequate height for age, which is indicative of chronic or cumulative nutritional deprivation in early childhood. A stunted child's height-for-age is below -2 standard deviations from the median height-for-age (termed HAZ) of the WHO Child Growth Standards, while a severely stunted child is below -3 standard deviations.

Wasting is inadequate weight for height, which points to acute or short-term undernutrition. A wasted child's weight-for-height (WHZ) is below -2 standard deviations from the WHO Child Growth Standards; a severely wasted child is below -3 standard deviations. (Another way to determine severe wasting or severe acute malnutrition is through a measurement of a child's mid-upper arm circumference (MUAC).

Underweight is inadequate weight for age, a composite indicator that encompasses stunting and wasting. An underweight child's weight-for-age (WAZ) is below -2 standard deviations from the WHO Child Growth Standards; again, a severely underweight child is below -3 standard deviations.

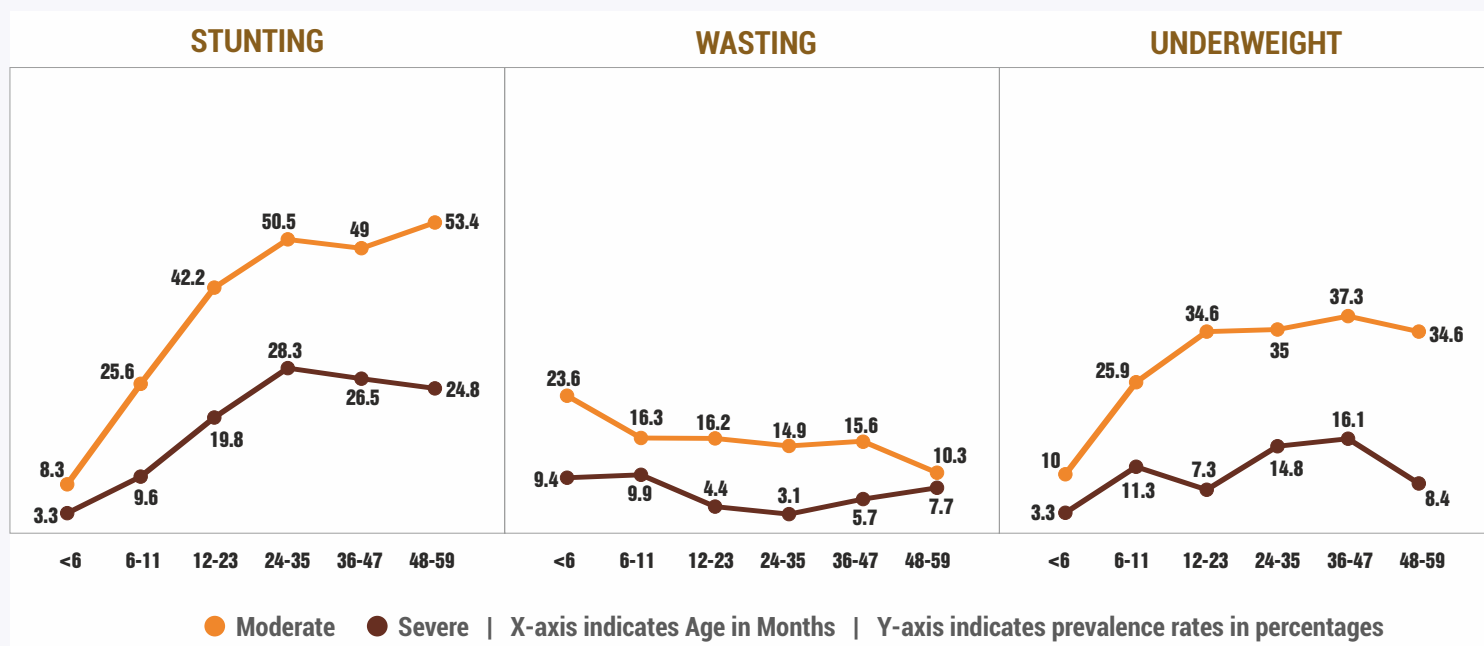


*Wasting is subject to seasonal variations either in food supply or disease prevalence and hence may not be comparable across groups of children measured at different times of the year within a survey round as well as between different survey rounds.

¹¹ Source : NFHS-3, 2006

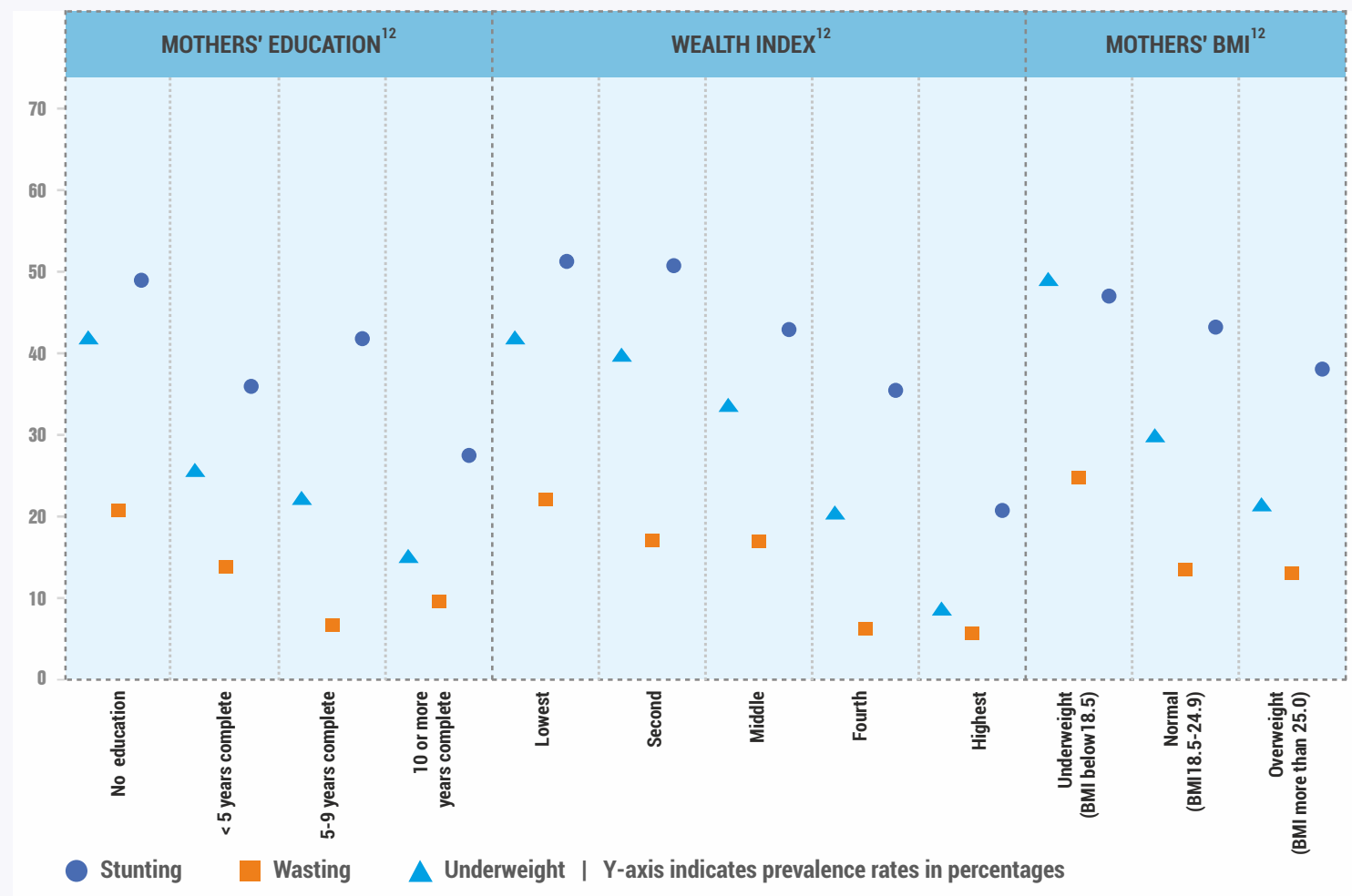
B. CHILD UNDERNUTRITION, BY AGE GROUPS¹²

Percentage of moderate (below -2 SD from the WHO growth standards) and severe (below -3 SD) stunting, wasting and underweight are available for 6 age groups among children under 5.

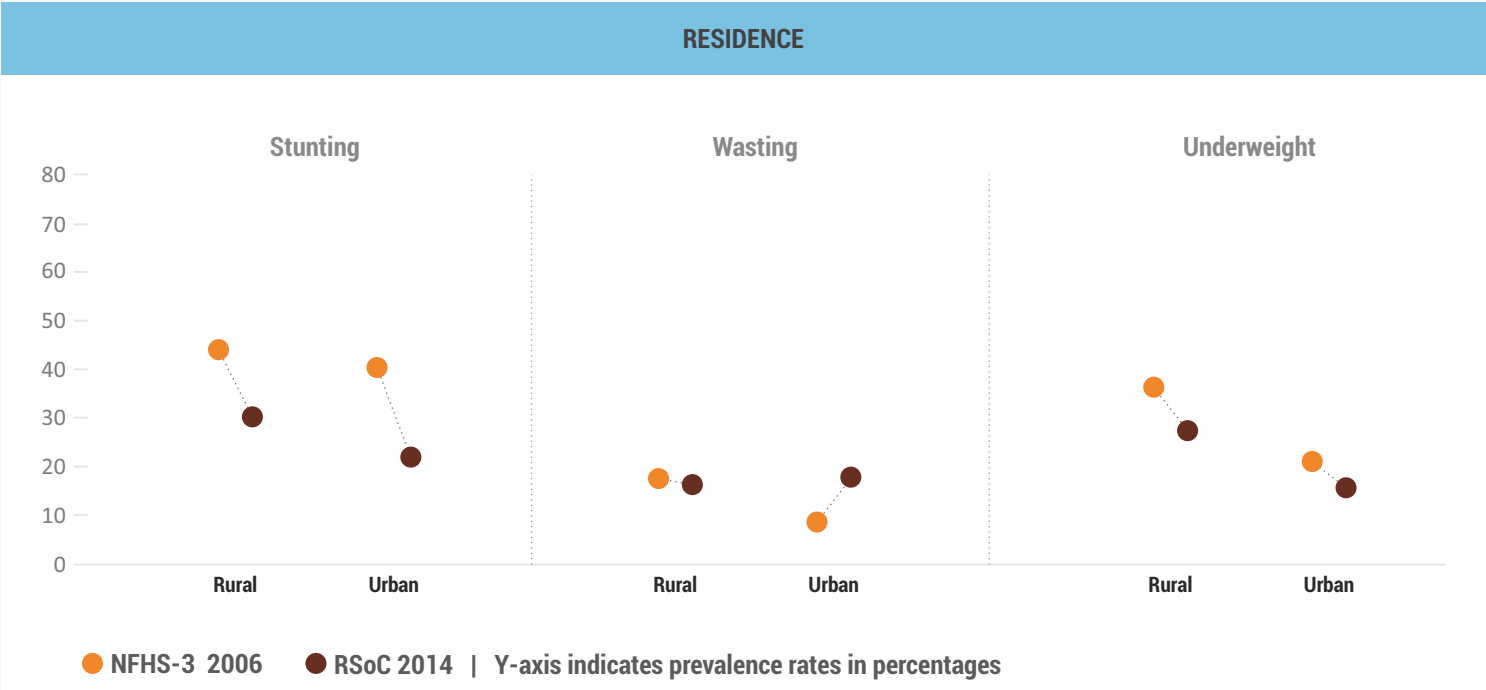
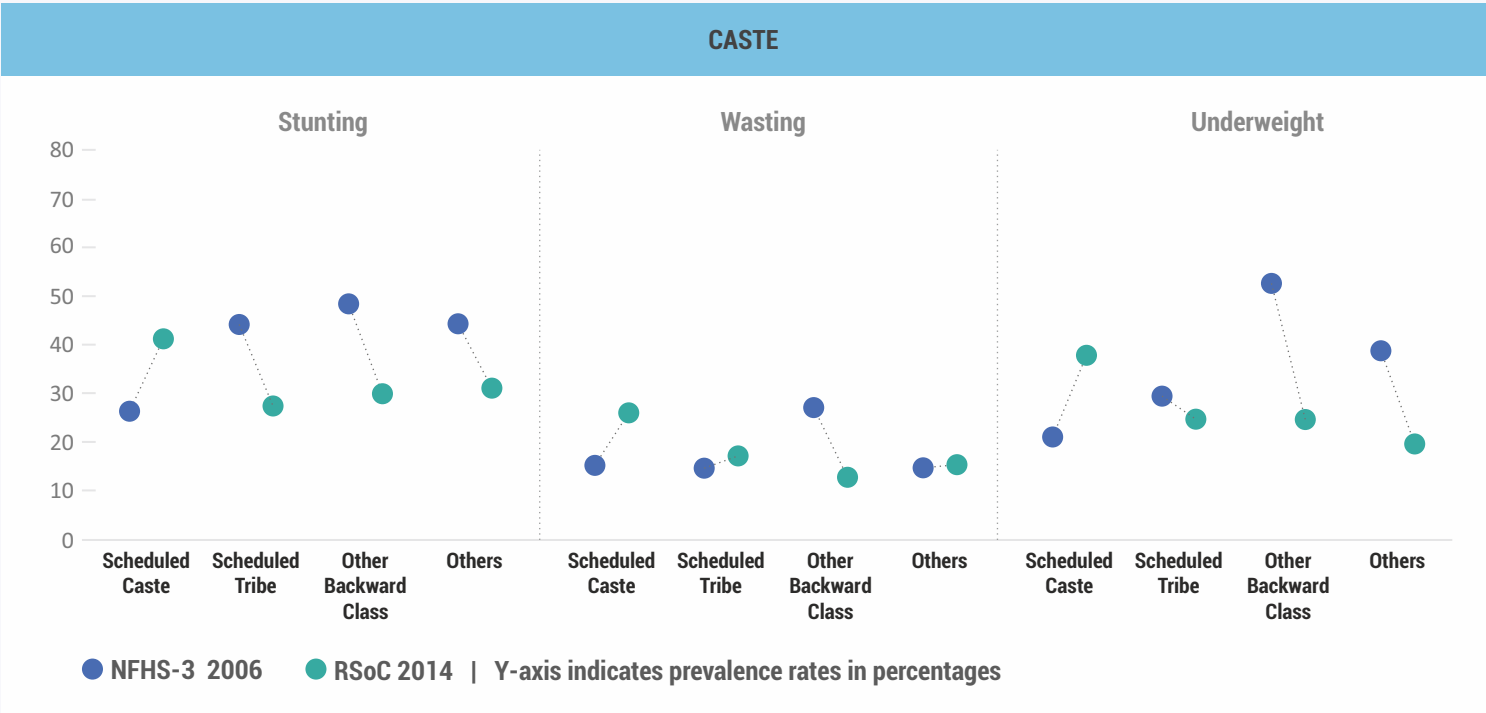


C. PREVALENCE OF CHILD UNDERNUTRITION, BY BACKGROUND CHARACTERISTICS

In this section, child undernutrition outcomes are presented, along with key socioeconomic drivers that are known to be associated with child nutrition, such as caste, residence, mother's health and education, and household income.



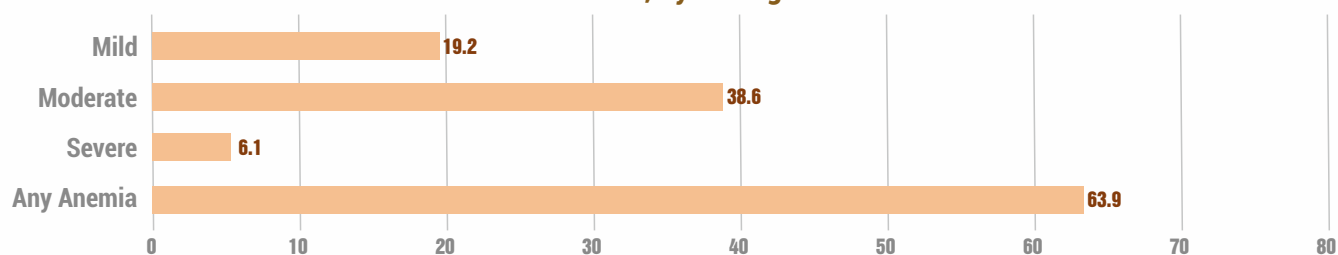
¹² Source : NFHS-3, 2006



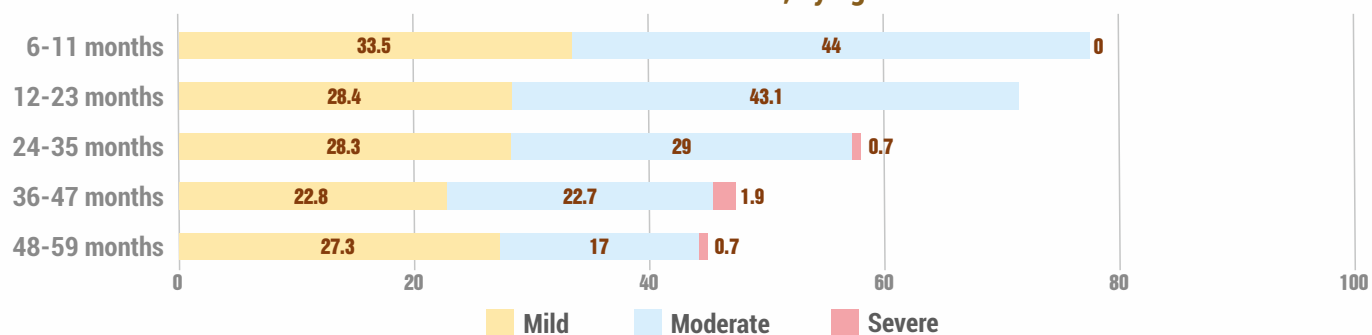
D. ANEMIA PREVALENCE

Anemia can impair physical and cognitive development among children and create long term impacts on productivity and wellbeing. This section features data on anemia prevalence by severity and age groups for children under 5.

Anemia Status, by hemoglobin level¹³



Anemia Prevalence, by age¹⁴



¹³ Source : DLHS-4, 2012-13

¹⁴ Source : NFHS-3, 2006

III. IMMEDIATE DETERMINANTS

A. INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES¹⁵

This section presents indicators for assessing IYCF practices as recommended by the WHO and revised in 2008. Following optimal IYCF practices during the first 1,000 days is crucial for early child survival and growth as well as long-term health and wellbeing.

Children aged 0-23 months breastfed immediately/within an hour of birth		66.5%
	Children aged 0-5 months who were exclusively breastfed	59.8%
	Children aged 6-8 months who were fed complementary foods	64.9%
	For breastfed children (6-23 months)- A. Fed minimum number of times. Note : At least twice a day for breastfed infants 6-8 months old and at least three times a day for breastfed children 9-23 months old B. Had minimum dietary diversity Note : Minimum dietary diversity refers to four or more food groups^B fed to children aged 6-23 months	41.2% 34.7%

B. CHILD HEALTH¹⁵

Prevalence of childhood illnesses (in children aged 0-59 months)

Had diarrhea in 15 days prior to survey	4.2%
Had fever in 15 days prior to survey	9.3%
Had symptoms of Acute Respiratory Infection (ARI) in 15 days prior to survey	3.1%

^B The 7 food groups include the following: i. grains, roots and tubers ii. legumes and nuts iii. dairy products (milk, yoghurt, cheese) iv. Flesh foods (meat, fish, poultry, and liver/organ meats) v. eggs vi. Vitamin-A rich fruits and vegetables vii. other fruits and vegetables.

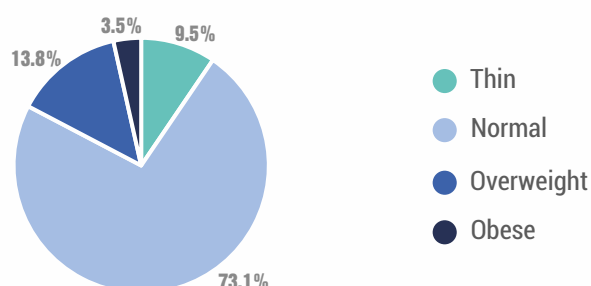
¹⁵ Source : RSoC, 2014

C. NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

Maternal health and nutrition, as well as adolescent nutrition, have important consequences for intergenerational transmission of undernutrition. Data on Body Mass Index (BMI), anemia prevalence and height among women of reproductive age are presented in this section, as are data on adolescent BMI and anemia.

C.1. WOMEN 15-49 YEARS OLD¹⁶

BMI^c levels of women aged 15-49 years



^cBody Mass Index (BMI) is defined as the weight in kilograms by the square of the height in metres (kg/m²). It is a simple index of weight-for-height which is commonly used to classify underweight, overweight and obesity in adults. Range: BMI < 18.5 = total thin, BMI 18.5-24.9 = normal, BMI 25.0-29.9 = Overweight, BMI > 30.0 = Obese [per WHO Standards]



56.7%

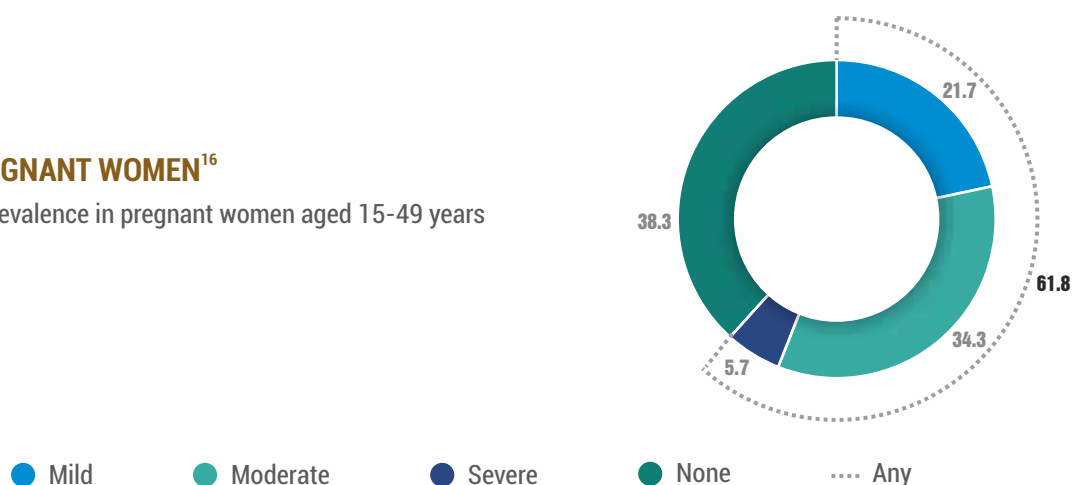
Women aged 15-49 years are anemic

4.1%

Women aged 15-49 years are severely anemic

C.2. PREGNANT WOMEN¹⁶

Anemia prevalence in pregnant women aged 15-49 years



Mild

Moderate

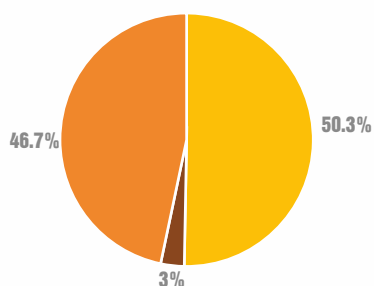
Severe

None

Any

C.3. ADOLESCENT GIRLS

BMI levels of adolescent girls aged 15-18 years¹⁷



Normal

Thin

Overweight and Obese



51.2%

Adolescent girls aged 15-19 years are anemic^{17a}

1.2%

Adolescent girls aged 15-19 years are severely anemic^{17a}

¹⁶ Source : DLHS-4, 2012-13

¹⁷ Source : RSoC, 2014

^{17a} Source : NFHS-3, 2006

IV. UNDERLYING DETERMINANTS

A. SOCIAL STATUS OF WOMEN

Women's status is recognized to contribute in significant ways to improving nutrition. This section presents indicators that are representative of women's social status, including measures of education, age at marriage and first birth, employment, decision making and domestic violence. It also includes the Gender Empowerment Measure that captures gender inequality along three dimensions: political participation and decision-making power, economic participation and decision-making power, and power over economic resources.



Currently married women who have 10 or more years of schooling¹⁸ **21%**



52.5% Women aged 20-24 years who were married before the age of 18¹⁹

22.3 Average age at marriage¹⁹

Gender Empowerment Measure^{D,20}

0.5

0.5

National Average²⁰



Female workforce participation rate²² **35.4%**

Currently married women who make decisions about²³:



27.9% Own healthcare



19.6% Major household purchase



59.4% Purchases for daily household needs



30.9% Visits to her family/friends/relatives



43.0% Women who have experienced any form of physical/sexual/emotional violence²³

70.8% Ever married women who justify hitting/wife-beating (for either of the reasons mentioned)²³

^D The Gender Empowerment Measure is a weighted average index based on indicators that are classified into three dimensions: a. political participation and decision-making power b. economic participation and decision-making power and c. power over economic resources. The index ranges from a minimum of 0 to a maximum of 1, with a higher score indicating greater empowerment of women. (More information available at <http://wcd.nic.in/publication/GDIGEReport/Part3.pdf>.)

¹⁸ Source : DLHS-4, 2012-13

¹⁹ Source : RSoC, 2014

²⁰ Source : MoWCD, 2006

²² Source : Women and Men in India, 16th Issue MoSPI, 2014

²³ Source : NFHS-3, 2006

B. WATER AND SANITATION

Poor hygiene and sanitation, by directly increasing exposure and susceptibility to infections, are associated with undernutrition among children. This section covers key indicators on access to safe drinking water and availability of sanitation facilities at the state level. It also includes the expenditure on toilet construction under the Total Sanitation Campaign.



96.7%

Households with access to improved sources of drinking water^{E, 24}

55.1%

Households using improved sanitation facility^{F, 24}



31.7%

Households practicing open defecation²⁴

0.2 M

Expenditure on toilets under Total Sanitation Campaign (TSC)^{G, 25}



1,065 M

National Average²⁵

C. AGRICULTURE AND FOOD SECURITY

Agriculture productivity and food security can affect household access to foods necessary for a healthy diet. Thus, this section presents indicators related to agricultural growth and food consumption patterns in the state, indicating the level of food security in the state relative to the national situation.



2.8%

Growth rate of agriculture from 2007-2012²⁶



0.1%

Share in India's total foodgrain production²⁷



Mean Calorie intake per person per day (in Kcal)²⁸

RURAL

URBAN

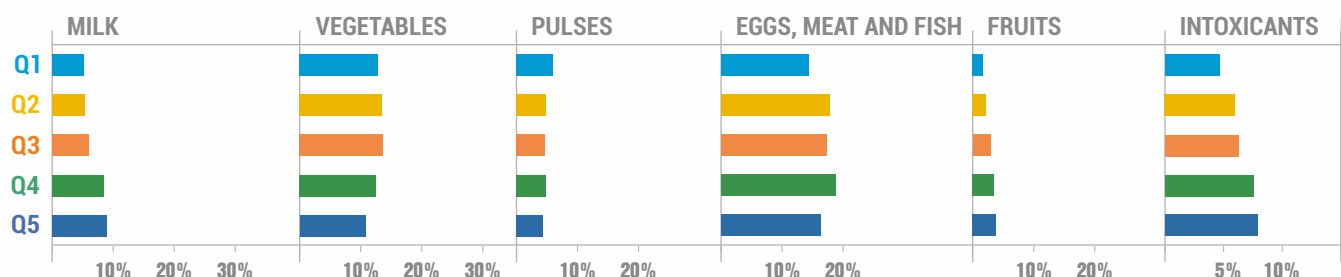
NA 2233

ARUNACHAL PRADESH INDIA AVG

NA 2206

ARUNACHAL PRADESH INDIA AVG

Expenditure on food items by income quintiles²⁸



^E Improved sources of drinking water include: piped water into dwelling, piped water to yard/plot, public tap or standpipe, tubewell or borehole, protected dug well, protected spring, and rainwater (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>).

^F Improved sanitation means households using improved toilets that include: flush toilet, piped sewer system, septic tank, flush/pour flush to pit latrine, ventilated improved pit latrine, pit latrine with slab, composting toilet, special case (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>); excludes those households who are using improved toilets but sharing toilet facilities with other households.

^G Besides toilet construction subsidies, this expenditure also includes funding other activities such as solid and liquid waste management, IEC activities for sustainable demand generation for sanitation facilities, assistance to production centers of sanitary materials and rural sanitary marts, provision of construction of community sanitary complexes, provision of sanitation facilities in govt. schools and Anganwadis in govt. buildings etc.

²⁴ Source : RSoC, 2014

²⁵ Source : Indiastat, Rajya Sabha Unstarred Question No. 2950, dated on 30.08.2011, 2011-12

²⁶ Source : Indiastat, compiled by datanet from Rajyasabha & Lok Sabha unstarred questions no. 3039, 4535. 2007-12

²⁷ Source : Indiastat, Ministry of Agriculture, Government of India 2011-2012

²⁸ Source : NSSO, 68th round-Nutritional Intake in India, 2011-12

V. STATUS OF NUTRITION-RELEVANT INTERVENTIONS

A. NUTRITION-SPECIFIC INTERVENTIONS

The financial resources allocated to, and spent on direct nutrition-specific interventions can determine the scale, coverage and quality of interventions to reach vulnerable target populations. These services, in India, are delivered both by the Integrated Child Development Scheme (ICDS) and the National Health Mission (NHM). This section includes data on the coverage of interventions delivered by these two key centrally-sponsored schemes that directly impact maternal and child nutrition and health. We also include here information on the human resources and service availability of these schemes and expenditures.

A.1. COVERAGE OF ICDS AND NHM:

The Integrated Child Development Services (ICDS) aims to improve the nutrition and health status of children under-six through a package of services (supplementary nutrition, immunization, health check-up, referral services, etc.) delivered through frontline workers at the Anganwadi Centres (AWCs). This section provides information on expenditure on ICDS and coverage of its supplementary nutrition programme (SNP). This section also covers critical services provided by the health system, including provision of care for pregnant women and child immunization. Immunization plays a crucial role in complementing actions to improve nutrition. The link between undernutrition and infectious diseases is cyclical, poor nutrition increases vulnerability to infections, which in turn worsen nutrition status. Data on immunization among children are presented by residence. Here, full immunization refers to children covered with BCG, measles and 3 doses each of DPT and polio.

Beneficiaries who availed supplementary food under ICDS²⁹

Children 6-35 months	51.1%
Children 36-71 months	63.2%
Pregnant women	20.6%
Lactating mothers	25.9%

Beneficiaries who received supplementary food for at least 21 days in the month prior to the survey

Children aged 6-35 months	0.4%
Children aged 36-71 months	1.1%
Pregnant women	NA
Lactating women	0%

²⁹ Source : RSoC, 2014

SERVICES PROVIDED TO WOMEN WHO HAD A LIVE BIRTH IN LAST 35 MONTHS³⁰



73.8%

Received 3 or more antenatal checkups prior to delivery



77.5%

Received 2 or more TT injections prior to delivery



27.7%

Consumed 100 or more IFA tablets/syrup during pregnancy



63.7%

Had Institutional delivery



65.4%

Women who had live birth in 35 months where delivery was assisted by skilled health provider³⁰



47%

Rural

62.5%

Urban

Children aged 12-23 months who are fully immunised³⁰



9%

Children aged 12-23 months who have not received any immunisation³⁰

WOMEN GIVEN ADVICE ON³¹:



45.3%

Breastfeeding



32.5%

Nutrition of mother and child



26.4%

Institutional delivery

A.2. PERSONNEL CAPACITY OF ICDS AND NRHM:

This section features data on availability of healthcare personnel and services available to women of reproductive age (antenatal care, tetanus toxoid coverage, iron-folic acid supplementation coverage, institutional delivery and counseling). Household and individual access to health services can directly impact children's nutrition and welfare during the crucial first 1,000 days of life.

Availability of Anganwadi Centres and Workers (AWCs and AWWs) ^{H, 30}	Value
Pending or vacant Anganwadi workers to sanctioned number of workers ^{30a}	3.2%
AWWs living in the AWC village/ward	92.9%
AWWs having 10 or more years of schooling	31.6%
Median age of AWWs	32 years
AWCs serving to population more than the stipulated norm	0.2%

Growth Monitoring ³⁰	Value
AWCs having functional baby weighing scale	64.5%
AWCs having functional adult weighing scale	9.6%
Available WHO growth chart at AWCs	47.1%

^H Number of AWCs surveyed for Arunachal Pradesh as per RSoC 2014 is 131.

³⁰ Source : RSoC, 2014

^{30a} Source : MoWCD, 2012

³¹ Source : DLHS-4, 2012-13

Training and Comprehensive Knowledge ³²	Value
AWWs having correct knowledge of intake of food by pregnant women	58.7%
AWWs having correct knowledge of normal birth weight of children	59.5%
AWWs having correct knowledge of initiation of breastfeeding within one hour	96.1%
AWWs having correct knowledge of exclusive breastfeeding for the first six months	92%
AWWs having correct knowledge of appropriate age of child for complementary feeding	71%

Health Service Delivery Personnel	Value
ASHAs selected ³³	97%
Current density of ASHA as per Census 2011 rural population ³³	1 per 918 persons
Pending or vacant ANM positions sub centres & PHCs ³⁴	NA

A.3. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SPECIFIC INTERVENTIONS

Expenditure on Schemes (in million dollars)	In million USD	National Average
ICDS (ICDS general + SNP + training) (women and children) ³⁵	21	75
NRHM expenditure (Central Government) ³⁶	8.9	68.8
NRHM expenditure (State Government) ³⁶	2.4	9.3

B. NUTRITION-SENSITIVE INTERVENTIONS

This section includes information on expenditure and coverage of key centrally-sponsored schemes that indirectly impact maternal and child nutrition. These are: the Mid Day Meal Scheme (MDMS), Public Distribution System (PDS), and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

B.1. COVERAGE OF SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS

Coverage of Schemes	Value
MDMS (base: eligible children*) ³⁷	3.9%
PDS (base: rural and urban households reporting consumption) ³⁸	51.5%
MGNREGA (base: rural persons 18 years and above registered in MGNREG job card and demanded work during last 365 days) ³⁹	92%

* All children studying in primary & upper primary classes in schools supported under Sarva Shiksha Abhiyan and NCLP (National Child Labour Project) run by Ministry of Labour.

B.2. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS:

Expenditure on Schemes (in million dollars)	In million USD	National Average
MDMS ⁴⁰	5	47
PDS ⁴¹	40.3	475.3
MGNREGA ⁴²	9	214

³² Source : RSoC, 2014

³³ Source : NRHM, 2013

³⁴ Source : MoHFW, 2013

³⁵ Source : Lok Sabha Unstarred Question # 846 dated 27.02.2015, 2012-13

³⁶ Source : Lok Sabha Annexured Unstarred Question # 409 dated 6.12.2013, 2012-13

³⁷ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/lsq15/15/as216.htm 2011-12

³⁸ Source : Report No. 558, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

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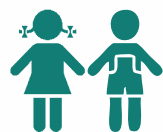
⁴⁰ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014, 2012-13

⁴¹ Source : Food Corporation of India 2013, 2012-13

⁴² Source : Lok Sabha Annexured Unstarred Question # 3835 dated 19.03.2015, 2012-13

FAST FACTS ON NUTRITION AND ITS DETERMINANTS IN ASSAM

World Health Assembly Nutrition Targets



CHILDREN UNDER 5 YEARS

40.6%
Stunted¹
9.7%
Wasted¹

World Health Assembly Nutrition Targets


64.7%

 Infants 0-5
months old who are
exclusively breastfed¹

13.6%

 Children under
3 years who have low
birth weight (<2.5 kgs)²

69.5%

 Women
15-49 years old
with anemia¹

Immediate Determinants


76.1%

 Infants 6-8 months old who receive solid, semi-solid or soft foods²
17.8%

 Infants & young children 6-23 months old who achieve minimal diet diversity in
complementary feeding²

69.6%

 Children 6-59 months
old with anemia¹

2.1%

 Children 6-59 months old who
had diarrhea in 15 days prior
to survey²

Immediate Determinants


0%

 Children 6-35 months old
who received supplementary
food under ICDS for 21 days
in the month prior to survey²

55.3%

 Children 12-23
months old who are
fully immunized²

74.2%

 Mothers of
children under 36 months
old who received three
or more antenatal checkups²

Underlying Determinants


18%

 Currently
married women with 10
or more years of schooling¹

32.5%

 Women aged 20-24
years who were
married before the age of 18²

40.8%

 Adolescent girls
15-18 years old
with low BMI (<18.5)²

Underlying Determinants


37.5%

 Households
practicing
open defecation²

32%

 Population
below
state-specific poverty line³

 Does state have a
high-level nutrition mission?

NO
¹ Source : RSoC, 2014

² Source : NFHS-3, 2006

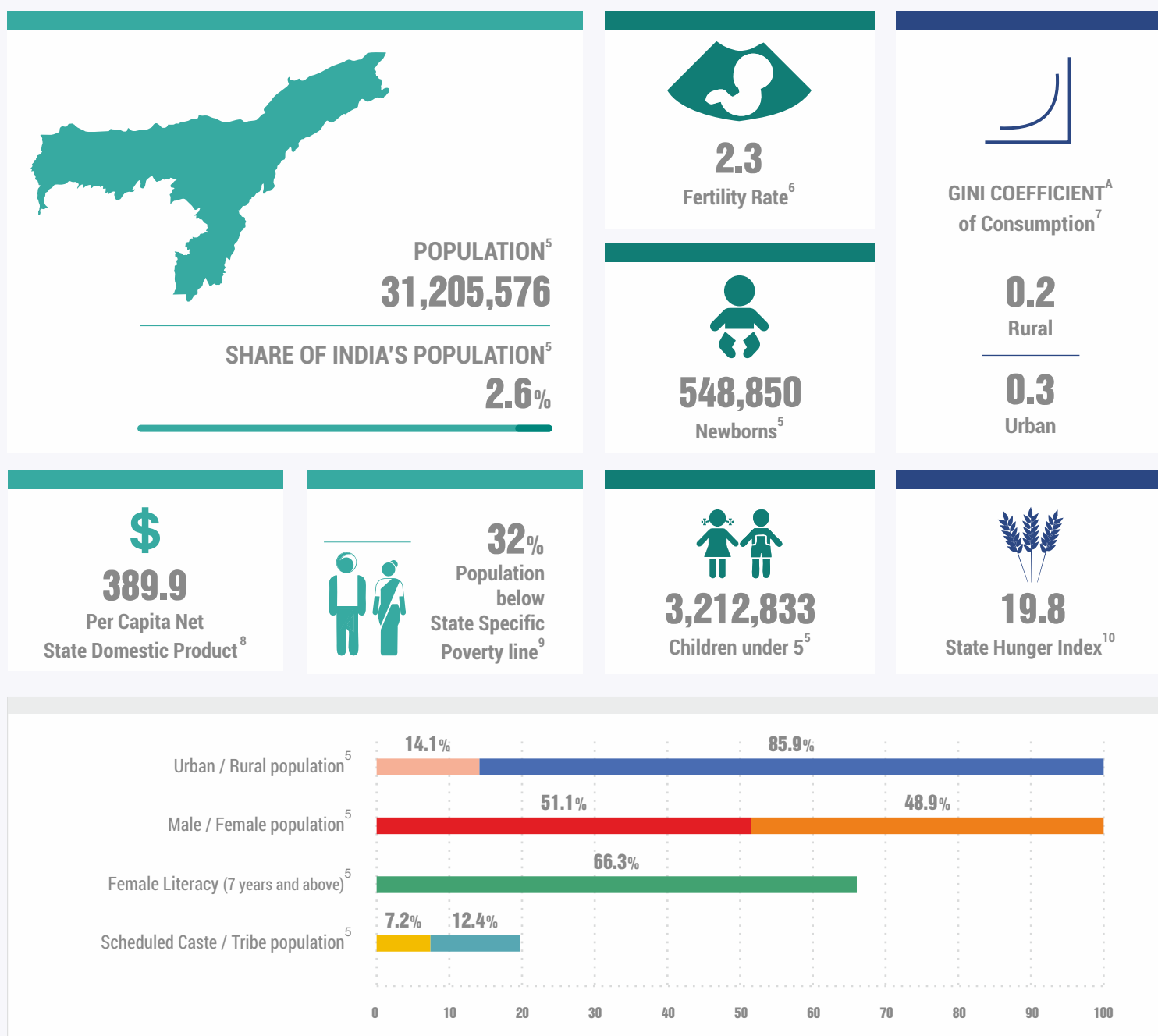
³ Source : DLHS-3, 2007-08

⁴ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Govt. of India

I. CONTEXT

A. DEMOGRAPHIC CONTEXT

This section highlights the demographic composition of the state in terms of male-female, rural-urban, and SC-ST ratios, literacy and fertility rates. In addition, it also includes the size of the population of newborns and children less than five years of age (as of the Census of India, 2011) to illustrate the size of the target population for nutrition-related interventions that need to reach this vulnerable population.



A : Gini coefficient is a measure of inequality of distribution. A Gini coefficient of 0 represents perfect equality, while a value of 100 implies perfect inequality. (See Appendix A for more information)

⁵ Source : Primary Census Abstract, Census, 2011

⁶ Source : SRS, 2013

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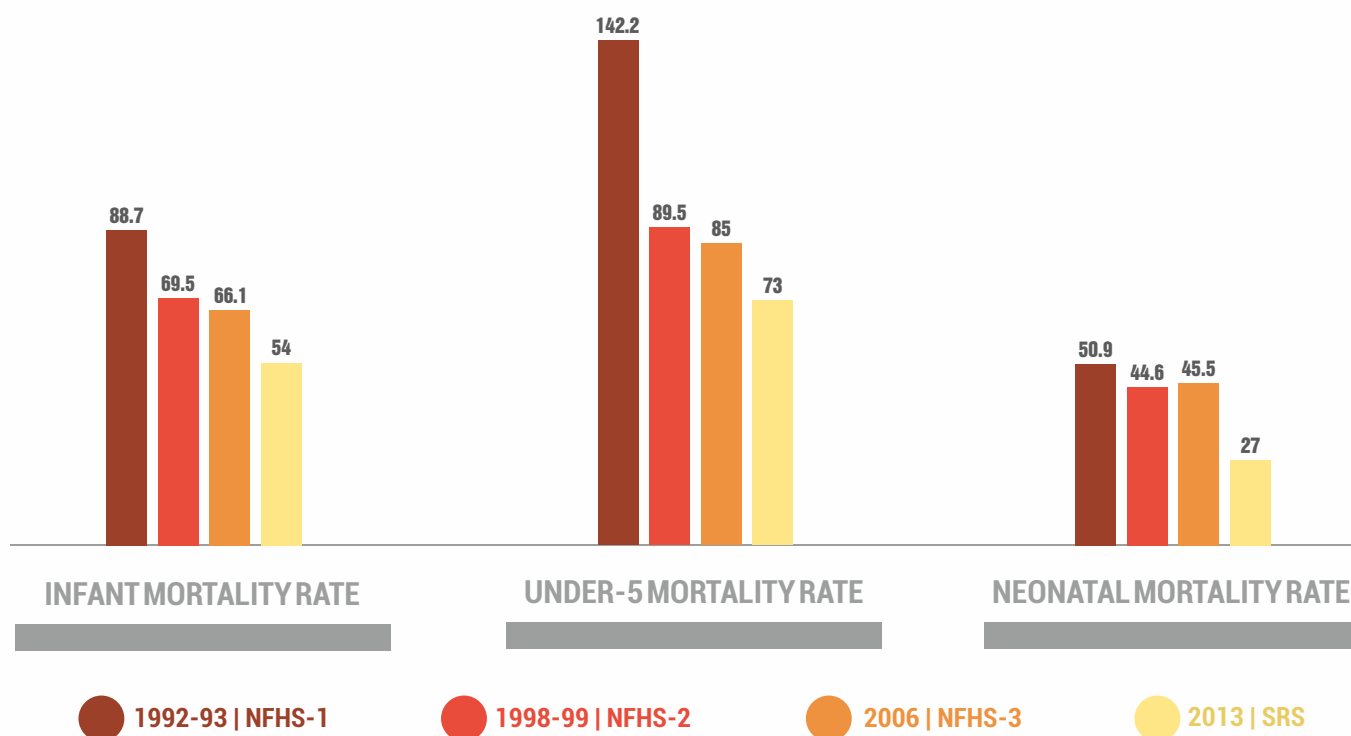
⁸ Source : Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14; http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82

⁹ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Government of India, 2011-12 : http://planningcommission.nic.in/news/pre_pov2307.pdf

¹⁰ Source : IFPRI, India State Hunger Index, 2009

B. CHILD MORTALITY PER THOUSAND LIVE BIRTHS

This section illustrates trends in mortality in neonates, infants and children under 5 years, since 1992. The purpose of this is to highlight the success achieved by individual states in averting deaths of children since the economic growth of the 1990s.



II. NUTRITIONAL STATUS AMONG CHILDREN

This section presents data on nutrition outcome indicators (stunting, wasting, and underweight) and anemia prevalence. Anthropometric measures for children under 5 (stunting, wasting, and underweight) are presented over time periods, by age groups and by background characteristics. This data aims to convey the prevalence and severity of undernutrition in the state.

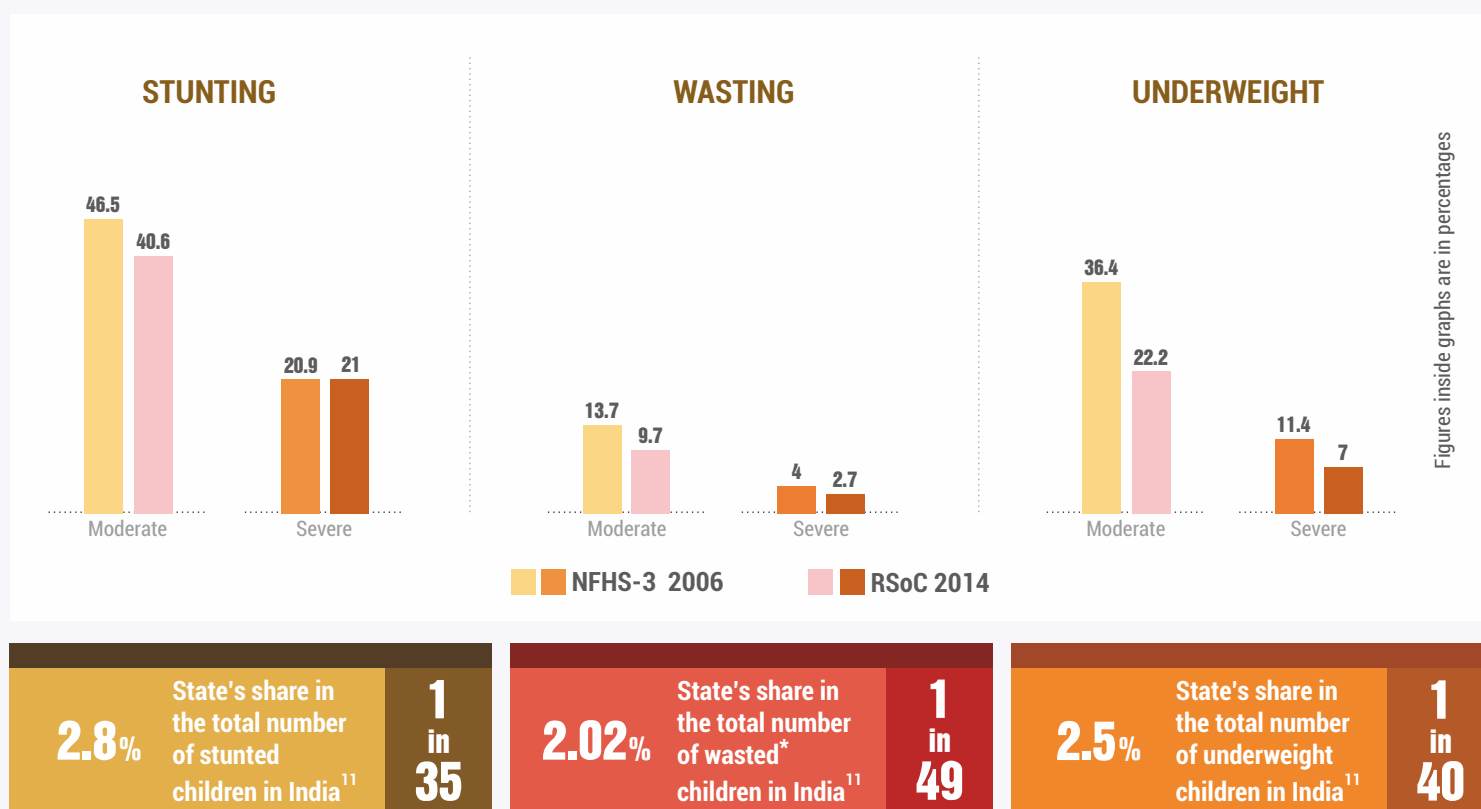
A. CHILD UNDERNUTRITION, BY TIME PERIOD

ANTHROPOMETRIC MEASURES

Stunting is inadequate height for age, which is indicative of chronic or cumulative nutritional deprivation in early childhood. A stunted child's height-for-age is below -2 standard deviations from the median height-for-age (termed HAZ) of the WHO Child Growth Standards, while a severely stunted child is below -3 standard deviations.

Wasting is inadequate weight for height, which points to acute or short-term undernutrition. A wasted child's weight-for-height (WHZ) is below -2 standard deviations from the WHO Child Growth Standards; a severely wasted child is below -3 standard deviations. (Another way to determine severe wasting or severe acute malnutrition is through a measurement of a child's mid-upper arm circumference (MUAC).

Underweight is inadequate weight for age, a composite indicator that encompasses stunting and wasting. An underweight child's weight-for-age (WAZ) is below -2 standard deviations from the WHO Child Growth Standards; again, a severely underweight child is below -3 standard deviations.

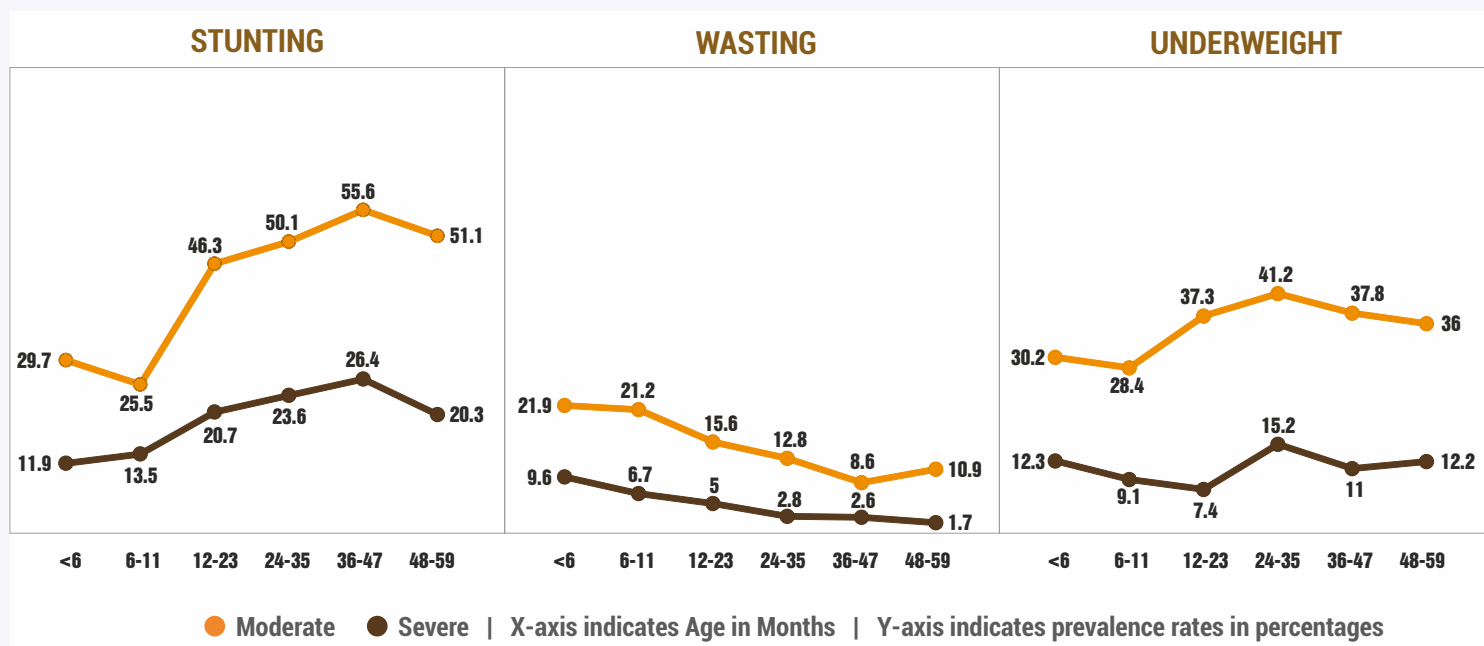


*Wasting is subject to seasonal variations either in food supply or disease prevalence and hence may not be comparable across groups of children measured at different times of the year within a survey round as well as between different survey rounds.

¹¹ Source : NFHS-3, 2006

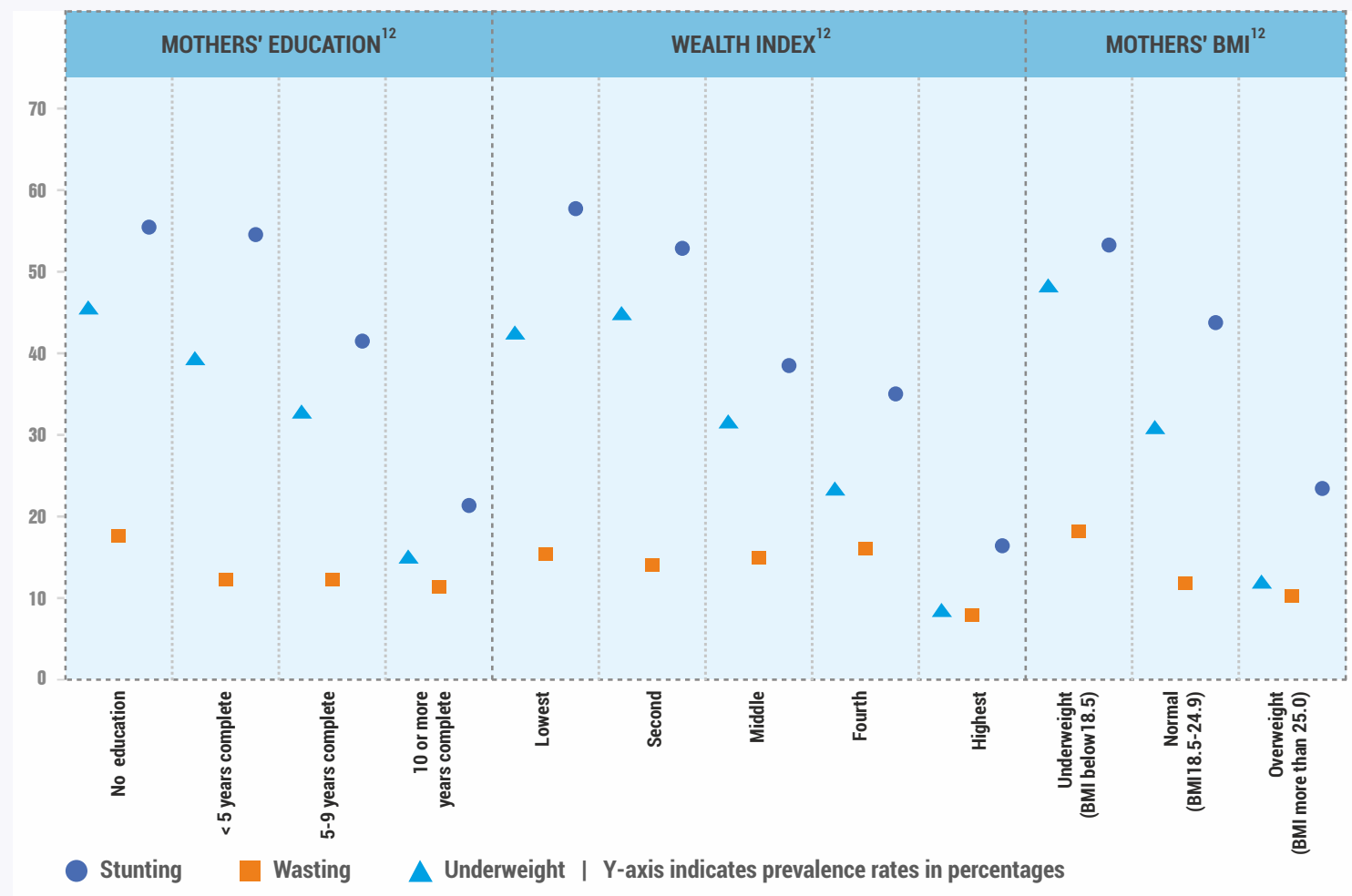
B. CHILD UNDERNUTRITION, BY AGE GROUPS¹²

Percentage of moderate (below -2 SD from the WHO growth standards) and severe (below -3 SD) stunting, wasting and underweight are available for 6 age groups among children under 5.



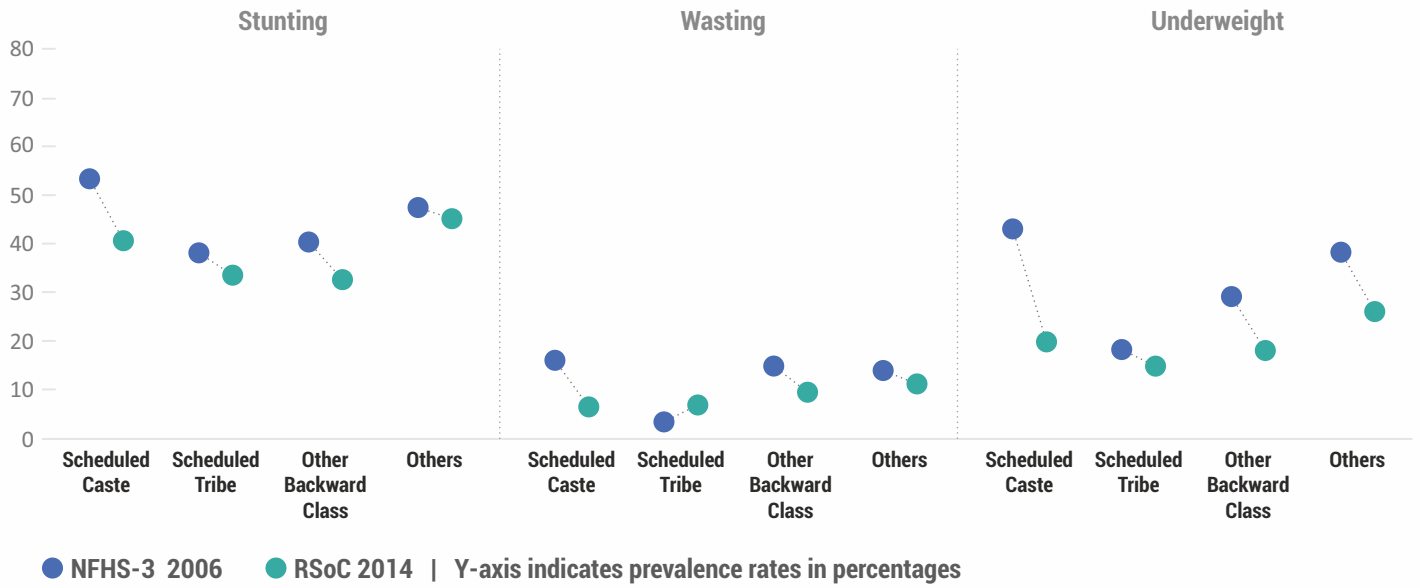
C. PREVALENCE OF CHILD UNDERNUTRITION, BY BACKGROUND CHARACTERISTICS

In this section, child undernutrition outcomes are presented, along with key socioeconomic drivers that are known to be associated with child nutrition, such as caste, residence, mother's health and education, and household income.

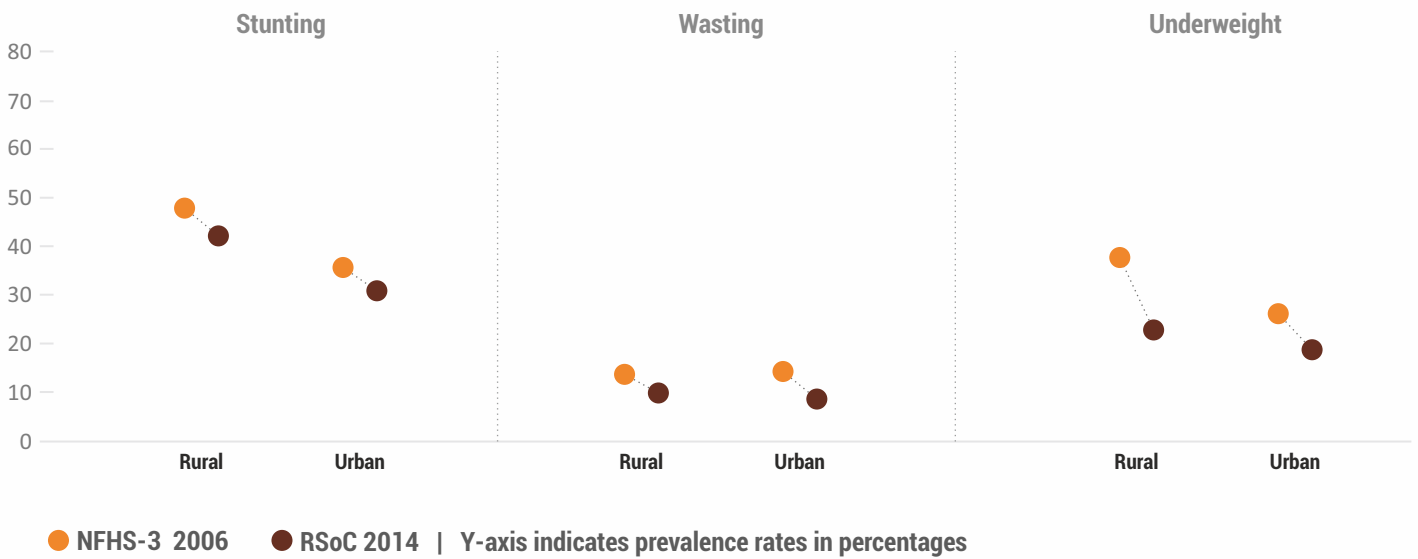


¹² Source : NFHS-3, 2006

CASTE

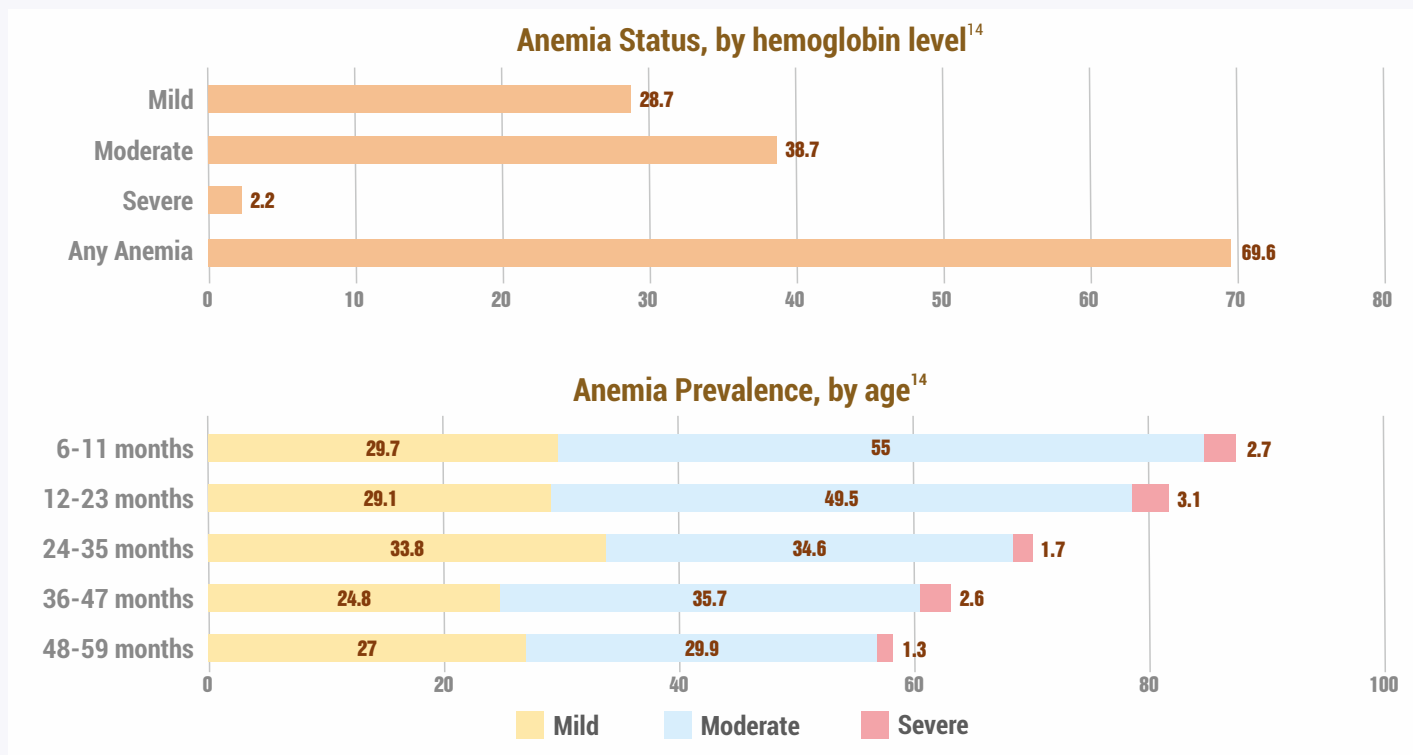


RESIDENCE



D. ANEMIA PREVALENCE

Anemia can impair physical and cognitive development among children and create long term impacts on productivity and wellbeing. This section features data on anemia prevalence by severity and age groups for children under 5.



¹⁴ Source : NFHS-3, 2006

III. IMMEDIATE DETERMINANTS

A. INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES¹⁵

This section presents indicators for assessing IYCF practices as recommended by the WHO and revised in 2008. Following optimal IYCF practices during the first 1,000 days is crucial for early child survival and growth as well as long-term health and wellbeing.

Children aged 0-23 months breastfed immediately/within an hour of birth		72.9%
	Children aged 0-5 months who were exclusively breastfed	64.7%
	Children aged 6-8 months who were fed complementary foods	76.1%
	For breastfed children (6-23 months)- A. Fed minimum number of times. Note : At least twice a day for breastfed infants 6-8 months old and at least three times a day for breastfed children 9-23 months old B. Had minimum dietary diversity Note : Minimum dietary diversity refers to four or more food groups^B fed to children aged 6-23 months	25.6% 17.8%

B. CHILD HEALTH¹⁵

Prevalence of childhood illnesses (in children aged 0-59 months)

Had diarrhea in 15 days prior to survey	2.1%
Had fever in 15 days prior to survey	10.4%
Had symptoms of Acute Respiratory Infection (ARI) in 15 days prior to survey	4.3%

^B The 7 food groups include the following: i. grains, roots and tubers ii. legumes and nuts iii. dairy products (milk, yoghurt, cheese) iv. Flesh foods (meat, fish, poultry, and liver/organ meats) v. eggs vi. Vitamin-A rich fruits and vegetables vii. other fruits and vegetables.

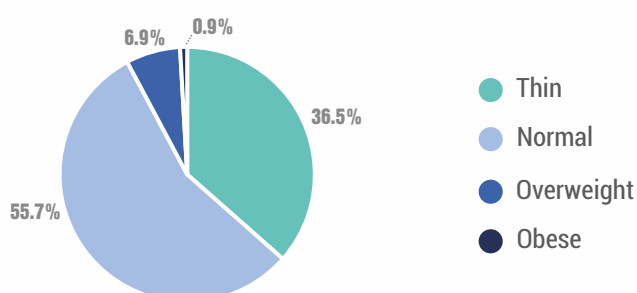
¹⁵ Source : RSoC, 2014

C. NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

Maternal health and nutrition, as well as adolescent nutrition, have important consequences for intergenerational transmission of undernutrition. Data on Body Mass Index (BMI), anemia prevalence and height among women of reproductive age are presented in this section, as are data on adolescent BMI and anemia.

C.1. WOMEN 15-49 YEARS OLD¹⁶

BMI^c levels of women aged 15-49 years



^cBody Mass Index (BMI) is defined as the weight in kilograms by the square of the height in metres (kg/m²). It is a simple index of weight-for-height which is commonly used to classify underweight, overweight and obesity in adults. Range: BMI < 18.5 = total thin, BMI 18.5-24.9 = normal, BMI 25.0-29.9 = Overweight, BMI > 30.0 = Obese [per WHO Standards]



69.5%

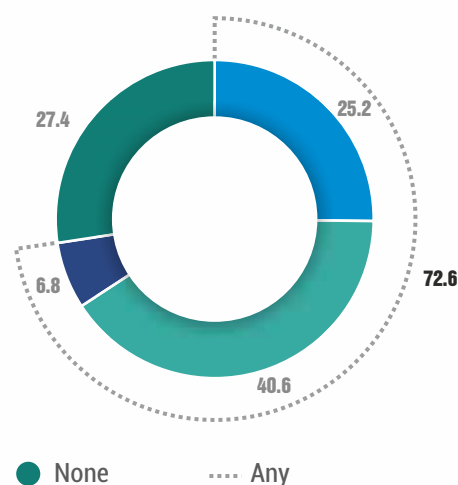
Women aged 15-49 years are anemic

3.4%

Women aged 15-49 years are severely anemic

C.2. PREGNANT WOMEN¹⁶

Anemia prevalence in pregnant women aged 15-49 years



● Mild

● Moderate

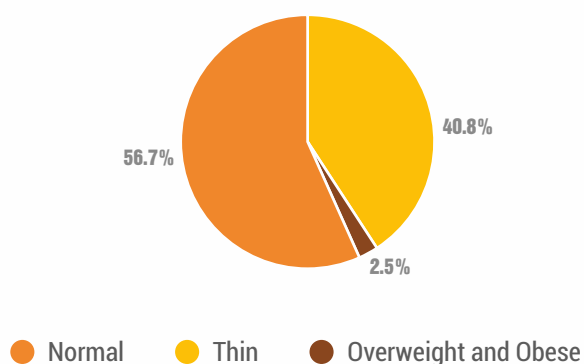
● Severe

● None

--- Any

C.3. ADOLESCENT GIRLS

BMI levels of adolescent girls aged 15-18 years¹⁷



67.8%

Adolescent girls aged 15-19 years are anemic¹⁶

3.3%

Adolescent girls aged 15-19 years are severely anemic¹⁶

¹⁶ Source : NFHS-3, 2006

¹⁷ Source : RSoC, 2014

IV. UNDERLYING DETERMINANTS

A. SOCIAL STATUS OF WOMEN

Women's status is recognized to contribute in significant ways to improving nutrition. This section presents indicators that are representative of women's social status, including measures of education, age at marriage and first birth, employment, decision making and domestic violence. It also includes the Gender Empowerment Measure that captures gender inequality along three dimensions: political participation and decision-making power, economic participation and decision-making power, and power over economic resources.



Currently married women who have 10 or more years of schooling¹⁸ **18%**



32.5% Women aged 20-24 years who were married before the age of 18¹⁹

21.4 Average age at marriage¹⁹

Gender Empowerment Measure^{D,20}

0.4

0.5

National Average²⁰



Female workforce participation rate²² **22.5%**

Currently married women who make decisions about²³:



16.5% Own healthcare



5.9% Major household purchase



14% Purchases for daily household needs



9.1% Visits to her family/friends/relatives



42.1% Women who have experienced any form of physical/sexual/emotional violence²³

43.9% Ever married women who justify hitting/wife-beating (for either of the reasons mentioned)²³

^D The Gender Empowerment Measure is a weighted average index based on indicators that are classified into three dimensions: a. political participation and decision-making power b. economic participation and decision-making power and c. power over economic resources. The index ranges from a minimum of 0 to a maximum of 1, with a higher score indicating greater empowerment of women. (More information available at <http://wcd.nic.in/publication/GDIGEReport/Part3.pdf>.)

¹⁸ Source : DLHS-3, 2007-08

¹⁹ Source : RSoC, 2014

²⁰ Source : MoWCD, 2006

²² Source : Women and Men in India, 16th Issue MoSPI, 2014

²³ Source : NFHS-3, 2006

B. WATER AND SANITATION

Poor hygiene and sanitation, by directly increasing exposure and susceptibility to infections, are associated with undernutrition among children. This section covers key indicators on access to safe drinking water and availability of sanitation facilities at the state level. It also includes the expenditure on toilet construction under the Total Sanitation Campaign.



87.2%

Households with access to improved sources of drinking water^{E, 24}

42.4%

Households using improved sanitation facility^{F, 24}



37.5%

Households practicing open defecation²⁴

42 M

Expenditure on toilets under Total Sanitation Campaign (TSC)^{G, 25}



1,065 M

National Average²⁵

C. AGRICULTURE AND FOOD SECURITY

Agriculture productivity and food security can affect household access to foods necessary for a healthy diet. Thus, this section presents indicators related to agricultural growth and food consumption patterns in the state, indicating the level of food security in the state relative to the national situation.



2%

Growth rate of agriculture from 2007-2012²⁶



1.8%

Share in India's total foodgrain production²⁷



Mean Calorie intake per person per day (in Kcal)²⁸

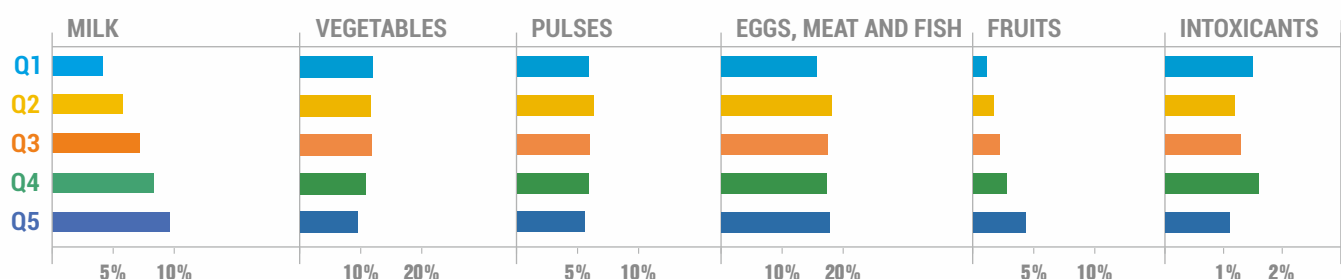
RURAL

2170 **2233**
ASSAM INDIA AVG

URBAN

2110 **2206**
ASSAM INDIA AVG

Expenditure on food items by income quintiles²⁸



^E Improved sources of drinking water include: piped water into dwelling, piped water to yard/plot, public tap or standpipe, tubewell or borehole, protected dug well, protected spring, and rainwater (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>).

^F Improved sanitation means households using improved toilets that include: flush toilet, piped sewer system, septic tank, flush/pour flush to pit latrine, ventilated improved pit latrine, pit latrine with slab, composting toilet, special case (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>); excludes those households who are using improved toilets but sharing toilet facilities with other households.

^G Besides toilet construction subsidies, this expenditure also includes funding other activities such as solid and liquid waste management, IEC activities for sustainable demand generation for sanitation facilities, assistance to production centers of sanitary materials and rural sanitary marts, provision of construction of community sanitary complexes, provision of sanitation facilities in govt. schools and Anganwadis in govt. buildings etc.

²⁴ Source : RSoC, 2014

²⁵ Source : Indiastat, Rajya Sabha Unstarred Question No. 2950, dated on 30.08.2011, 2011-12

²⁶ Source : Indiastat, compiled by datanet from Rajyasabha & Lok Sabha unstarred questions no. 3039, 4535. 2007-12

²⁷ Source : Indiastat, Ministry of Agriculture, Government of India 2011-2012

²⁸ Source : NSSO, 68th round-Nutritional Intake in India, 2011-12

V. STATUS OF NUTRITION-RELEVANT INTERVENTIONS

A. NUTRITION-SPECIFIC INTERVENTIONS

The financial resources allocated to, and spent on direct nutrition-specific interventions can determine the scale, coverage and quality of interventions to reach vulnerable target populations. These services, in India, are delivered both by the Integrated Child Development Scheme (ICDS) and the National Health Mission (NHM). This section includes data on the coverage of interventions delivered by these two key centrally-sponsored schemes that directly impact maternal and child nutrition and health. We also include here information on the human resources and service availability of these schemes and expenditures.

A.1. COVERAGE OF ICDS AND NHM:

The Integrated Child Development Services (ICDS) aims to improve the nutrition and health status of children under-six through a package of services (supplementary nutrition, immunization, health check-up, referral services, etc.) delivered through frontline workers at the Anganwadi Centres (AWCs). This section provides information on expenditure on ICDS and coverage of its supplementary nutrition programme (SNP). This section also covers critical services provided by the health system, including provision of care for pregnant women and child immunization. Immunization plays a crucial role in complementing actions to improve nutrition. The link between undernutrition and infectious diseases is cyclical, poor nutrition increases vulnerability to infections, which in turn worsen nutrition status. Data on immunization among children are presented by residence. Here, full immunization refers to children covered with BCG, measles and 3 doses each of DPT and polio.

Beneficiaries who availed supplementary food under ICDS²⁹

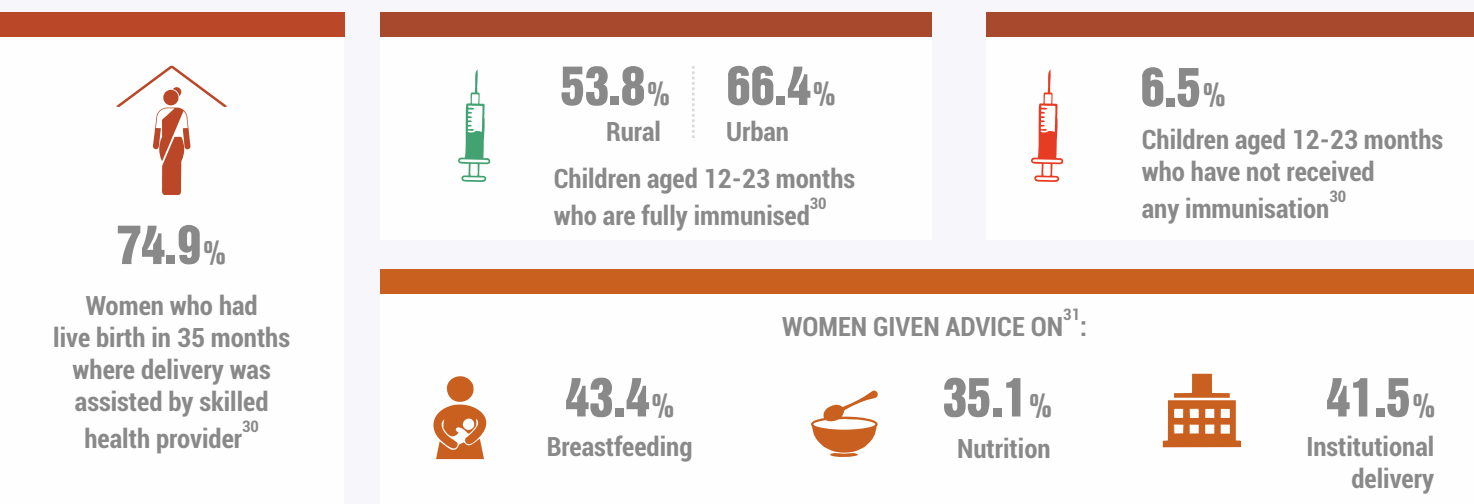
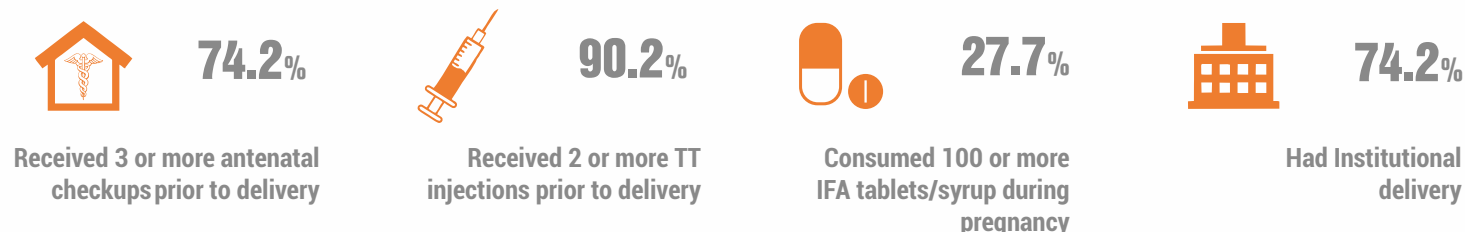
Children 6-35 months	71.2%
Children 36-71 months	72.9%
Pregnant women	29.8%
Lactating mothers	41.4%

Beneficiaries who received supplementary food for at least 21 days in the month prior to the survey

Children aged 6-35 months	0%
Children aged 36-71 months	4.7%
Pregnant women	1.9%
Lactating women	0%

²⁹ Source : RSoC, 2014

SERVICES PROVIDED TO WOMEN WHO HAD A LIVE BIRTH IN LAST 35 MONTHS³⁰



A.2. PERSONNEL CAPACITY OF ICDS AND NRHM:

This section features data on availability of healthcare personnel and services available to women of reproductive age (antenatal care, tetanus toxoid coverage, iron-folic acid supplementation coverage, institutional delivery and counseling). Household and individual access to health services can directly impact children's nutrition and welfare during the crucial first 1,000 days of life.

Availability of Anganwadi Centres and Workers (AWCs and AWWs) ^{H, 30}	Value
Pending or vacant Anganwadi workers to sanctioned number of workers ^{30a}	6.5%
AWWs living in the AWC village/ward	85.9%
AWWs having 10 or more years of schooling	92.2%
Median age of AWWs	35 years
AWCs serving to population more than the stipulated norm	17.6%

Growth Monitoring ³⁰	Value
AWCs having functional baby weighing scale	68.7%
AWCs having functional adult weighing scale	6.3%
Available WHO growth chart at AWCs	88.3%

^H Number of AWCs surveyed for Assam as per RSoC 2014 is 151.

³⁰ Source : RSoC, 2014

^{30a} Source : MoWCD, 2012

³¹ Source : DLHS 3, 2007-08

Training and Comprehensive Knowledge ³²	Value
AWWs having correct knowledge of intake of food by pregnant women	84.1%
AWWs having correct knowledge of normal birth weight of children	74.5%
AWWs having correct knowledge of initiation of breastfeeding within one hour	96%
AWWs having correct knowledge of exclusive breastfeeding for the first six months	78%
AWWs having correct knowledge of appropriate age of child for complementary feeding	72.6%

Health Service Delivery Personnel	Value
ASHAs selected ³³	98%
Current density of ASHA as per Census 2011 rural population ³³	1 per 918 persons
Pending or vacant ANM positions sub centres & PHCs ³⁴	NA

A.3. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SPECIFIC INTERVENTIONS

Expenditure on Schemes (in million dollars)	In million USD	National Average
ICDS (ICDS general + SNP + training) (women and children) ³⁵	150	75
NRHM expenditure (Central Government) ³⁶	143.2	68.8
NRHM expenditure (State Government) ³⁶	54	9.3

B. NUTRITION-SENSITIVE INTERVENTIONS

This section includes information on expenditure and coverage of key centrally-sponsored schemes that indirectly impact maternal and child nutrition. These are: the Mid Day Meal Scheme (MDMS), Public Distribution System (PDS), and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

B.1. COVERAGE OF SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS

Coverage of Schemes	Value
MDMS (base: eligible children*) ³⁷	42.1%
PDS (base: rural and urban households reporting consumption) ³⁸	50.3%
MGNREGA (base: rural persons 18 years and above registered in MGNREG job card and demanded work during last 365 days) ³⁹	73.7%

* All children studying in primary & upper primary classes in schools supported under Sarva Shiksha Abhiyan and NCLP (National Child Labour Project) run by Ministry of Labour.

B.2. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS:

Expenditure on Schemes (in million dollars)	In million USD	National Average
MDMS ⁴⁰	76	47
PDS ⁴¹	714.1	475.3
MGNREGA ⁴²	109	214

³² Source : RSoC, 2014

³³ Source : NRHM, 2013

³⁴ Source : MoHFW, 2013

³⁵ Source : Lok Sabha Unstarred Question # 846 dated 27.02.2015, 2012-13

³⁶ Source : Lok Sabha Annexured Unstarred Question # 409 dated 6.12.2013, 2012-13

³⁷ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/lsq15/15/as216.htm 2011-12

³⁸ Source : Report No. 558, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

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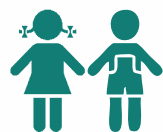
⁴⁰ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014, 2012-13

⁴¹ Source : Food Corporation of India 2013, 2012-13

⁴² Source : Lok Sabha Annexured Unstarred Question # 3835 dated 19.03.2015, 2012-13

FAST FACTS ON NUTRITION AND ITS DETERMINANTS IN BIHAR

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CHILDREN UNDER 5 YEARS

49.4%
Stunted¹
13.1%
Wasted¹

World Health Assembly Nutrition Targets


70.8%

 Infants 0-5
months old who are
exclusively breastfed¹

15%

 Children under
3 years who have low
birth weight (<2.5 kgs)²

67.4%

 Women
15-49 years old
with anemia¹

Immediate Determinants


45.7%

 Infants 6-8 months old who receive solid, semi-solid or soft foods²
16.1%

 Infants & young children 6-23 months old who achieve minimal diet diversity in
complementary feeding²

78%

 Children 6-59 months
old with anemia¹

4.5%

 Children 6-59 months old who
had diarrhea in 15 days prior
to survey²

Immediate Determinants


0%

 Children 6-35 months old
who received supplementary
food under ICDS for 21 days
in the month prior to survey²

60.4%

 Children 12-23
months old who are
fully immunized²

32.8%

 Mothers of
children under 36 months
old who received three
or more antenatal checkups²

Underlying Determinants


10.9%

 Currently
married women with 10
or more years of schooling¹

47.1%

 Women aged 20-24
years who were
married before the age of 18²

45.2%

 Adolescent girls
15-18 years old
with low BMI (<18.5)²

Underlying Determinants


74.8%

 Households
practicing
open defecation²

33.7%

 Population
below
state-specific poverty line³

 Does state have a
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NO
¹ Source : RSoC, 2014

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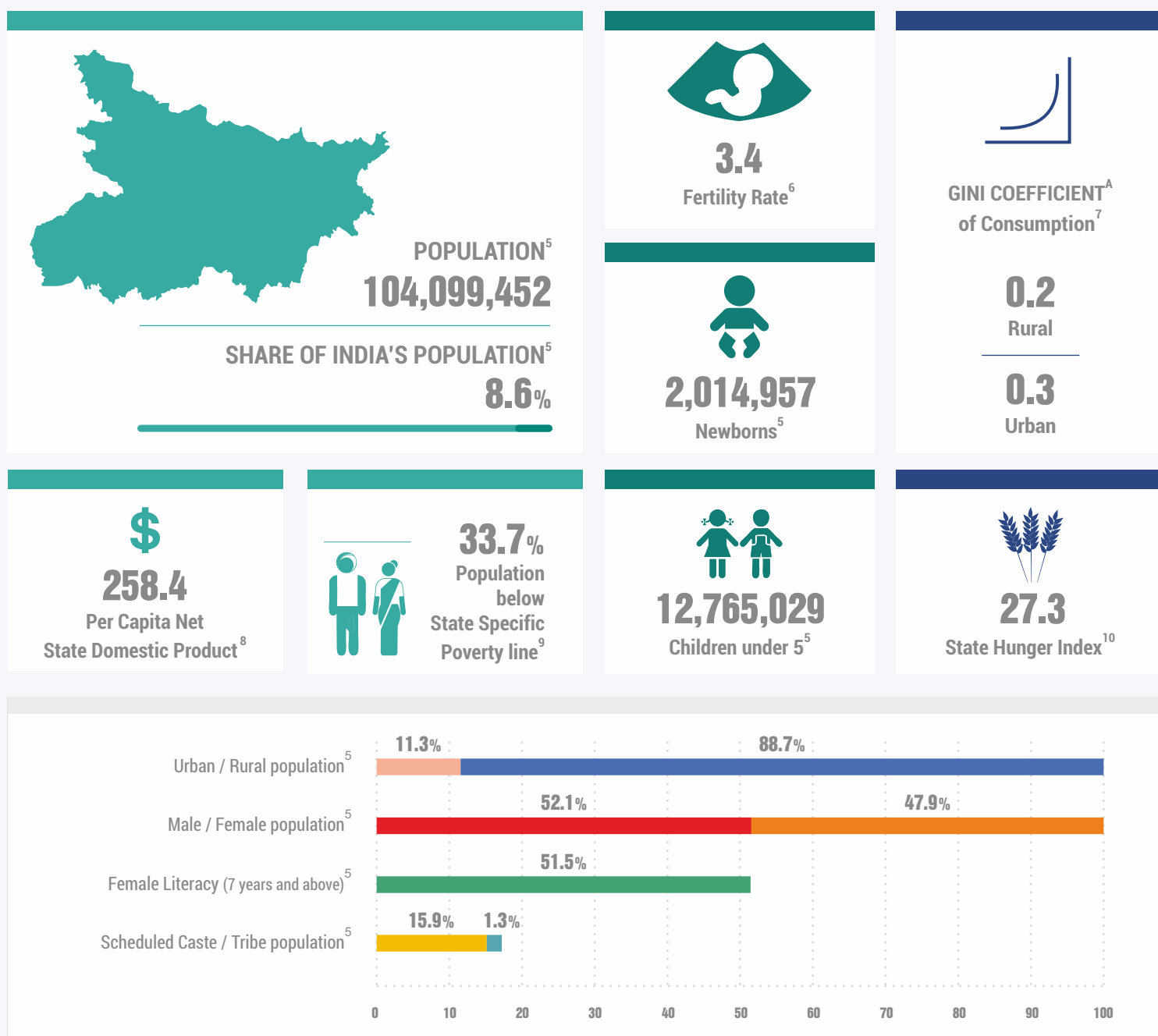
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I. CONTEXT

A. DEMOGRAPHIC CONTEXT

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⁷ Source : Planning Commission Estimates: NSSO 66th round-Employment and Unemployment Survey, 2009-10

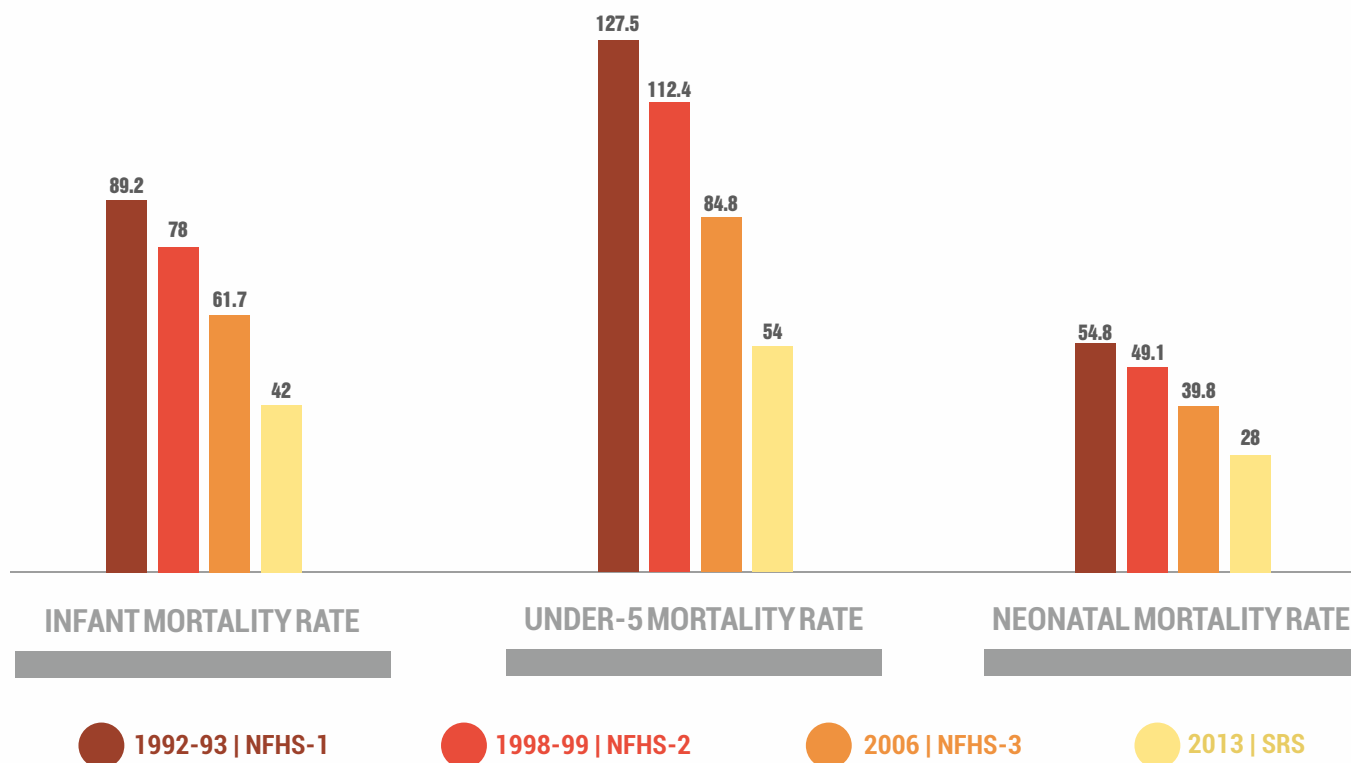
⁸ Source : Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14; http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82

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¹⁰ Source : IFPRI, India State Hunger Index, 2009

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This section presents data on nutrition outcome indicators (stunting, wasting, and underweight) and anemia prevalence. Anthropometric measures for children under 5 (stunting, wasting, and underweight) are presented over time periods, by age groups and by background characteristics. This data aims to convey the prevalence and severity of undernutrition in the state.

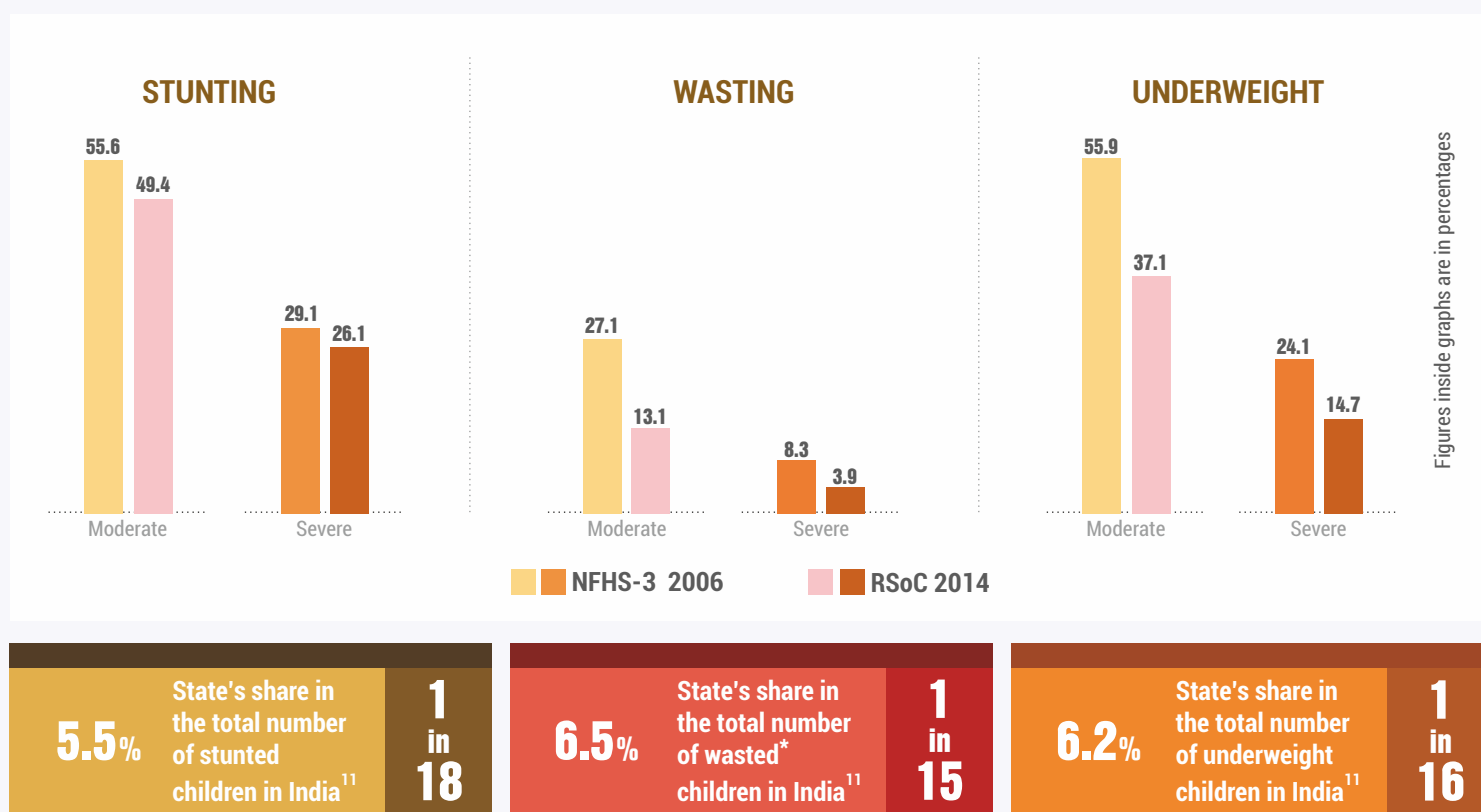
A. CHILD UNDERNUTRITION, BY TIME PERIOD

ANTHROPOMETRIC MEASURES

Stunting is inadequate height for age, which is indicative of chronic or cumulative nutritional deprivation in early childhood. A stunted child's height-for-age is below -2 standard deviations from the median height-for-age (termed HAZ) of the WHO Child Growth Standards, while a severely stunted child is below -3 standard deviations.

Wasting is inadequate weight for height, which points to acute or short-term undernutrition. A wasted child's weight-for-height (WHZ) is below -2 standard deviations from the WHO Child Growth Standards; a severely wasted child is below -3 standard deviations. (Another way to determine severe wasting or severe acute malnutrition is through a measurement of a child's mid-upper arm circumference (MUAC).

Underweight is inadequate weight for age, a composite indicator that encompasses stunting and wasting. An underweight child's weight-for-age (WAZ) is below -2 standard deviations from the WHO Child Growth Standards; again, a severely underweight child is below -3 standard deviations.

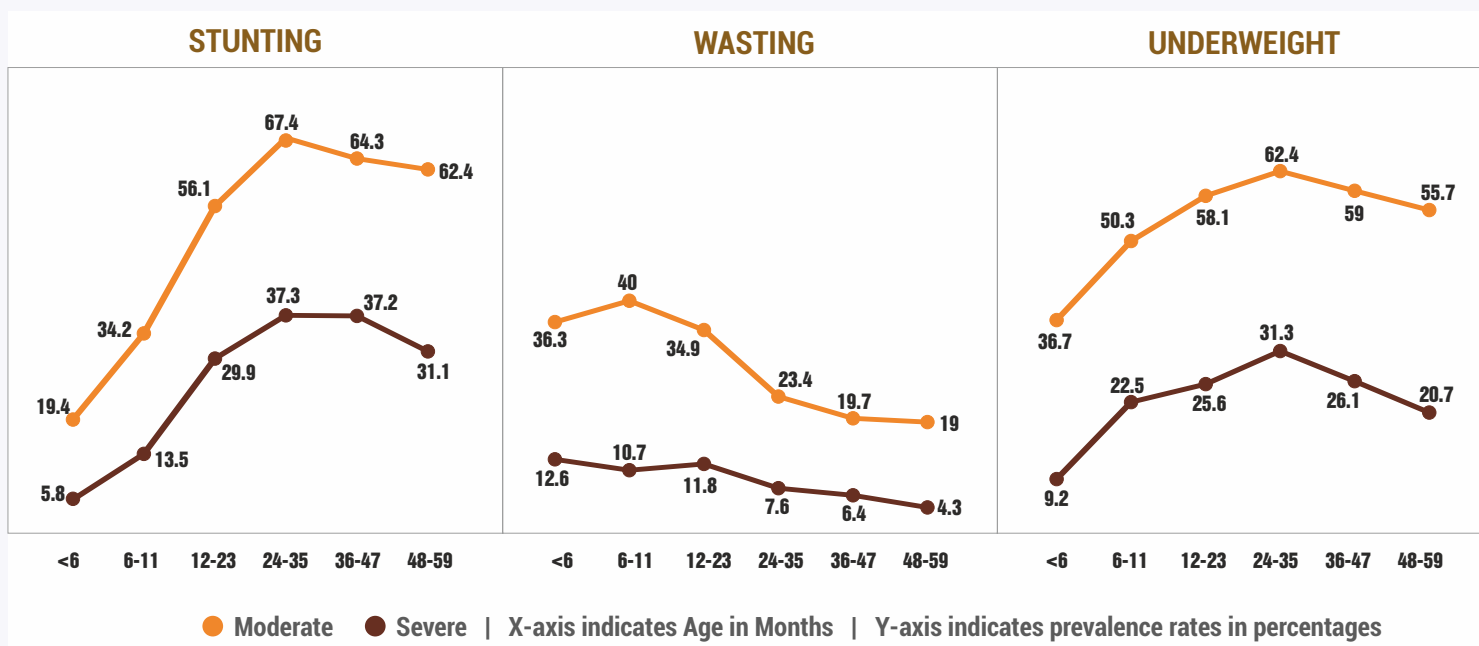


*Wasting is subject to seasonal variations either in food supply or disease prevalence and hence may not be comparable across groups of children measured at different times of the year within a survey round as well as between different survey rounds.

¹¹ Source : NFHS-3, 2006

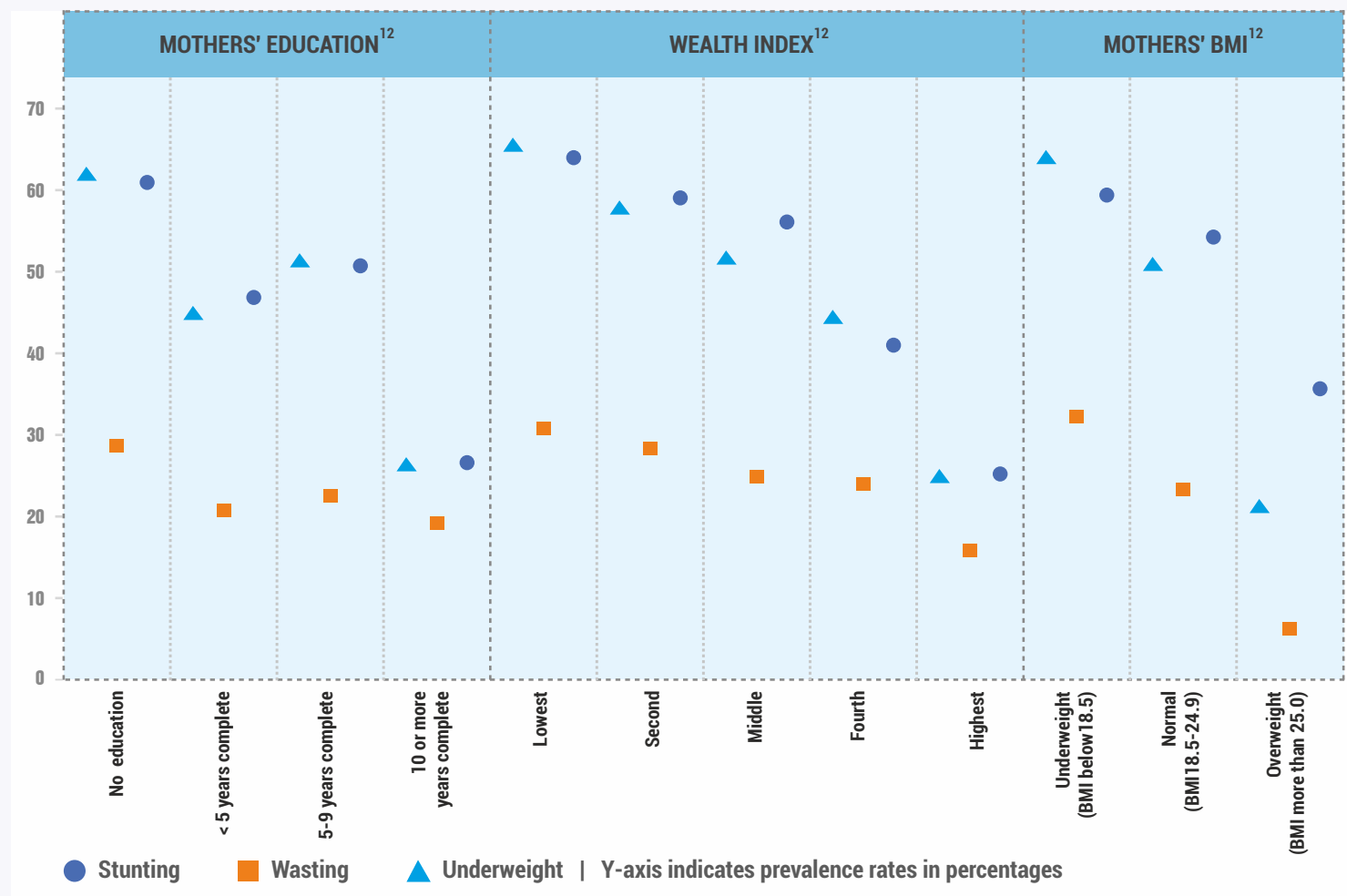
B. CHILD UNDERNUTRITION, BY AGE GROUPS¹²

Percentage of moderate (below -2 SD from the WHO growth standards) and severe (below -3 SD) stunting, wasting and underweight are available for 6 age groups among children under 5.



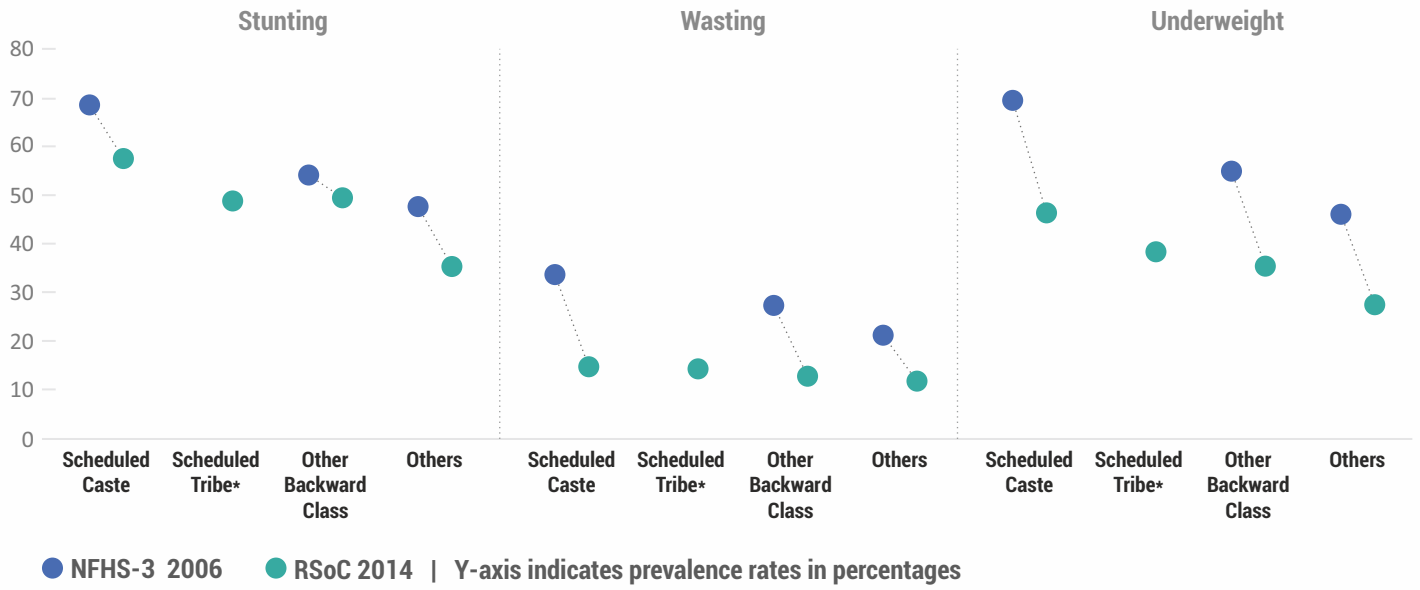
C. PREVALENCE OF CHILD UNDERNUTRITION, BY BACKGROUND CHARACTERISTICS

In this section, child undernutrition outcomes are presented, along with key socioeconomic drivers that are known to be associated with child nutrition, such as caste, residence, mother's health and education, and household income.



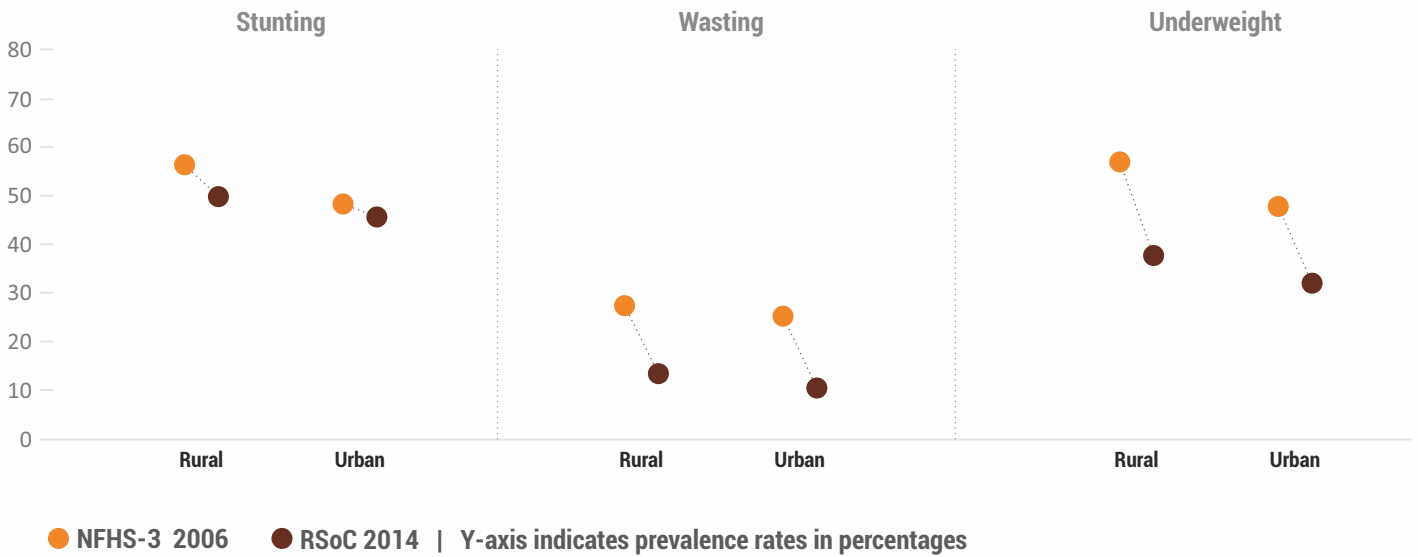
¹² Source : NFHS-3, 2006

CASTE



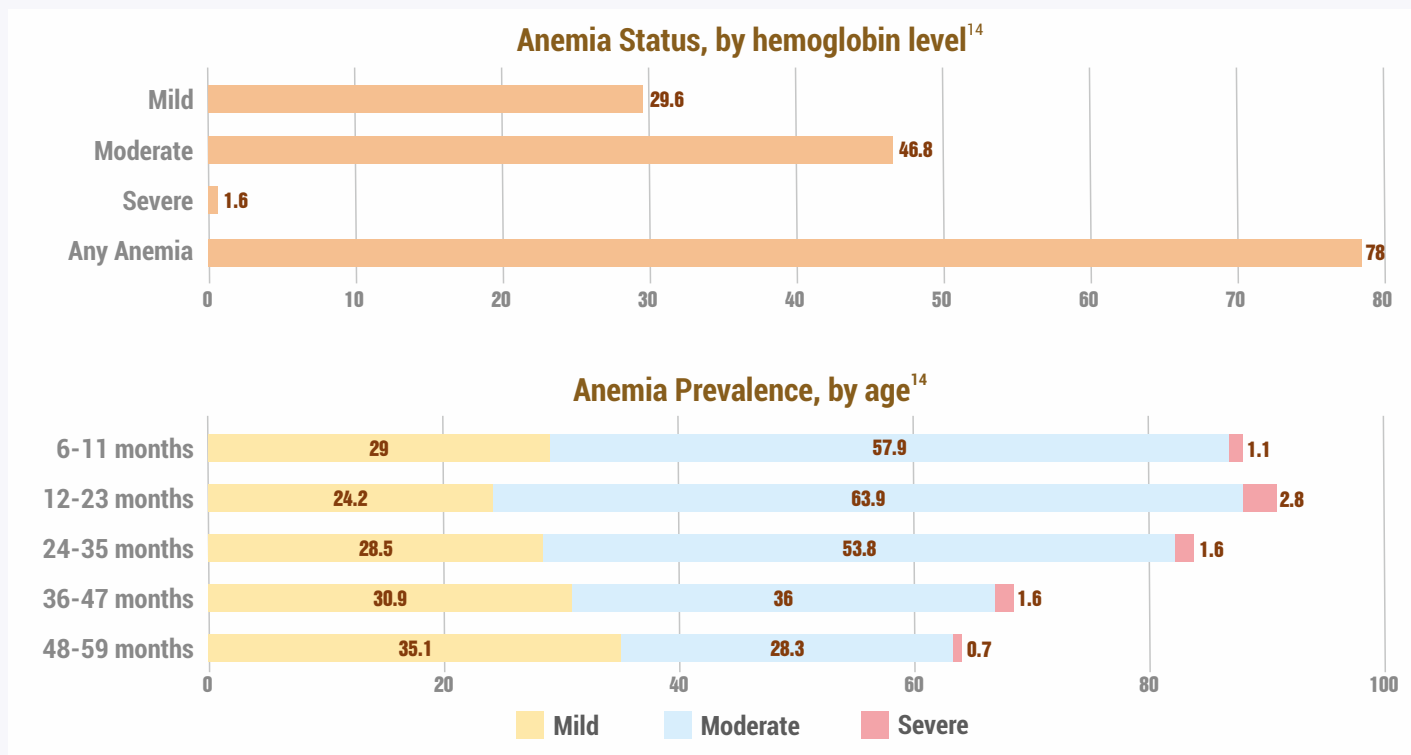
*Data for Scheduled Tribes is not available in NFHS-3 for this state

RESIDENCE



D. ANEMIA PREVALENCE

Anemia can impair physical and cognitive development among children and create long term impacts on productivity and wellbeing. This section features data on anemia prevalence by severity and age groups for children under 5.



¹⁴ Source : NFHS-3, 2006

III. IMMEDIATE DETERMINANTS

A. INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES¹⁵

This section presents indicators for assessing IYCF practices as recommended by the WHO and revised in 2008. Following optimal IYCF practices during the first 1,000 days is crucial for early child survival and growth as well as long-term health and wellbeing.

Children aged 0-23 months breastfed immediately/within an hour of birth		35.5%
	Children aged 0-5 months who were exclusively breastfed	70.8%
	Children aged 6-8 months who were fed complementary foods	45.7%
	For breastfed children (6-23 months)- A. Fed minimum number of times. Note : At least twice a day for breastfed infants 6-8 months old and at least three times a day for breastfed children 9-23 months old B. Had minimum dietary diversity Note : Minimum dietary diversity refers to four or more food groups^B fed to children aged 6-23 months	45.7% 16.1%

B. CHILD HEALTH¹⁵

Prevalence of childhood illnesses (in children aged 0-59 months)

Had diarrhea in 15 days prior to survey	4.5%
Had fever in 15 days prior to survey	16.3%
Had symptoms of Acute Respiratory Infection (ARI) in 15 days prior to survey	12%

^B The 7 food groups include the following: i. grains, roots and tubers ii. legumes and nuts iii. dairy products (milk, yoghurt, cheese) iv. Flesh foods (meat, fish, poultry, and liver/organ meats) v. eggs vi. Vitamin-A rich fruits and vegetables vii. other fruits and vegetables.

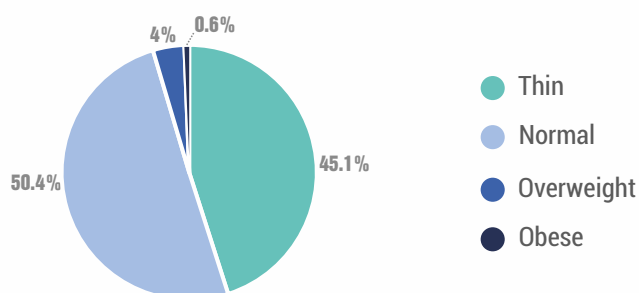
¹⁵ Source : RSoC, 2014

C. NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

Maternal health and nutrition, as well as adolescent nutrition, have important consequences for intergenerational transmission of undernutrition. Data on Body Mass Index (BMI), anemia prevalence and height among women of reproductive age are presented in this section, as are data on adolescent BMI and anemia.

C.1. WOMEN 15-49 YEARS OLD¹⁶

BMI^c levels of women aged 15-49 years



^cBody Mass Index (BMI) is defined as the weight in kilograms by the square of the height in metres (kg/m²). It is a simple index of weight-for-height which is commonly used to classify underweight, overweight and obesity in adults. Range: BMI < 18.5 = total thin, BMI 18.5-24.9 = normal, BMI 25.0-29.9 = Overweight, BMI > 30.0 = Obese [per WHO Standards]



67.4%

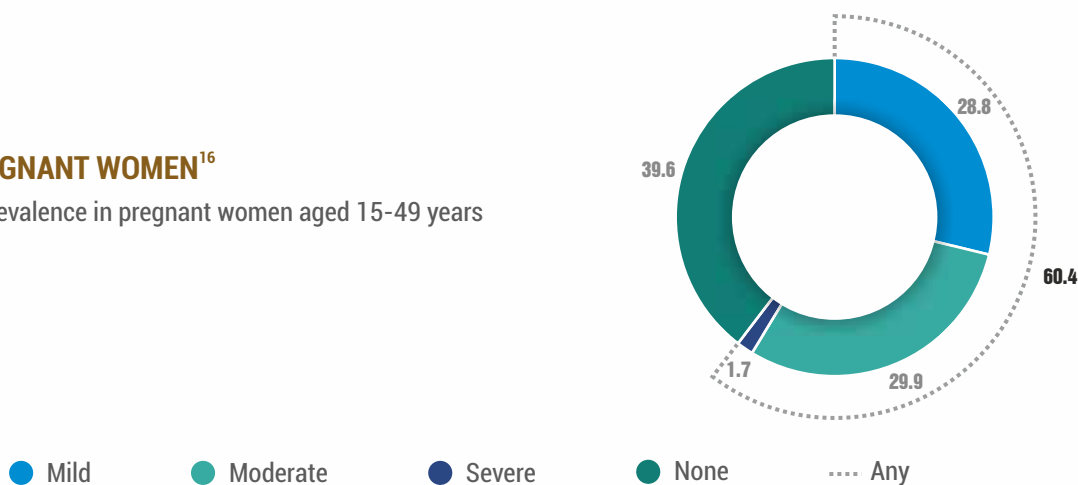
Women aged 15-49 years are anemic

1%

Women aged 15-49 years are severely anemic

C.2. PREGNANT WOMEN¹⁶

Anemia prevalence in pregnant women aged 15-49 years



● Mild

● Moderate

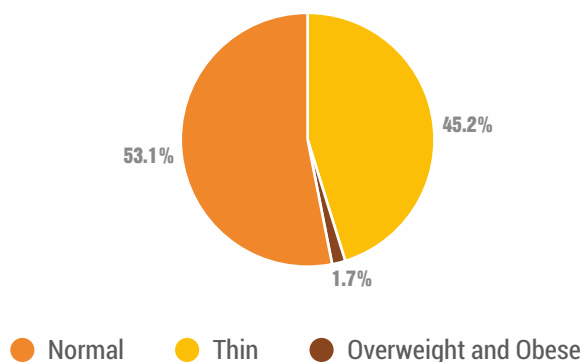
● Severe

● None

--- Any

C.3. ADOLESCENT GIRLS

BMI levels of adolescent girls aged 15-18 years¹⁷



66.4%

Adolescent girls aged 15-19 years are anemic¹⁶

1.1%

Adolescent girls aged 15-19 years are severely anemic¹⁶

¹⁶ Source : NFHS-3, 2006

¹⁷ Source : RSoC, 2014

IV. UNDERLYING DETERMINANTS

A. SOCIAL STATUS OF WOMEN

Women's status is recognized to contribute in significant ways to improving nutrition. This section presents indicators that are representative of women's social status, including measures of education, age at marriage and first birth, employment, decision making and domestic violence. It also includes the Gender Empowerment Measure that captures gender inequality along three dimensions: political participation and decision-making power, economic participation and decision-making power, and power over economic resources.



Currently married women who have 10 or more years of schooling¹⁸ **10.9%**



47.1% Women aged 20-24 years who were married before the age of 18¹⁹

18.8 Average age at marriage¹⁹

Gender Empowerment Measure^{D,20}

0.4

0.5

National Average²⁰



Female workforce participation rate²² **19.1%**

Currently married women who make decisions about²³:



22.5% Own healthcare



9.8% Major household purchase



30.4% Purchases for daily household needs



9.3% Visits to her family/friends/relatives



60.8% Women who have experienced any form of physical/sexual/emotional violence²³

54.8% Ever married women who justify hitting/wife-beating (for either of the reasons mentioned)²³

^D The Gender Empowerment Measure is a weighted average index based on indicators that are classified into three dimensions: a. political participation and decision-making power b. economic participation and decision-making power and c. power over economic resources. The index ranges from a minimum of 0 to a maximum of 1, with a higher score indicating greater empowerment of women. (More information available at <http://wcd.nic.in/publication/GDIGEReport/Part3.pdf>.)

¹⁸ Source : DLHS-3, 2007-08

¹⁹ Source : RSoC, 2014

²⁰ Source : MoWCD, 2006

²² Source : Women and Men in India, 16th Issue MoSPI, 2014

²³ Source : NFHS-3, 2006

B. WATER AND SANITATION

Poor hygiene and sanitation, by directly increasing exposure and susceptibility to infections, are associated with undernutrition among children. This section covers key indicators on access to safe drinking water and availability of sanitation facilities at the state level. It also includes the expenditure on toilet construction under the Total Sanitation Campaign.



97.7%

Households with access to improved sources of drinking water^{E, 24}

18.3%

Households using improved sanitation facility^{F, 24}



74.8%

Households practicing open defecation²⁴

75.6 M

Expenditure on toilets under Total Sanitation Campaign (TSC)^{G, 25}



1,065 M

National Average²⁵

C. AGRICULTURE AND FOOD SECURITY

Agriculture productivity and food security can affect household access to foods necessary for a healthy diet. Thus, this section presents indicators related to agricultural growth and food consumption patterns in the state, indicating the level of food security in the state relative to the national situation.



7%

Growth rate of agriculture from 2007-2012²⁶



5.4%

Share in India's total foodgrain production²⁷



Mean Calorie intake per person per day (in Kcal)²⁸

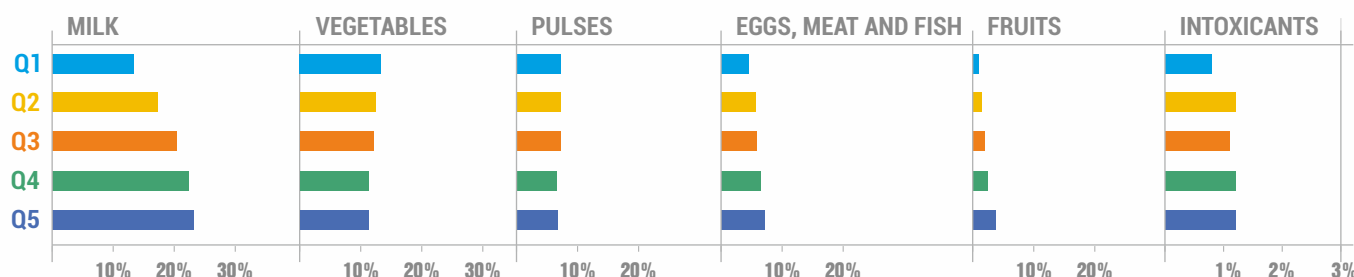
RURAL

2242 **2233**
BIHAR INDIA AVG

URBAN

2170 **2206**
BIHAR INDIA AVG

Expenditure on food items by income quintiles²⁸



^E Improved sources of drinking water include: piped water into dwelling, piped water to yard/plot, public tap or standpipe, tubewell or borehole, protected dug well, protected spring, and rainwater (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>).

^F Improved sanitation means households using improved toilets that include: flush toilet, piped sewer system, septic tank, flush/pour flush to pit latrine, ventilated improved pit latrine, pit latrine with slab, composting toilet, special case (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>); excludes those households who are using improved toilets but sharing toilet facilities with other households.

^G Besides toilet construction subsidies, this expenditure also includes funding other activities such as solid and liquid waste management, IEC activities for sustainable demand generation for sanitation facilities, assistance to production centers of sanitary materials and rural sanitary marts, provision of construction of community sanitary complexes, provision of sanitation facilities in govt. schools and Anganwadis in govt. buildings etc.

²⁴ Source : RSoC, 2014

²⁵ Source : Indiastat, Rajya Sabha Unstarred Question No. 2950, dated on 30.08.2011, 2011-12

²⁶ Source : Indiastat, compiled by datanet from Rajyasabha & Loksabha unstarred questions no. 3039, 4535. 2007-12

²⁷ Source : Indiastat, Ministry of Agriculture, Government of India 2011-2012

²⁸ Source : NSSO, 68th round-Nutritional Intake in India, 2011-12

V. STATUS OF NUTRITION-RELEVANT INTERVENTIONS

A. NUTRITION-SPECIFIC INTERVENTIONS

The financial resources allocated to, and spent on direct nutrition-specific interventions can determine the scale, coverage and quality of interventions to reach vulnerable target populations. These services, in India, are delivered both by the Integrated Child Development Scheme (ICDS) and the National Health Mission (NHM). This section includes data on the coverage of interventions delivered by these two key centrally-sponsored schemes that directly impact maternal and child nutrition and health. We also include here information on the human resources and service availability of these schemes and expenditures.

A.1. COVERAGE OF ICDS AND NHM:

The Integrated Child Development Services (ICDS) aims to improve the nutrition and health status of children under-six through a package of services (supplementary nutrition, immunization, health check-up, referral services, etc.) delivered through frontline workers at the Anganwadi Centres (AWCs). This section provides information on expenditure on ICDS and coverage of its supplementary nutrition programme (SNP). This section also covers critical services provided by the health system, including provision of care for pregnant women and child immunization. Immunization plays a crucial role in complementing actions to improve nutrition. The link between undernutrition and infectious diseases is cyclical, poor nutrition increases vulnerability to infections, which in turn worsen nutrition status. Data on immunization among children are presented by residence. Here, full immunization refers to children covered with BCG, measles and 3 doses each of DPT and polio.

Beneficiaries who availed supplementary food under ICDS²⁹

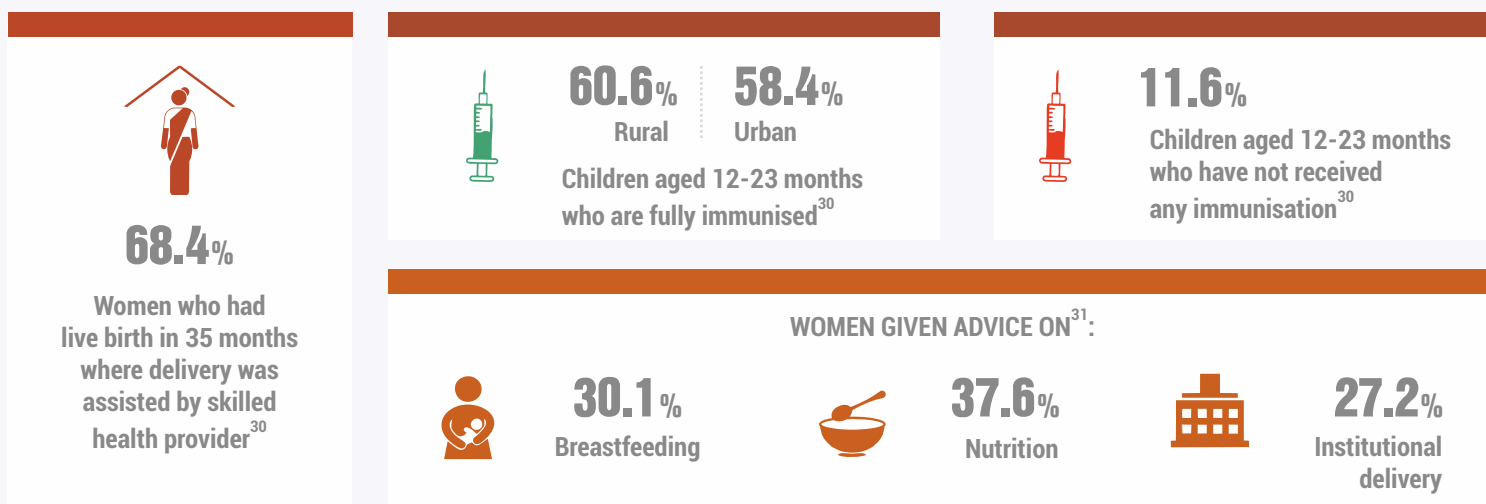
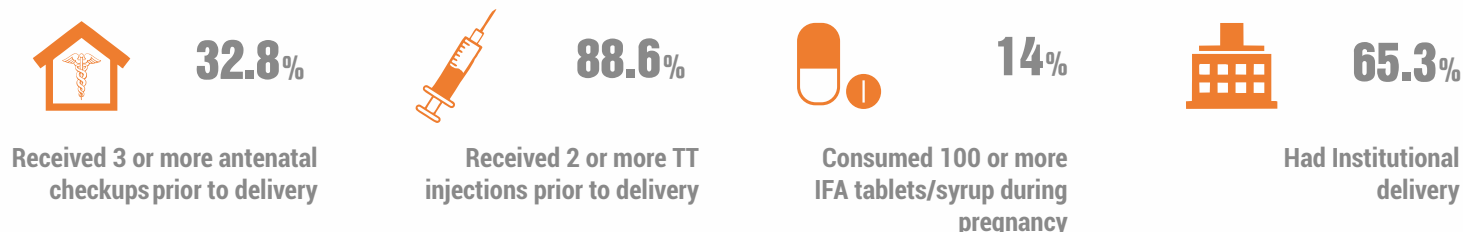
Children 6-35 months	36.6%
Children 36-71 months	42.9%
Pregnant women	21.7%
Lactating mothers	39.3%

Beneficiaries who received supplementary food for at least 21 days in the month prior to the survey

Children aged 6-35 months	0%
Children aged 36-71 months	34.1%
Pregnant women	33.2%
Lactating women	0%

²⁹ Source : RSoC, 2014

SERVICES PROVIDED TO WOMEN WHO HAD A LIVE BIRTH IN LAST 35 MONTHS³⁰



WOMEN GIVEN ADVICE ON³¹:



A.2. PERSONNEL CAPACITY OF ICDS AND NRHM:

This section features data on availability of healthcare personnel and services available to women of reproductive age (antenatal care, tetanus toxoid coverage, iron-folic acid supplementation coverage, institutional delivery and counseling). Household and individual access to health services can directly impact children's nutrition and welfare during the crucial first 1,000 days of life.

Availability of Anganwadi Centres and Workers (AWCs and AWWs) ^{H, 30}	Value
Pending or vacant Anganwadi workers to sanctioned number of workers ^{30a}	11.2%
AWWs living in the AWC village/ward	89.8%
AWWs having 10 or more years of schooling	99.1%
Median age of AWWs	35 years
AWCs serving to population more than the stipulated norm	92.4%

Growth Monitoring ³⁰	Value
AWCs having functional baby weighing scale	56.5%
AWCs having functional adult weighing scale	50.1%
Available WHO growth chart at AWCs	88.2%

^H Number of AWCs surveyed for Bihar as per RSoC 2014 is 292.

³⁰ Source : RSoC, 2014

^{30a} Source : MoWCD, 2012

³¹ Source : DLHS-3, 2007-08

Training and Comprehensive Knowledge ³²	Value
AWWs having correct knowledge of intake of food by pregnant women	92.6%
AWWs having correct knowledge of normal birth weight of children	77.1%
AWWs having correct knowledge of initiation of breastfeeding within one hour	97.6%
AWWs having correct knowledge of exclusive breastfeeding for the first six months	96.6%
AWWs having correct knowledge of appropriate age of child for complementary feeding	55.4%

Health Service Delivery Personnel	Value
ASHAs selected ³³	97%
Current density of ASHA as per Census 2011 rural population ³³	1 per 1,090 persons
Pending or vacant ANM positions sub centres & PHCs ³⁴	0

A.3. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SPECIFIC INTERVENTIONS

Expenditure on Schemes (in million dollars)	In million USD	National Average
ICDS (ICDS general + SNP + training) (women and children) ³⁵	180	75
NRHM expenditure (Central Government) ³⁶	178.1	68.8
NRHM expenditure (State Government) ³⁶	27	9.3

B. NUTRITION-SENSITIVE INTERVENTIONS

This section includes information on expenditure and coverage of key centrally-sponsored schemes that indirectly impact maternal and child nutrition. These are: the Mid Day Meal Scheme (MDMS), Public Distribution System (PDS), and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

B.1. COVERAGE OF SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS

Coverage of Schemes	Value
MDMS (base: eligible children*) ³⁷	41.7%
PDS (base: rural and urban households reporting consumption) ³⁸	44%
MGNREGA (base: rural persons 18 years and above registered in MGNREG job card and demanded work during last 365 days) ³⁹	57.2%

* All children studying in primary & upper primary classes in schools supported under Sarva Shiksha Abhiyan and NCLP (National Child Labour Project) run by Ministry of Labour.

B.2. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS:

Expenditure on Schemes (in million dollars)	In million USD	National Average
MDMS ⁴⁰	140	47
PDS ⁴¹	1252.3	475.3
MGNREGA ⁴²	310	214

³² Source : RSoC, 2014

³³ Source : NRHM, 2013

³⁴ Source : MoHFW, 2013

³⁵ Source : Lok Sabha Unstarred Question # 846 dated 27.02.2015, 2012-13

³⁶ Source : Lok Sabha Annexured Unstarred Question # 409 dated 6.12.2013, 2012-13

³⁷ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/lsq15/15/as216.htm 2011-12

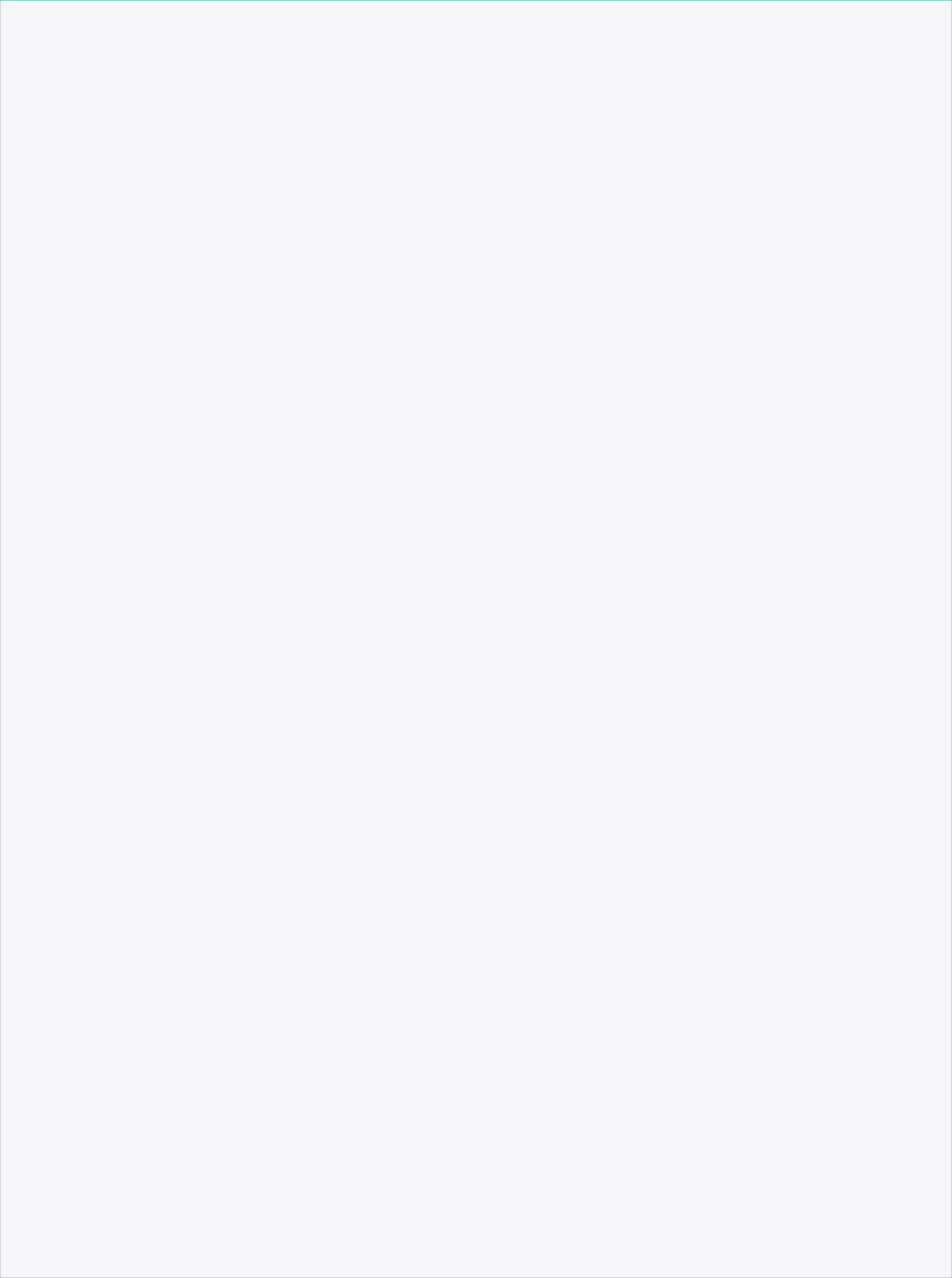
³⁸ Source : Report No. 558, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

³⁹ Source : Report No. 554, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

⁴⁰ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014, 2012-13

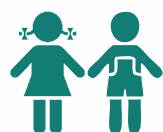
⁴¹ Source : Food Corporation of India 2013, 2012-13

⁴² Source : Lok Sabha Annexured Unstarred Question # 3835 dated 19.03.2015, 2012-13



FAST FACTS ON NUTRITION AND ITS DETERMINANTS IN CHHATTISGARH

World Health Assembly Nutrition Targets



CHILDREN UNDER 5 YEARS

43%
Stunted¹
12.9%
Wasted¹

World Health Assembly Nutrition Targets


82.3%

 Infants 0-5
months old who are
exclusively breastfed¹

16.9%

 Children under
3 years who have low
birth weight (<2.5 kgs)²

57.5%

 Women
15-49 years old
with anemia¹

Immediate Determinants


59.9%

 Infants 6-8 months old who receive solid, semi-solid or soft foods²
8.6%

 Infants & young children 6-23 months old who achieve minimal diet diversity in
complementary feeding²

71.2%

 Children 6-59 months
old with anemia¹

6.8%

 Children 6-59 months old who
had diarrhea in 15 days prior
to survey²

Immediate Determinants


49.7%

 Children 6-35 months old
who received supplementary
food under ICDS for 21 days
in the month prior to survey²

67.2%

 Children 12-23
months old who are
fully immunized²

79.5%

 Mothers of
children under 36 months
old who received three
or more antenatal checkups²

Underlying Determinants


9.1%

 Currently
married women with 10
or more years of schooling¹

26.9%

 Women aged 20-24
years who were
married before the age of 18²

43%

 Adolescent girls
15-18 years old
with low BMI (<18.5)²

Underlying Determinants


69.6%

 Households
practicing
open defecation²

39.9%

 Population
below
state-specific poverty line³

 Does state have a
high-level nutrition mission?

NO
¹ Source : RSoC, 2014

² Source : NFHS-3, 2006

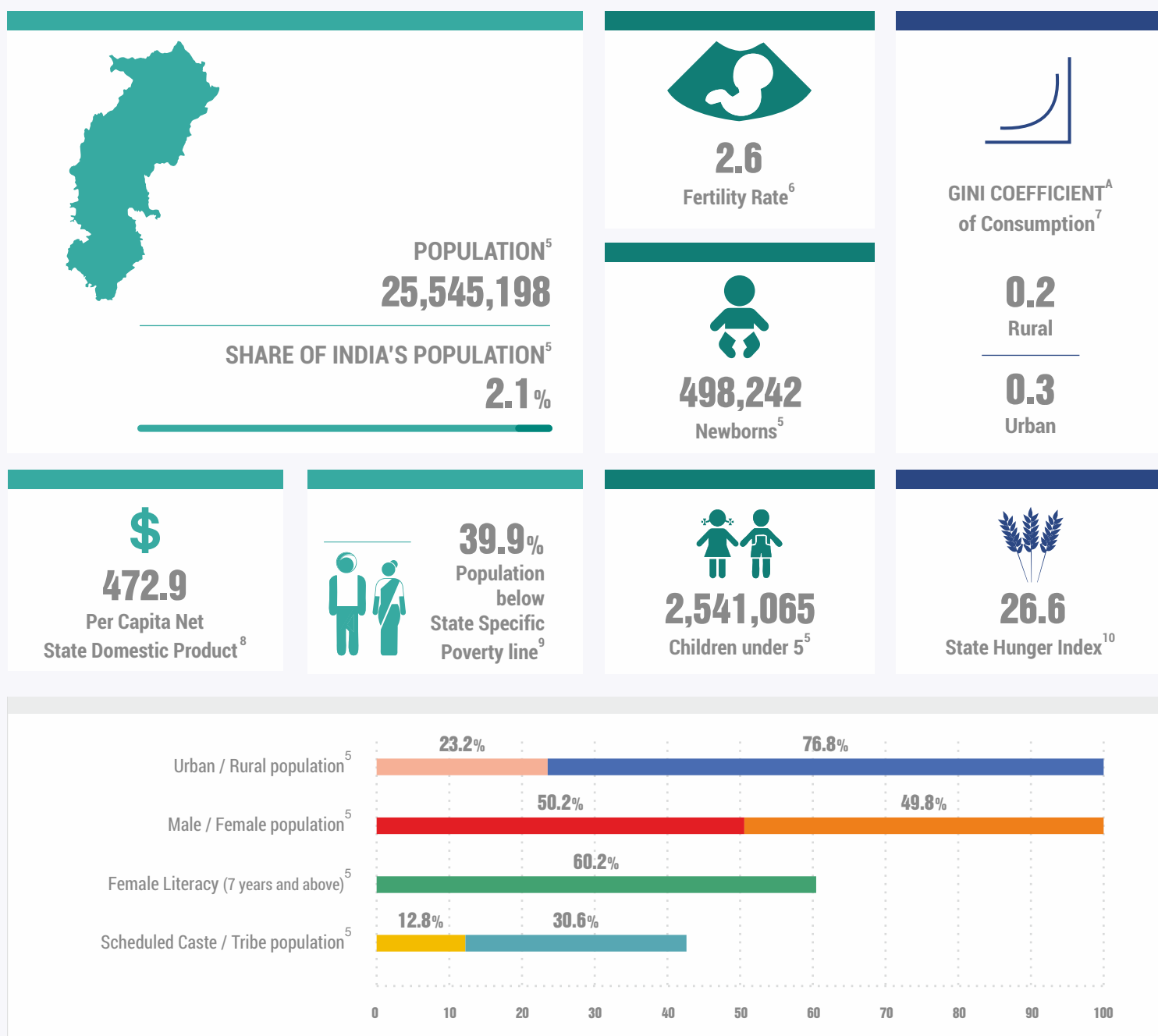
³ Source : DLHS-3, 2007-08

⁴ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Govt. of India

I. CONTEXT

A. DEMOGRAPHIC CONTEXT

This section highlights the demographic composition of the state in terms of male-female, rural-urban, and SC-ST ratios, literacy and fertility rates. In addition, it also includes the size of the population of newborns and children less than five years of age (as of the Census of India, 2011) to illustrate the size of the target population for nutrition-related interventions that need to reach this vulnerable population.



A : Gini coefficient is a measure of inequality of distribution. A Gini coefficient of 0 represents perfect equality, while a value of 100 implies perfect inequality. (See Appendix A for more information)

⁵ Source : Primary Census Abstract, Census, 2011

⁶ Source : SRS, 2013

⁷ Source : Planning Commission Estimates: NSSO 66th round-Employment and Unemployment Survey, 2009-10

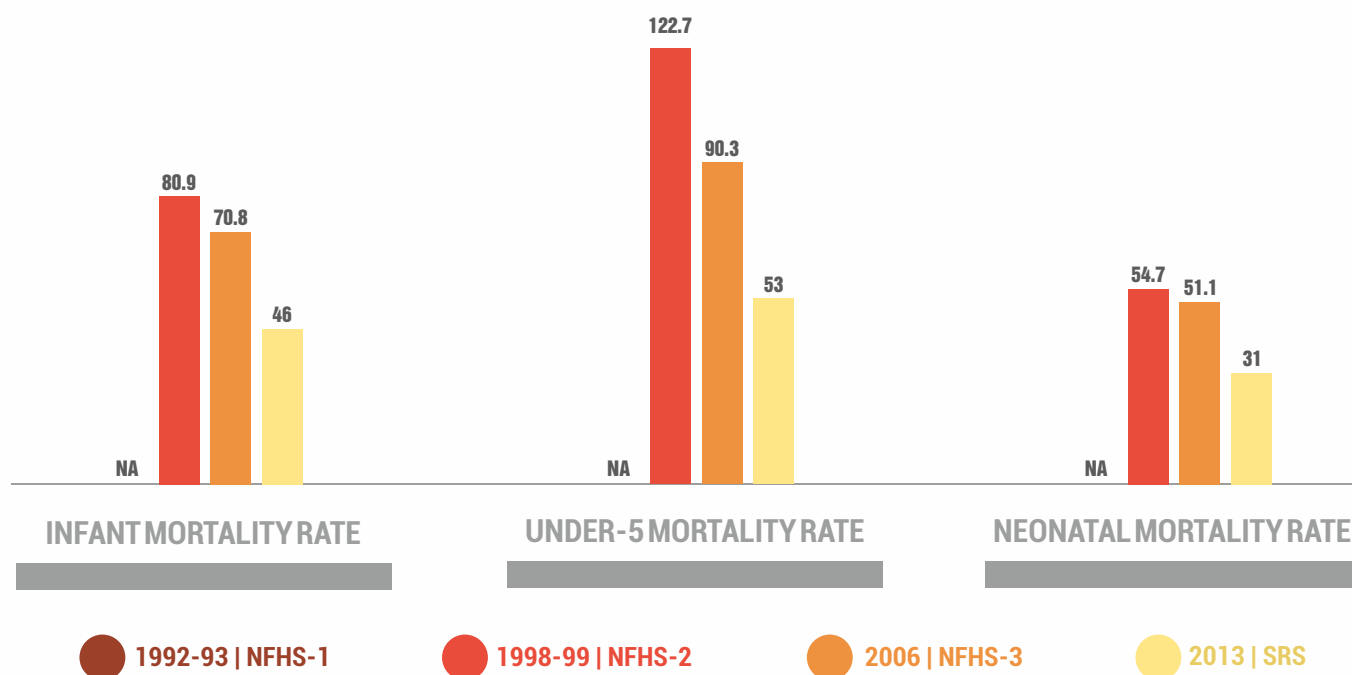
⁸ Source : Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14; http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82

⁹ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Government of India, 2011-12 : http://planningcommission.nic.in/news/pre_pov2307.pdf

¹⁰ Source : IFPRI, India State Hunger Index, 2009

B. CHILD MORTALITY PER THOUSAND LIVE BIRTHS

This section illustrates trends in mortality in neonates, infants and children under 5 years, since 1992. The purpose of this is to highlight the success achieved by individual states in averting deaths of children since the economic growth of the 1990s.



II. NUTRITIONAL STATUS AMONG CHILDREN

This section presents data on nutrition outcome indicators (stunting, wasting, and underweight) and anemia prevalence. Anthropometric measures for children under 5 (stunting, wasting, and underweight) are presented over time periods, by age groups and by background characteristics. This data aims to convey the prevalence and severity of undernutrition in the state.

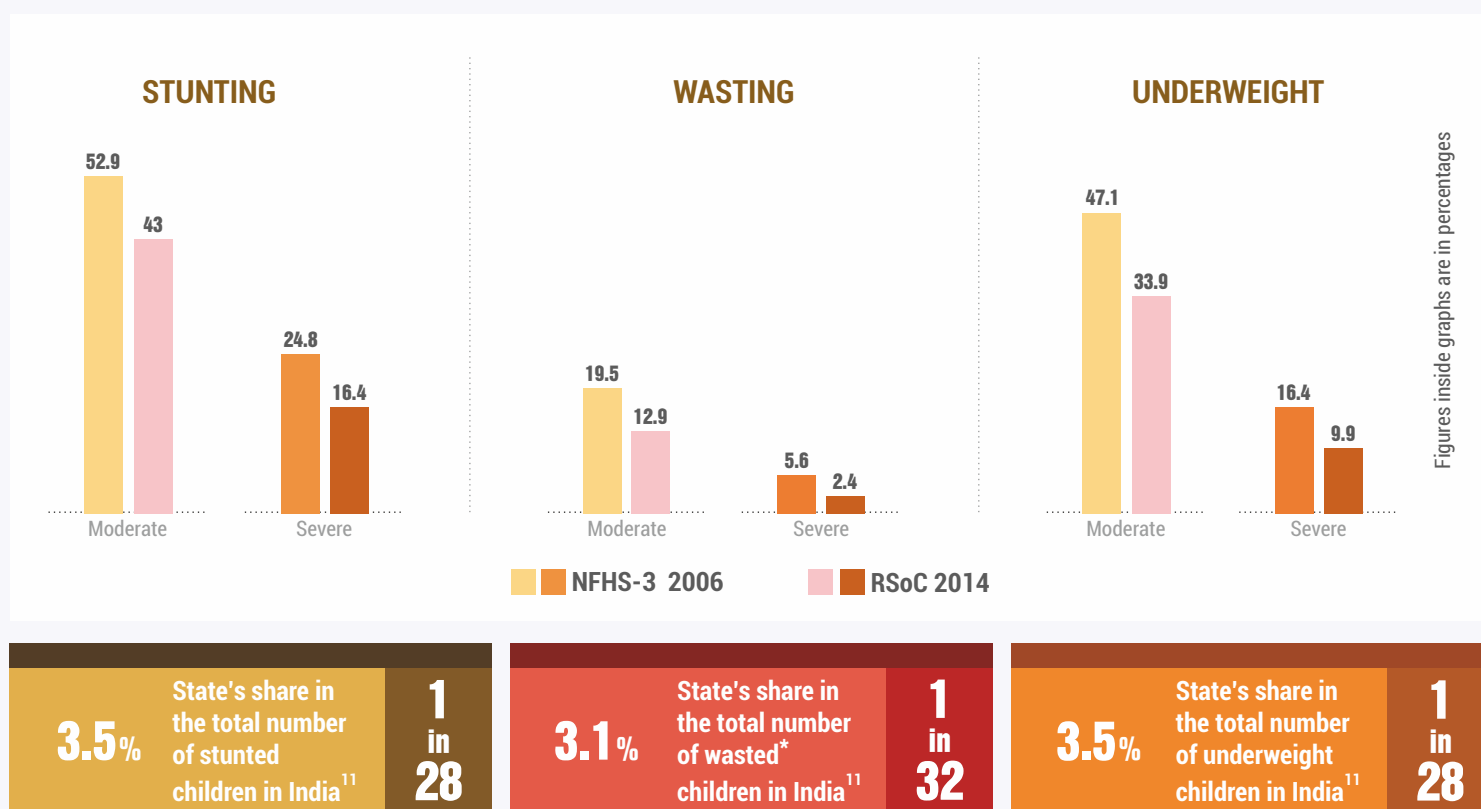
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Stunting is inadequate height for age, which is indicative of chronic or cumulative nutritional deprivation in early childhood. A stunted child's height-for-age is below -2 standard deviations from the median height-for-age (termed HAZ) of the WHO Child Growth Standards, while a severely stunted child is below -3 standard deviations.

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Underweight is inadequate weight for age, a composite indicator that encompasses stunting and wasting. An underweight child's weight-for-age (WAZ) is below -2 standard deviations from the WHO Child Growth Standards; again, a severely underweight child is below -3 standard deviations.

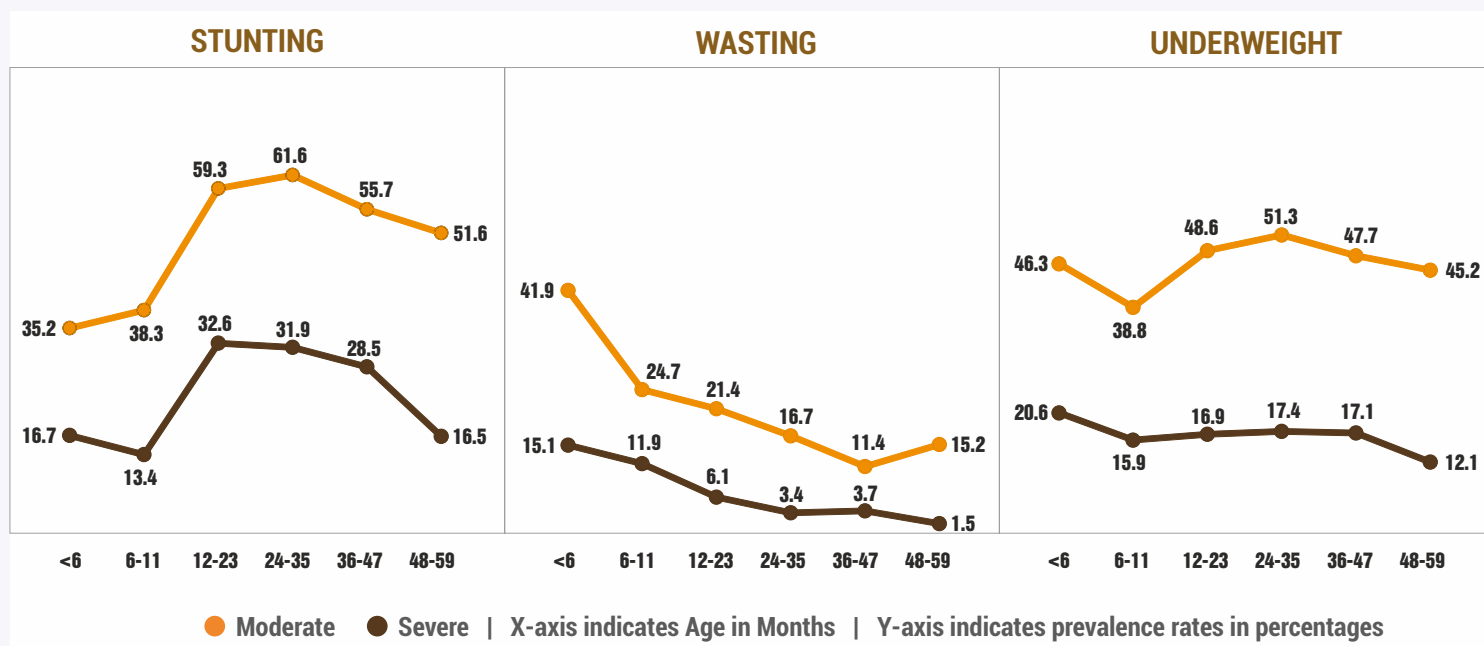


*Wasting is subject to seasonal variations either in food supply or disease prevalence and hence may not be comparable across groups of children measured at different times of the year within a survey round as well as between different survey rounds.

¹¹ Source : NFHS-3, 2006

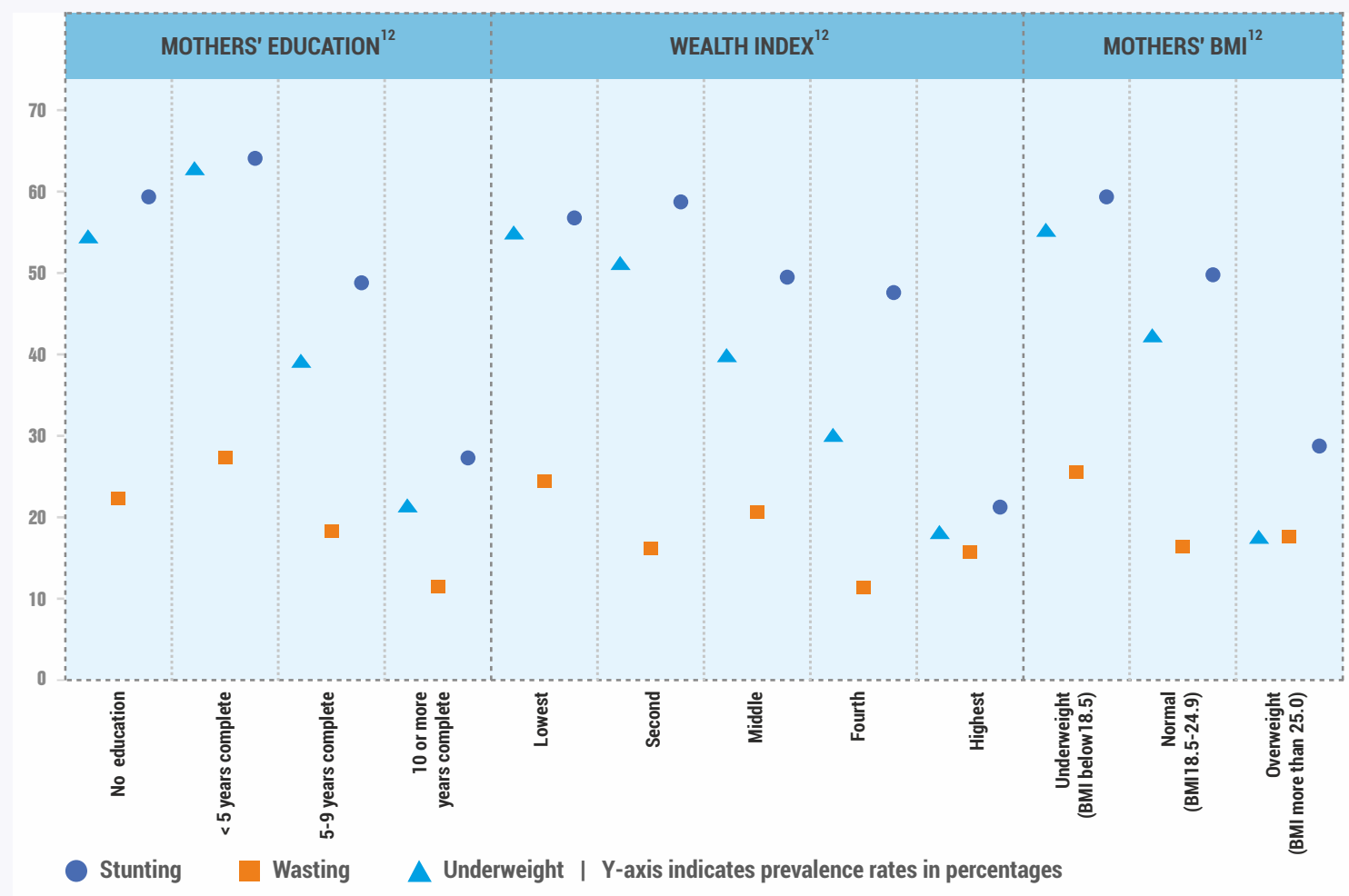
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Percentage of moderate (below -2 SD from the WHO growth standards) and severe (below -3 SD) stunting, wasting and underweight are available for 6 age groups among children under 5.



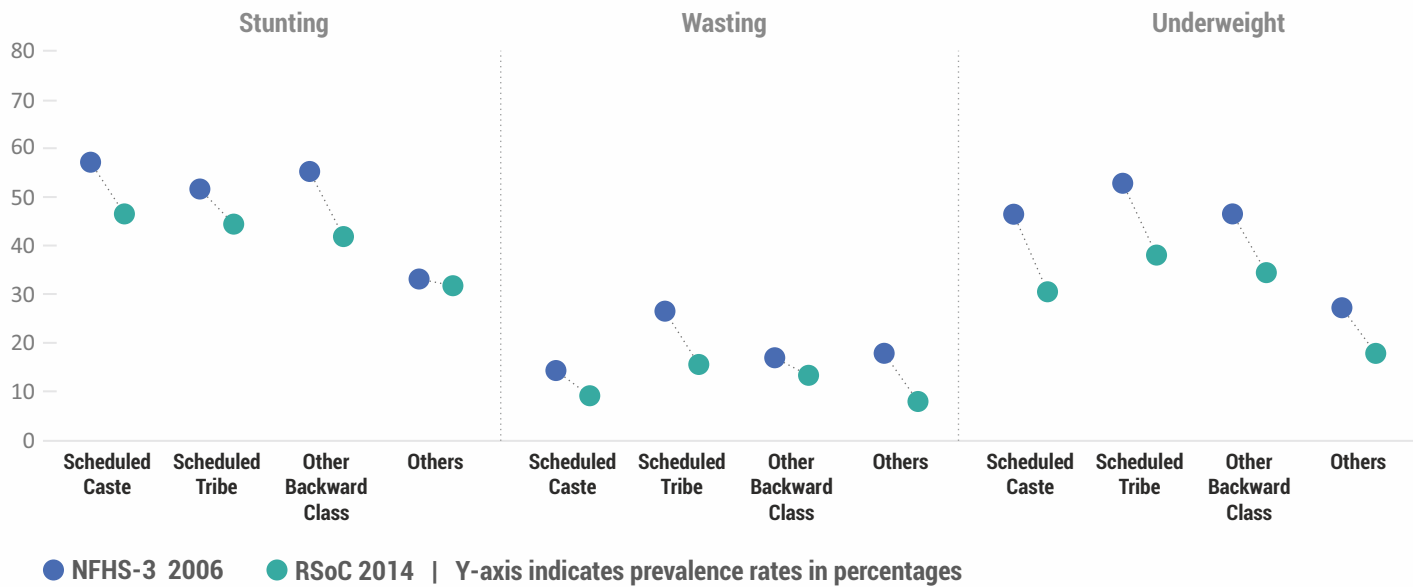
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In this section, child undernutrition outcomes are presented, along with key socioeconomic drivers that are known to be associated with child nutrition, such as caste, residence, mother's health and education, and household income.

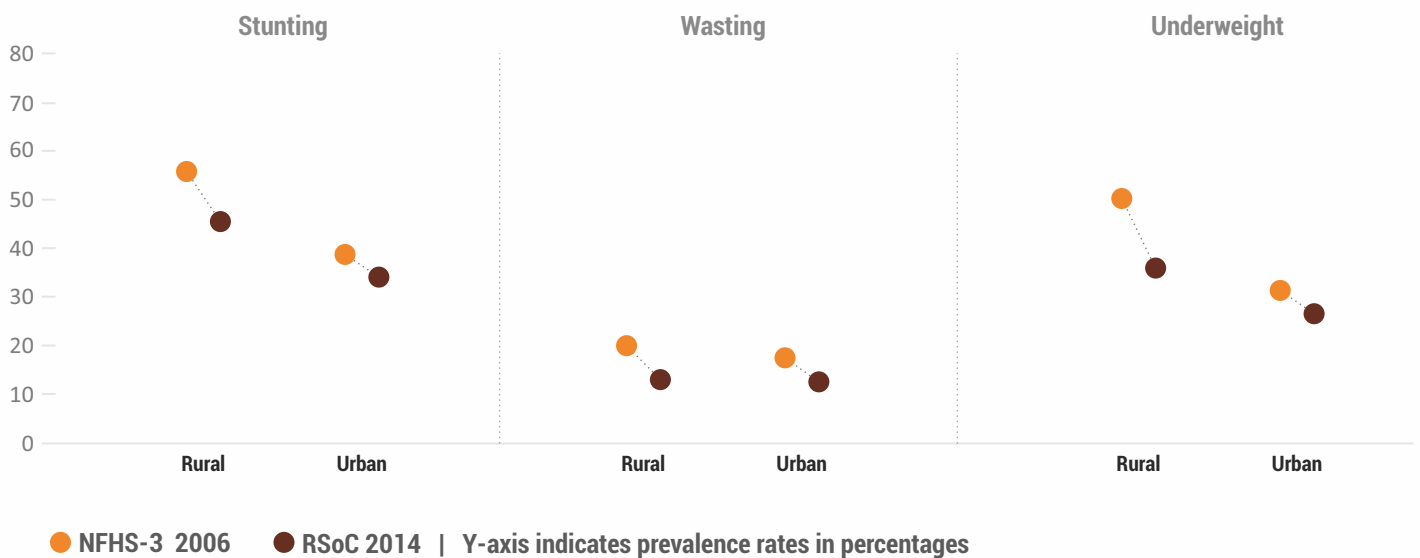


¹² Source : NFHS-3, 2006

CASTE

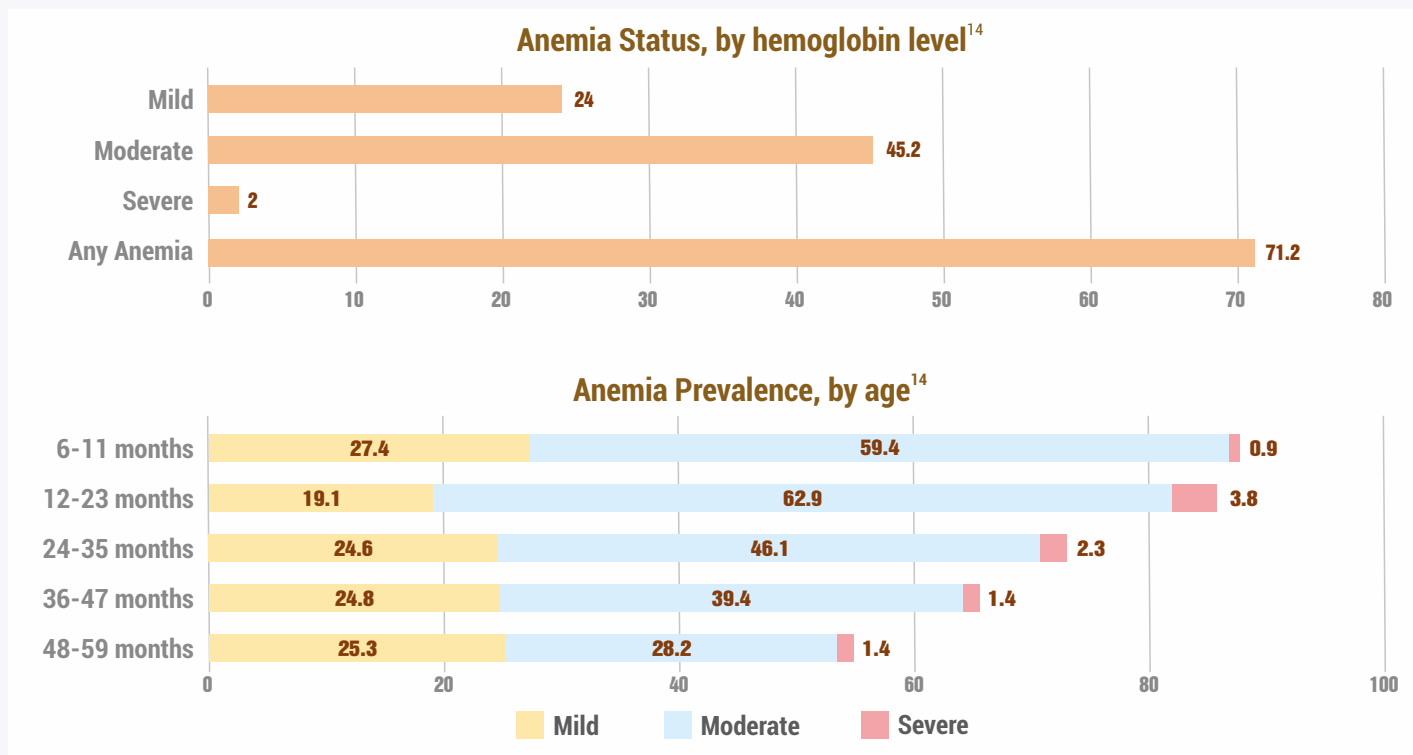


RESIDENCE



D. ANEMIA PREVALENCE

Anemia can impair physical and cognitive development among children and create long term impacts on productivity and wellbeing. This section features data on anemia prevalence by severity and age groups for children under 5.



¹⁴ Source : NFHS-3, 2006

III. IMMEDIATE DETERMINANTS

A. INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES¹⁵

This section presents indicators for assessing IYCF practices as recommended by the WHO and revised in 2008. Following optimal IYCF practices during the first 1,000 days is crucial for early child survival and growth as well as long-term health and wellbeing.

Children aged 0-23 months breastfed immediately/within an hour of birth		44.9%
	Children aged 0-5 months who were exclusively breastfed	82.3%
	Children aged 6-8 months who were fed complementary foods	59.9%
	For breastfed children (6-23 months)- A. Fed minimum number of times. Note : At least twice a day for breastfed infants 6-8 months old and at least three times a day for breastfed children 9-23 months old B. Had minimum dietary diversity Note : Minimum dietary diversity refers to four or more food groups^B fed to children aged 6-23 months	57.5%
		8.6%

B. CHILD HEALTH¹⁵

Prevalence of childhood illnesses (in children aged 0-59 months)	
Had diarrhea in 15 days prior to survey	6.8%
Had fever in 15 days prior to survey	16.1%
Had symptoms of Acute Respiratory Infection (ARI) in 15 days prior to survey	11%

^B The 7 food groups include the following: i. grains, roots and tubers ii. legumes and nuts iii. dairy products (milk, yoghurt, cheese) iv. Flesh foods (meat, fish, poultry, and liver/organ meats) v. eggs vi. Vitamin-A rich fruits and vegetables vii. other fruits and vegetables.

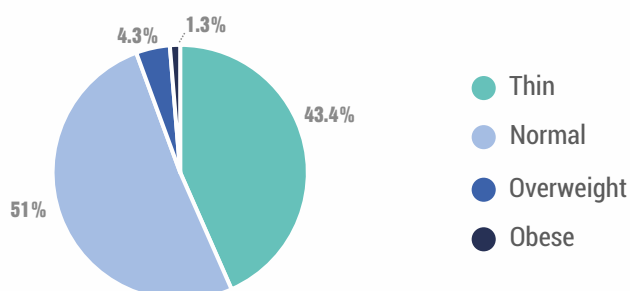
¹⁵ Source : RSoC, 2014

C. NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

Maternal health and nutrition, as well as adolescent nutrition, have important consequences for intergenerational transmission of undernutrition. Data on Body Mass Index (BMI), anemia prevalence and height among women of reproductive age are presented in this section, as are data on adolescent BMI and anemia.

C.1. WOMEN 15-49 YEARS OLD¹⁶

BMI^c levels of women aged 15-49 years



^cBody Mass Index (BMI) is defined as the weight in kilograms by the square of the height in metres (kg/m²). It is a simple index of weight-for-height which is commonly used to classify underweight, overweight and obesity in adults. Range: BMI < 18.5 = total thin, BMI 18.5-24.9 = normal, BMI 25.0-29.9 = Overweight, BMI > 30.0 = Obese [per WHO Standards]



57.5%

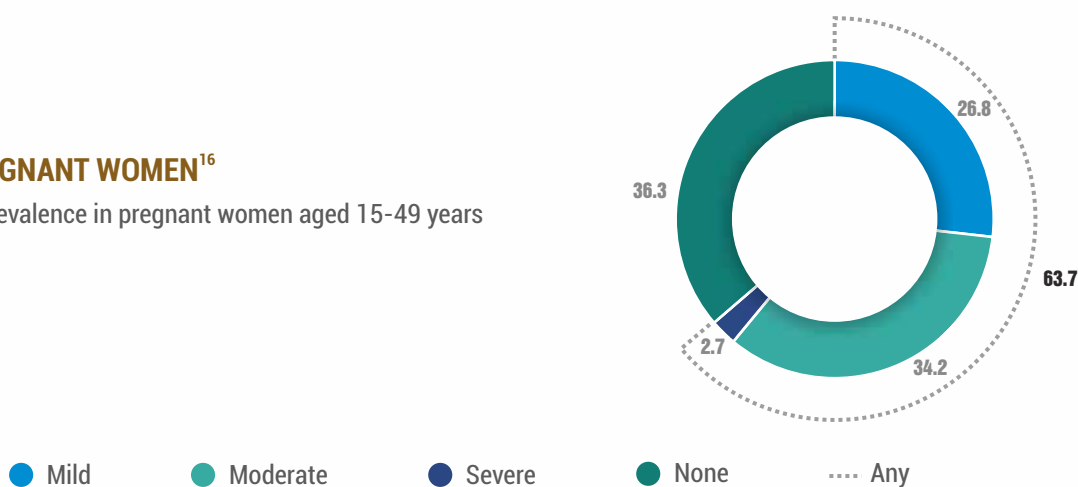
Women aged 15-49 years are anemic

1.9%

Women aged 15-49 years are severely anemic

C.2. PREGNANT WOMEN¹⁶

Anemia prevalence in pregnant women aged 15-49 years



● Mild

● Moderate

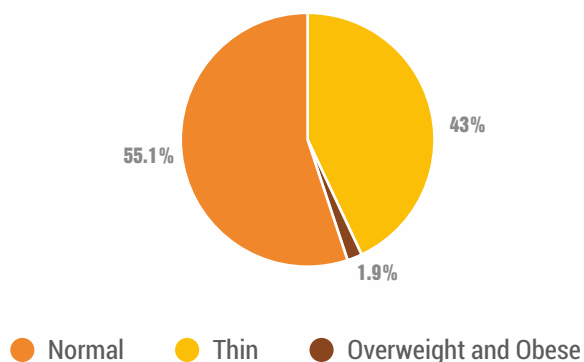
● Severe

● None

--- Any

C.3. ADOLESCENT GIRLS

BMI levels of adolescent girls aged 15-18 years¹⁷



58.7%

Adolescent girls aged 15-19 years are anemic¹⁶

2.3%

Adolescent girls aged 15-19 years are severely anemic¹⁶

¹⁶ Source : NFHS-3, 2006

¹⁷ Source : RSoC, 2014

IV. UNDERLYING DETERMINANTS

A. SOCIAL STATUS OF WOMEN

Women's status is recognized to contribute in significant ways to improving nutrition. This section presents indicators that are representative of women's social status, including measures of education, age at marriage and first birth, employment, decision making and domestic violence. It also includes the Gender Empowerment Measure that captures gender inequality along three dimensions: political participation and decision-making power, economic participation and decision-making power, and power over economic resources.



Currently married women who have 10 or more years of schooling¹⁸ **9.1%**



26.9% Women aged 20-24 years who were married before the age of 18¹⁹

20.5 Average age at marriage¹⁹

Gender Empowerment Measure^{D,20}

0.5

0.5

National Average²⁰



Female workforce participation rate²² **39.7%**

Currently married women who make decisions about²³:



18.3% Own healthcare



3.9% Major household purchase



35.7% Purchases for daily household needs



4.2% Visits to her family/friends/relatives



32.3% Women who have experienced any form of physical/sexual/emotional violence²³

34% Ever married women who justify hitting/wife-beating (for either of the reasons mentioned)²³

^D The Gender Empowerment Measure is a weighted average index based on indicators that are classified into three dimensions: a. political participation and decision-making power b. economic participation and decision-making power and c. power over economic resources. The index ranges from a minimum of 0 to a maximum of 1, with a higher score indicating greater empowerment of women. (More information available at <http://wcd.nic.in/publication/GDIGEReport/Part3.pdf>.)

¹⁸ Source : DLHS-3, 2007-08

¹⁹ Source : RSoC, 2014

²⁰ Source : MoWCD, 2006

²² Source : Women and Men in India, 16th Issue MoSPI, 2014

²³ Source : NFHS-3, 2006

B. WATER AND SANITATION

Poor hygiene and sanitation, by directly increasing exposure and susceptibility to infections, are associated with undernutrition among children. This section covers key indicators on access to safe drinking water and availability of sanitation facilities at the state level. It also includes the expenditure on toilet construction under the Total Sanitation Campaign.



89.8%

Households with access to improved sources of drinking water^{E, 24}

18.4%

Households using improved sanitation facility^{F, 24}



69.6%

Households practicing open defecation²⁴

31 M

Expenditure on toilets under Total Sanitation Campaign (TSC)^{G, 25}



1,065 M

National Average²⁵

C. AGRICULTURE AND FOOD SECURITY

Agriculture productivity and food security can affect household access to foods necessary for a healthy diet. Thus, this section presents indicators related to agricultural growth and food consumption patterns in the state, indicating the level of food security in the state relative to the national situation.



1.7%

Growth rate of agriculture from 2007-2012²⁶



2.6%

Share in India's total foodgrain production²⁷



Mean Calorie intake per person per day (in Kcal)²⁸

RURAL

URBAN

2162

2233

CHHATTISGARH

INDIA AVG

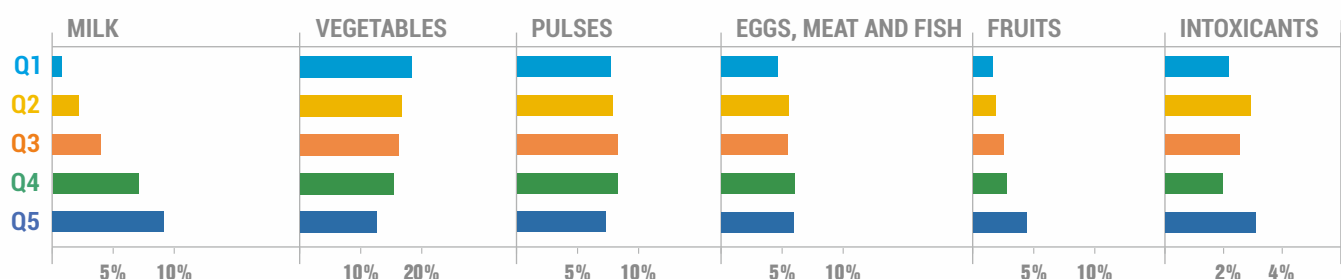
2205

2206

CHHATTISGARH

INDIA AVG

Expenditure on food items by income quintiles²⁸



^E Improved sources of drinking water include: piped water into dwelling, piped water to yard/plot, public tap or standpipe, tubewell or borehole, protected dug well, protected spring, and rainwater (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>).

^F Improved sanitation means households using improved toilets that include: flush toilet, piped sewer system, septic tank, flush/pour flush to pit latrine, ventilated improved pit latrine, pit latrine with slab, composting toilet, special case (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>); excludes those households who are using improved toilets but sharing toilet facilities with other households.

^G Besides toilet construction subsidies, this expenditure also includes funding other activities such as solid and liquid waste management, IEC activities for sustainable demand generation for sanitation facilities, assistance to production centers of sanitary materials and rural sanitary marts, provision of construction of community sanitary complexes, provision of sanitation facilities in govt. schools and Anganwadis in govt. buildings etc.

²⁴ Source : RSoC, 2014

²⁵ Source : Indiastat, Rajya Sabha Unstarred Question No. 2950, dated on 30.08.2011, 2011-12

²⁶ Source : Indiastat, compiled by datanet from Rajyasabha & Lok Sabha unstarred questions no. 3039, 4535. 2007-12

²⁷ Source : Indiastat, Ministry of Agriculture, Government of India 2011-2012

²⁸ Source : NSSO, 68th round-Nutritional Intake in India, 2011-12

V. STATUS OF NUTRITION-RELEVANT INTERVENTIONS

A. NUTRITION-SPECIFIC INTERVENTIONS

The financial resources allocated to, and spent on direct nutrition-specific interventions can determine the scale, coverage and quality of interventions to reach vulnerable target populations. These services, in India, are delivered both by the Integrated Child Development Scheme (ICDS) and the National Health Mission (NHM). This section includes data on the coverage of interventions delivered by these two key centrally-sponsored schemes that directly impact maternal and child nutrition and health. We also include here information on the human resources and service availability of these schemes and expenditures.

A.1. COVERAGE OF ICDS AND NHM:

The Integrated Child Development Services (ICDS) aims to improve the nutrition and health status of children under-six through a package of services (supplementary nutrition, immunization, health check-up, referral services, etc.) delivered through frontline workers at the Anganwadi Centres (AWCs). This section provides information on expenditure on ICDS and coverage of its supplementary nutrition programme (SNP). This section also covers critical services provided by the health system, including provision of care for pregnant women and child immunization. Immunization plays a crucial role in complementing actions to improve nutrition. The link between undernutrition and infectious diseases is cyclical, poor nutrition increases vulnerability to infections, which in turn worsen nutrition status. Data on immunization among children are presented by residence. Here, full immunization refers to children covered with BCG, measles and 3 doses each of DPT and polio.

Beneficiaries who availed supplementary food under ICDS²⁹

Children 6-35 months	82.8%
Children 36-71 months	60.2%
Pregnant women	65.4%
Lactating mothers	81.5%

Beneficiaries who received supplementary food for at least 21 days in the month prior to the survey

Children aged 6-35 months	49.7%
Children aged 36-71 months	29.8%
Pregnant women	62%
Lactating women	49.9%

²⁹ Source : RSoC, 2014

SERVICES PROVIDED TO WOMEN WHO HAD A LIVE BIRTH IN LAST 35 MONTHS³⁰



79.5%

Received 3 or more antenatal checkups prior to delivery



92.2%

Received 2 or more TT injections prior to delivery



22.1%

Consumed 100 or more IFA tablets/syrup during pregnancy



56.1%

Had Institutional delivery



64.2%

Women who had live birth in 35 months where delivery was assisted by skilled health provider³⁰



66.4%

Rural

70.1%

Urban

Children aged 12-23 months who are fully immunised³⁰



1.7%

Children aged 12-23 months who have not received any immunisation³⁰

WOMEN GIVEN ADVICE ON³¹:



59.7%

Breastfeeding



53.6%

Nutrition



38.7%

Institutional delivery

A.2. PERSONNEL CAPACITY OF ICDS AND NRHM:

This section features data on availability of healthcare personnel and services available to women of reproductive age (antenatal care, tetanus toxoid coverage, iron-folic acid supplementation coverage, institutional delivery and counseling). Household and individual access to health services can directly impact children's nutrition and welfare during the crucial first 1,000 days of life.

Availability of Anganwadi Centres and Workers (AWCs and AWWs) ^{H, 30}	Value
Pending or vacant Anganwadi workers to sanctioned number of workers ^{30a}	25.7%
AWWs living in the AWC village/ward	83.9%
AWWs having 10 or more years of schooling	72.5%
Median age of AWWs	34 years
AWCs serving to population more than the stipulated norm	21%

Growth Monitoring ³⁰	Value
AWCs having functional baby weighing scale	87.8%
AWCs having functional adult weighing scale	78.7%
Available WHO growth chart at AWCs	93%

^H Number of AWCs surveyed for Chhattisgarh as per RSoC 2014 is 202.

³⁰ Source : RSoC, 2014

^{30a} Source : MoWCD, 2012

³¹ Source : DLHS-3, 2007-08

Training and Comprehensive Knowledge ³²	Value
AWWs having correct knowledge of intake of food by pregnant women	85.7%
AWWs having correct knowledge of normal birth weight of children	88%
AWWs having correct knowledge of initiation of breastfeeding within one hour	95.8%
AWWs having correct knowledge of exclusive breastfeeding for the first six months	87.6%
AWWs having correct knowledge of appropriate age of child for complementary feeding	22.4%

Health Service Delivery Personnel	Value
ASHAs selected ³³	100%
Current density of ASHA as per Census 2011 rural population ³³	1 per 297 persons
Pending or vacant ANM positions sub centres & PHCs ³⁴	29.7%

A.3. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SPECIFIC INTERVENTIONS

Expenditure on Schemes (in million dollars)	In million USD	National Average
ICDS (ICDS general + SNP + training) (women and children) ³⁵	90	75
NRHM expenditure (Central Government) ³⁶	59.6	68.8
NRHM expenditure (State Government) ³⁶	24.5	9.3

B. NUTRITION-SENSITIVE INTERVENTIONS

This section includes information on expenditure and coverage of key centrally-sponsored schemes that indirectly impact maternal and child nutrition. These are: the Mid Day Meal Scheme (MDMS), Public Distribution System (PDS), and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

B.1. COVERAGE OF SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS

Coverage of Schemes	Value
MDMS (base: eligible children*) ³⁷	62.6%
PDS (base: rural and urban households reporting consumption) ³⁸	56%
MGNREGA (base: rural persons 18 years and above registered in MGNREG job card and demanded work during last 365 days) ³⁹	90.8%

* All children studying in primary & upper primary classes in schools supported under Sarva Shiksha Abhiyan and NCLP (National Child Labour Project) run by Ministry of Labour.

B.2. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS:

Expenditure on Schemes (in million dollars)	In million USD	National Average
MDMS ⁴⁰	69	47
PDS ⁴¹	485.3	475.3
MGNREGA ⁴²	370	214

³² Source : RSoC, 2014

³³ Source : NRHM, 2013

³⁴ Source : MoHFW, 2013

³⁵ Source : Lok Sabha Unstarred Question # 846 dated 27.02.2015, 2012-13

³⁶ Source : Lok Sabha Annexured Unstarred Question # 409 dated 6.12.2013, 2012-13

³⁷ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/lsq15/15/as216.htm 2011-12

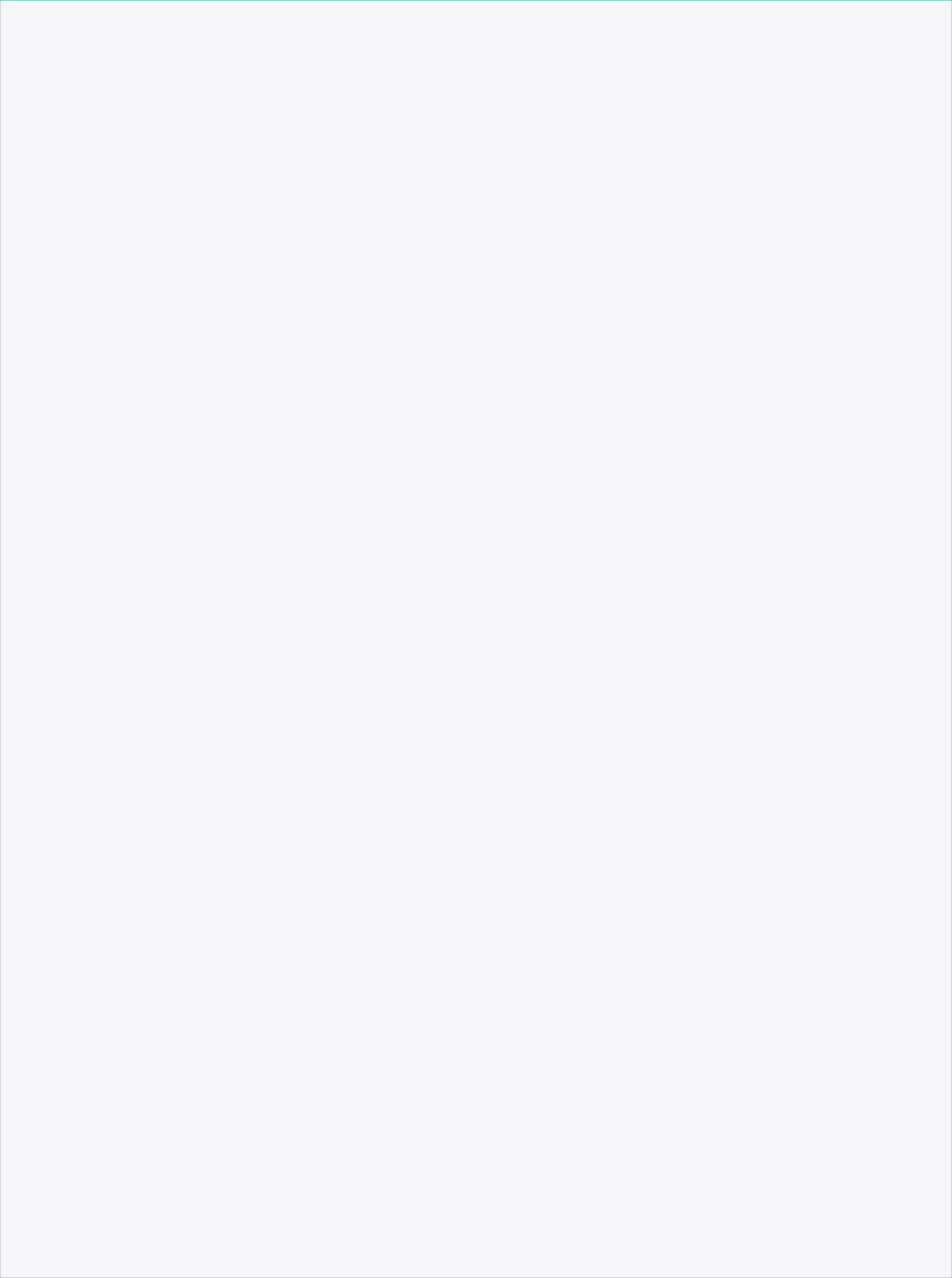
³⁸ Source : Report No. 558, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

³⁹ Source : Report No. 554, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

⁴⁰ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014, 2012-13

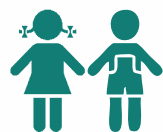
⁴¹ Source : Food Corporation of India 2013, 2012-13

⁴² Source : Lok Sabha Annexured Unstarred Question # 3835 dated 19.03.2015, 2012-13



FAST FACTS ON NUTRITION AND ITS DETERMINANTS IN DELHI

World Health Assembly Nutrition Targets



CHILDREN UNDER 5 YEARS

29.1%
Stunted¹
14.3%
Wasted¹

World Health Assembly Nutrition Targets


67.8%

 Infants 0-5
months old who are
exclusively breastfed¹

21.9%

 Children under
3 years who have low
birth weight (<2.5 kgs)²

44.3%

 Women
15-49 years old
with anemia¹

Immediate Determinants


43.3%

 Infants 6-8 months old who receive solid, semi-solid or soft foods²
19.5%

 Infants & young children 6-23 months old who achieve minimal diet diversity in
complementary feeding²

57%

 Children 6-59 months
old with anemia¹

4.5%

 Children 6-59 months old who
had diarrhea in 15 days prior
to survey²

Immediate Determinants


18.4%

 Children 6-35 months old
who received supplementary
food under ICDS for 21 days
in the month prior to survey²

69.7%

 Children 12-23
months old who are
fully immunized²

75.5%

 Mothers of
children under 36 months
old who received three
or more antenatal checkups²

Underlying Determinants


44.6%

 Currently
married women with 10
or more years of schooling¹

18.8%

 Women aged 20-24
years who were
married before the age of 18²

43.7%

 Adolescent girls
15-18 years old
with low BMI (<18.5)²

Underlying Determinants


2.5%

 Households
practicing
open defecation²

10.4%

 Population
below
state-specific poverty line³

 Does state have a
high-level nutrition mission?

NO
¹ Source : RSoC, 2014

² Source : NFHS-3, 2006

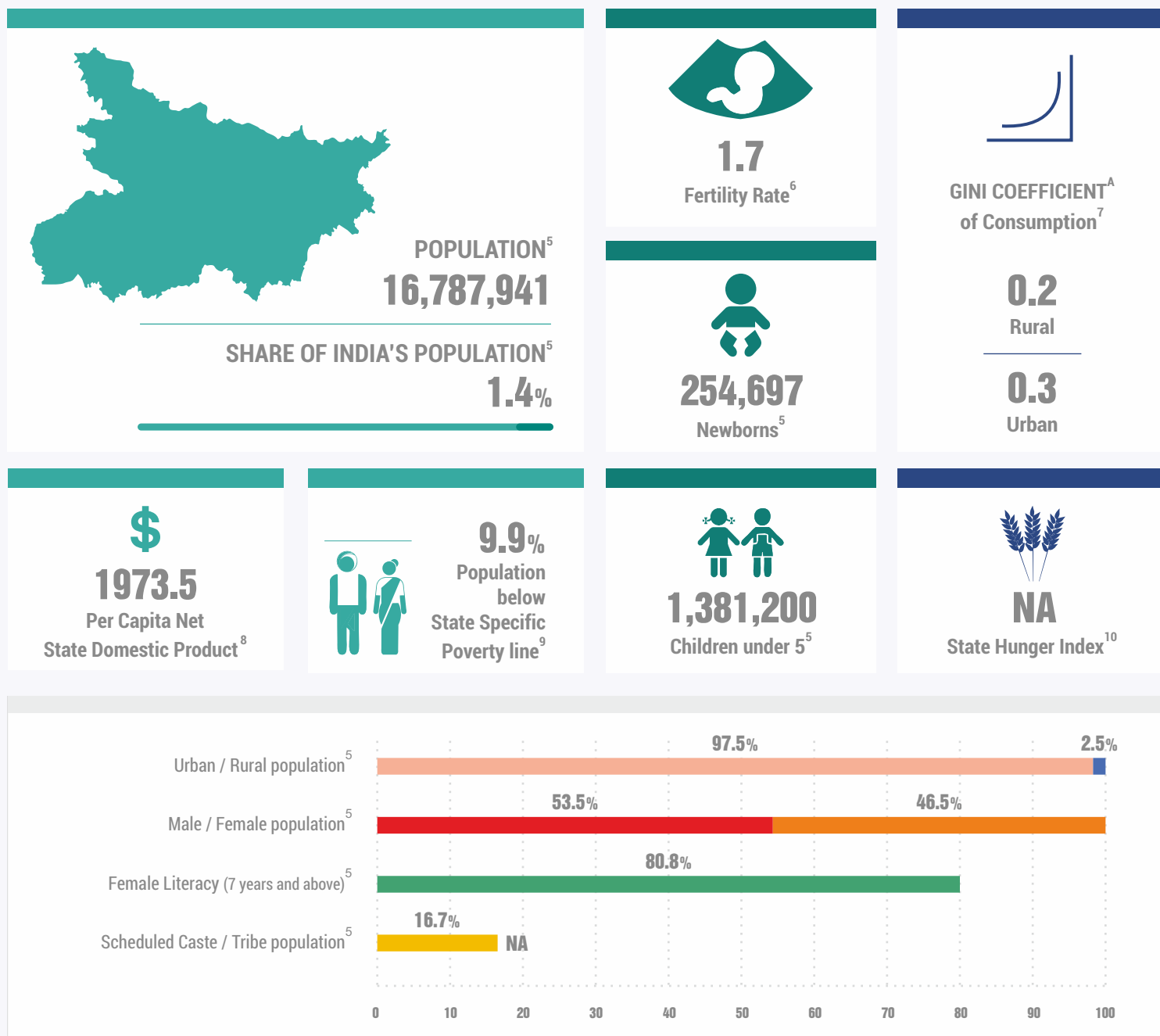
³ Source : DLHS-3, 2007-08

⁴ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Govt. of India

I. CONTEXT

A. DEMOGRAPHIC CONTEXT

This section highlights the demographic composition of the state in terms of male-female, rural-urban, and SC-ST ratios, literacy and fertility rates. In addition, it also includes the size of the population of newborns and children less than five years of age (as of the Census of India, 2011) to illustrate the size of the target population for nutrition-related interventions that need to reach this vulnerable population.



A : Gini coefficient is a measure of inequality of distribution. A Gini coefficient of 0 represents perfect equality, while a value of 100 implies perfect inequality. (See Appendix A for more information)

⁵ Source : Primary Census Abstract, Census, 2011

⁶ Source : SRS, 2013

⁷ Source : Planning Commission Estimates: NSSO 66th round-Employment and Unemployment Survey, 2009-10

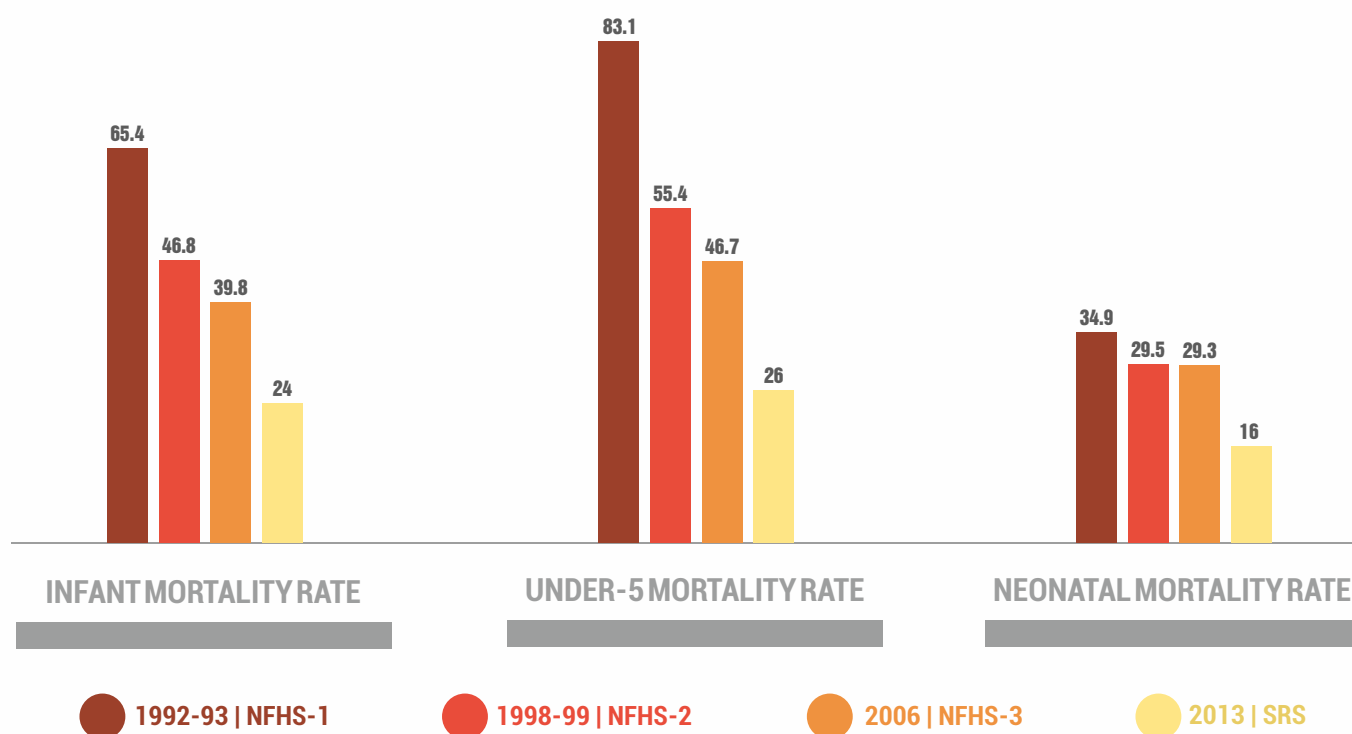
⁸ Source : Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14; http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82

⁹ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Government of India, 2011-12 : http://planningcommission.nic.in/news/pre_pov2307.pdf

¹⁰ Source : IFPRI, India State Hunger Index, 2009

B. CHILD MORTALITY PER THOUSAND LIVE BIRTHS

This section illustrates trends in mortality in neonates, infants and children under 5 years, since 1992. The purpose of this is to highlight the success achieved by individual states in averting deaths of children since the economic growth of the 1990s.



II. NUTRITIONAL STATUS AMONG CHILDREN

This section presents data on nutrition outcome indicators (stunting, wasting, and underweight) and anemia prevalence. Anthropometric measures for children under 5 (stunting, wasting, and underweight) are presented over time periods, by age groups and by background characteristics. This data aims to convey the prevalence and severity of undernutrition in the state.

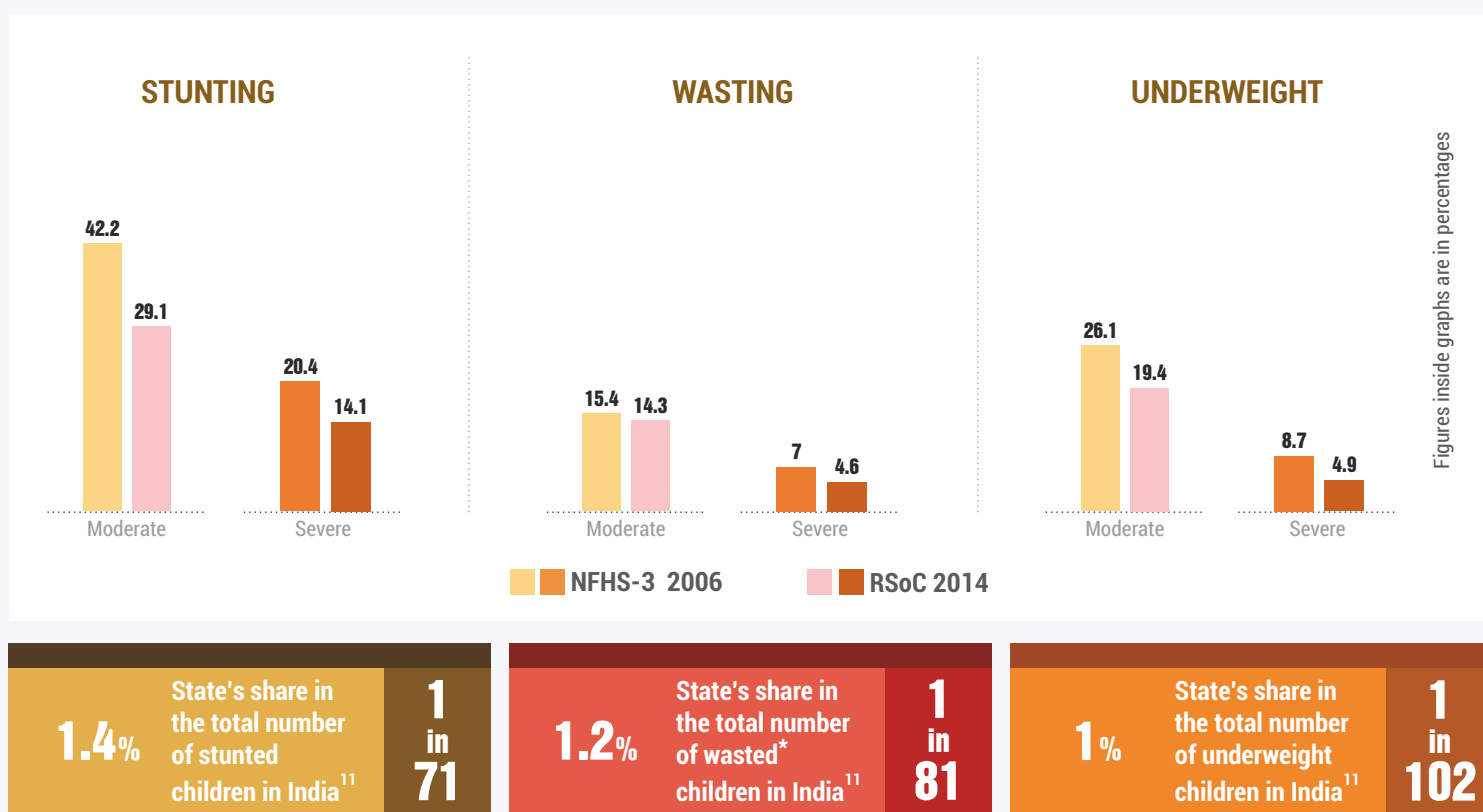
A. CHILD UNDERNUTRITION, BY TIME PERIOD

ANTHROPOMETRIC MEASURES

Stunting is inadequate height for age, which is indicative of chronic or cumulative nutritional deprivation in early childhood. A stunted child's height-for-age is below -2 standard deviations from the median height-for-age (termed HAZ) of the WHO Child Growth Standards, while a severely stunted child is below -3 standard deviations.

Wasting is inadequate weight for height, which points to acute or short-term undernutrition. A wasted child's weight-for-height (WHZ) is below -2 standard deviations from the WHO Child Growth Standards; a severely wasted child is below -3 standard deviations. (Another way to determine severe wasting or severe acute malnutrition is through a measurement of a child's mid-upper arm circumference (MUAC).

Underweight is inadequate weight for age, a composite indicator that encompasses stunting and wasting. An underweight child's weight-for-age (WAZ) is below -2 standard deviations from the WHO Child Growth Standards; again, a severely underweight child is below -3 standard deviations.

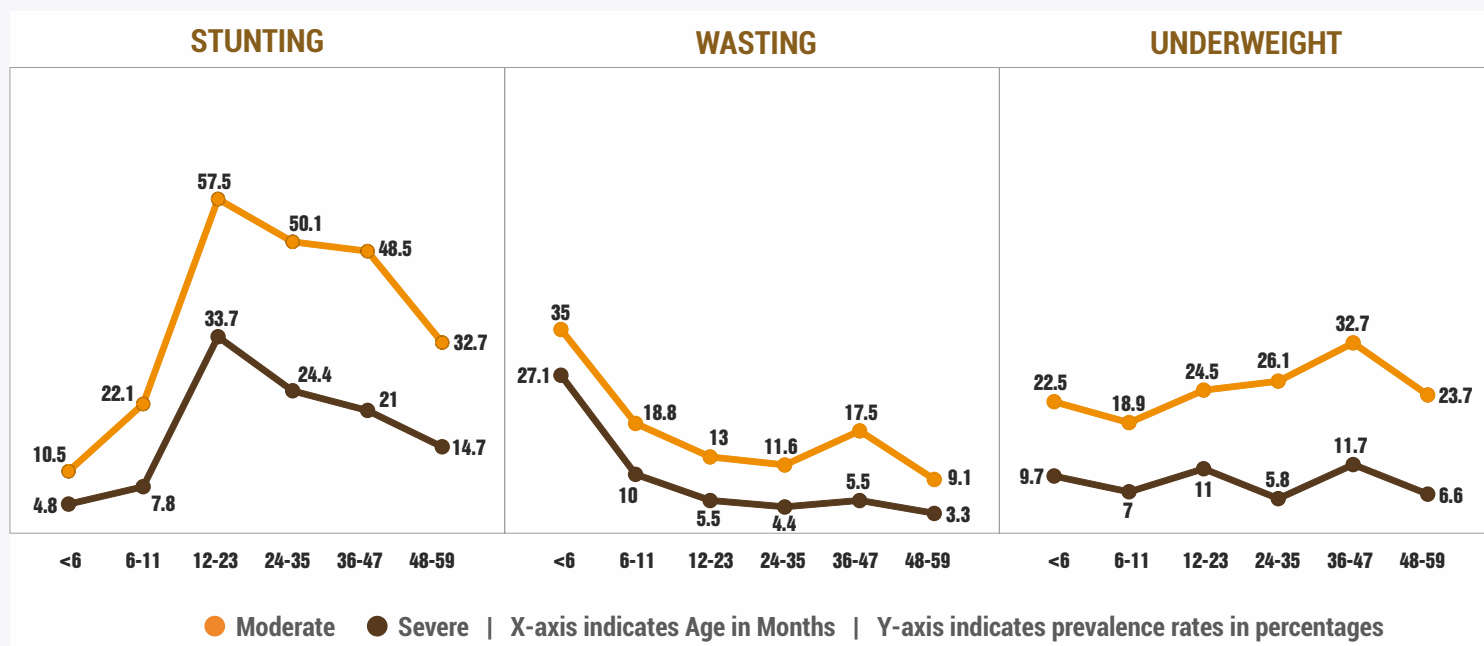


*Wasting is subject to seasonal variations either in food supply or disease prevalence and hence may not be comparable across groups of children measured at different times of the year within a survey round as well as between different survey rounds.

¹¹ Source : NFHS-3, 2006

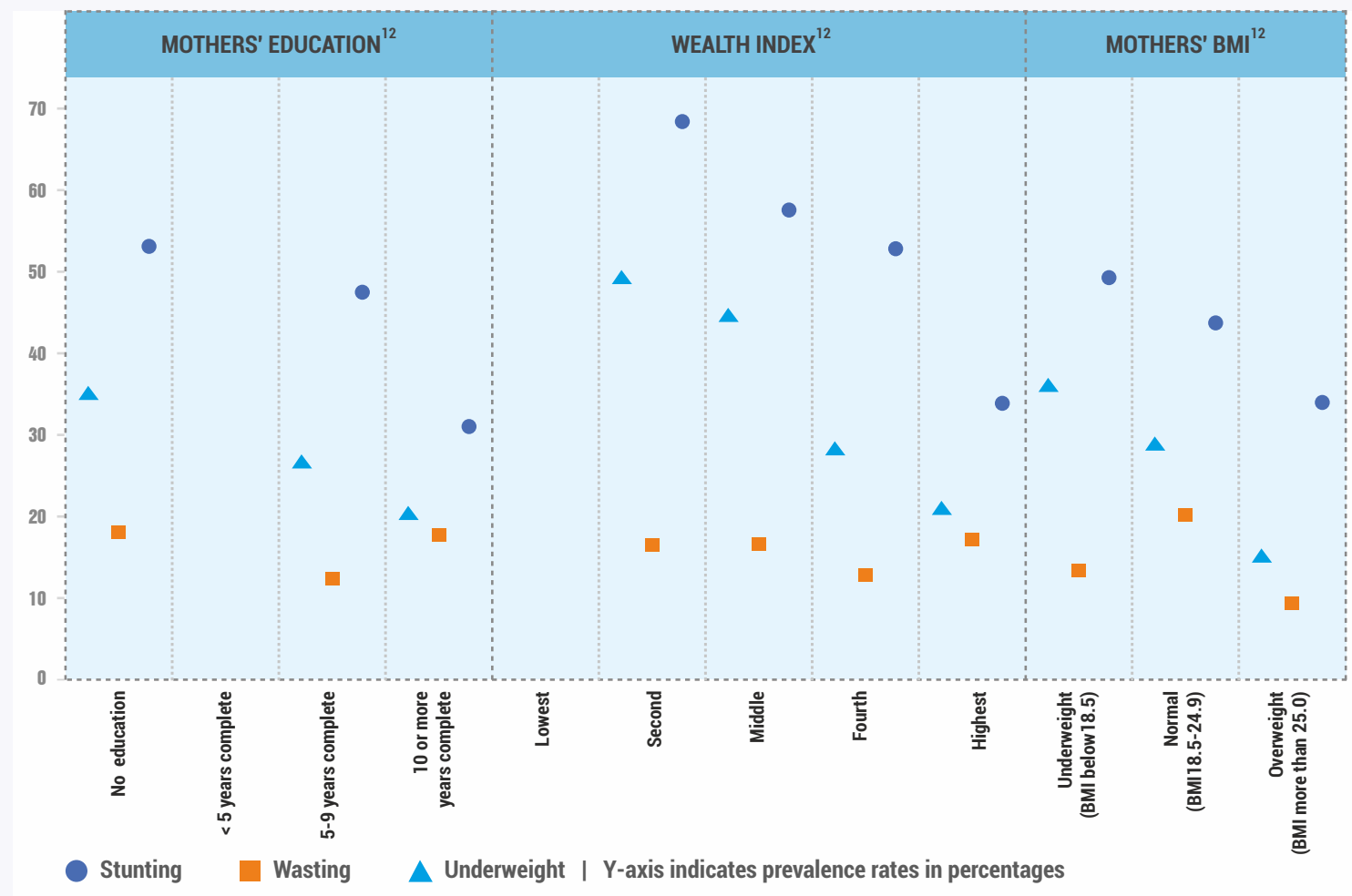
B. CHILD UNDERNUTRITION, BY AGE GROUPS¹²

Percentage of moderate (below -2 SD from the WHO growth standards) and severe (below -3 SD) stunting, wasting and underweight are available for 6 age groups among children under 5.



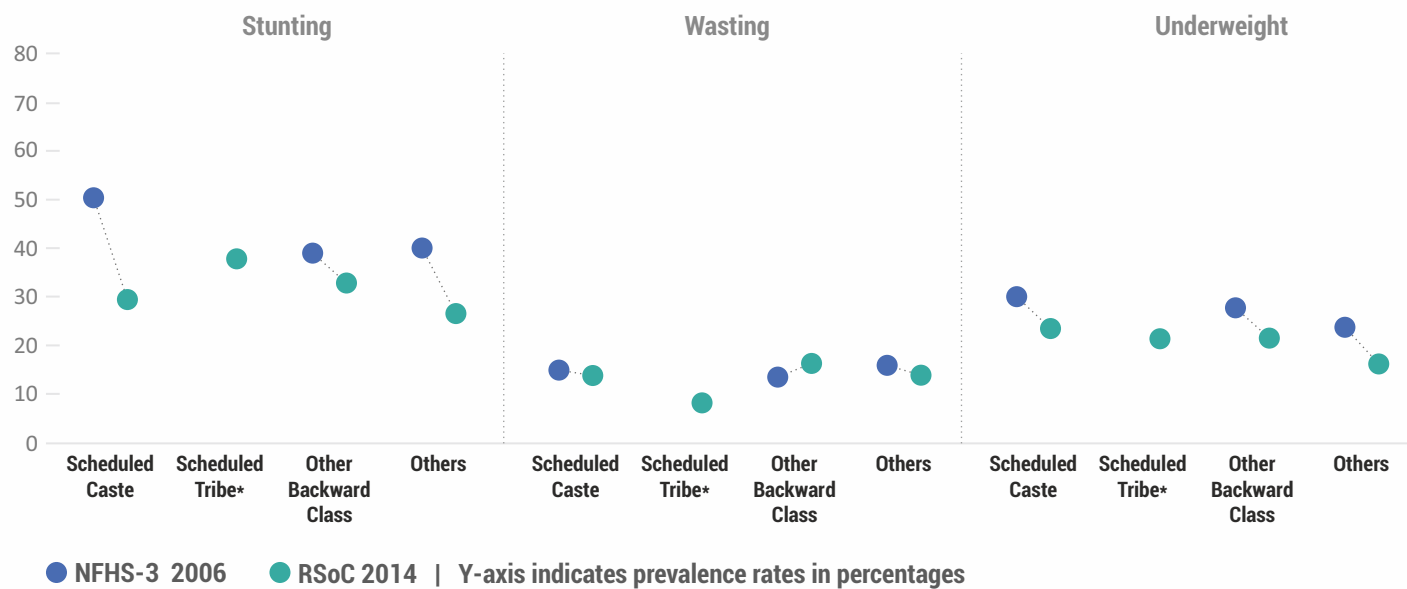
C. PREVALENCE OF CHILD UNDERNUTRITION, BY BACKGROUND CHARACTERISTICS

In this section, child undernutrition outcomes are presented, along with key socioeconomic drivers that are known to be associated with child nutrition, such as caste, residence, mother's health and education, and household income.



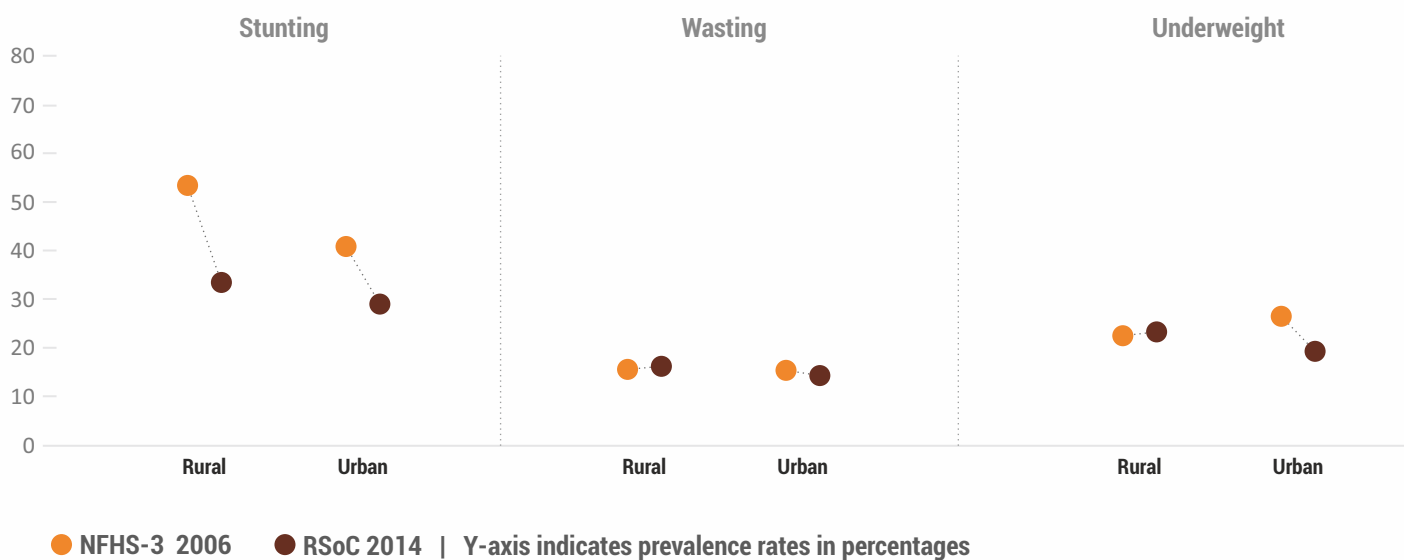
¹² Source : NFHS-3, 2006

CASTE



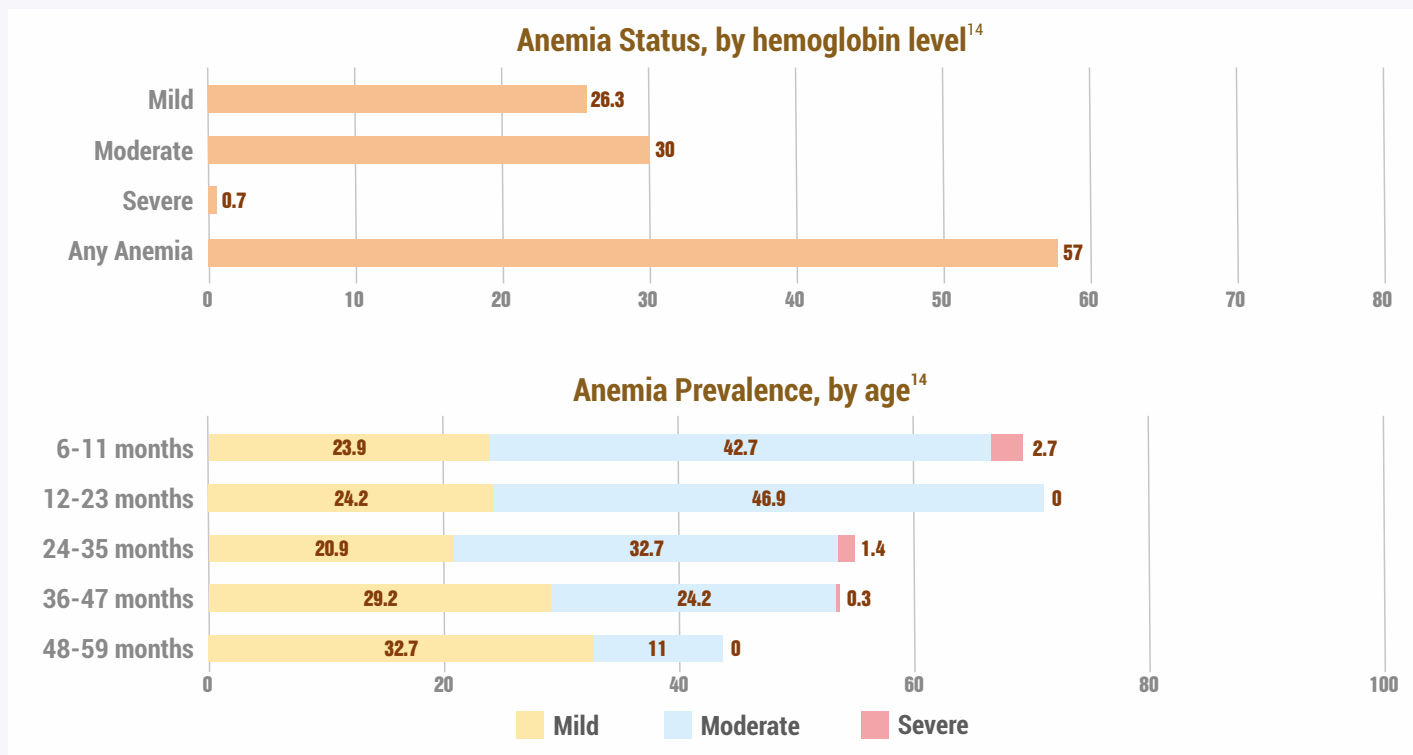
*Data for Scheduled Tribes is not available in NFHS-3 for this state

RESIDENCE



D. ANEMIA PREVALENCE

Anemia can impair physical and cognitive development among children and create long term impacts on productivity and wellbeing. This section features data on anemia prevalence by severity and age groups for children under 5.



¹⁴ Source : NFHS-3, 2006

III. IMMEDIATE DETERMINANTS

A. INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES¹⁵

This section presents indicators for assessing IYCF practices as recommended by the WHO and revised in 2008. Following optimal IYCF practices during the first 1,000 days is crucial for early child survival and growth as well as long-term health and wellbeing.

Children aged 0-23 months breastfed immediately/within an hour of birth		36.9%
	Children aged 0-5 months who were exclusively breastfed	67.8%
	Children aged 6-8 months who were fed complementary foods	43.3%
	For breastfed children (6-23 months)- A. Fed minimum number of times. Note : At least twice a day for breastfed infants 6-8 months old and at least three times a day for breastfed children 9-23 months old B. Had minimum dietary diversity Note : Minimum dietary diversity refers to four or more food groups^B fed to children aged 6-23 months	31.6% 19.5%

B. CHILD HEALTH¹⁵

Prevalence of childhood illnesses (in children aged 0-59 months)

Had diarrhea in 15 days prior to survey	4.5%
Had fever in 15 days prior to survey	7.1%
Had symptoms of Acute Respiratory Infection (ARI) in 15 days prior to survey	5%

^B The 7 food groups include the following: i. grains, roots and tubers ii. legumes and nuts iii. dairy products (milk, yoghurt, cheese) iv. Flesh foods (meat, fish, poultry, and liver/organ meats) v. eggs vi. Vitamin-A rich fruits and vegetables vii. other fruits and vegetables.

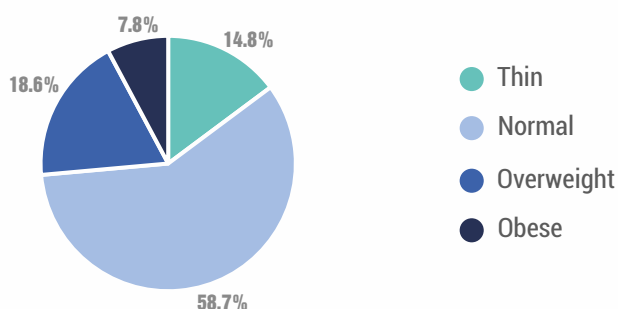
¹⁵ Source : RSoC, 2014

C. NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

Maternal health and nutrition, as well as adolescent nutrition, have important consequences for intergenerational transmission of undernutrition. Data on Body Mass Index (BMI), anemia prevalence and height among women of reproductive age are presented in this section, as are data on adolescent BMI and anemia.

C.1. WOMEN 15-49 YEARS OLD¹⁶

BMI^c levels of women aged 15-49 years



^cBody Mass Index (BMI) is defined as the weight in kilograms by the square of the height in metres (kg/m²). It is a simple index of weight-for-height which is commonly used to classify underweight, overweight and obesity in adults. Range: BMI < 18.5 = total thin, BMI 18.5-24.9 = normal, BMI 25.0-29.9 = Overweight, BMI > 30.0 = Obese [per WHO Standards]



44.3%

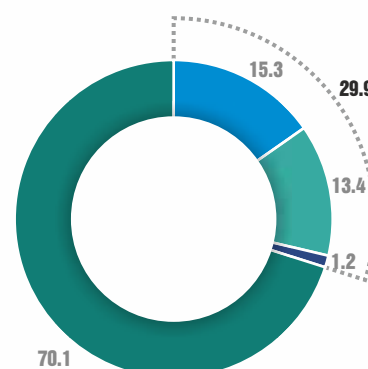
Women aged 15-49 years are anemic

0.2%

Women aged 15-49 years are severely anemic

C.2. PREGNANT WOMEN¹⁶

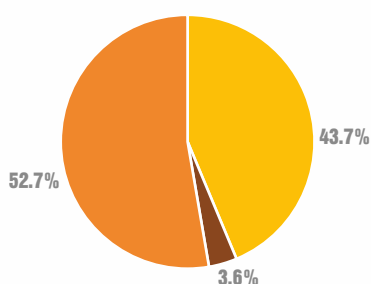
Anemia prevalence in pregnant women aged 15-49 years



● Mild ● Moderate ● Severe ● None ---- Any

C.3. ADOLESCENT GIRLS

BMI levels of adolescent girls aged 15-18 years¹⁷



● Normal ● Thin ● Overweight and Obese



49.7%

Adolescent girls aged 15-19 years are anemic¹⁶

0.1%

Adolescent girls aged 15-19 years are severely anemic¹⁶

¹⁶ Source : NFHS-3, 2006

¹⁷ Source : RSoC, 2014

IV. UNDERLYING DETERMINANTS

A. SOCIAL STATUS OF WOMEN

Women's status is recognized to contribute in significant ways to improving nutrition. This section presents indicators that are representative of women's social status, including measures of education, age at marriage and first birth, employment, decision making and domestic violence. It also includes the Gender Empowerment Measure that captures gender inequality along three dimensions: political participation and decision-making power, economic participation and decision-making power, and power over economic resources.



Currently married women who have 10 or more years of schooling¹⁸ **44.6%**



18.8% Women aged 20-24 years who were married before the age of 18¹⁹

22.1 Average age at marriage¹⁹

Gender Empowerment Measure^{D,20}

0.6

0.5

National Average²⁰



Female workforce participation rate²² **10.6%**

Currently married women who make decisions about²³:



35.7% Own healthcare



6.1% Major household purchase



46.9% Purchases for daily household needs



10% Visits to her family/friends/relatives



17.2% Women who have experienced any form of physical/sexual/emotional violence²³

35.2% Ever married women who justify hitting/wife-beating (for either of the reasons mentioned)²³

^D The Gender Empowerment Measure is a weighted average index based on indicators that are classified into three dimensions: a. political participation and decision-making power b. economic participation and decision-making power and c. power over economic resources. The index ranges from a minimum of 0 to a maximum of 1, with a higher score indicating greater empowerment of women. (More information available at <http://wcd.nic.in/publication/GDIGEReport/Part3.pdf>.)

¹⁸ Source : DLHS-3, 2007-08

¹⁹ Source : RSoC, 2014

²⁰ Source : MoWCD, 2006

²² Source : Women and Men in India, 16th Issue MoSPI, 2014

²³ Source : NFHS-3, 2006

B. WATER AND SANITATION

Poor hygiene and sanitation, by directly increasing exposure and susceptibility to infections, are associated with undernutrition among children. This section covers key indicators on access to safe drinking water and availability of sanitation facilities at the state level. It also includes the expenditure on toilet construction under the Total Sanitation Campaign.



90%

Households with access to improved sources of drinking water^{E, 24}

68%

Households using improved sanitation facility^{F, 24}



2.5%

Households practicing open defecation²⁴

NA

Expenditure on toilets under Total Sanitation Campaign (TSC)^{G, 25}



1,065 M

National Average²⁵

C. AGRICULTURE AND FOOD SECURITY

Agriculture productivity and food security can affect household access to foods necessary for a healthy diet. Thus, this section presents indicators related to agricultural growth and food consumption patterns in the state, indicating the level of food security in the state relative to the national situation.



NA

Growth rate of agriculture from 2007-2012²⁶



0.1%

Share in India's total foodgrain production²⁷



Mean Calorie intake per person per day (in Kcal)²⁸

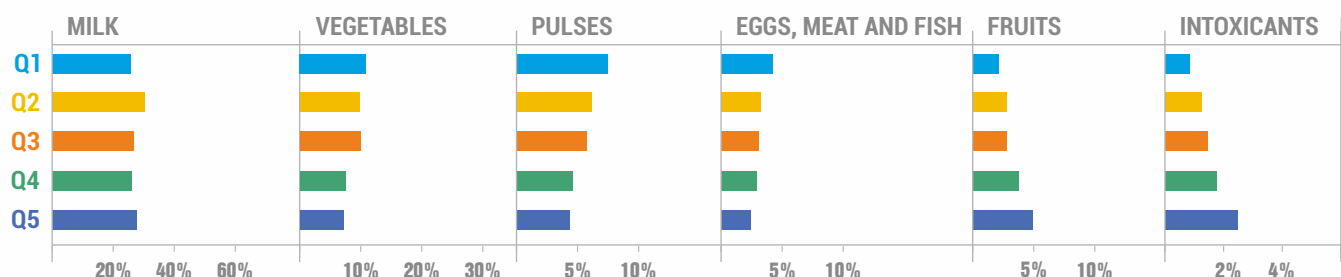
RURAL

NA 2233
DELHI INDIA AVG

URBAN

NA 2206
DELHI INDIA AVG

Expenditure on food items by income quintiles²⁸



^E Improved sources of drinking water include: piped water into dwelling, piped water to yard/plot, public tap or standpipe, tubewell or borehole, protected dug well, protected spring, and rainwater (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>).

^F Improved sanitation means households using improved toilets that include: flush toilet, piped sewer system, septic tank, flush/pour flush to pit latrine, ventilated improved pit latrine, pit latrine with slab, composting toilet, special case (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>); excludes those households who are using improved toilets but sharing toilet facilities with other households.

^G Besides toilet construction subsidies, this expenditure also includes funding other activities such as solid and liquid waste management, IEC activities for sustainable demand generation for sanitation facilities, assistance to production centers of sanitary materials and rural sanitary marts, provision of construction of community sanitary complexes, provision of sanitation facilities in govt. schools and Anganwadis in govt. buildings etc.

²⁴ Source : RSoC, 2014

²⁵ Source : Indiastat, Rajya Sabha Unstarred Question No. 2950, dated on 30.08.2011, 2011-12

²⁶ Source : Indiastat, compiled by datanet from Rajyasabha & Loksabha unstarred questions no. 3039, 4535. 2007-12

²⁷ Source : Indiastat, Ministry of Agriculture, Government of India 2011-2012

²⁸ Source : NSSO, 68th round-Nutritional Intake in India, 2011-12

V. STATUS OF NUTRITION-RELEVANT INTERVENTIONS

A. NUTRITION-SPECIFIC INTERVENTIONS

The financial resources allocated to, and spent on direct nutrition-specific interventions can determine the scale, coverage and quality of interventions to reach vulnerable target populations. These services, in India, are delivered both by the Integrated Child Development Scheme (ICDS) and the National Health Mission (NHM). This section includes data on the coverage of interventions delivered by these two key centrally-sponsored schemes that directly impact maternal and child nutrition and health. We also include here information on the human resources and service availability of these schemes and expenditures.

A.1. COVERAGE OF ICDS AND NHM:

The Integrated Child Development Services (ICDS) aims to improve the nutrition and health status of children under-six through a package of services (supplementary nutrition, immunization, health check-up, referral services, etc.) delivered through frontline workers at the Anganwadi Centres (AWCs). This section provides information on expenditure on ICDS and coverage of its supplementary nutrition programme (SNP). This section also covers critical services provided by the health system, including provision of care for pregnant women and child immunization. Immunization plays a crucial role in complementing actions to improve nutrition. The link between undernutrition and infectious diseases is cyclical, poor nutrition increases vulnerability to infections, which in turn worsen nutrition status. Data on immunization among children are presented by residence. Here, full immunization refers to children covered with BCG, measles and 3 doses each of DPT and polio.

Beneficiaries who availed supplementary food under ICDS²⁹

Children 6-35 months	11.9%
Children 36-71 months	13.7%
Pregnant women	8.8%
Lactating mothers	4.3%

Beneficiaries who received supplementary food for at least 21 days in the month prior to the survey

Children aged 6-35 months	18.4%
Children aged 36-71 months	29.3%
Pregnant women	NA
Lactating women	NA

²⁹ Source : RSoC, 2014

SERVICES PROVIDED TO WOMEN WHO HAD A LIVE BIRTH IN LAST 35 MONTHS³⁰



75.5%

Received 3 or more antenatal checkups prior to delivery



88.2%

Received 2 or more TT injections prior to delivery



22.2%

Consumed 100 or more IFA tablets/syrup during pregnancy



83.4%

Had Institutional delivery



85.5%

Women who had live birth in 35 months where delivery was assisted by skilled health provider³⁰



58.9%

Rural

70%

Urban

Children aged 12-23 months who are fully immunised³⁰



4.9%

Children aged 12-23 months who have not received any immunisation³⁰

WOMEN GIVEN ADVICE ON³¹:



76%

Breastfeeding



62.7%

Nutrition



49.8%

Institutional delivery

A.2. PERSONNEL CAPACITY OF ICDS AND NRHM:

This section features data on availability of healthcare personnel and services available to women of reproductive age (antenatal care, tetanus toxoid coverage, iron-folic acid supplementation coverage, institutional delivery and counseling). Household and individual access to health services can directly impact children's nutrition and welfare during the crucial first 1,000 days of life.

Availability of Anganwadi Centres and Workers (AWCs and AWWs) ^{H, 30}	Value
Pending or vacant Anganwadi workers to sanctioned number of workers ^{30a}	5.6%
AWWs living in the AWC village/ward	30.8%
AWWs having 10 or more years of schooling	98.3%
Median age of AWWs	40 years
AWCs serving to population more than the stipulated norm	81.4%

Growth Monitoring ³⁰	Value
AWCs having functional baby weighing scale	60.5%
AWCs having functional adult weighing scale	67.2%
Available WHO growth chart at AWCs	79.7%

^H Number of AWCs surveyed for Delhi as per RSoC 2014 is 122.

³⁰ Source : RSoC, 2014

^{30a} Source : MoWCD, 2012

³¹ Source : DLHS-3, 2007-08

Training and Comprehensive Knowledge ³²	Value
AWWs having correct knowledge of intake of food by pregnant women	92.2%
AWWs having correct knowledge of normal birth weight of children	88%
AWWs having correct knowledge of initiation of breastfeeding within one hour	94%
AWWs having correct knowledge of exclusive breastfeeding for the first six months	91.5%
AWWs having correct knowledge of appropriate age of child for complementary feeding	71.6%

Health Service Delivery Personnel	Value
ASHAs selected ³³	93%
Current density of ASHA as per Census 2011 rural population ³³	1 per 2000 persons
Pending or vacant ANM positions sub centres & PHCs ³⁴	0%

A.3. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SPECIFIC INTERVENTIONS

Expenditure on Schemes (in million dollars)	In million USD	National Average
ICDS (ICDS general + SNP + training) (women and children) ³⁵	27	75
NRHM expenditure (Central Government) ³⁶	8.7	68.8
NRHM expenditure (State Government) ³⁶	7.9	9.3

B. NUTRITION-SENSITIVE INTERVENTIONS

This section includes information on expenditure and coverage of key centrally-sponsored schemes that indirectly impact maternal and child nutrition. These are: the Mid Day Meal Scheme (MDMS), Public Distribution System (PDS), and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

B.1. COVERAGE OF SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS

Coverage of Schemes	Value
MDMS (base: eligible children*) ³⁷	18.1%
PDS (base: rural and urban households reporting consumption) ³⁸	9.2%
MGNREGA (base: rural persons 18 years and above registered in MGNREG job card and demanded work during last 365 days) ³⁹	NA

* All children studying in primary & upper primary classes in schools supported under Sarva Shiksha Abhiyan and NCLP (National Child Labour Project) run by Ministry of Labour.

B.2. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS:

Expenditure on Schemes (in million dollars)	In million USD	National Average
MDMS ⁴⁰	13	47
PDS ⁴¹	167.9	475.3
MGNREGA ⁴²	NA	214

³² Source : RSoC, 2014

³³ Source : NRHM, 2013

³⁴ Source : MoHFW, 2013

³⁵ Source : Lok Sabha Unstarred Question # 846 dated 27.02.2015, 2012-13

³⁶ Source : Lok Sabha Annexured Unstarred Question # 409 dated 6.12.2013, 2012-13

³⁷ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/lsq15/15/as216.htm 2011-12

³⁸ Source : Report No. 558, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

³⁹ Source : Report No. 554, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

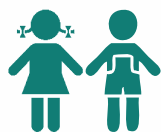
⁴⁰ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014, 2012-13

⁴¹ Source : Food Corporation of India 2013, 2012-13

⁴² Source : Lok Sabha Annexured Unstarred Question # 3835 dated 19.03.2015, 2012-13

FAST FACTS ON NUTRITION AND ITS DETERMINANTS IN GOA

World Health Assembly Nutrition Targets



CHILDREN UNDER 5 YEARS

21.3%
Stunted¹
15.4%
Wasted¹

World Health Assembly Nutrition Targets


62.6%

 Infants 0-5 months old who are exclusively breastfed¹

16.7%

 Children under 3 years who have low birth weight (<2.5 kgs)¹

63.4%

 Women 15-49 years old with anemia²

Immediate Determinants


75.6%

 Infants 6-8 months old who receive solid, semi-solid or soft foods¹
38%

 Infants & young children 6-23 months old who achieve minimal diet diversity in complementary feeding¹

72.9%

 Children 6-59 months old with anemia²

5.8%

 Children 6-59 months old who had diarrhea in 15 days prior to survey¹

Immediate Determinants


66.5%

 Children 6-35 months old who received supplementary food under ICDS for 21 days in the month prior to survey¹

91.9%

 Children 12-23 months old who are fully immunized¹

94.1%

 Mothers of children under 36 months old who received three or more antenatal checkups¹

Underlying Determinants


58.9%

 Currently married women with 10 or more years of schooling²

16.1%

 Women aged 20-24 years who were married before the age of 18¹

55.9%

 Adolescent girls 15-18 years old with low BMI (<18.5)¹

Underlying Determinants


13.9%

 Households practicing open defecation¹

5.1%

 Population below state-specific poverty line³

Does state have a high-level nutrition mission?

NO
¹ Source : RSoC, 2014

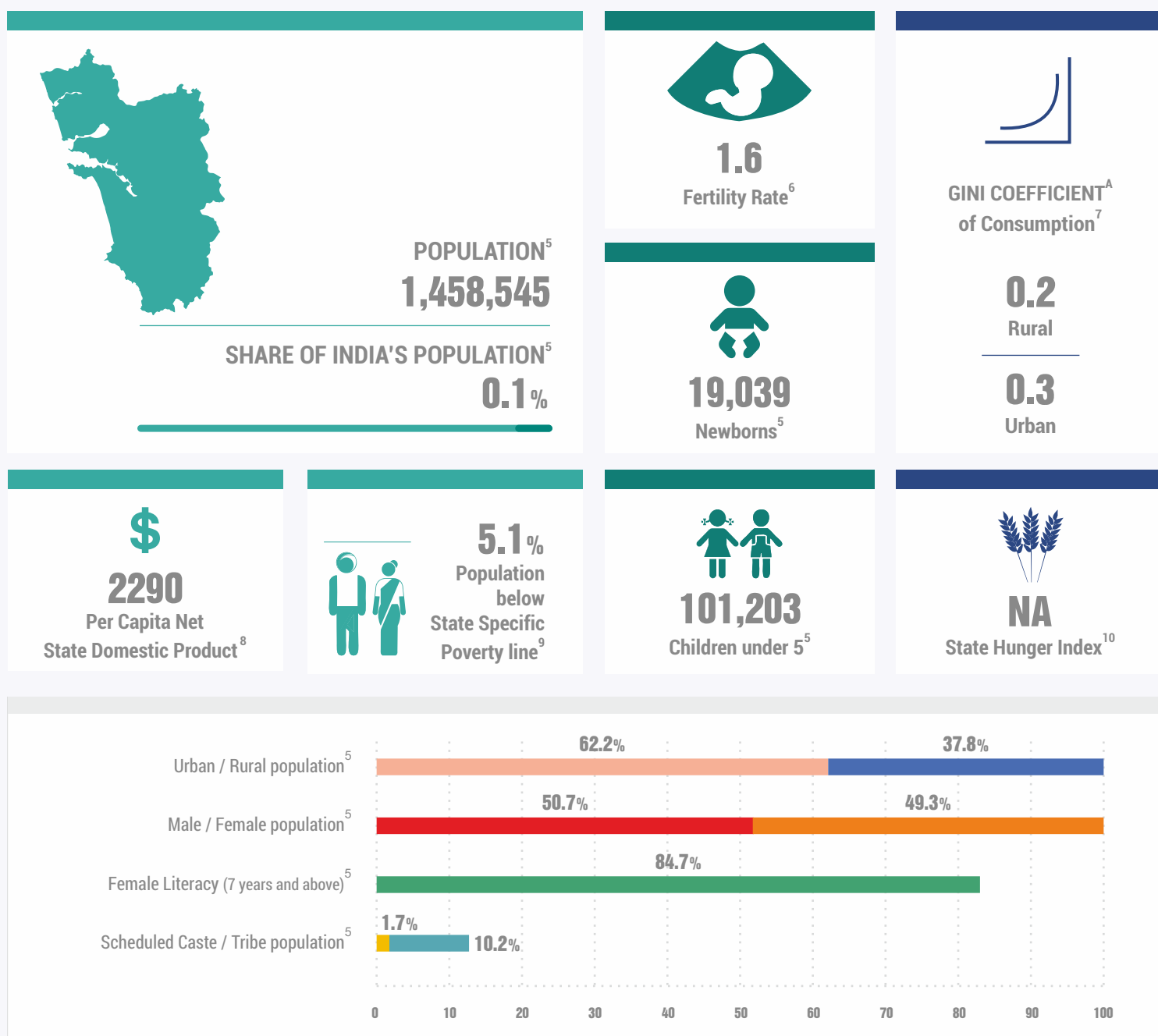
² Source : DLHS4, 2012-13

³ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Govt. of India

I. CONTEXT

A. DEMOGRAPHIC CONTEXT

This section highlights the demographic composition of the state in terms of male-female, rural-urban, and SC-ST ratios, literacy and fertility rates. In addition, it also includes the size of the population of newborns and children less than five years of age (as of the Census of India, 2011) to illustrate the size of the target population for nutrition-related interventions that need to reach this vulnerable population.



A : Gini coefficient is a measure of inequality of distribution. A Gini coefficient of 0 represents perfect equality, while a value of 100 implies perfect inequality. (See Appendix A for more information)

⁵ Source : Primary Census Abstract, Census, 2011

⁶ Source : SRS, 2009

⁷ Source : Planning Commission Estimates: NSSO 66th round-Employment and Unemployment Survey, 2009-10

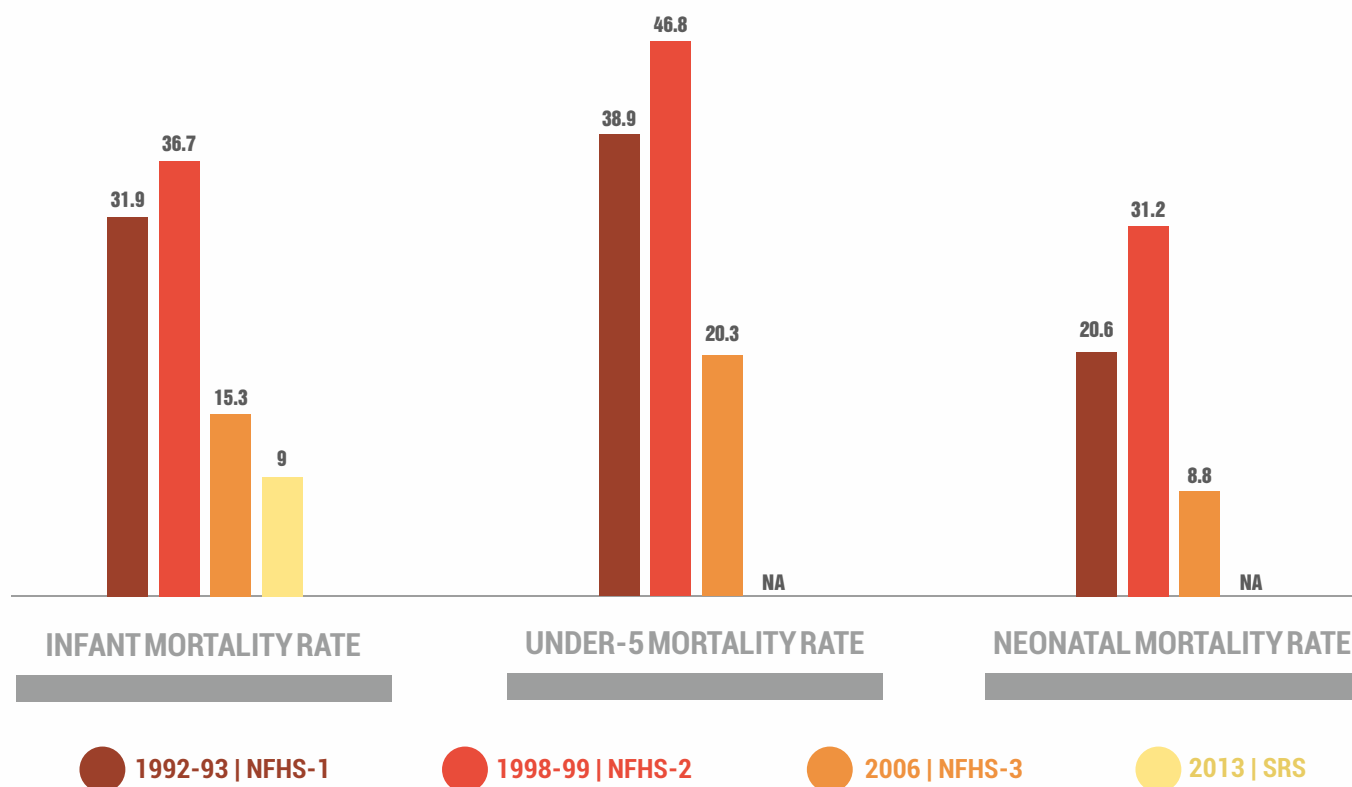
⁸ Source : Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14 : http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82

⁹ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Government of India, 2011-12 : http://planningcommission.nic.in/news/pre_pov2307.pdf

¹⁰ Source : IFPRI, India State Hunger Index, 2009

B. CHILD MORTALITY PER THOUSAND LIVE BIRTHS

This section illustrates trends in mortality in neonates, infants and children under 5 years, since 1992. The purpose of this is to highlight the success achieved by individual states in averting deaths of children since the economic growth of the 1990s.



II. NUTRITIONAL STATUS AMONG CHILDREN

This section presents data on nutrition outcome indicators (stunting, wasting, and underweight) and anemia prevalence. Anthropometric measures for children under 5 (stunting, wasting, and underweight) are presented over time periods, by age groups and by background characteristics. This data aims to convey the prevalence and severity of undernutrition in the state.

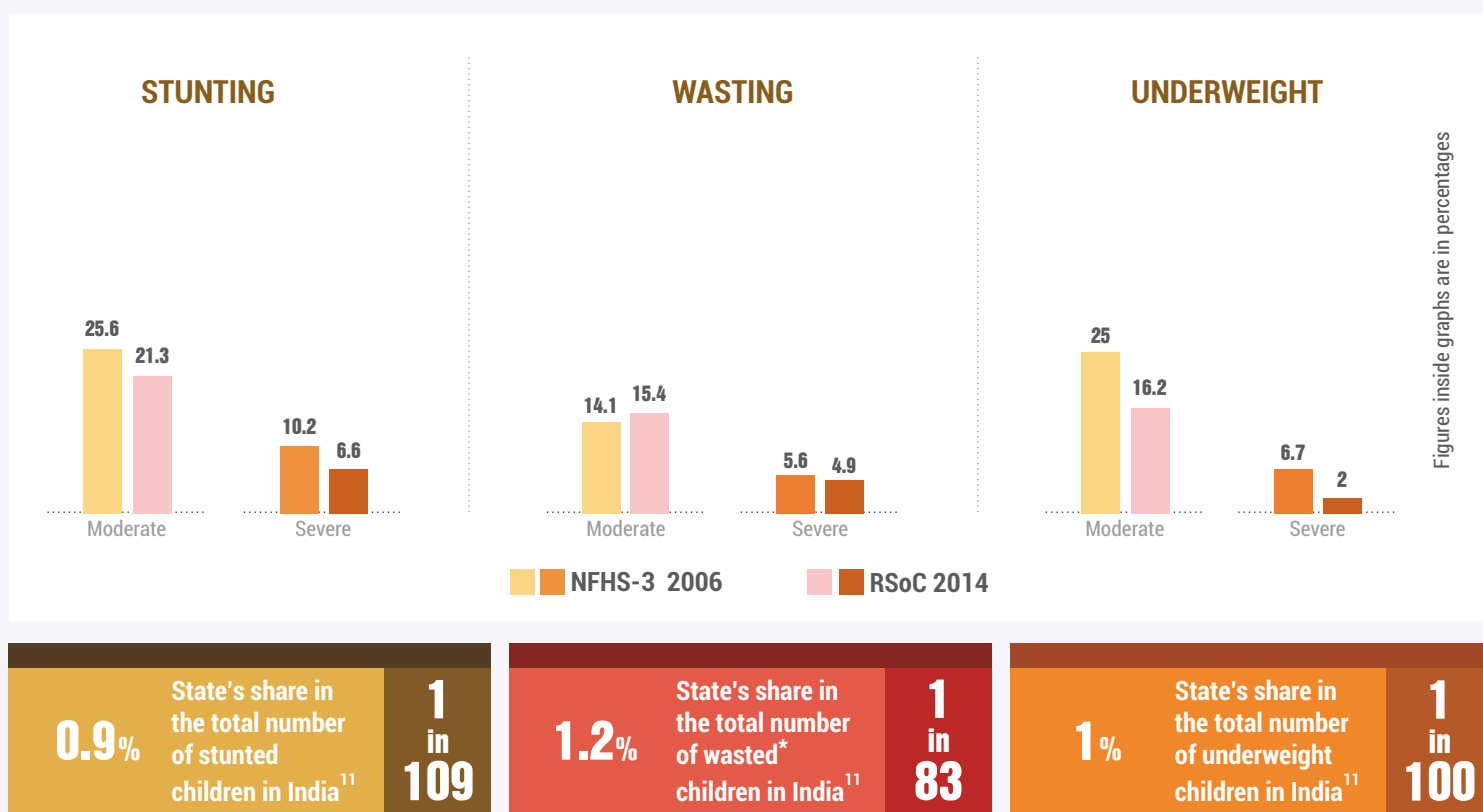
A. CHILD UNDERNUTRITION, BY TIME PERIOD

ANTHROPOMETRIC MEASURES

Stunting is inadequate height for age, which is indicative of chronic or cumulative nutritional deprivation in early childhood. A stunted child's height-for-age is below -2 standard deviations from the median height-for-age (termed HAZ) of the WHO Child Growth Standards, while a severely stunted child is below -3 standard deviations.

Wasting is inadequate weight for height, which points to acute or short-term undernutrition. A wasted child's weight-for-height (WHZ) is below -2 standard deviations from the WHO Child Growth Standards; a severely wasted child is below -3 standard deviations. (Another way to determine severe wasting or severe acute malnutrition is through a measurement of a child's mid-upper arm circumference (MUAC).

Underweight is inadequate weight for age, a composite indicator that encompasses stunting and wasting. An underweight child's weight-for-age (WAZ) is below -2 standard deviations from the WHO Child Growth Standards; again, a severely underweight child is below -3 standard deviations.

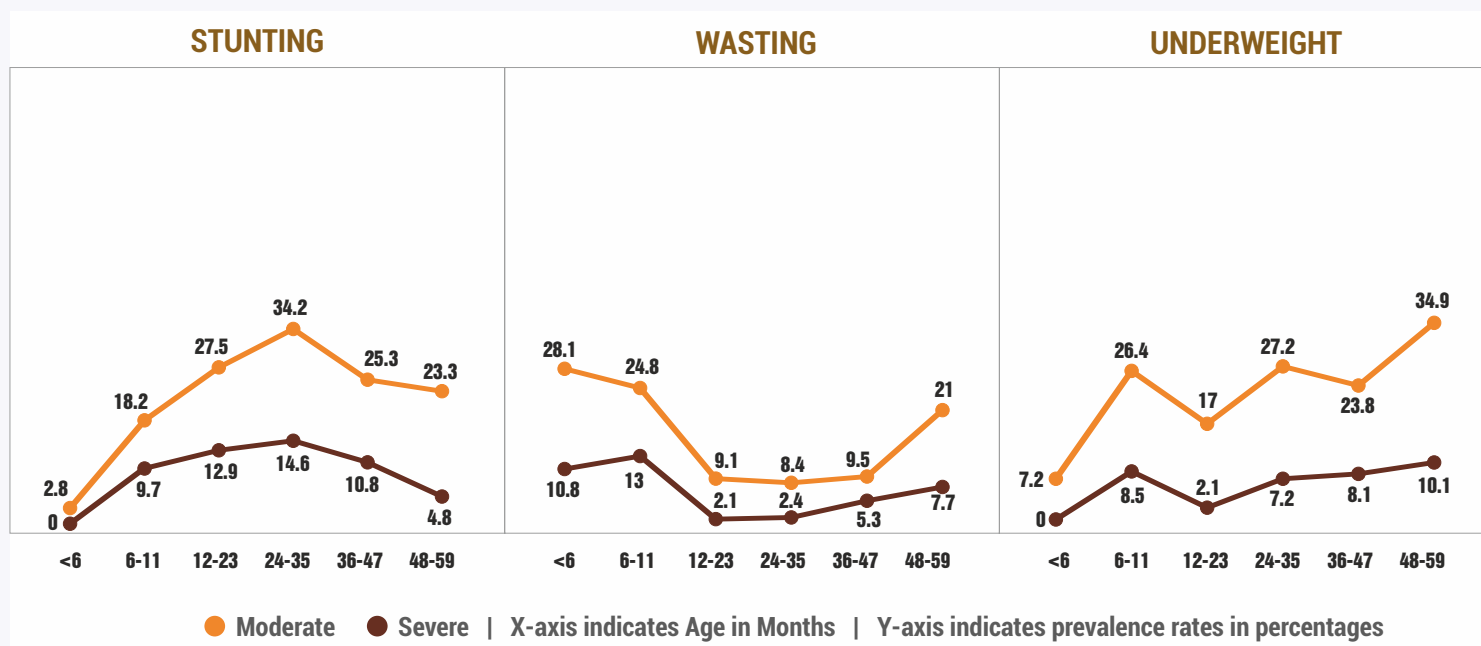


*Wasting is subject to seasonal variations either in food supply or disease prevalence and hence may not be comparable across groups of children measured at different times of the year within a survey round as well as between different survey rounds.

¹¹ Source : NFHS-3, 2006

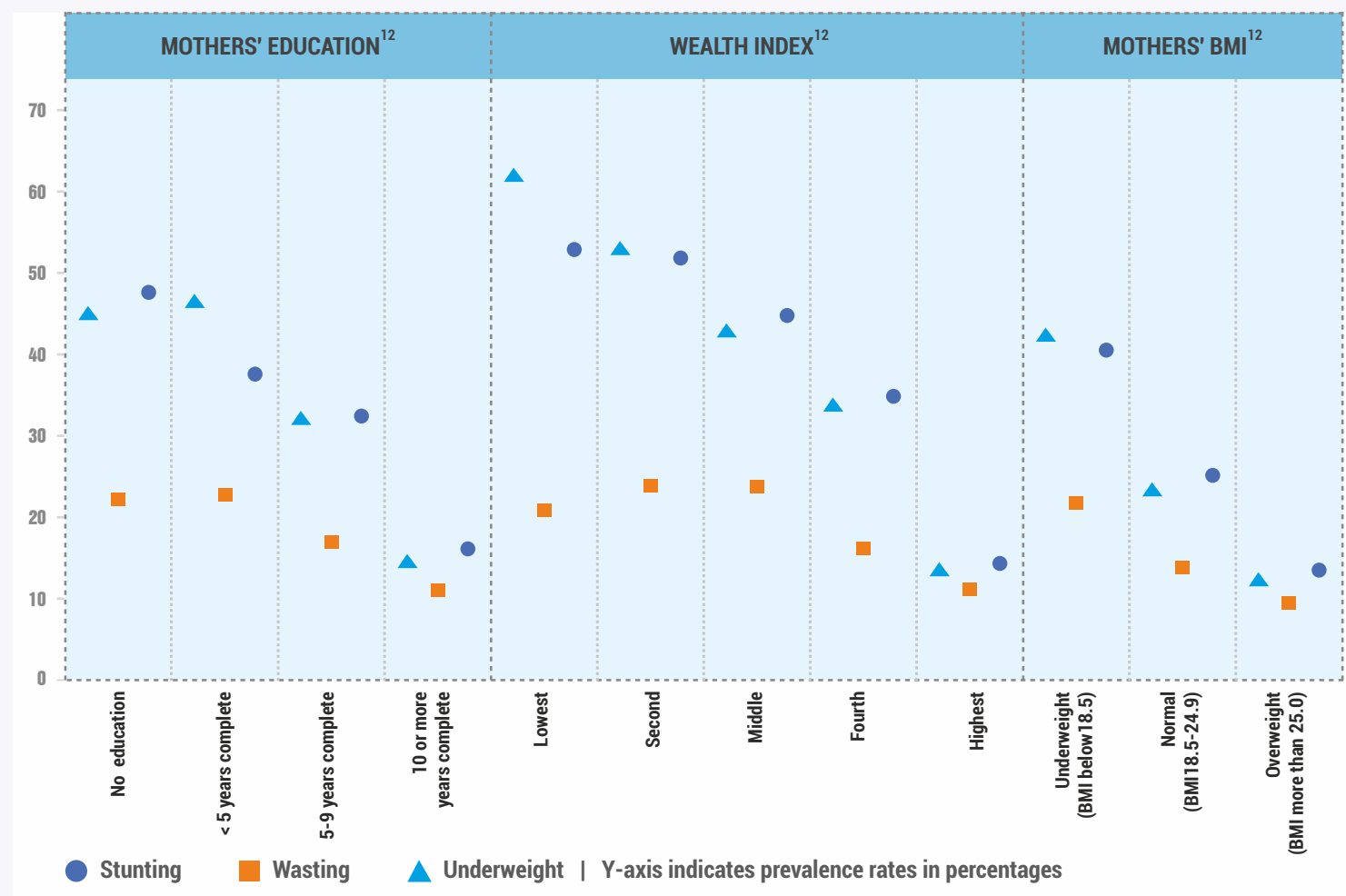
B. CHILD UNDERNUTRITION, BY AGE GROUPS¹²

Percentage of moderate (below -2 SD from the WHO growth standards) and severe (below -3 SD) stunting, wasting and underweight are available for 6 age groups among children under 5.



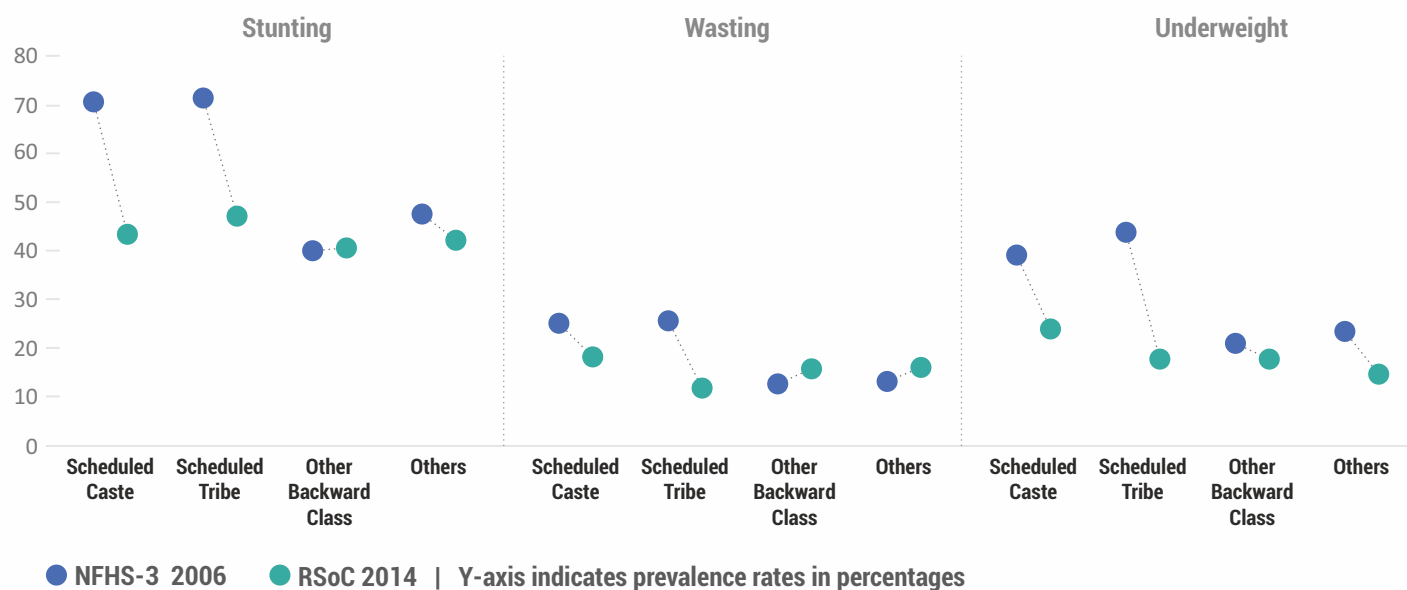
C. PREVALENCE OF CHILD UNDERNUTRITION, BY BACKGROUND CHARACTERISTICS

In this section, child undernutrition outcomes are presented, along with key socioeconomic drivers that are known to be associated with child nutrition, such as caste, residence, mother's health and education, and household income.

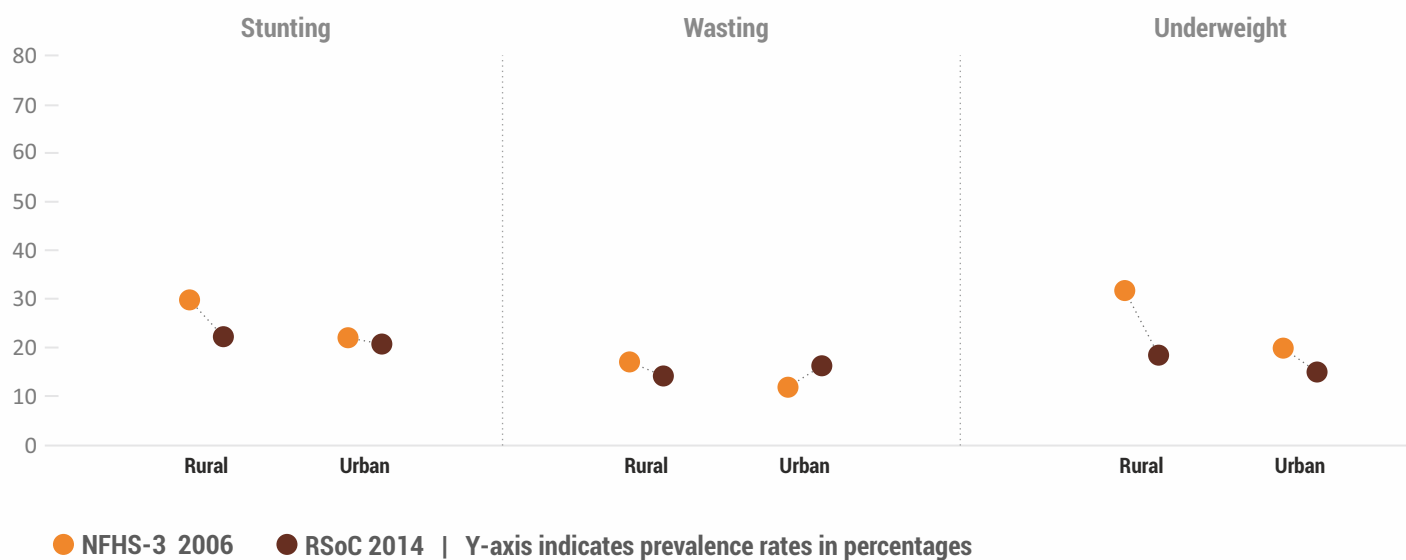


¹² Source : NFHS-3, 2006

CASTE

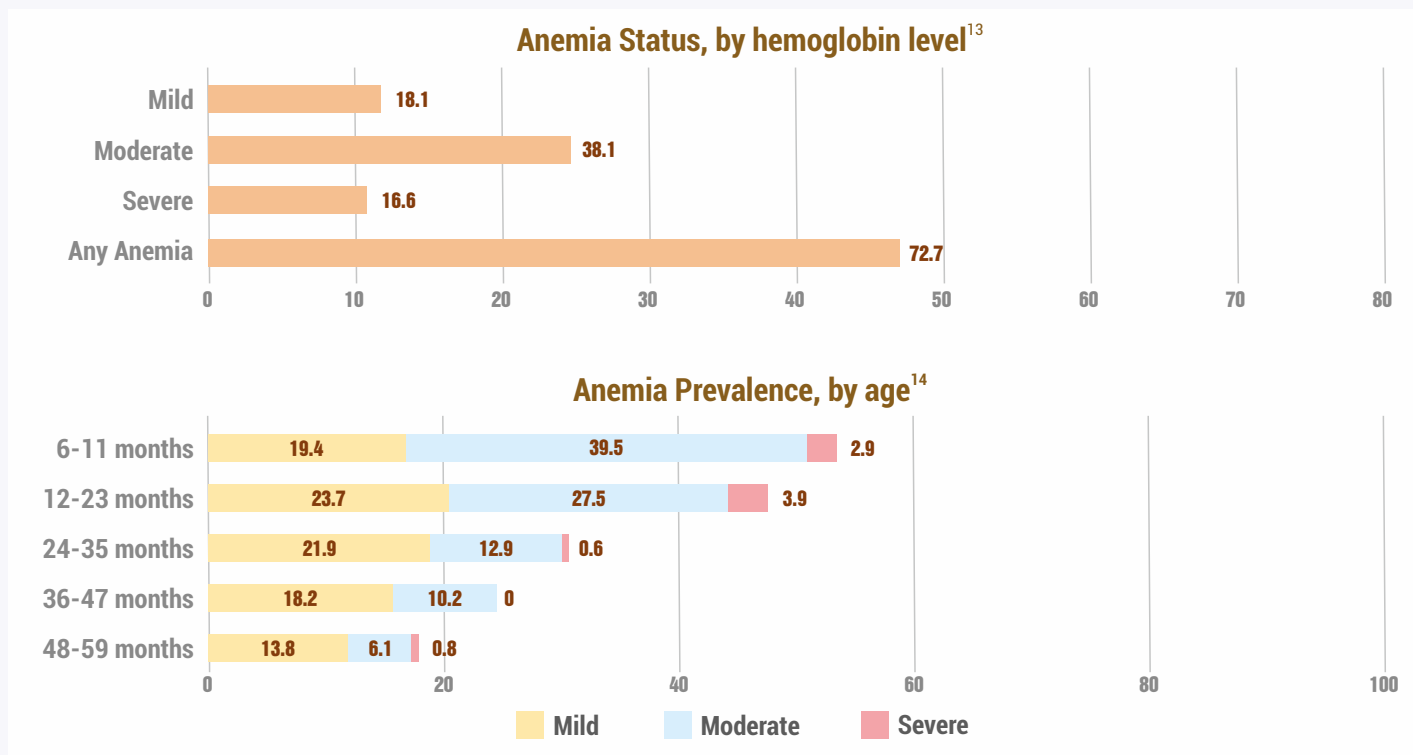


RESIDENCE



D. ANEMIA PREVALENCE

Anemia can impair physical and cognitive development among children and create long term impacts on productivity and wellbeing. This section features data on anemia prevalence by severity and age groups for children under 5.



¹³ Source : DLHS-4, 2012-13

¹⁴ Source : NFHS-3, 2006

III. IMMEDIATE DETERMINANTS

A. INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES¹⁵

This section presents indicators for assessing IYCF practices as recommended by the WHO and revised in 2008. Following optimal IYCF practices during the first 1,000 days is crucial for early child survival and growth as well as long-term health and wellbeing.

Children aged 0-23 months breastfed immediately/within an hour of birth		56.2%
	Children aged 0-5 months who were exclusively breastfed	62.6%
	Children aged 6-8 months who were fed complementary foods	75.6%
	For breastfed children (6-23 months)- A. Fed minimum number of times. Note : At least twice a day for breastfed infants 6-8 months old and at least three times a day for breastfed children 9-23 months old B. Had minimum dietary diversity Note : Minimum dietary diversity refers to four or more food groups^B fed to children aged 6-23 months	38.5% 38%

B. CHILD HEALTH¹⁵

Prevalence of childhood illnesses (in children aged 0-59 months)

Had diarrhea in 15 days prior to survey	5.8%
Had fever in 15 days prior to survey	12.3%
Had symptoms of Acute Respiratory Infection (ARI) in 15 days prior to survey	4.9%

^B The 7 food groups include the following: i. grains, roots and tubers ii. legumes and nuts iii. dairy products (milk, yoghurt, cheese) iv. Flesh foods (meat, fish, poultry, and liver/organ meats) v. eggs vi. Vitamin-A rich fruits and vegetables vii. other fruits and vegetables.

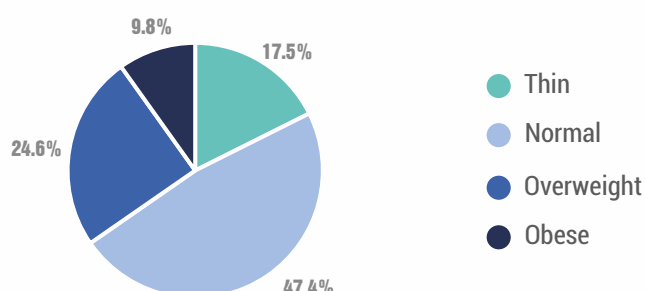
¹⁵ Source : RSoC, 2014

C. NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

Maternal health and nutrition, as well as adolescent nutrition, have important consequences for intergenerational transmission of undernutrition. Data on Body Mass Index (BMI), anemia prevalence and height among women of reproductive age are presented in this section, as are data on adolescent BMI and anemia.

C.1. WOMEN 15-49 YEARS OLD¹⁶

BMI^c levels of women aged 15-49 years



^cBody Mass Index (BMI) is defined as the weight in kilograms by the square of the height in metres (kg/m²). It is a simple index of weight-for-height which is commonly used to classify underweight, overweight and obesity in adults. Range: BMI < 18.5 = total thin, BMI 18.5-24.9 = normal, BMI 25.0-29.9 = Overweight, BMI > 30.0 = Obese [per WHO Standards]



63.4%

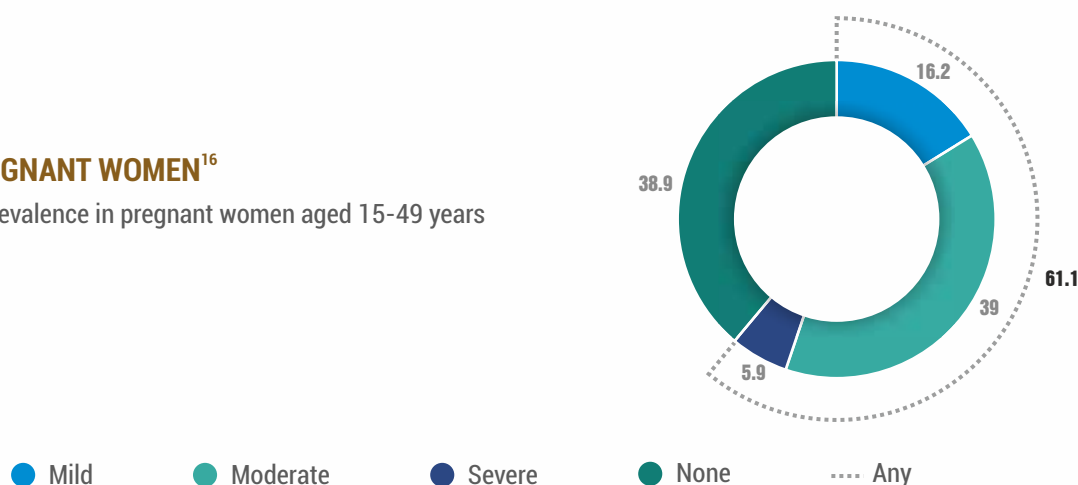
Women aged 15-49 years are anemic

7.3%

Women aged 15-49 years are severely anemic

C.2. PREGNANT WOMEN¹⁶

Anemia prevalence in pregnant women aged 15-49 years



Mild

Moderate

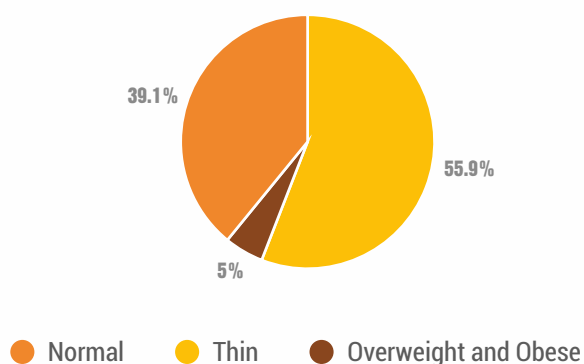
Severe

None

Any

C.3. ADOLESCENT GIRLS

BMI levels of adolescent girls aged 15-18 years¹⁷



39.1%

Adolescent girls aged 15-19 years are anemic¹⁶

0.4%

Adolescent girls aged 15-19 years are severely anemic¹⁶

¹⁶ Source : DLHS-4, 2012-13

¹⁷ Source : RSoC, 2014

^{17a} Source : NFHS-3, 2006

IV. UNDERLYING DETERMINANTS

A. SOCIAL STATUS OF WOMEN

Women's status is recognized to contribute in significant ways to improving nutrition. This section presents indicators that are representative of women's social status, including measures of education, age at marriage and first birth, employment, decision making and domestic violence. It also includes the Gender Empowerment Measure that captures gender inequality along three dimensions: political participation and decision-making power, economic participation and decision-making power, and power over economic resources.



Currently married women who have 10 or more years of schooling¹⁸ **58.9%**



16.1% Women aged 20-24 years who were married before the age of 18¹⁹

29.1 Average age at marriage¹⁹

Gender Empowerment Measure^{D,20}

0.5

0.5

National Average²⁰



Female workforce participation rate²² **21.9%**

Currently married women who make decisions about²³:



32.8% Own healthcare



13.3% Major household purchase



44.2% Purchases for daily household needs



27.8% Visits to her family/friends/relatives



19.6% Women who have experienced any form of physical/sexual/emotional violence²³

40.2% Ever married women who justify hitting/wife-beating (for either of the reasons mentioned)²³

^D The Gender Empowerment Measure is a weighted average index based on indicators that are classified into three dimensions: a. political participation and decision-making power b. economic participation and decision-making power and c. power over economic resources. The index ranges from a minimum of 0 to a maximum of 1, with a higher score indicating greater empowerment of women. (More information available at <http://wcd.nic.in/publication/GDIGEReport/Part3.pdf>.)

¹⁸ Source : DLHS-4, 2012-13

¹⁹ Source : RSoC, 2014

²⁰ Source : MoWCD, 2006

²² Source : Women and Men in India, 16th Issue MoSPI, 2014

²³ Source : NFHS-3, 2006

B. WATER AND SANITATION

Poor hygiene and sanitation, by directly increasing exposure and susceptibility to infections, are associated with undernutrition among children. This section covers key indicators on access to safe drinking water and availability of sanitation facilities at the state level. It also includes the expenditure on toilet construction under the Total Sanitation Campaign.



89.5%

Households with access to improved sources of drinking water^{E, 24}

67%

Households using improved sanitation facility^{F, 24}



13.9%

Households practicing open defecation²⁴

0.3 M

Expenditure on toilets under Total Sanitation Campaign (TSC)^{G, 25}



1,065 M

National Average²⁵

C. AGRICULTURE AND FOOD SECURITY

Agriculture productivity and food security can affect household access to foods necessary for a healthy diet. Thus, this section presents indicators related to agricultural growth and food consumption patterns in the state, indicating the level of food security in the state relative to the national situation.



7.7%

Growth rate of agriculture from 2007-2012²⁶



0.05%

Share in India's total foodgrain production²⁷



Mean Calorie intake per person per day (in Kcal)²⁸

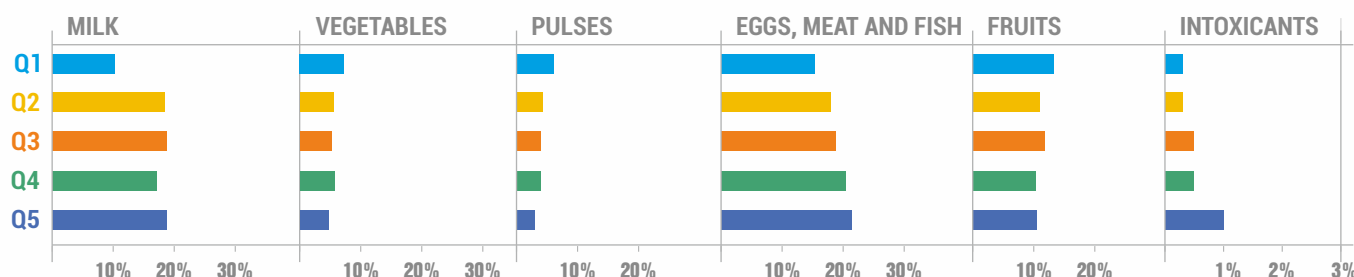
RURAL

NA 2233
GOA INDIA AVG

URBAN

NA 2206
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Expenditure on food items by income quintiles²⁸



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Beneficiaries who availed supplementary food under ICDS²⁹

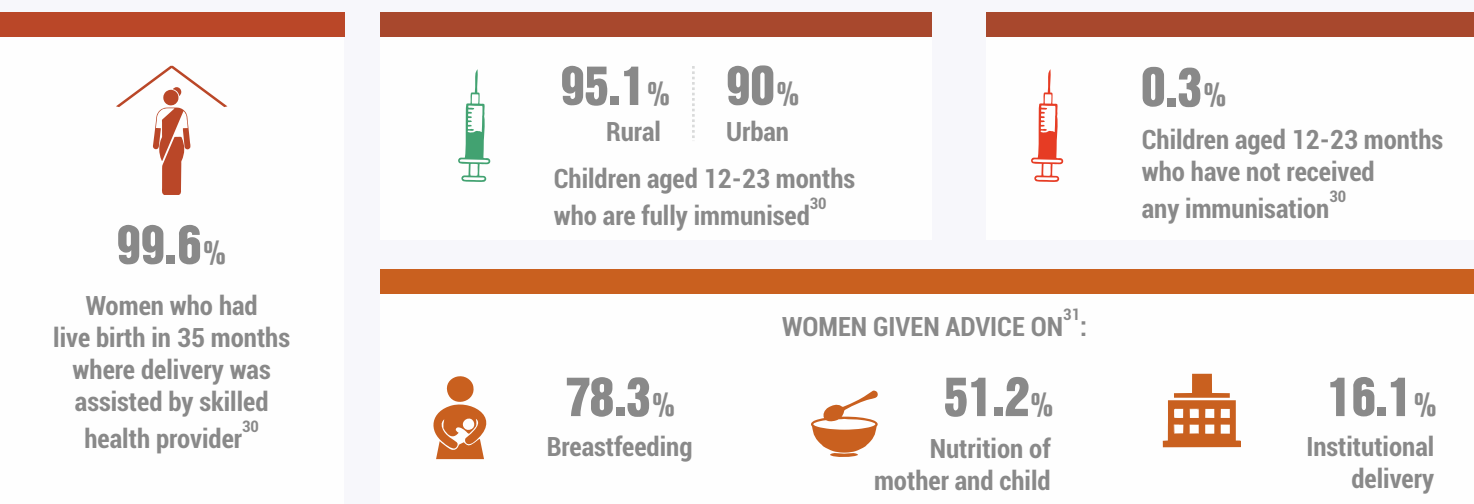
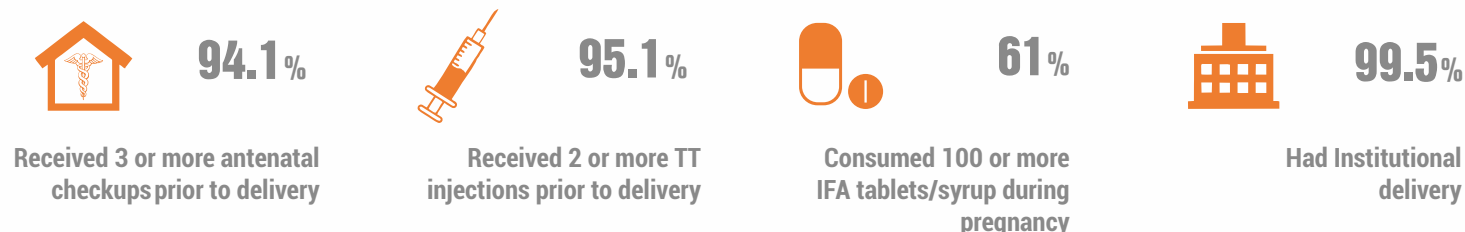
Children 6-35 months	66.5%
Children 36-71 months	41.8%
Pregnant women	49.2%
Lactating mothers	70.2%

Beneficiaries who received supplementary food for at least 21 days in the month prior to the survey

Children aged 6-35 months	62.6%
Children aged 36-71 months	66.6%
Pregnant women	70.7%
Lactating women	69.9%

²⁹ Source : RSoC, 2014

SERVICES PROVIDED TO WOMEN WHO HAD A LIVE BIRTH IN LAST 35 MONTHS³⁰



WOMEN GIVEN ADVICE ON³¹:



A.2. PERSONNEL CAPACITY OF ICDS AND NRHM:

This section features data on availability of healthcare personnel and services available to women of reproductive age (antenatal care, tetanus toxoid coverage, iron-folic acid supplementation coverage, institutional delivery and counseling). Household and individual access to health services can directly impact children's nutrition and welfare during the crucial first 1,000 days of life.

Availability of Anganwadi Centres and Workers (AWCs and AWWs) ^{H, 30}	Value
Pending or vacant Anganwadi workers to sanctioned number of workers*	0.3%
AWWs living in the AWC village/ward	59.4%
AWWs having 10 or more years of schooling	99.3%
Median age of AWWs	42 years
AWCs serving to population more than the stipulated norm	48.2%

Growth Monitoring ³⁰	Value
AWCs having functional baby weighing scale	94.9%
AWCs having functional adult weighing scale	95.7%
Available WHO growth chart at AWCs	99.6%

^H Number of AWCs surveyed for Goa as per RSoC 2014 is 100.

³⁰ Source : RSoC, 2014

³¹ Source : DLHS-4, 2012-13

* Source : MoWCD, 2012

Training and Comprehensive Knowledge ³²	Value
AWWs having correct knowledge of intake of food by pregnant women	100%
AWWs having correct knowledge of normal birth weight of children	96.3%
AWWs having correct knowledge of initiation of breastfeeding within one hour	98.2%
AWWs having correct knowledge of exclusive breastfeeding for the first six months	100%
AWWs having correct knowledge of appropriate age of child for complementary feeding	99.6%

Health Service Delivery Personnel	Value
ASHAs selected ³³	NA
Current density of ASHA as per Census 2011 rural population ³³	NA
Pending or vacant ANM positions sub centres & PHCs ³⁴	0%

A.3. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SPECIFIC INTERVENTIONS

Expenditure on Schemes (in million dollars)	In million USD	National Average
ICDS (ICDS general + SNP + training) (women and children) ³⁵	3	75
NRHM expenditure (Central Government) ³⁶	4.1	68.8
NRHM expenditure (State Government) ³⁶	0.6	9.3

B. NUTRITION-SENSITIVE INTERVENTIONS

This section includes information on expenditure and coverage of key centrally-sponsored schemes that indirectly impact maternal and child nutrition. These are: the Mid Day Meal Scheme (MDMS), Public Distribution System (PDS), and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

B.1. COVERAGE OF SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS

Coverage of Schemes	Value
MDMS (base: eligible children*) ³⁷	13.2%
PDS (base: rural and urban households reporting consumption) ³⁸	62.5%
MGNREGA (base: rural persons 18 years and above registered in MGNREG job card and demanded work during last 365 days) ³⁹	100%

* All children studying in primary & upper primary classes in schools supported under Sarva Shiksha Abhiyan and NCLP (National Child Labour Project) run by Ministry of Labour.

B.2. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS:

Expenditure on Schemes (in million dollars)	In million USD	National Average
MDMS ⁴⁰	2	47
PDS ⁴¹	25.2	475.3
MGNREGA ⁴²	0	214

³² Source : RSoC, 2014

³³ Source : NRHM, 2013

³⁴ Source : MoHFW, 2013

³⁵ Source : Lok Sabha Unstarred Question # 846 dated 27.02.2015, 2012-13

³⁶ Source : Lok Sabha Annexured Unstarred Question # 409 dated 6.12.2013, 2012-13

³⁷ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/lsq15/15/as216.htm 2011-12

³⁸ Source : Report No. 558, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

³⁹ Source : Report No. 554, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

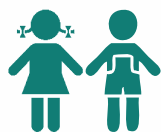
⁴⁰ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014, 2012-13

⁴¹ Source : Food Corporation of India 2013, 2012-13

⁴² Source : Lok Sabha Annexured Unstarred Question # 3835 dated 19.03.2015, 2012-13

FAST FACTS ON NUTRITION AND ITS DETERMINANTS IN GUJARAT

World Health Assembly Nutrition Targets



CHILDREN UNDER 5 YEARS

41.6%
Stunted¹
18.7%
Wasted¹

World Health Assembly Nutrition Targets


74.4%

 Infants 0-5 months old who are exclusively breastfed¹

19.5%

 Children under 3 years who have low birth weight (<2.5 kgs)²

55.3%

 Women 15-49 years old with anemia¹

Immediate Determinants


43.4%

 Infants 6-8 months old who receive solid, semi-solid or soft foods²
20.2%

 Infants & young children 6-23 months old who achieve minimal diet diversity in complementary feeding²

69.7%

 Children 6-59 months old with anemia¹

8.8%

 Children 6-59 months old who had diarrhea in 15 days prior to survey²

Immediate Determinants


24.4%

 Children 6-35 months old who received supplementary food under ICDS for 21 days in the month prior to survey²

56.2%

 Children 12-23 months old who are fully immunized²

72.3%

 Mothers of children under 36 months old who received three or more antenatal checkups²

Underlying Determinants


44.6%

 Currently married women with 10 or more years of schooling¹

17%

 Women aged 20-24 years who were married before the age of 18²

52.6%

 Adolescent girls 15-18 years old with low BMI (<18.5)²

Underlying Determinants


38.1%

 Households practicing open defecation²

16.6%

 Population below state-specific poverty line³

Does state have a high-level nutrition mission?

YES
¹ Source : RSoC, 2014

² Source : NFHS-3, 2006

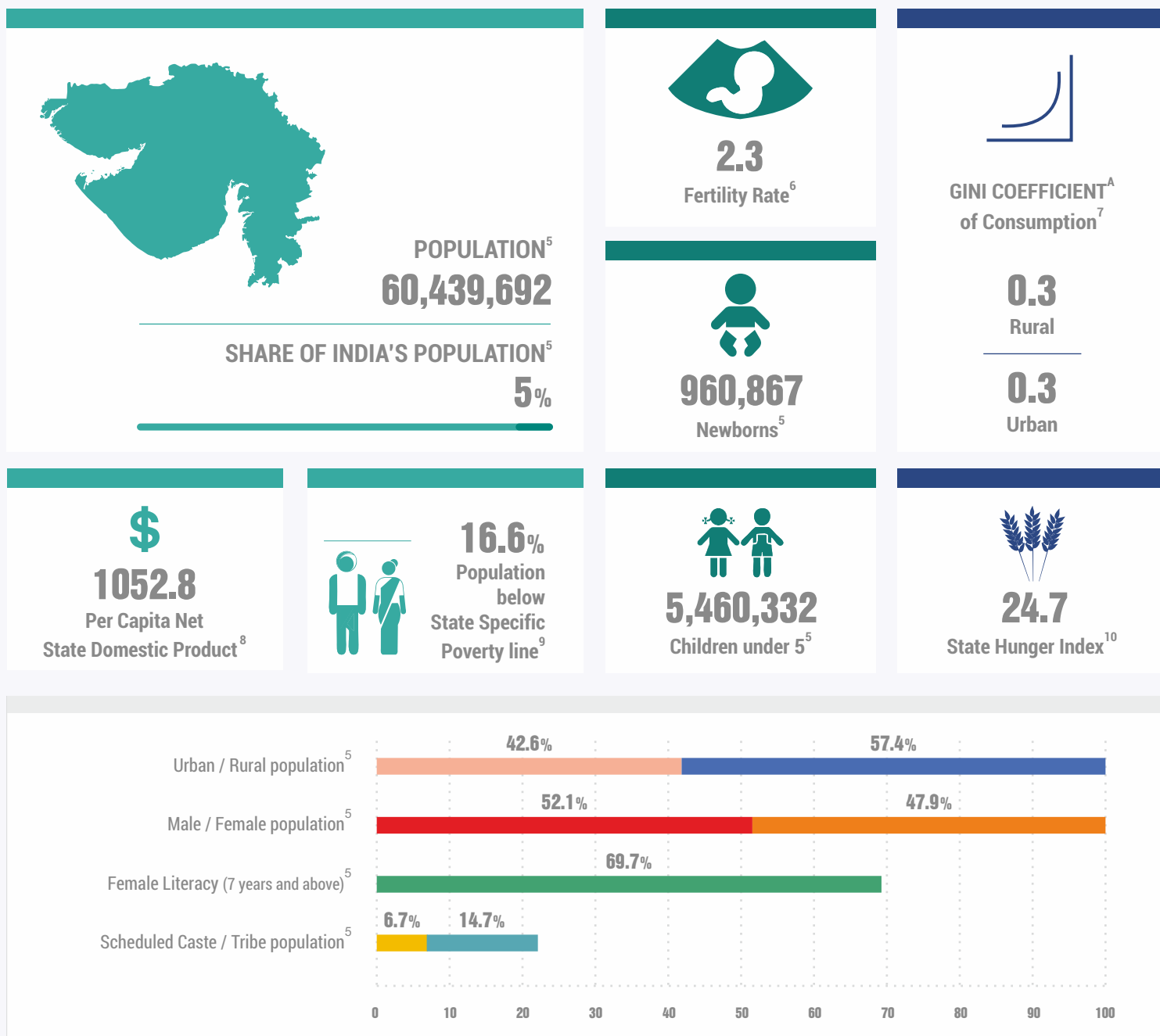
³ Source : DLHS-3, 2007-08

⁴ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Govt. of India

I. CONTEXT

A. DEMOGRAPHIC CONTEXT

This section highlights the demographic composition of the state in terms of male-female, rural-urban, and SC-ST ratios, literacy and fertility rates. In addition, it also includes the size of the population of newborns and children less than five years of age (as of the Census of India, 2011) to illustrate the size of the target population for nutrition-related interventions that need to reach this vulnerable population.



A : Gini coefficient is a measure of inequality of distribution. A Gini coefficient of 0 represents perfect equality, while a value of 100 implies perfect inequality. (See Appendix A for more information)

⁵ Source : Primary Census Abstract, Census, 2011

⁶ Source : SRS, 2013

⁷ Source : Planning Commission Estimates: NSSO 66th round-Employment and Unemployment Survey, 2009-10

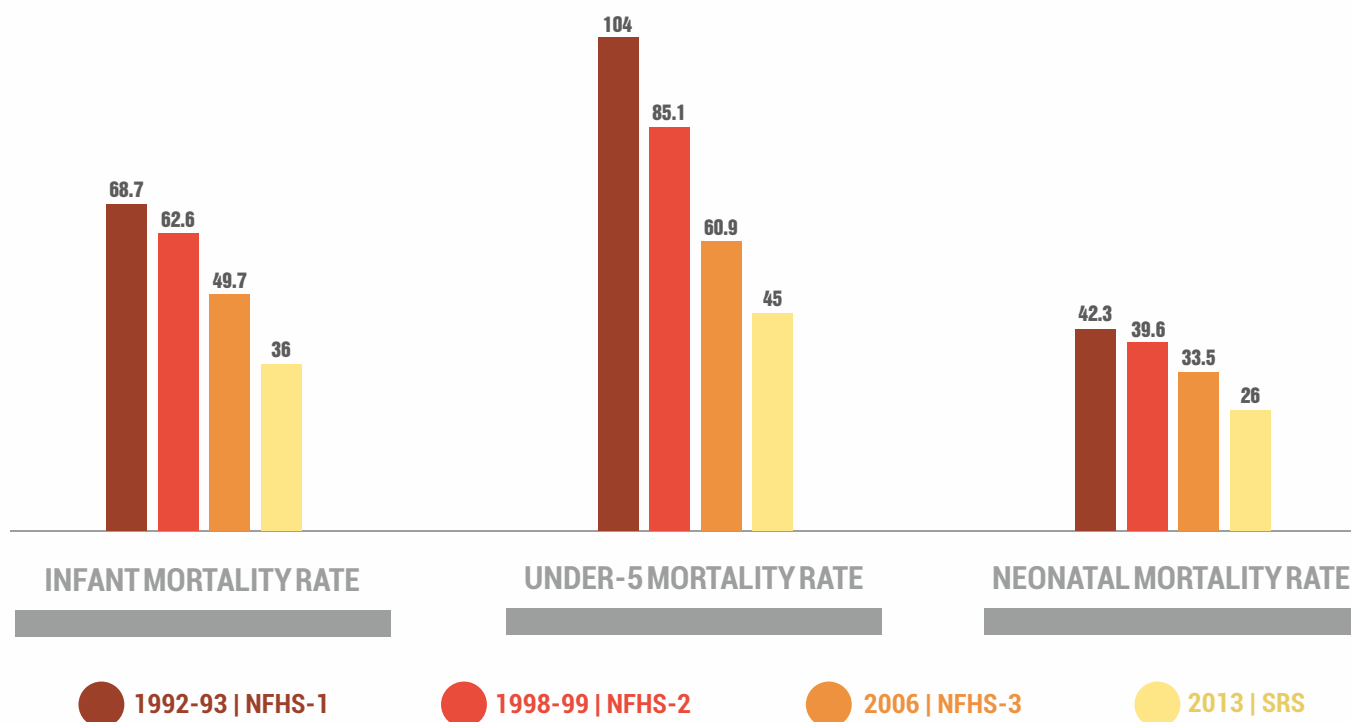
⁸ Source : Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14; http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82

⁹ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Government of India, 2011-12 : http://planningcommission.nic.in/news/pre_pov2307.pdf

¹⁰ Source : IFPRI, India State Hunger Index, 2009

B. CHILD MORTALITY PER THOUSAND LIVE BIRTHS

This section illustrates trends in mortality in neonates, infants and children under 5 years, since 1992. The purpose of this is to highlight the success achieved by individual states in averting deaths of children since the economic growth of the 1990s.



II. NUTRITIONAL STATUS AMONG CHILDREN

This section presents data on nutrition outcome indicators (stunting, wasting, and underweight) and anemia prevalence. Anthropometric measures for children under 5 (stunting, wasting, and underweight) are presented over time periods, by age groups and by background characteristics. This data aims to convey the prevalence and severity of undernutrition in the state.

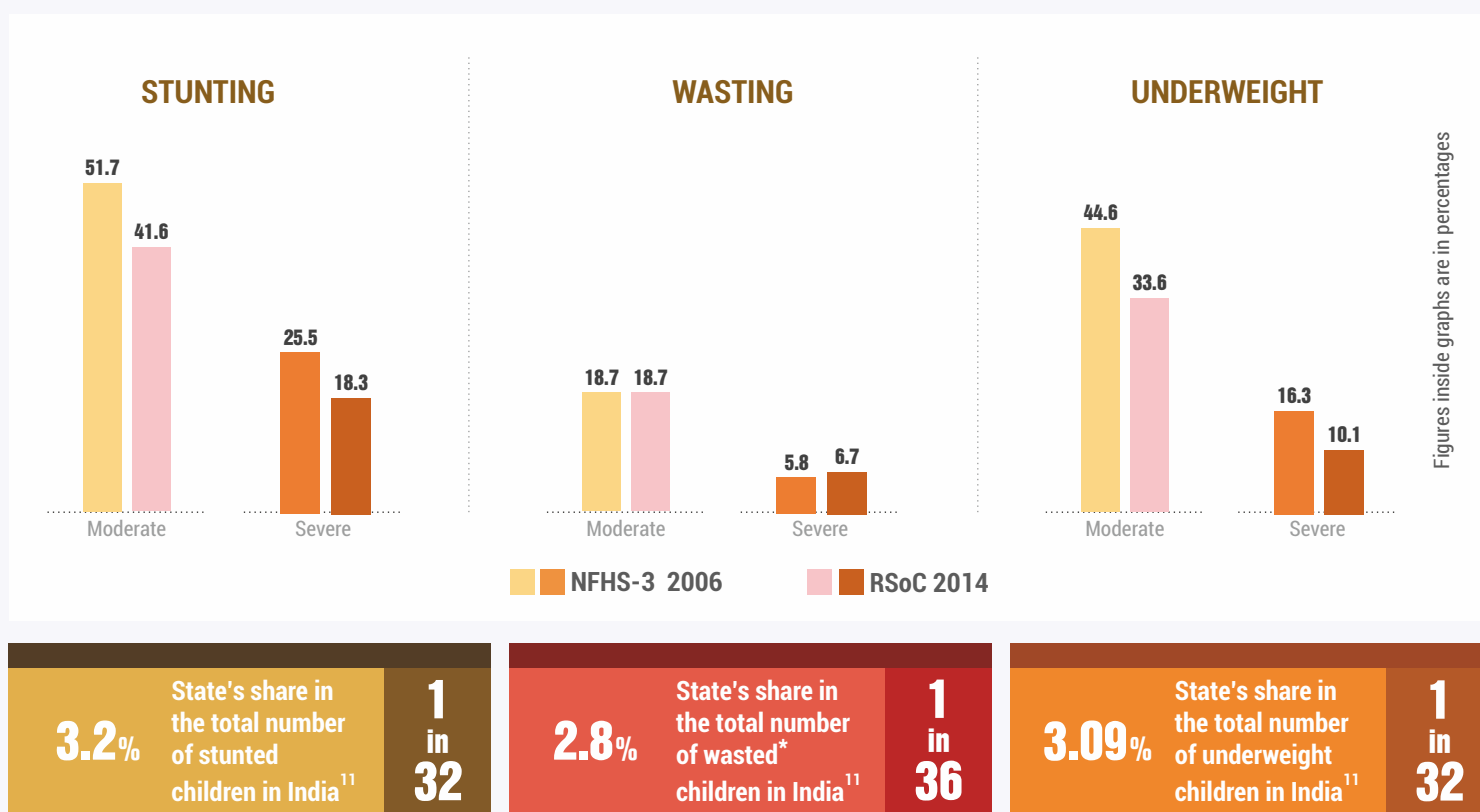
A. CHILD UNDERNUTRITION, BY TIME PERIOD

ANTHROPOMETRIC MEASURES

Stunting is inadequate height for age, which is indicative of chronic or cumulative nutritional deprivation in early childhood. A stunted child's height-for-age is below -2 standard deviations from the median height-for-age (termed HAZ) of the WHO Child Growth Standards, while a severely stunted child is below -3 standard deviations.

Wasting is inadequate weight for height, which points to acute or short-term undernutrition. A wasted child's weight-for-height (WHZ) is below -2 standard deviations from the WHO Child Growth Standards; a severely wasted child is below -3 standard deviations. (Another way to determine severe wasting or severe acute malnutrition is through a measurement of a child's mid-upper arm circumference (MUAC).

Underweight is inadequate weight for age, a composite indicator that encompasses stunting and wasting. An underweight child's weight-for-age (WAZ) is below -2 standard deviations from the WHO Child Growth Standards; again, a severely underweight child is below -3 standard deviations.

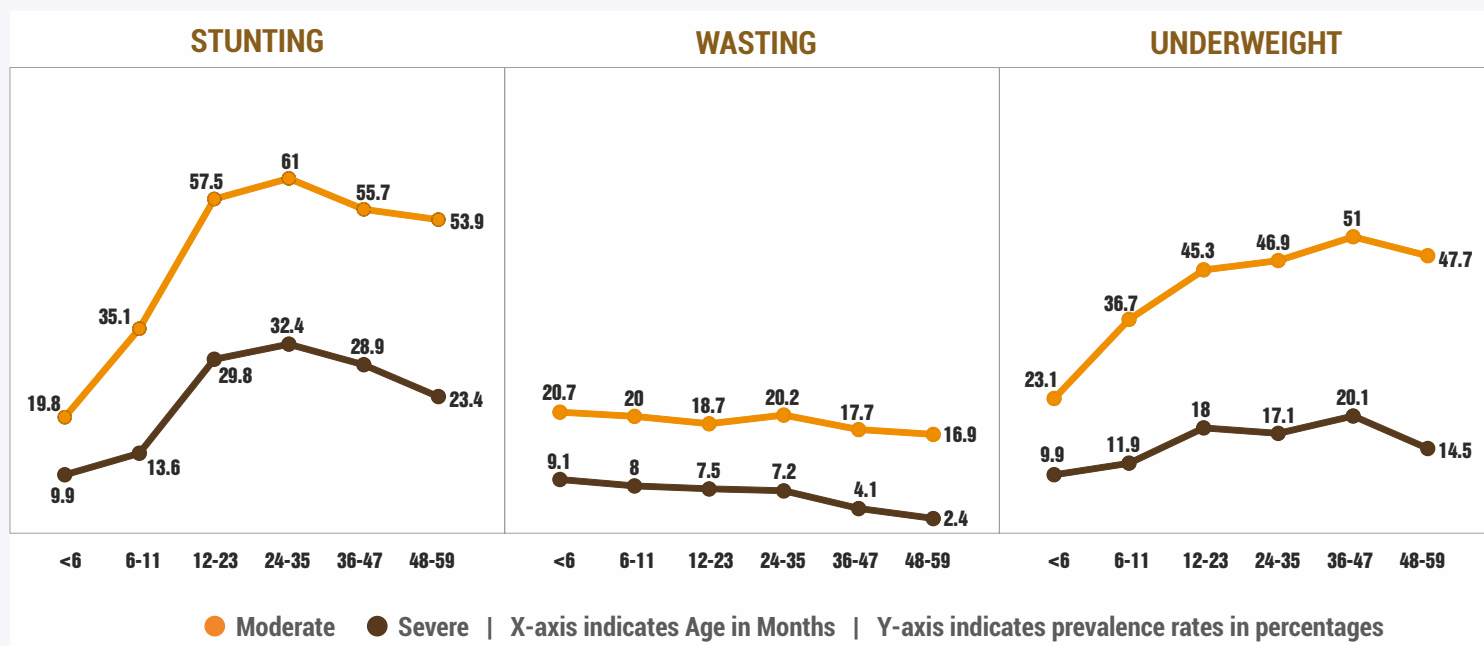


*Wasting is subject to seasonal variations either in food supply or disease prevalence and hence may not be comparable across groups of children measured at different times of the year within a survey round as well as between different survey rounds.

¹¹ Source : NFHS-3, 2006

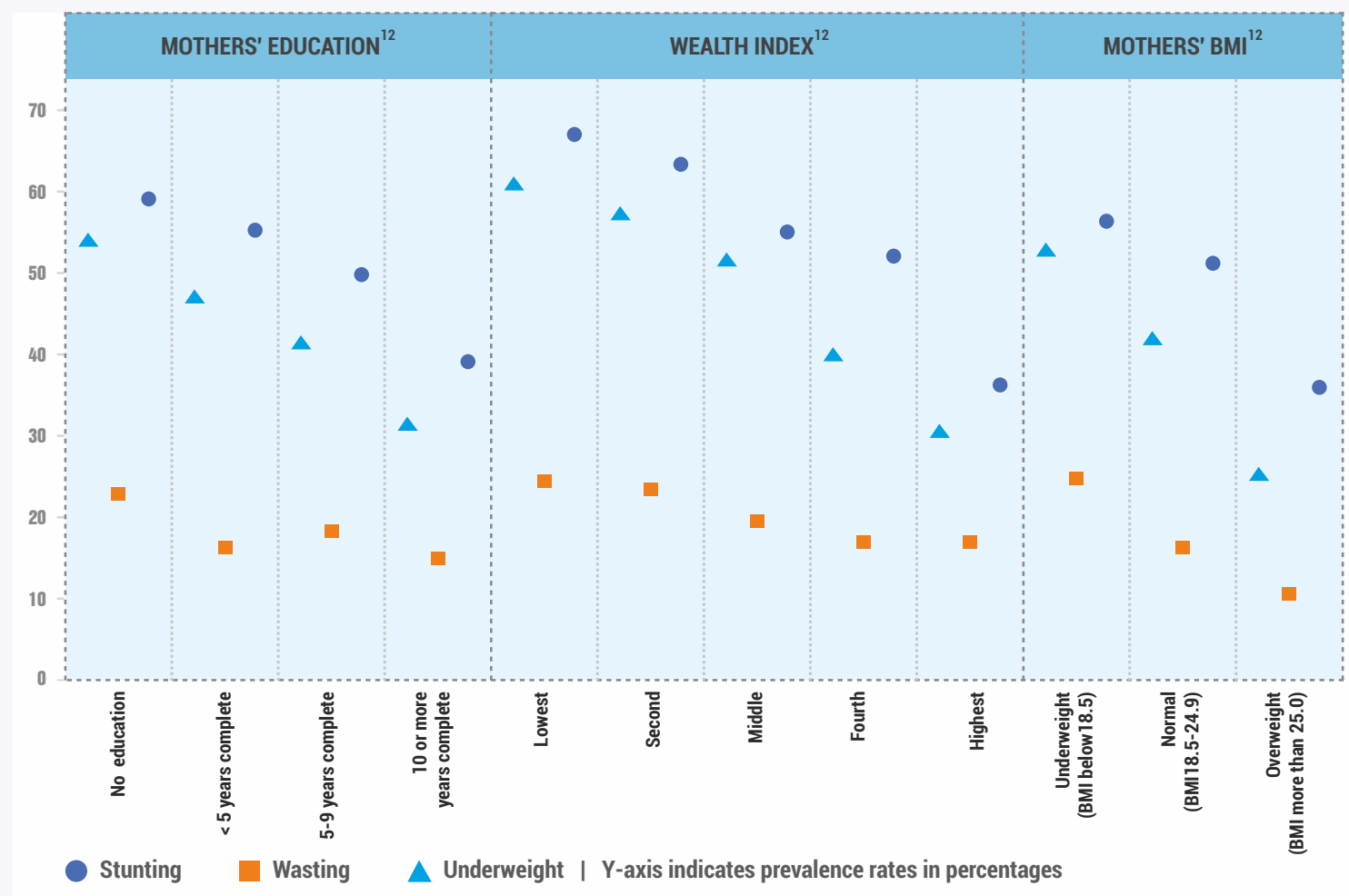
B. CHILD UNDERNUTRITION, BY AGE GROUPS¹²

Percentage of moderate (below -2 SD from the WHO growth standards) and severe (below -3 SD) stunting, wasting and underweight are available for 6 age groups among children under 5.



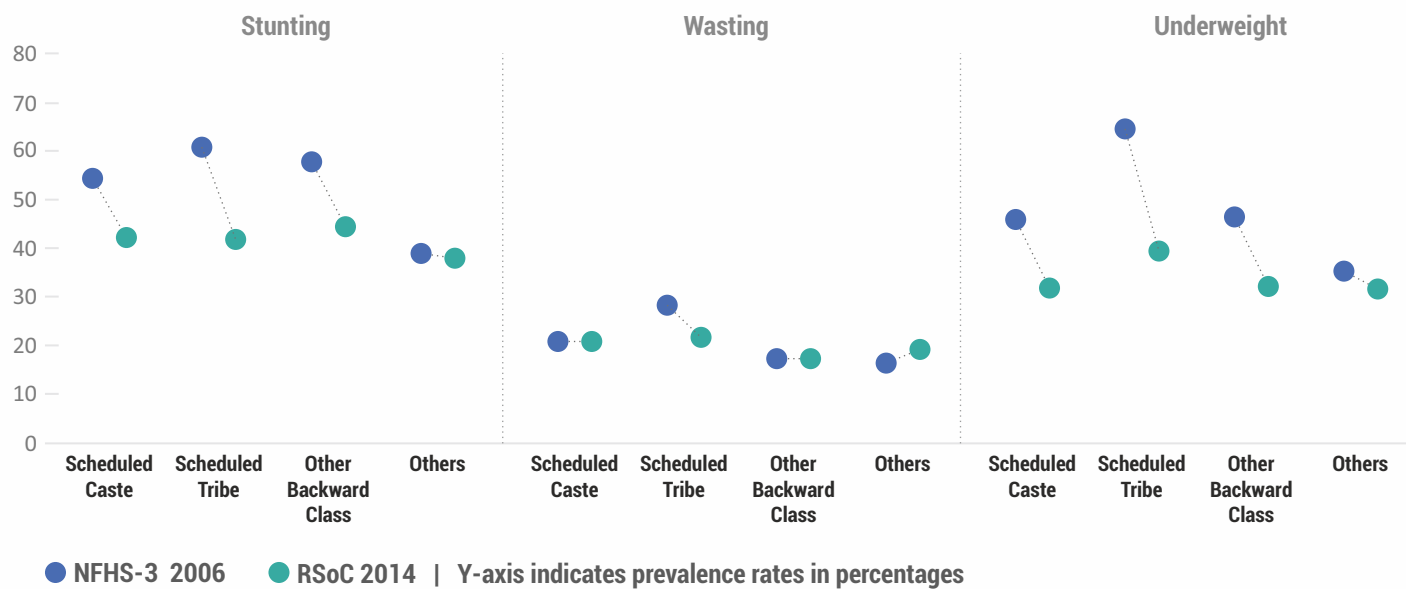
C. PREVALENCE OF CHILD UNDERNUTRITION, BY BACKGROUND CHARACTERISTICS

In this section, child undernutrition outcomes are presented, along with key socioeconomic drivers that are known to be associated with child nutrition, such as caste, residence, mother's health and education, and household income.

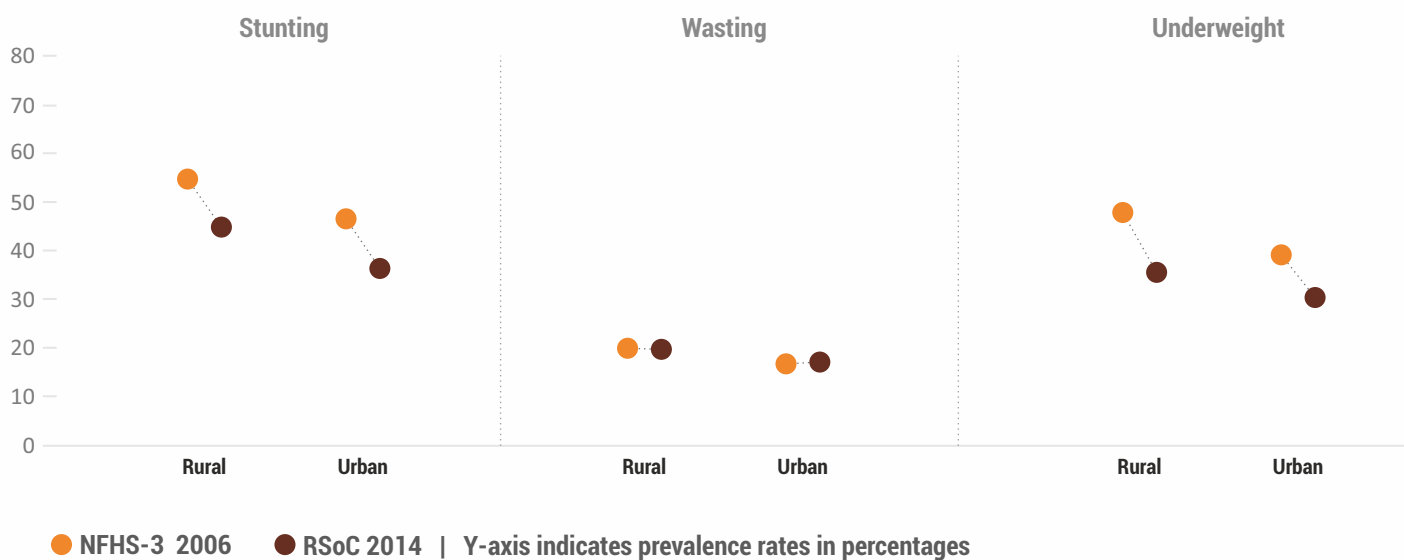


¹² Source : NFHS-3, 2006

CASTE

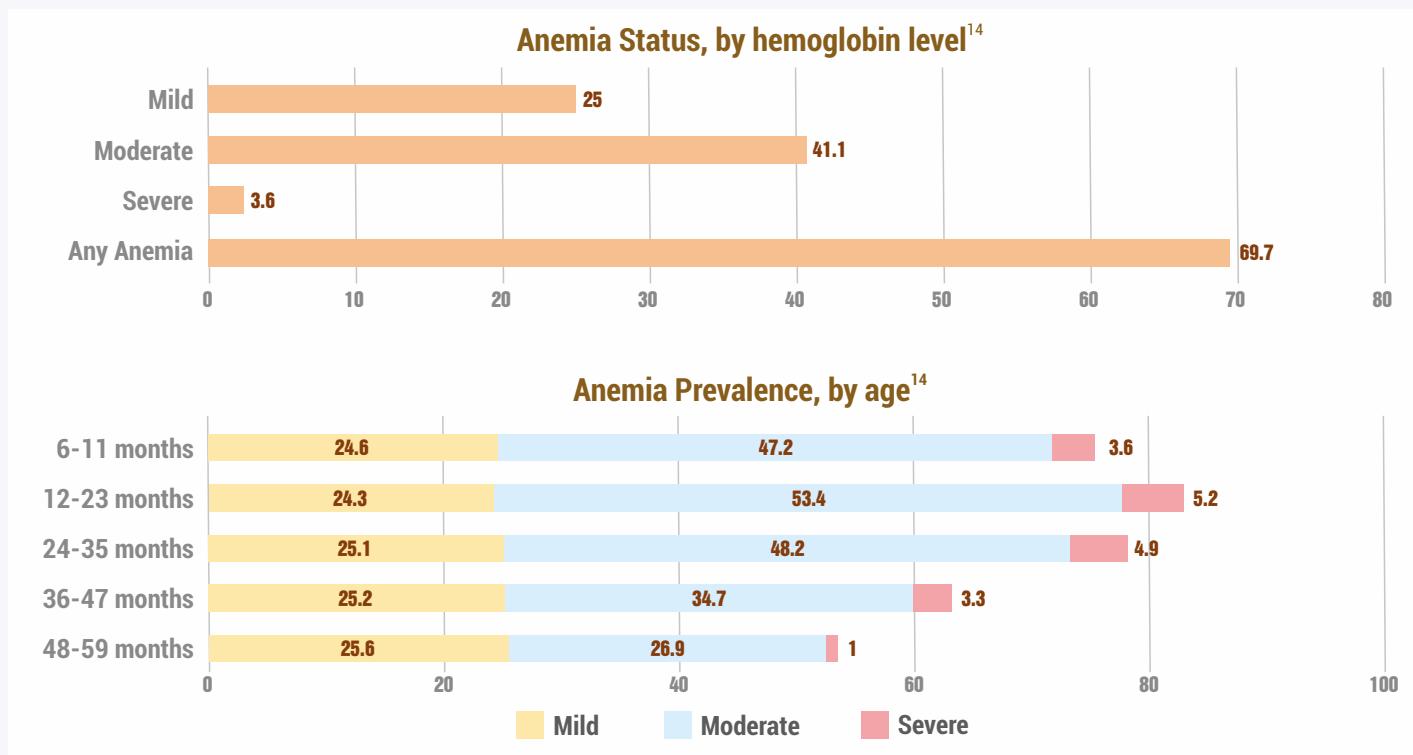


RESIDENCE



D. ANEMIA PREVALENCE

Anemia can impair physical and cognitive development among children and create long term impacts on productivity and wellbeing. This section features data on anemia prevalence by severity and age groups for children under 5.



¹⁴ Source : NFHS-3, 2006

III. IMMEDIATE DETERMINANTS

A. INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES¹⁵

This section presents indicators for assessing IYCF practices as recommended by the WHO and revised in 2008. Following optimal IYCF practices during the first 1,000 days is crucial for early child survival and growth as well as long-term health and wellbeing.

Children aged 0-23 months breastfed immediately/within an hour of birth		44.9%
	Children aged 0-5 months who were exclusively breastfed	74.4%
	Children aged 6-8 months who were fed complementary foods	43.4%
	For breastfed children (6-23 months)- A. Fed minimum number of times. Note : At least twice a day for breastfed infants 6-8 months old and at least three times a day for breastfed children 9-23 months old B. Had minimum dietary diversity Note : Minimum dietary diversity refers to four or more food groups^B fed to children aged 6-23 months	30.4% 20.2%

B. CHILD HEALTH¹⁵

Prevalence of childhood illnesses (in children aged 0-59 months)

Had diarrhea in 15 days prior to survey	8.8%
Had fever in 15 days prior to survey	12.7%
Had symptoms of Acute Respiratory Infection (ARI) in 15 days prior to survey	10.4%

^B The 7 food groups include the following: i. grains, roots and tubers ii. legumes and nuts iii. dairy products (milk, yoghurt, cheese) iv. Flesh foods (meat, fish, poultry, and liver/organ meats) v. eggs vi. Vitamin-A rich fruits and vegetables vii. other fruits and vegetables.

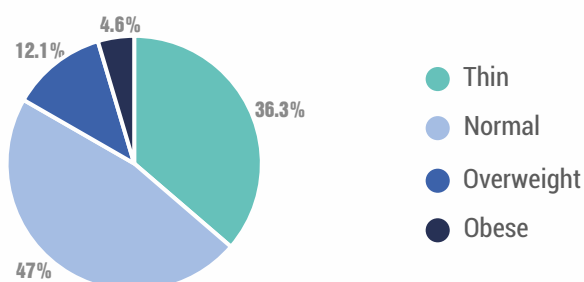
¹⁵ Source : RSoC, 2014

C. NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

Maternal health and nutrition, as well as adolescent nutrition, have important consequences for intergenerational transmission of undernutrition. Data on Body Mass Index (BMI), anemia prevalence and height among women of reproductive age are presented in this section, as are data on adolescent BMI and anemia.

C.1. WOMEN 15-49 YEARS OLD¹⁶

BMI^c levels of women aged 15-49 years



^cBody Mass Index (BMI) is defined as the weight in kilograms by the square of the height in metres (kg/m²). It is a simple index of weight-for-height which is commonly used to classify underweight, overweight and obesity in adults. Range: BMI < 18.5 = total thin, BMI 18.5-24.9 = normal, BMI 25.0-29.9 = Overweight, BMI > 30.0 = Obese [per WHO Standards]



55.3%

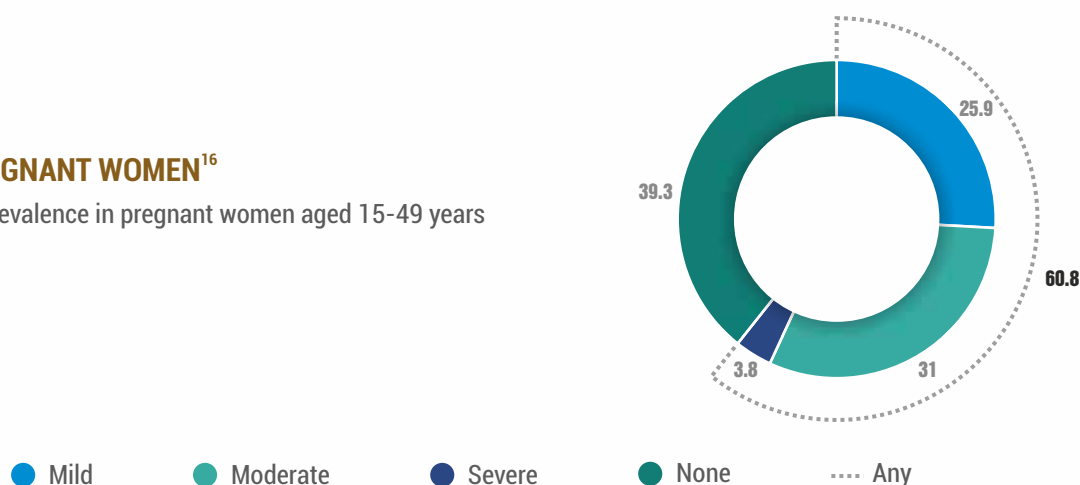
Women aged 15-49 years are anemic

2.6%

Women aged 15-49 years are severely anemic

C.2. PREGNANT WOMEN¹⁶

Anemia prevalence in pregnant women aged 15-49 years



● Mild

● Moderate

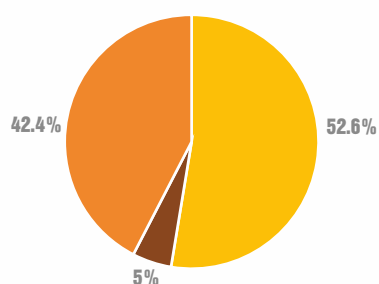
● Severe

● None

--- Any

C.3. ADOLESCENT GIRLS

BMI levels of adolescent girls aged 15-18 years¹⁷



● Normal

● Thin

● Overweight and Obese



57.4%

Adolescent girls aged 15-19 years are anemic¹⁶

2.1%

Adolescent girls aged 15-19 years are severely anemic¹⁶

¹⁶ Source : NFHS-3, 2006

¹⁷ Source : RSoC, 2014

IV. UNDERLYING DETERMINANTS

A. SOCIAL STATUS OF WOMEN

Women's status is recognized to contribute in significant ways to improving nutrition. This section presents indicators that are representative of women's social status, including measures of education, age at marriage and first birth, employment, decision making and domestic violence. It also includes the Gender Empowerment Measure that captures gender inequality along three dimensions: political participation and decision-making power, economic participation and decision-making power, and power over economic resources.



Currently married women who have 10 or more years of schooling¹⁸ **20.3%**



17% Women aged 20-24 years who were married before the age of 18¹⁹ **22.2** Average age at marriage¹⁹

Gender Empowerment Measure^{D,20}

0.5

0.5

National Average²⁰



Female workforce participation rate²² **23.4%**

Currently married women who make decisions about²³:



33.4% Own healthcare



7.7% Major household purchase



51.3% Purchases for daily household needs



8.6% Visits to her family/friends/relatives



33.8% Women who have experienced any form of physical/sexual/emotional violence²³

58% Ever married women who justify hitting/wife-beating (for either of the reasons mentioned)²³

^D The Gender Empowerment Measure is a weighted average index based on indicators that are classified into three dimensions: a. political participation and decision-making power b. economic participation and decision-making power and c. power over economic resources. The index ranges from a minimum of 0 to a maximum of 1, with a higher score indicating greater empowerment of women. (More information available at <http://wcd.nic.in/publication/GDIGEReport/Part3.pdf>.)

¹⁸ Source : DLHS-3, 2007-08

¹⁹ Source : RSoC, 2014

²⁰ Source : MoWCD, 2006

²² Source : Women and Men in India, 16th Issue MoSPI, 2014

²³ Source : NFHS-3, 2006

B. WATER AND SANITATION

Poor hygiene and sanitation, by directly increasing exposure and susceptibility to infections, are associated with undernutrition among children. This section covers key indicators on access to safe drinking water and availability of sanitation facilities at the state level. It also includes the expenditure on toilet construction under the Total Sanitation Campaign.



96.6%

Households with access to improved sources of drinking water^{E, 24}

55.2%

Households using improved sanitation facility^{F, 24}



38.1%

Households practicing open defecation²⁴

44.9 M

Expenditure on toilets under Total Sanitation Campaign (TSC)^{G, 25}



1,065 M

National Average²⁵

C. AGRICULTURE AND FOOD SECURITY

Agriculture productivity and food security can affect household access to foods necessary for a healthy diet. Thus, this section presents indicators related to agricultural growth and food consumption patterns in the state, indicating the level of food security in the state relative to the national situation.



5.5%

Growth rate of agriculture from 2007-2012²⁶



3.4%

Share in India's total foodgrain production²⁷



Mean Calorie intake per person per day (in Kcal)²⁸

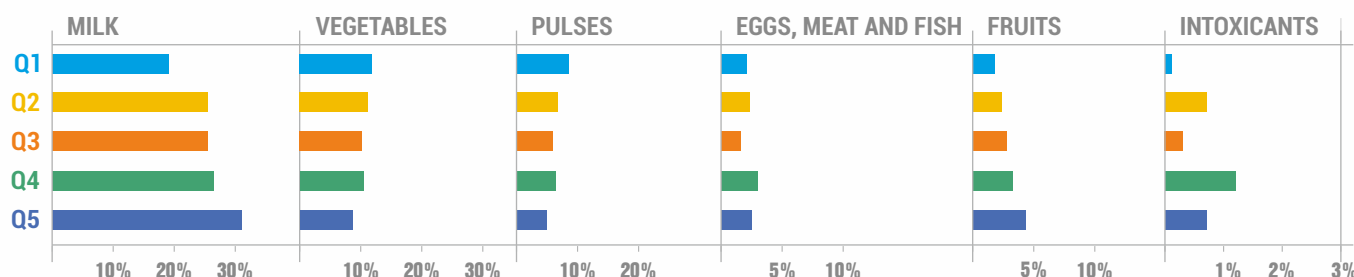
RURAL

2024 **2233**
GUJARAT INDIA AVG

URBAN

2154 **2206**
GUJARAT INDIA AVG

Expenditure on food items by income quintiles²⁸



^E Improved sources of drinking water include: piped water into dwelling, piped water to yard/plot, public tap or standpipe, tubewell or borehole, protected dug well, protected spring, and rainwater (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>).

^F Improved sanitation means households using improved toilets that include: flush toilet, piped sewer system, septic tank, flush/pour flush to pit latrine, ventilated improved pit latrine, pit latrine with slab, composting toilet, special case (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>); excludes those households who are using improved toilets but sharing toilet facilities with other households.

^G Besides toilet construction subsidies, this expenditure also includes funding other activities such as solid and liquid waste management, IEC activities for sustainable demand generation for sanitation facilities, assistance to production centers of sanitary materials and rural sanitary marts, provision of construction of community sanitary complexes, provision of sanitation facilities in govt. schools and Anganwadis in govt. buildings etc.

²⁴ Source : RSoC, 2014

²⁵ Source : Indiastat, Rajya Sabha Unstarred Question No. 2950, dated on 30.08.2011, 2011-12

²⁶ Source : Indiastat, compiled by datanet from Rajyasabha & Loksabha unstarred questions no. 3039, 4535. 2007-12

²⁷ Source : Indiastat, Ministry of Agriculture, Government of India 2011-2012

²⁸ Source : NSSO, 68th round-Nutritional Intake in India, 2011-12

V. STATUS OF NUTRITION-RELEVANT INTERVENTIONS

A. NUTRITION-SPECIFIC INTERVENTIONS

The financial resources allocated to, and spent on direct nutrition-specific interventions can determine the scale, coverage and quality of interventions to reach vulnerable target populations. These services, in India, are delivered both by the Integrated Child Development Scheme (ICDS) and the National Health Mission (NHM). This section includes data on the coverage of interventions delivered by these two key centrally-sponsored schemes that directly impact maternal and child nutrition and health. We also include here information on the human resources and service availability of these schemes and expenditures.

A.1. COVERAGE OF ICDS AND NHM:

The Integrated Child Development Services (ICDS) aims to improve the nutrition and health status of children under-six through a package of services (supplementary nutrition, immunization, health check-up, referral services, etc.) delivered through frontline workers at the Anganwadi Centres (AWCs). This section provides information on expenditure on ICDS and coverage of its supplementary nutrition programme (SNP). This section also covers critical services provided by the health system, including provision of care for pregnant women and child immunization. Immunization plays a crucial role in complementing actions to improve nutrition. The link between undernutrition and infectious diseases is cyclical, poor nutrition increases vulnerability to infections, which in turn worsen nutrition status. Data on immunization among children are presented by residence. Here, full immunization refers to children covered with BCG, measles and 3 doses each of DPT and polio.

Beneficiaries who availed supplementary food under ICDS²⁹

Children 6-35 months	54.5%
Children 36-71 months	69.8%
Pregnant women	49%
Lactating mothers	49.4%

Beneficiaries who received supplementary food for at least 21 days in the month prior to the survey

Children aged 6-35 months	24.4%
Children aged 36-71 months	40.5%
Pregnant women	20.2%
Lactating women	19.6%

²⁹ Source : RSoC, 2014

SERVICES PROVIDED TO WOMEN WHO HAD A LIVE BIRTH IN LAST 35 MONTHS³⁰



72.3%

Received 3 or more antenatal checkups prior to delivery



87.6%

Received 2 or more TT injections prior to delivery



31.2%

Consumed 100 or more IFA tablets/syrup during pregnancy



87.9%

Had Institutional delivery



89.6%

Women who had live birth in 35 months where delivery was assisted by skilled health provider³⁰



53.6%

Rural

59.9%

Urban

Children aged 12-23 months who are fully immunised³⁰



6.2%

Children aged 12-23 months who have not received any immunisation³⁰

WOMEN GIVEN ADVICE ON³¹:



65%

Breastfeeding



59.5%

Nutrition



42.9%

Institutional delivery

A.2. PERSONNEL CAPACITY OF ICDS AND NRHM:

This section features data on availability of healthcare personnel and services available to women of reproductive age (antenatal care, tetanus toxoid coverage, iron-folic acid supplementation coverage, institutional delivery and counseling). Household and individual access to health services can directly impact children's nutrition and welfare during the crucial first 1,000 days of life.

Availability of Anganwadi Centres and Workers (AWCs and AWWs) ^{H, 30}	Value
Pending or vacant Anganwadi workers to sanctioned number of workers ^{30a}	7.5%
AWWs living in the AWC village/ward	84.6%
AWWs having 10 or more years of schooling	77.1%
Median age of AWWs	40 years
AWCs serving to population more than the stipulated norm	58.9%

Growth Monitoring ³⁰	Value
AWCs having functional baby weighing scale	82.5%
AWCs having functional adult weighing scale	48.1%
Available WHO growth chart at AWCs	96.2%

^H Number of AWCs surveyed for Gujarat as per RSoC 2014 is 174.

³⁰ Source : RSoC, 2014

^{30a} Source : MoWCD, 2012

³¹ Source : DLHS-3, 2007-08

Training and Comprehensive Knowledge ³²	Value
AWWs having correct knowledge of intake of food by pregnant women	97.4%
AWWs having correct knowledge of normal birth weight of children	66.5%
AWWs having correct knowledge of initiation of breastfeeding within one hour	100%
AWWs having correct knowledge of exclusive breastfeeding for the first six months	98.5%
AWWs having correct knowledge of appropriate age of child for complementary feeding	54%

Health Service Delivery Personnel	Value
ASHAs selected ³³	90%
Current density of ASHA as per Census 2011 rural population ³³	1 per 1089 persons
Pending or vacant ANM positions sub centres & PHCs ³⁴	11.8%

A.3. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SPECIFIC INTERVENTIONS

Expenditure on Schemes (in million dollars)	In million USD	National Average
ICDS (ICDS general + SNP + training) (women and children) ³⁵	100	75
NRHM expenditure (Central Government) ³⁶	108	68.8
NRHM expenditure (State Government) ³⁶	7.4	9.3

B. NUTRITION-SENSITIVE INTERVENTIONS

This section includes information on expenditure and coverage of key centrally-sponsored schemes that indirectly impact maternal and child nutrition. These are: the Mid Day Meal Scheme (MDMS), Public Distribution System (PDS), and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

B.1. COVERAGE OF SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS

Coverage of Schemes	Value
MDMS (base: eligible children*) ³⁷	28.3%
PDS (base: rural and urban households reporting consumption) ³⁸	19.8%
MGNREGA (base: rural persons 18 years and above registered in MGNREG job card and demanded work during last 365 days) ³⁹	45.9%

* All children studying in primary & upper primary classes in schools supported under Sarva Shiksha Abhiyan and NCLP (National Child Labour Project) run by Ministry of Labour.

B.2. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS:

Expenditure on Schemes (in million dollars)	In million USD	National Average
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PDS ⁴¹	554.1	475.3
MGNREGA ⁴²	103	214

³² Source : RSoC, 2014

³³ Source : NRHM, 2013

³⁴ Source : MoHFW, 2013

³⁵ Source : Lok Sabha Unstarred Question # 846 dated 27.02.2015, 2012-13

³⁶ Source : Lok Sabha Annexured Unstarred Question # 409 dated 6.12.2013, 2012-13

³⁷ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/lsq15/15/as216.htm 2011-12

³⁸ Source : Report No. 558, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

³⁹ Source : Report No. 554, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

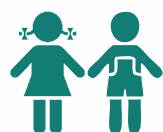
⁴⁰ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014, 2012-13

⁴¹ Source : Food Corporation of India 2013, 2012-13

⁴² Source : Lok Sabha Annexured Unstarred Question # 3835 dated 19.03.2015, 2012-13

FAST FACTS ON NUTRITION AND ITS DETERMINANTS IN HARYANA

World Health Assembly Nutrition Targets



CHILDREN UNDER 5 YEARS

36.5%
Stunted¹
8.8%
Wasted¹

World Health Assembly Nutrition Targets


53.6%

 Infants 0-5
months old who are
exclusively breastfed¹

20.9%

 Children under
3 years who have low
birth weight (<2.5 kgs)¹

57.7%

 Women
15-49 years old
with anemia²

Immediate Determinants


28.7% Infants 6-8 months old who receive solid, semi-solid or soft foods¹
9.2% Infants & young children 6-23 months old who achieve minimal diet diversity in complementary feeding¹

62.8% Children 6-59 months
old with anemia²

8.5% Children 6-59 months old who
had diarrhea in 15 days prior
to survey¹

Immediate Determinants


35.9%

 Children 6-35 months old
who received supplementary
food under ICDS for 21 days
in the month prior to survey¹

70.7%

 Children 12-23
months old who are
fully immunized¹

47.5%

 Mothers of
children under 36 months
old who received three
or more antenatal checkups¹

Underlying Determinants


37.5%

 Currently
married women with 10
or more years of schooling²

18.4%

 Women aged 20-24
years who were
married before the age of 18¹

49.3%

 Adolescent girls
15-18 years old
with low BMI (<18.5)¹

Underlying Determinants


25.6%

 Households
practicing
open defecation¹

11.2%

 Population
below
state-specific poverty line³

 Does state have a
high-level nutrition mission?

NO
¹ Source : RSoC, 2014

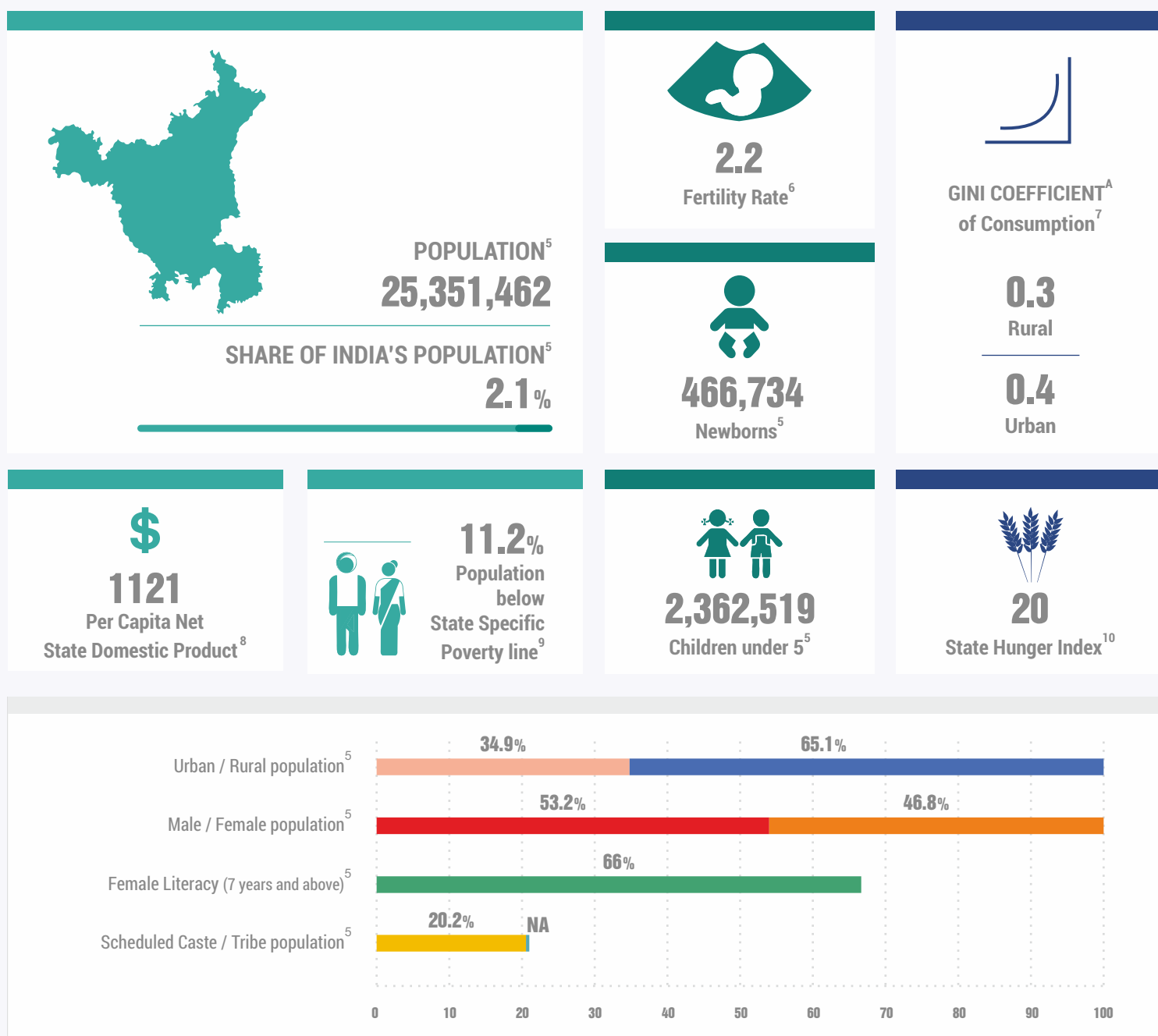
² Source : DLHS4, 2012-13

³ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Govt. of India

I. CONTEXT

A. DEMOGRAPHIC CONTEXT

This section highlights the demographic composition of the state in terms of male-female, rural-urban, and SC-ST ratios, literacy and fertility rates. In addition, it also includes the size of the population of newborns and children less than five years of age (as of the Census of India, 2011) to illustrate the size of the target population for nutrition-related interventions that need to reach this vulnerable population.



A : Gini coefficient is a measure of inequality of distribution. A Gini coefficient of 0 represents perfect equality, while a value of 100 implies perfect inequality. (See Appendix A for more information)

⁵ Source : Primary Census Abstract, Census, 2011

⁶ Source : SRS, 2013

⁷ Source : Planning Commission Estimates: NSSO 66th round-Employment and Unemployment Survey, 2009-10

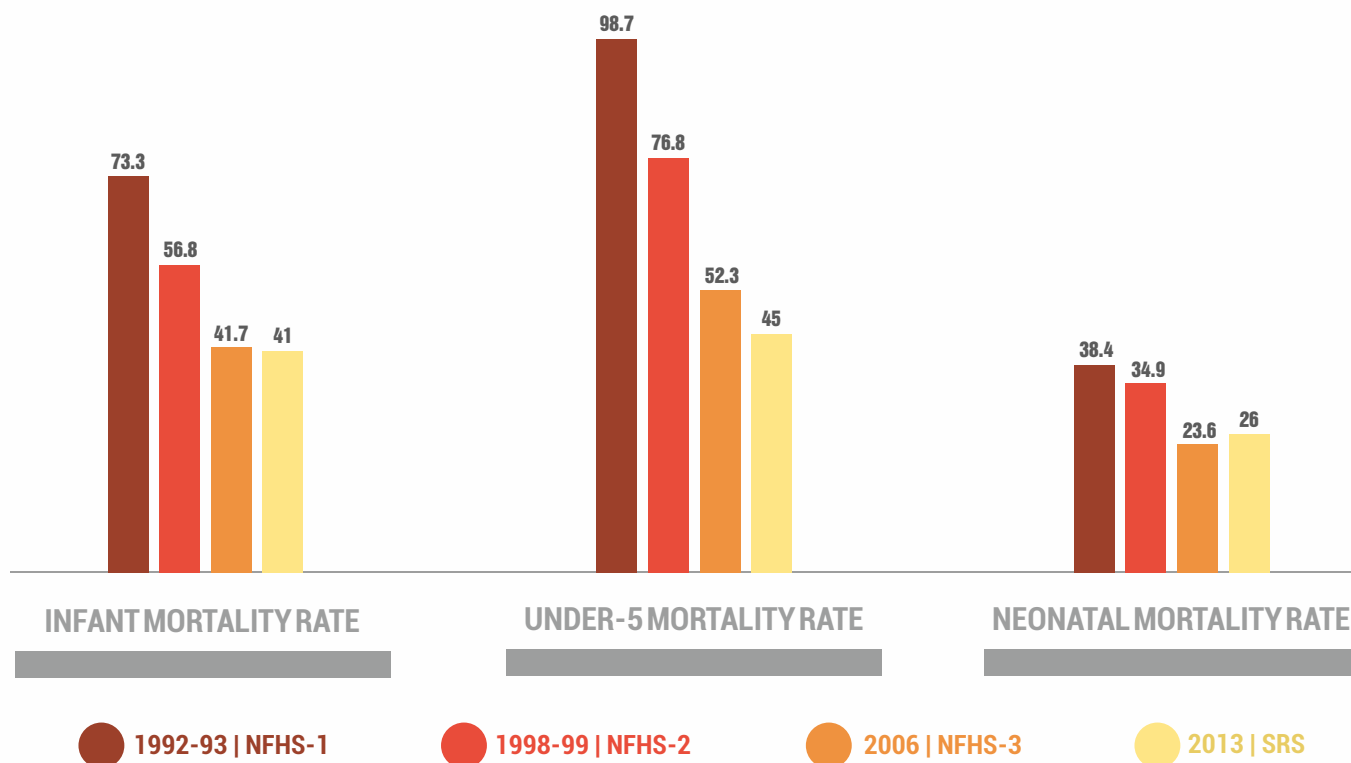
⁸ Source : Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14 : http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82

⁹ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Government of India, 2011-12 : http://planningcommission.nic.in/news/pre_pov2307.pdf

¹⁰ Source : IFPRI, India state hunger index, comparisons of hunger across states, 2009

B. CHILD MORTALITY PER THOUSAND LIVE BIRTHS

This section illustrates trends in mortality in neonates, infants and children under 5 years, since 1992. The purpose of this is to highlight the success achieved by individual states in averting deaths of children since the economic growth of the 1990s.



II. NUTRITIONAL STATUS AMONG CHILDREN

This section presents data on nutrition outcome indicators (stunting, wasting, and underweight) and anemia prevalence. Anthropometric measures for children under 5 (stunting, wasting, and underweight) are presented over time periods, by age groups and by background characteristics. This data aims to convey the prevalence and severity of undernutrition in the state.

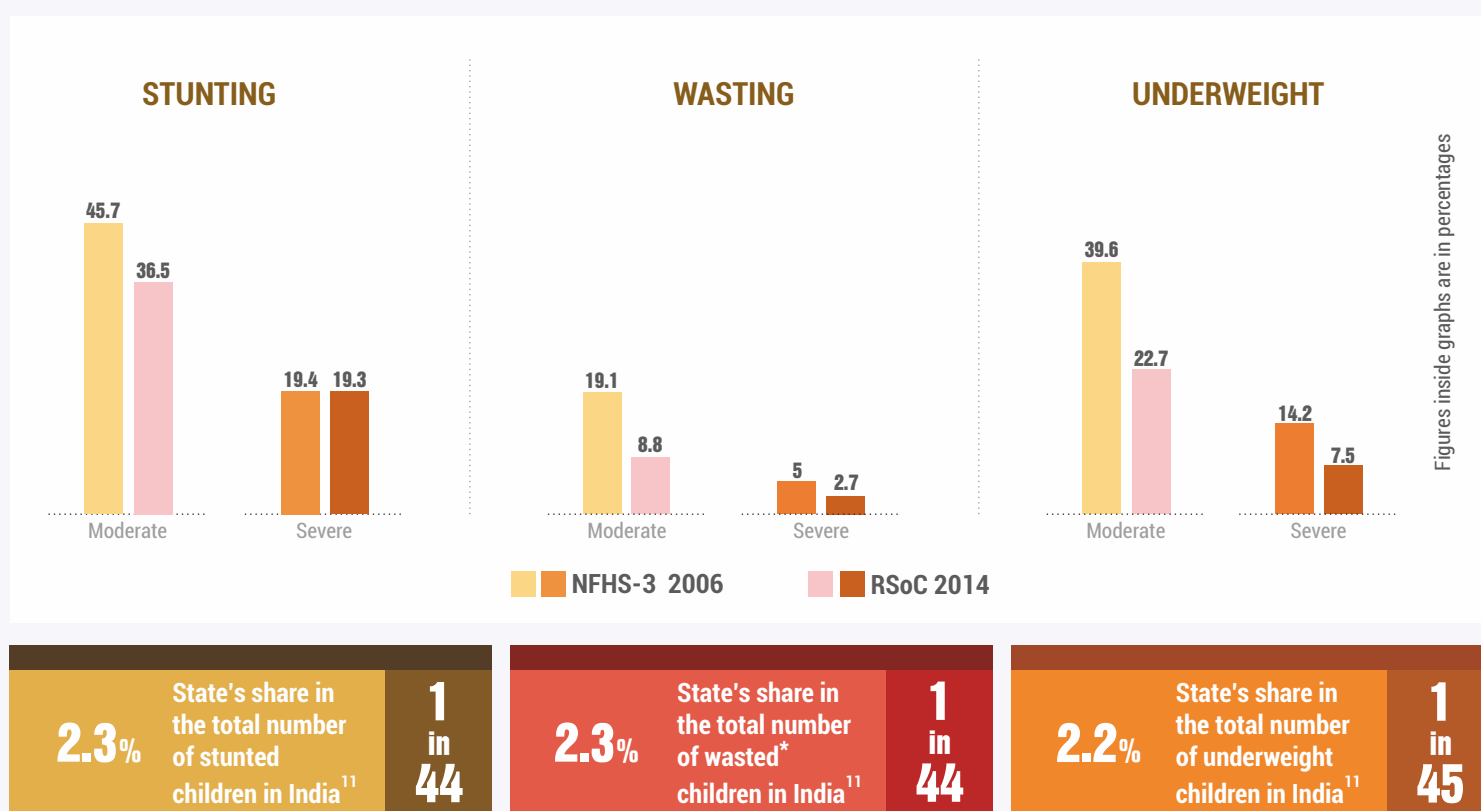
A. CHILD UNDERNUTRITION, BY TIME PERIOD

ANTHROPOMETRIC MEASURES

Stunting is inadequate height for age, which is indicative of chronic or cumulative nutritional deprivation in early childhood. A stunted child's height-for-age is below -2 standard deviations from the median height-for-age (termed HAZ) of the WHO Child Growth Standards, while a severely stunted child is below -3 standard deviations.

Wasting is inadequate weight for height, which points to acute or short-term undernutrition. A wasted child's weight-for-height (WHZ) is below -2 standard deviations from the WHO Child Growth Standards; a severely wasted child is below -3 standard deviations. (Another way to determine severe wasting or severe acute malnutrition is through a measurement of a child's mid-upper arm circumference (MUAC).

Underweight is inadequate weight for age, a composite indicator that encompasses stunting and wasting. An underweight child's weight-for-age (WAZ) is below -2 standard deviations from the WHO Child Growth Standards; again, a severely underweight child is below -3 standard deviations.

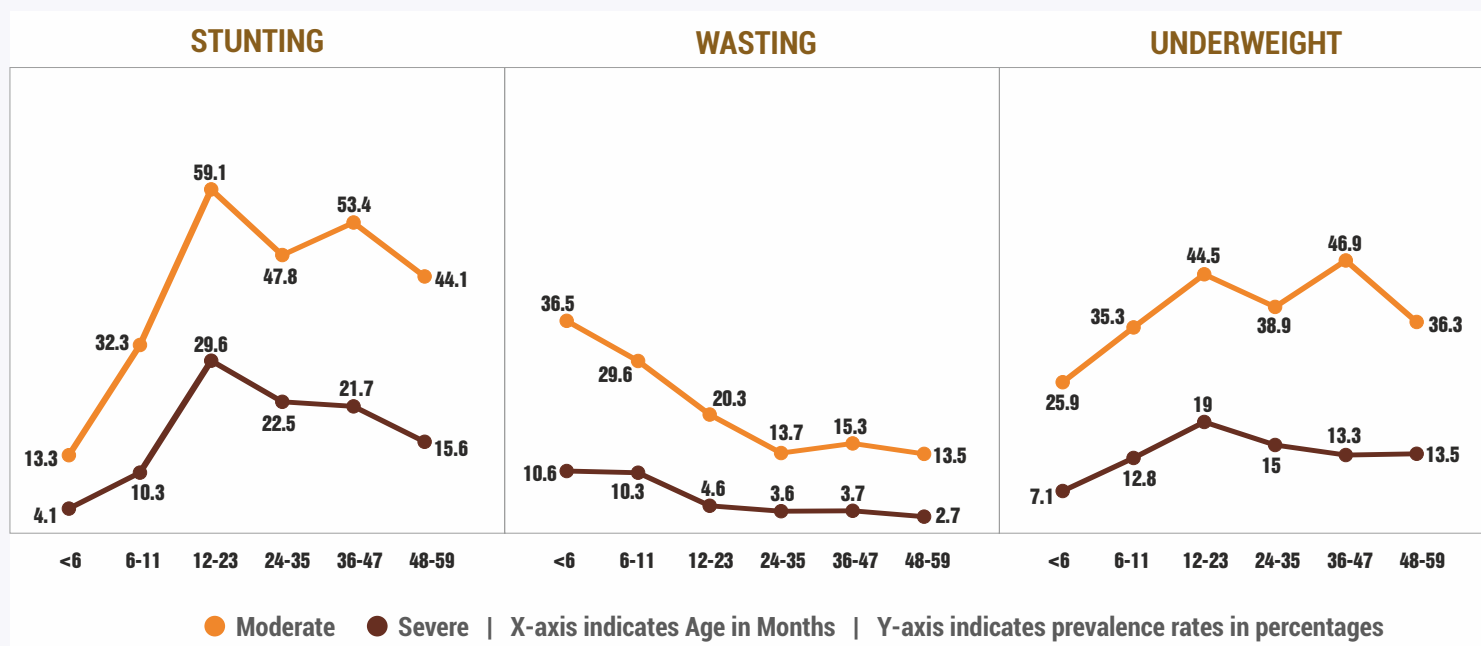


*Wasting is subject to seasonal variations either in food supply or disease prevalence and hence may not be comparable across groups of children measured at different times of the year within a survey round as well as between different survey rounds.

¹¹ Source : NFHS-3, 2006

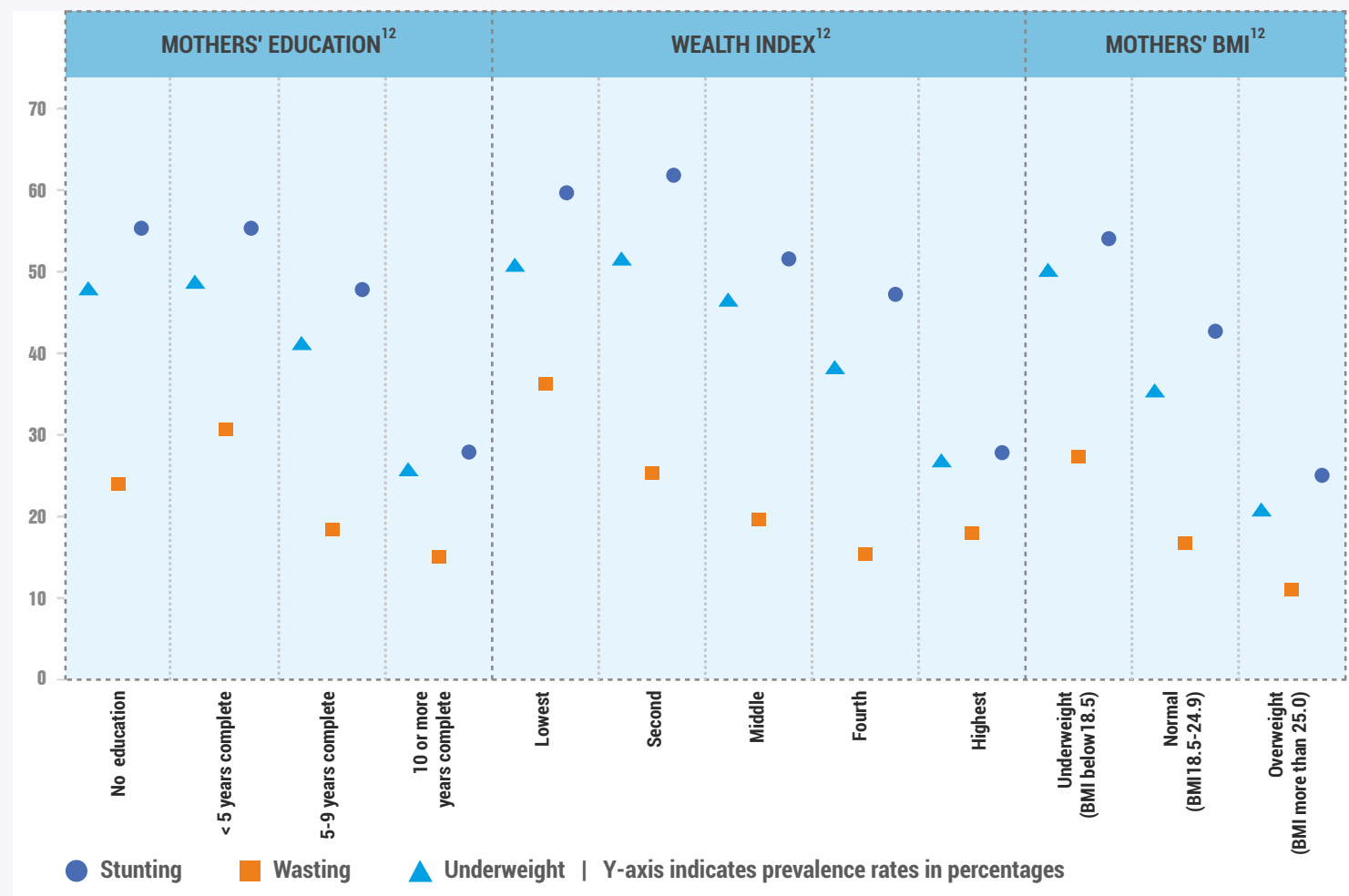
B. CHILD UNDERNUTRITION, BY AGE GROUPS¹²

Percentage of moderate (below -2 SD from the WHO growth standards) and severe (below -3 SD) stunting, wasting and underweight are available for 6 age groups among children under 5.



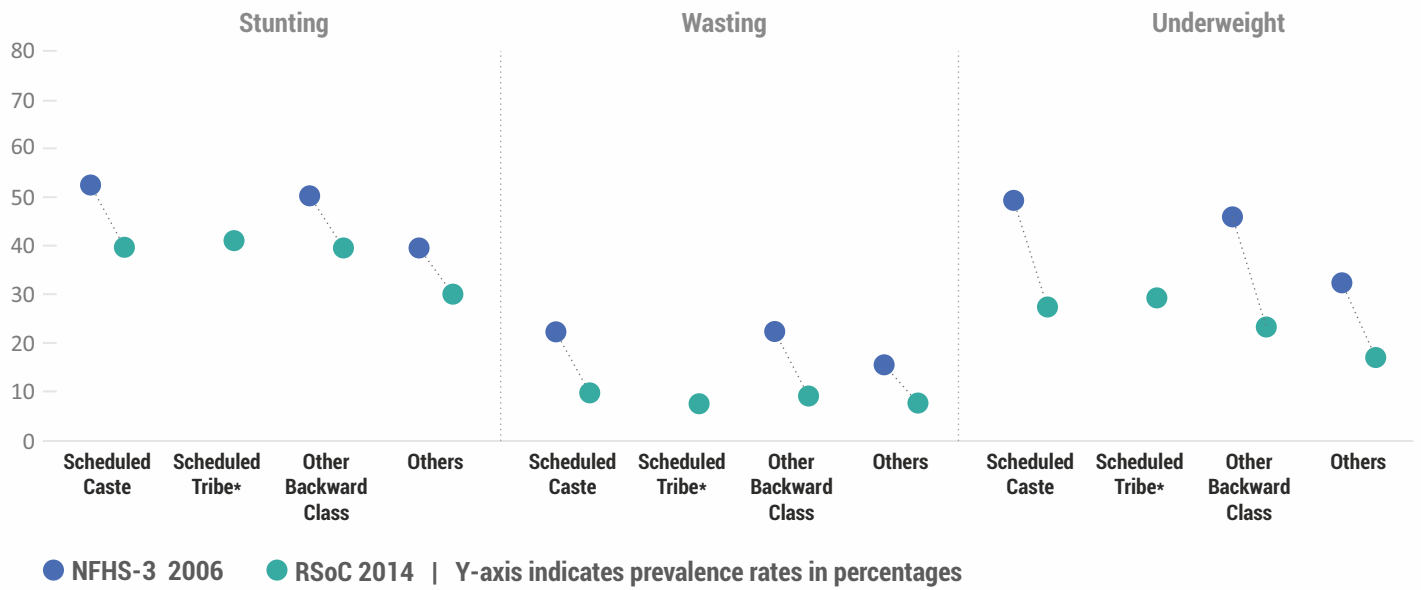
C. PREVALENCE OF CHILD UNDERNUTRITION, BY BACKGROUND CHARACTERISTICS

In this section, child undernutrition outcomes are presented, along with key socioeconomic drivers that are known to be associated with child nutrition, such as caste, residence, mother's health and education, and household income.



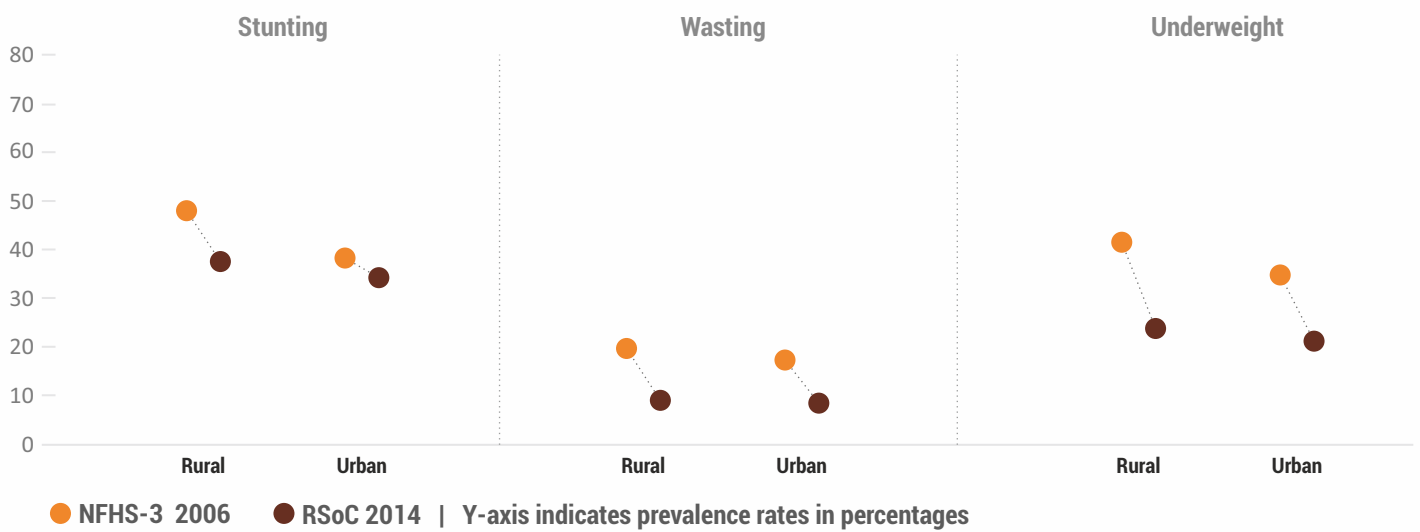
¹² Source : NFHS-3, 2006

CASTE



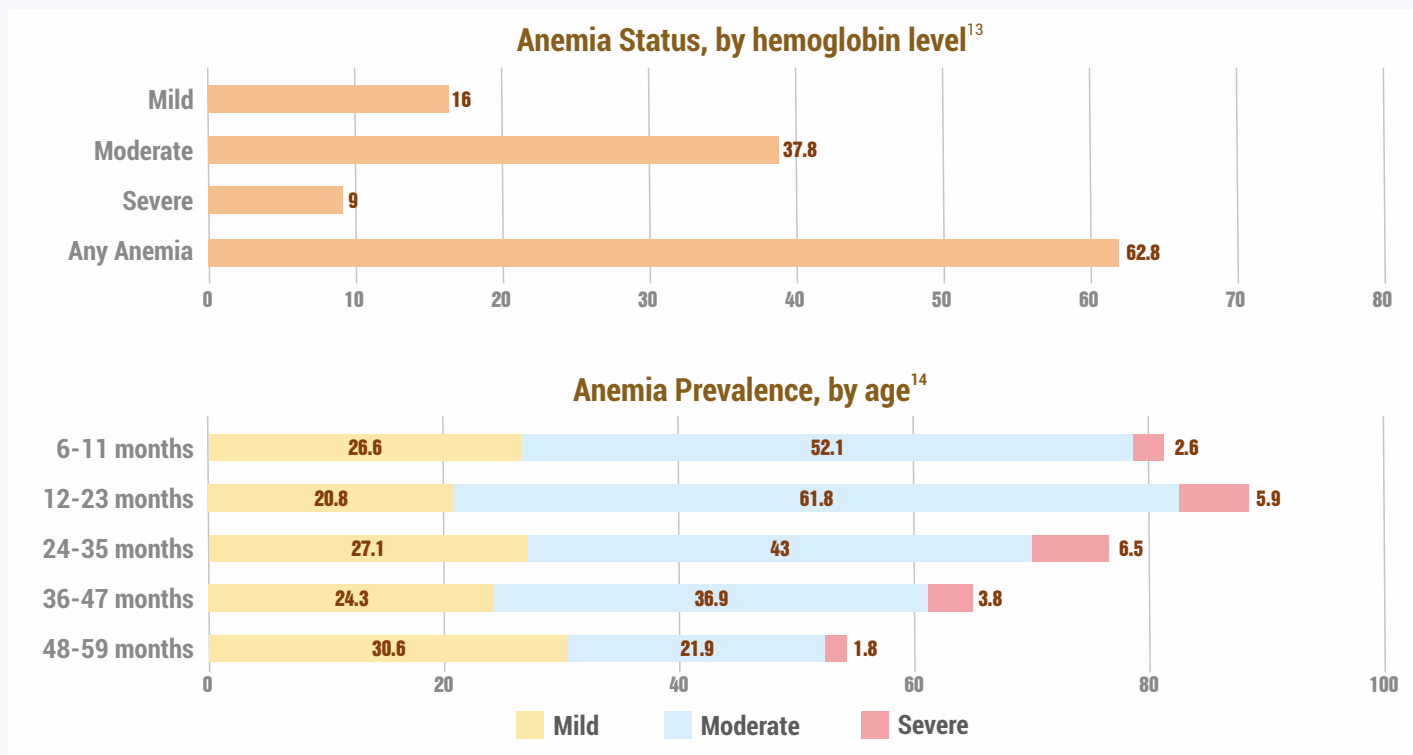
*Data for Scheduled Tribes is not available in NFHS-3 for this state

RESIDENCE



D. ANEMIA PREVALENCE

Anemia can impair physical and cognitive development among children and create long term impacts on productivity and wellbeing. This section features data on anemia prevalence by severity and age groups for children under 5.



¹³ Source : DLHS-4, 2012-13

¹⁴ Source : NFHS-3, 2006

III. IMMEDIATE DETERMINANTS

A. INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES¹⁵

This section presents indicators for assessing IYCF practices as recommended by the WHO and revised in 2008. Following optimal IYCF practices during the first 1,000 days is crucial for early child survival and growth as well as long-term health and wellbeing.

Children aged 0-23 months breastfed immediately/within an hour of birth		37.2%
	Children aged 0-5 months who were exclusively breastfed	53.6%
	Children aged 6-8 months who were fed complementary foods	28.7%
	For breastfed children (6-23 months)- A. Fed minimum number of times. Note : At least twice a day for breastfed infants 6-8 months old and at least three times a day for breastfed children 9-23 months old B. Had minimum dietary diversity Note : Minimum dietary diversity refers to four or more food groups^B fed to children aged 6-23 months	18.8% 9.2%

B. CHILD HEALTH¹⁵

Prevalence of childhood illnesses (in children aged 0-59 months)

Had diarrhea in 15 days prior to survey	8.5%
Had fever in 15 days prior to survey	11.9%
Had symptoms of Acute Respiratory Infection (ARI) in 15 days prior to survey	10.4%

^B The 7 food groups include the following: i. grains, roots and tubers ii. legumes and nuts iii. dairy products (milk, yoghurt, cheese) iv. Flesh foods (meat, fish, poultry, and liver/organ meats) v. eggs vi. Vitamin-A rich fruits and vegetables vii. other fruits and vegetables.

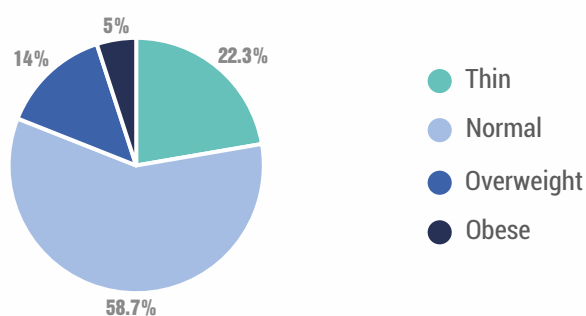
¹⁵ Source : RSoC, 2014

C. NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

Maternal health and nutrition, as well as adolescent nutrition, have important consequences for intergenerational transmission of undernutrition. Data on Body Mass Index (BMI), anemia prevalence and height among women of reproductive age are presented in this section, as are data on adolescent BMI and anemia.

C.1. WOMEN 15-49 YEARS OLD¹⁶

BMI^c levels of women aged 15-49 years



^cBody Mass Index (BMI) is defined as the weight in kilograms by the square of the height in metres (kg/m²). It is a simple index of weight-for-height which is commonly used to classify underweight, overweight and obesity in adults. Range: BMI < 18.5 = total thin, BMI 18.5-24.9 = normal, BMI 25.0-29.9 = Overweight, BMI > 30.0 = Obese [per WHO Standards]



57.7%

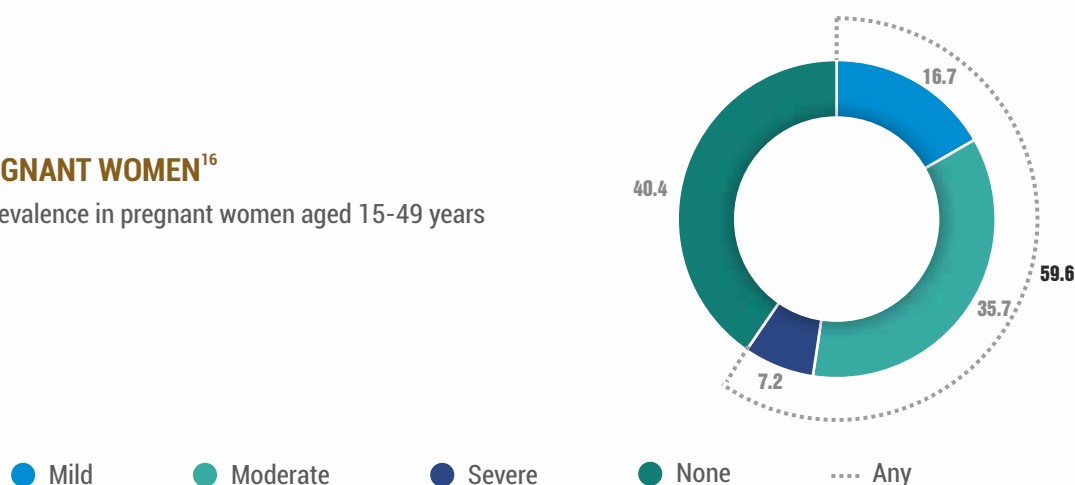
Women aged 15-49 years are anemic

6.4%

Women aged 15-49 years are severely anemic

C.2. PREGNANT WOMEN¹⁶

Anemia prevalence in pregnant women aged 15-49 years



● Mild

● Moderate

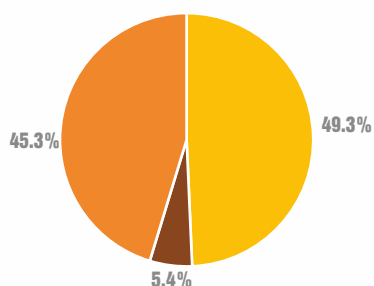
● Severe

● None

--- Any

C.3. ADOLESCENT GIRLS

BMI levels of adolescent girls aged 15-18 years¹⁷



● Normal

● Thin

● Overweight and Obese



57.7%

Adolescent girls aged 15-19 years are anemic^{17a}

1.6%

Adolescent girls aged 15-19 years are severely anemic^{17a}

¹⁶ Source : DLHS-4, 2012-13

¹⁷ Source : RSoC, 2014

^{17a} Source : NFHS-3, 2006

IV. UNDERLYING DETERMINANTS

A. SOCIAL STATUS OF WOMEN

Women's status is recognized to contribute in significant ways to improving nutrition. This section presents indicators that are representative of women's social status, including measures of education, age at marriage and first birth, employment, decision making and domestic violence. It also includes the Gender Empowerment Measure that captures gender inequality along three dimensions: political participation and decision-making power, economic participation and decision-making power, and power over economic resources.



Currently married women who have 10 or more years of schooling¹⁸ **37.5%**



18.4% Women aged 20-24 years who were married before the age of 18¹⁹

20.7 Average age at marriage¹⁹

Gender Empowerment Measure^{D,20}

0.5

0.5

National Average²⁰



Female workforce participation rate²² **17.8%**

Currently married women who make decisions about²³:



39.7% Own healthcare



4.3% Major household purchase



30% Purchases for daily household needs



9.1% Visits to her family/friends/relatives



28% Women who have experienced any form of physical/sexual/emotional violence²³

48.7% Ever married women who justify hitting/wife-beating (for either of the reasons mentioned)²³

^D The Gender Empowerment Measure is a weighted average index based on indicators that are classified into three dimensions: a. political participation and decision-making power b. economic participation and decision-making power and c. power over economic resources. The index ranges from a minimum of 0 to a maximum of 1, with a higher score indicating greater empowerment of women. (More information available at <http://wcd.nic.in/publication/GDIGEReport/Part3.pdf>.)

¹⁸ Source : DLHS-4, 2012-13

¹⁹ Source : RSoC, 2014

²⁰ Source : MoWCD, 2006

²² Source : Women and Men in India, 16th Issue MoSPI, 2014

²³ Source : NFHS-3, 2006

B. WATER AND SANITATION

Poor hygiene and sanitation, by directly increasing exposure and susceptibility to infections, are associated with undernutrition among children. This section covers key indicators on access to safe drinking water and availability of sanitation facilities at the state level. It also includes the expenditure on toilet construction under the Total Sanitation Campaign.



94.6%

Households with access to improved sources of drinking water^{E, 24}

62.4%

Households using improved sanitation facility^{F, 24}



25.6%

Households practicing open defecation²⁴

12.2 M

Expenditure on toilets under Total Sanitation Campaign (TSC)^{G, 25}



1,065 M

National Average²⁵

C. AGRICULTURE AND FOOD SECURITY

Agriculture productivity and food security can affect household access to foods necessary for a healthy diet. Thus, this section presents indicators related to agricultural growth and food consumption patterns in the state, indicating the level of food security in the state relative to the national situation.



5.3%

Growth rate of agriculture from 2007-2012²⁶



6.9%

Share in India's total foodgrain production²⁷



Mean Calorie intake per person per day (in Kcal)²⁸

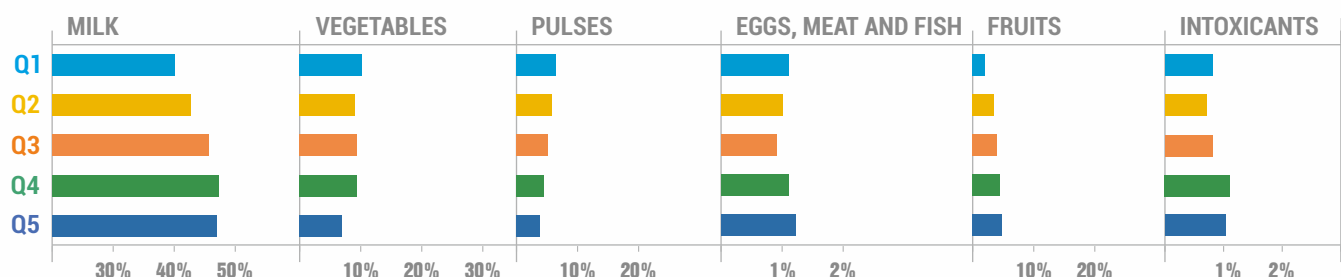
RURAL

2,441 **2233**
HARYANA INDIA AVG

URBAN

2,443 **2206**
HARYANA INDIA AVG

Expenditure on food items by income quintiles²⁸



^E Improved sources of drinking water include: piped water into dwelling, piped water to yard/plot, public tap or standpipe, tubewell or borehole, protected dug well, protected spring, and rainwater (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>).

^F Improved sanitation means households using improved toilets that include: flush toilet, piped sewer system, septic tank, flush/pour flush to pit latrine, ventilated improved pit latrine, pit latrine with slab, composting toilet, special case (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>); excludes those households who are using improved toilets but sharing toilet facilities with other households.

^G Besides toilet construction subsidies, this expenditure also includes funding other activities such as solid and liquid waste management, IEC activities for sustainable demand generation for sanitation facilities, assistance to production centers of sanitary materials and rural sanitary marts, provision of construction of community sanitary complexes, provision of sanitation facilities in govt. schools and Anganwadis in govt. buildings etc.

²⁴ Source : RSoC, 2014

²⁵ Source : Indiastat, Rajya Sabha Unstarred Question No. 2950, dated on 30.08.2011, 2011-12

²⁶ Source : Indiastat, compiled by datanet from Rajyasabha & Lok Sabha unstarred questions no. 3039, 4535. 2007-12

²⁷ Source : Indiastat, Ministry of Agriculture, Government of India 2011-2012

²⁸ Source : NSSO, 68th round-Nutritional Intake in India, 2011-12

V. STATUS OF NUTRITION-RELEVANT INTERVENTIONS

A. NUTRITION-SPECIFIC INTERVENTIONS

The financial resources allocated to, and spent on direct nutrition-specific interventions can determine the scale, coverage and quality of interventions to reach vulnerable target populations. These services, in India, are delivered both by the Integrated Child Development Scheme (ICDS) and the National Health Mission (NHM). This section includes data on the coverage of interventions delivered by these two key centrally-sponsored schemes that directly impact maternal and child nutrition and health. We also include here information on the human resources and service availability of these schemes and expenditures.

A.1. COVERAGE OF ICDS AND NHM:

The Integrated Child Development Services (ICDS) aims to improve the nutrition and health status of children under-six through a package of services (supplementary nutrition, immunization, health check-up, referral services, etc.) delivered through frontline workers at the Anganwadi Centres (AWCs). This section provides information on expenditure on ICDS and coverage of its supplementary nutrition programme (SNP). This section also covers critical services provided by the health system, including provision of care for pregnant women and child immunization. Immunization plays a crucial role in complementing actions to improve nutrition. The link between undernutrition and infectious diseases is cyclical, poor nutrition increases vulnerability to infections, which in turn worsen nutrition status. Data on immunization among children are presented by residence. Here, full immunization refers to children covered with BCG, measles and 3 doses each of DPT and polio.

Beneficiaries who availed supplementary food under ICDS²⁹

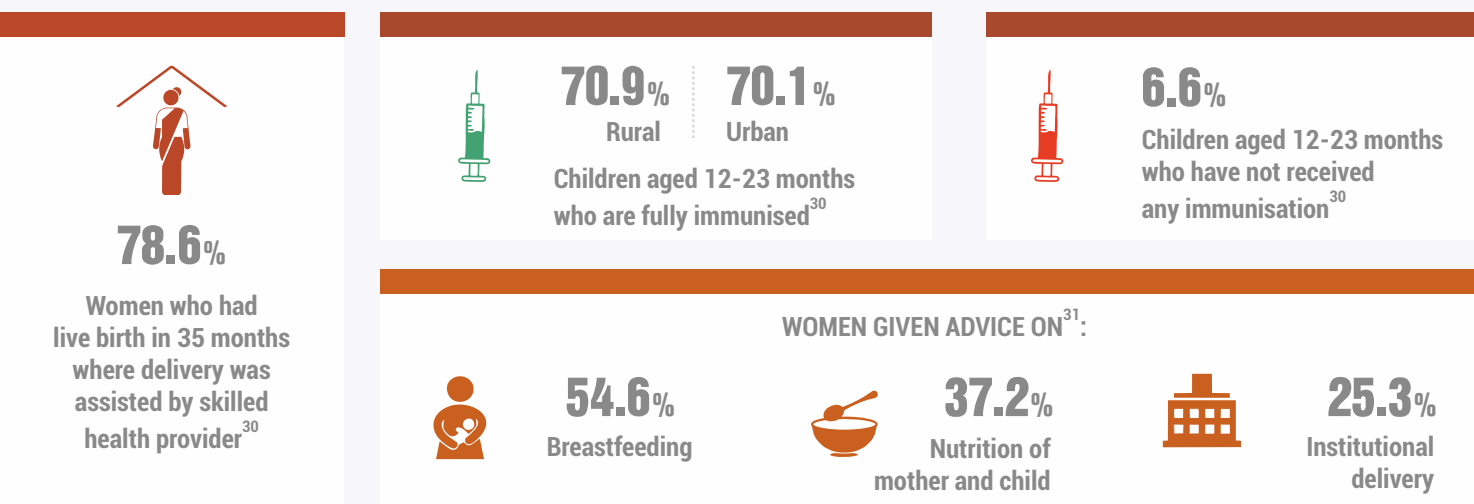
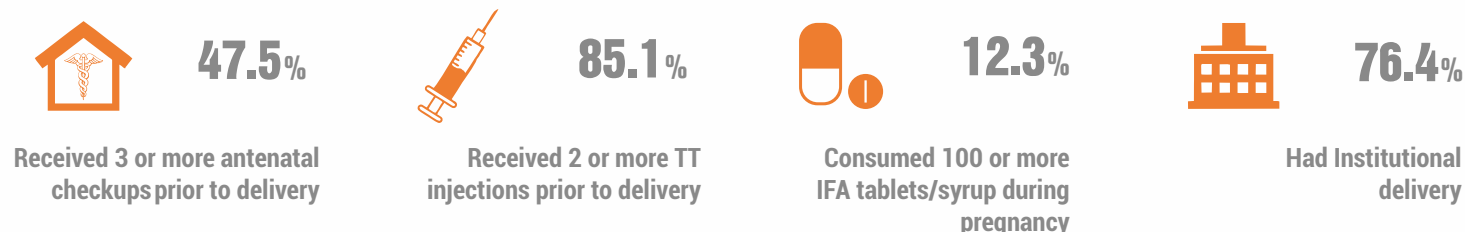
Children 6-35 months	17.8%
Children 36-71 months	17.9%
Pregnant women	19.6%
Lactating mothers	11.8%

Beneficiaries who received supplementary food for at least 21 days in the month prior to the survey

Children aged 6-35 months	35.9%
Children aged 36-71 months	37.3%
Pregnant women	30.3%
Lactating women	38.7%

²⁹ Source : RSoC, 2014

SERVICES PROVIDED TO WOMEN WHO HAD A LIVE BIRTH IN LAST 35 MONTHS³⁰



A.2. PERSONNEL CAPACITY OF ICDS AND NRHM:

This section features data on availability of healthcare personnel and services available to women of reproductive age (antenatal care, tetanus toxoid coverage, iron-folic acid supplementation coverage, institutional delivery and counseling). Household and individual access to health services can directly impact children's nutrition and welfare during the crucial first 1,000 days of life.

Availability of Anganwadi Centres and Workers (AWCs and AWWs) ^{H, 30}	Value
Pending or vacant Anganwadi workers to sanctioned number of workers ^{30a}	4.2%
AWWs living in the AWC village/ward	88.6%
AWWs having 10 or more years of schooling	87.5%
Median age of AWWs	38 years
AWCs serving to population more than the stipulated norm	58.9%

Growth Monitoring ³⁰	Value
AWCs having functional baby weighing scale	72.3%
AWCs having functional adult weighing scale	56.3%
Available WHO growth chart at AWCs	91.8%

^H Number of AWCs surveyed for Haryana as per RSoC 2014 is 144.

³⁰ Source : RSoC, 2014

^{30a} Source : MoWCD, 2012

³¹ Source : DLHS-4, 2012-13

Training and Comprehensive Knowledge ³²	Value
AWWs having correct knowledge of intake of food by pregnant women	90.3%
AWWs having correct knowledge of normal birth weight of children	84.7%
AWWs having correct knowledge of initiation of breastfeeding within one hour	96.5%
AWWs having correct knowledge of exclusive breastfeeding for the first six months	95.8%
AWWs having correct knowledge of appropriate age of child for complementary feeding	97.2%

Health Service Delivery Personnel	Value
ASHAs selected ³³	88%
Current density of ASHA as per Census 2011 rural population ³³	1 per 1104 persons
Pending or vacant ANM positions sub centres & PHCs ³⁴	0%

A.3. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SPECIFIC INTERVENTIONS

Expenditure on Schemes (in million dollars)	In million USD	National Average
ICDS (ICDS general + SNP + training) (women and children) ³⁵	51	75
NRHM expenditure (Central Government) ³⁶	48.1	68.8
NRHM expenditure (State Government) ³⁶	7.6	9.3

B. NUTRITION-SENSITIVE INTERVENTIONS

This section includes information on expenditure and coverage of key centrally-sponsored schemes that indirectly impact maternal and child nutrition. These are: the Mid Day Meal Scheme (MDMS), Public Distribution System (PDS), and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

B.1. COVERAGE OF SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS

Coverage of Schemes	Value
MDMS (base: eligible children*) ³⁷	11.7%
PDS (base: rural and urban households reporting consumption) ³⁸	14.8%
MGNREGA (base: rural persons 18 years and above registered in MGNREG job card and demanded work during last 365 days) ³⁹	91.9%

* All children studying in primary & upper primary classes in schools supported under Sarva Shiksha Abhiyan and NCLP (National Child Labour Project) run by Ministry of Labour.

B.2. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS:

Expenditure on Schemes (in million dollars)	In million USD	National Average
MDMS ⁴⁰	31	47
PDS ⁴¹	145.5	475.3
MGNREGA ⁴²	63	214

³² Source : RSoC, 2014

³³ Source : NRHM, 2013

³⁴ Source : MoHFW, 2013

³⁵ Source : Lok Sabha Unstarred Question # 846 dated 27.02.2015, 2012-13

³⁶ Source : Lok Sabha Annexured Unstarred Question # 409 dated 6.12.2013, 2012-13

³⁷ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/lsq15/15/as216.htm 2011-12

³⁸ Source : Report No. 558, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

³⁹ Source : Report No. 554, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

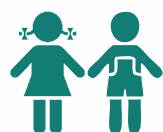
⁴⁰ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014, 2012-13

⁴¹ Source : Food Corporation of India 2013, 2012-13

⁴² Source : Lok Sabha Annexured Unstarred Question # 3835 dated 19.03.2015, 2012-13

FAST FACTS ON NUTRITION AND ITS DETERMINANTS IN HIMACHAL PRADESH

World Health Assembly Nutrition Targets



CHILDREN UNDER 5 YEARS

34.2%
Stunted¹
10.1%
Wasted¹

World Health Assembly Nutrition Targets


55.2%

 Infants 0-5
months old who are
exclusively breastfed¹

17.7%

 Children under
3 years who have low
birth weight (<2.5 kgs)¹

44%

 Women
15-49 years old
with anemia²

Immediate Determinants


61.8%

 Infants 6-8 months old who receive solid, semi-solid or soft foods¹
20.8%

 Infants & young children 6-23 months old who achieve minimal diet diversity in
complementary feeding¹

58.6%

 Children 6-59 months
old with anemia²

5.5%

 Children 6-59 months old who
had diarrhea in 15 days prior
to survey¹

Immediate Determinants


43.4%

 Children 6-35 months old
who received supplementary
food under ICDS for 21 days
in the month prior to survey¹

80.2%

 Children 12-23
months old who are
fully immunized¹

57.8%

 Mothers of
children under 36 months
old who received three
or more antenatal checkups¹

Underlying Determinants


52.7%

 Currently
married women with 10
or more years of schooling²

9.8%

 Women aged 20-24
years who were
married before the age of 18¹

51.6%

 Adolescent girls
15-18 years old
with low BMI (<18.5)¹

Underlying Determinants


21.8%

 Households
practicing
open defecation¹

8.1%

 Population
below
state-specific poverty line³

 Does state have a
high-level nutrition mission?

NO
¹ Source : RSoC, 2014

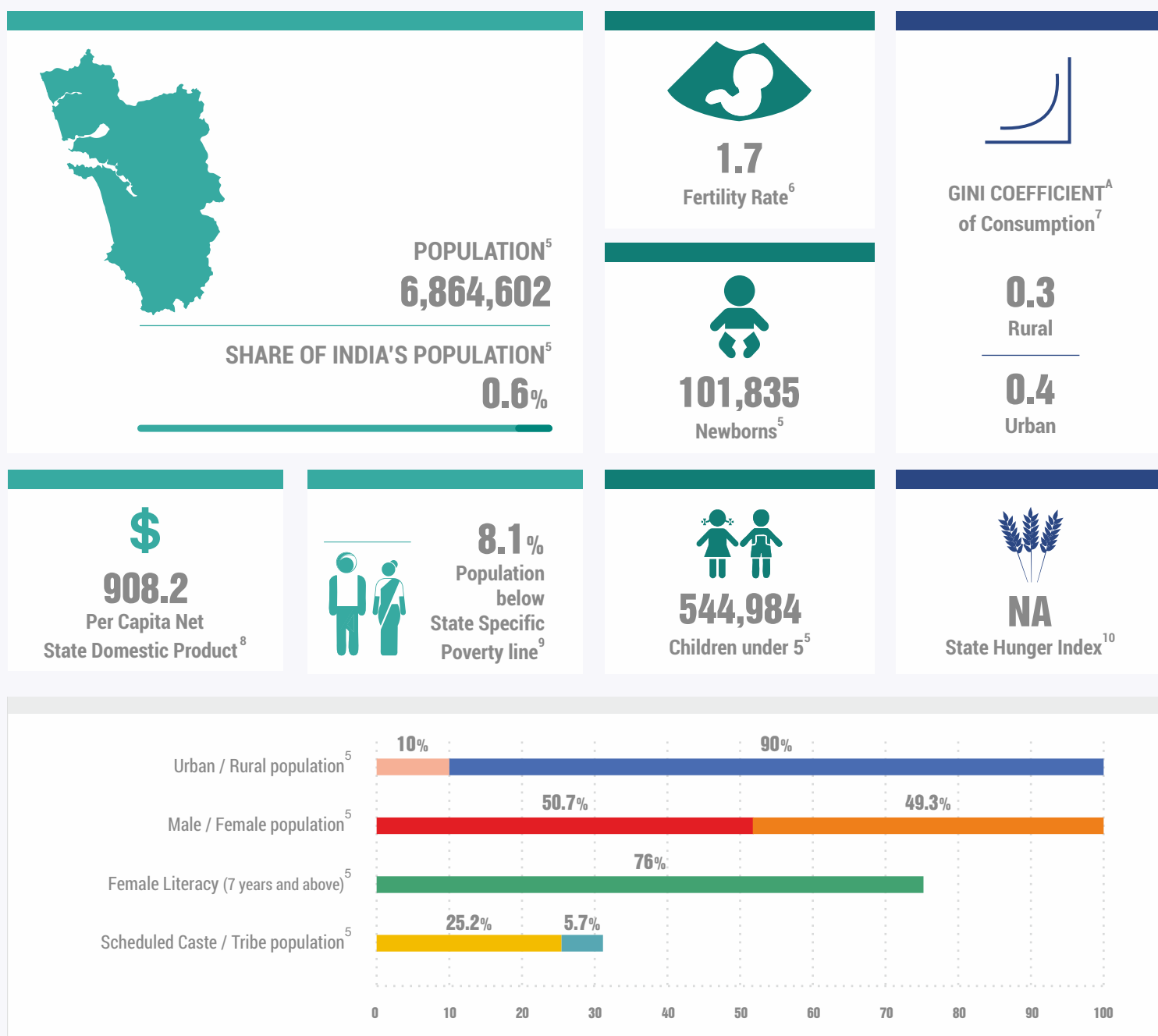
² Source : DLHS4, 2012-13

³ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Govt. of India

I. CONTEXT

A. DEMOGRAPHIC CONTEXT

This section highlights the demographic composition of the state in terms of male-female, rural-urban, and SC-ST ratios, literacy and fertility rates. In addition, it also includes the size of the population of newborns and children less than five years of age (as of the Census of India, 2011) to illustrate the size of the target population for nutrition-related interventions that need to reach this vulnerable population.



A : Gini coefficient is a measure of inequality of distribution. A Gini coefficient of 0 represents perfect equality, while a value of 100 implies perfect inequality. (See Appendix A for more information)

⁵ Source : Primary Census Abstract, Census, 2011

⁶ Source : SRS, 2013

⁷ Source : Planning Commission Estimates: NSSO 66th round-Employment and Unemployment Survey, 2009-10

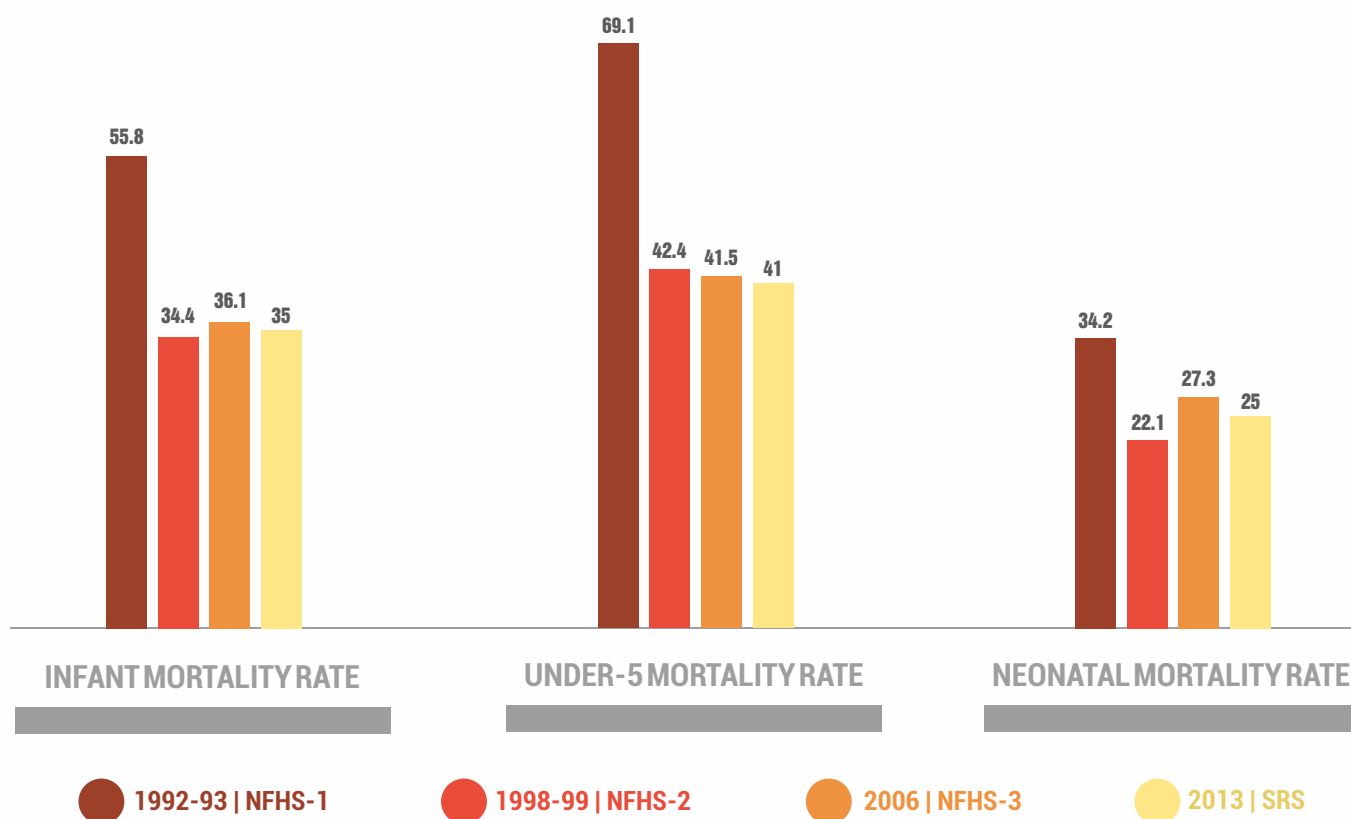
⁸ Source : Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14 : http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82

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B. CHILD MORTALITY PER THOUSAND LIVE BIRTHS

This section illustrates trends in mortality in neonates, infants and children under 5 years, since 1992. The purpose of this is to highlight the success achieved by individual states in averting deaths of children since the economic growth of the 1990s.



II. NUTRITIONAL STATUS AMONG CHILDREN

This section presents data on nutrition outcome indicators (stunting, wasting, and underweight) and anemia prevalence. Anthropometric measures for children under 5 (stunting, wasting, and underweight) are presented over time periods, by age groups and by background characteristics. This data aims to convey the prevalence and severity of undernutrition in the state.

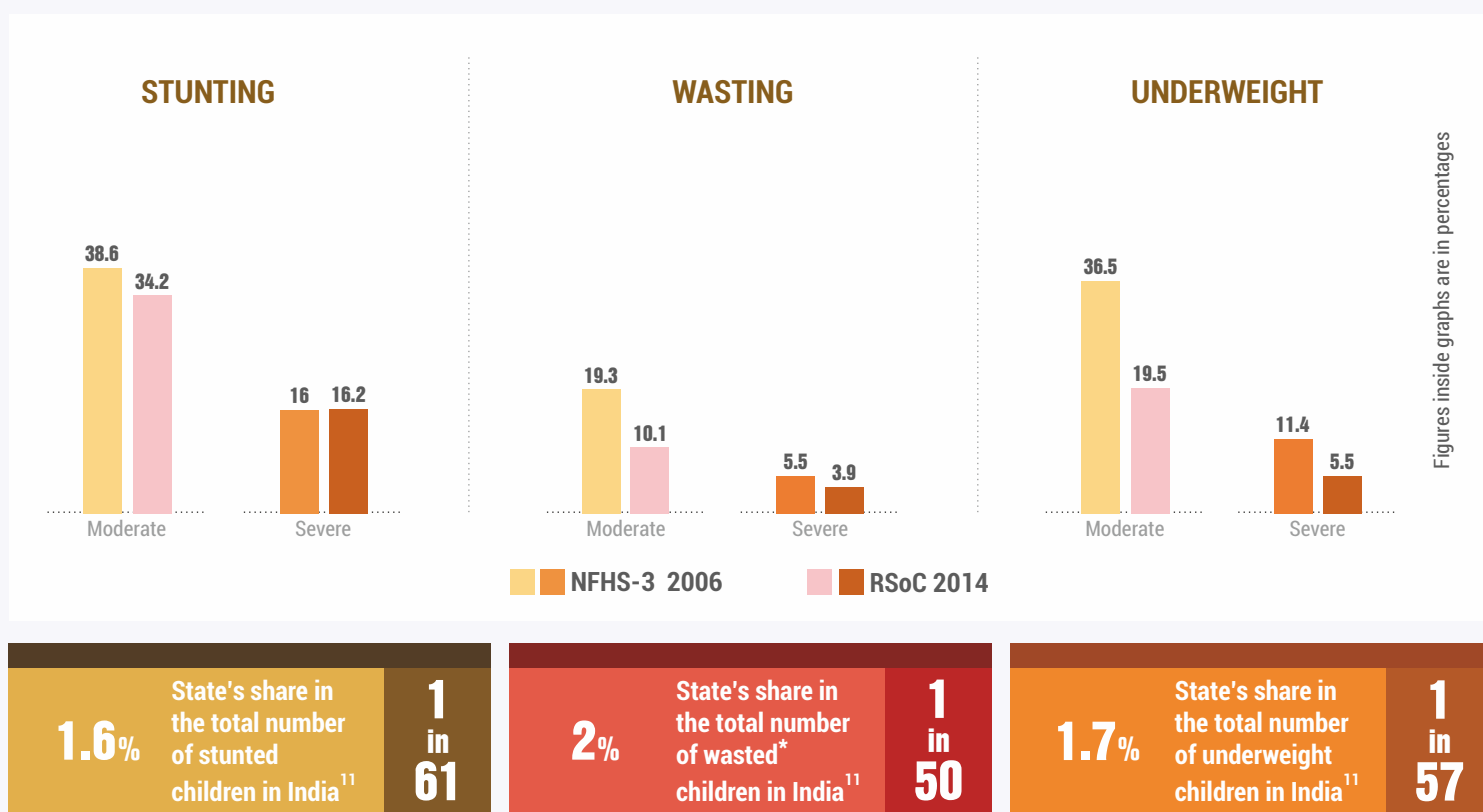
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Stunting is inadequate height for age, which is indicative of chronic or cumulative nutritional deprivation in early childhood. A stunted child's height-for-age is below -2 standard deviations from the median height-for-age (termed HAZ) of the WHO Child Growth Standards, while a severely stunted child is below -3 standard deviations.

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Underweight is inadequate weight for age, a composite indicator that encompasses stunting and wasting. An underweight child's weight-for-age (WAZ) is below -2 standard deviations from the WHO Child Growth Standards; again, a severely underweight child is below -3 standard deviations.

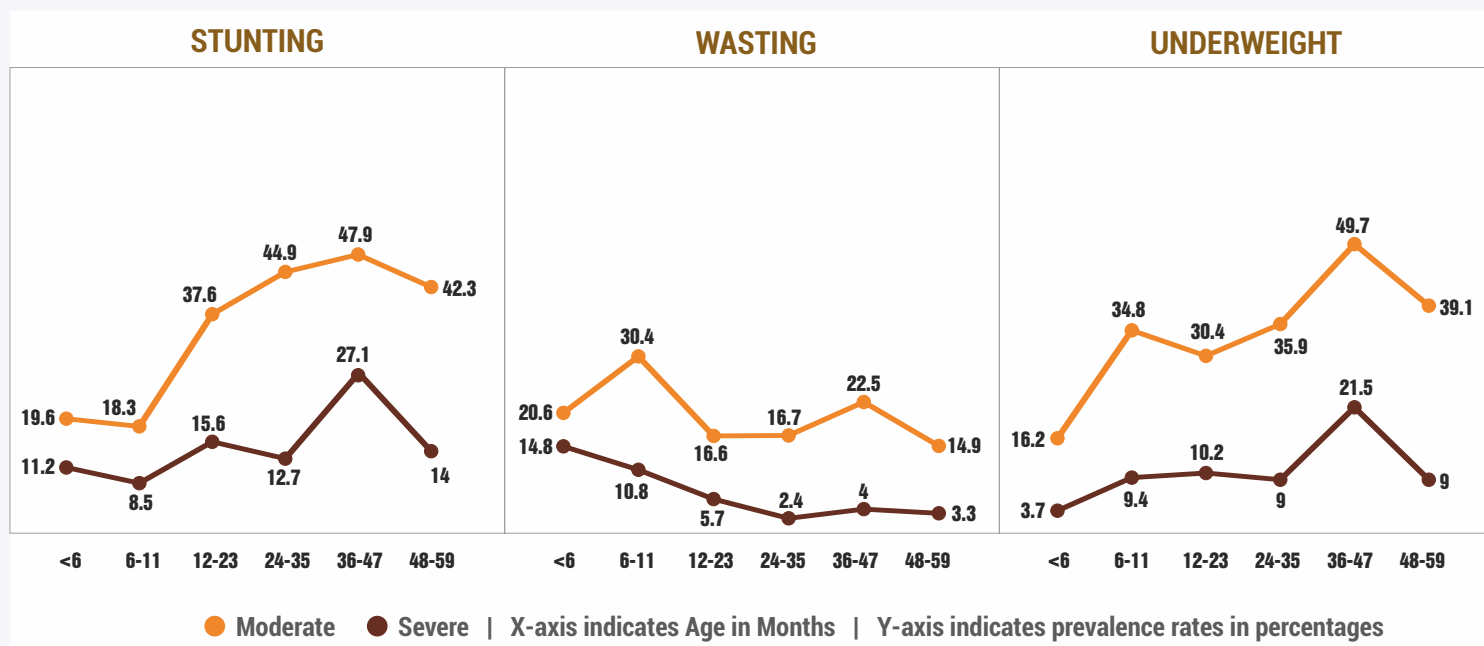


*Wasting is subject to seasonal variations either in food supply or disease prevalence and hence may not be comparable across groups of children measured at different times of the year within a survey round as well as between different survey rounds.

¹¹ Source : NFHS-3, 2006

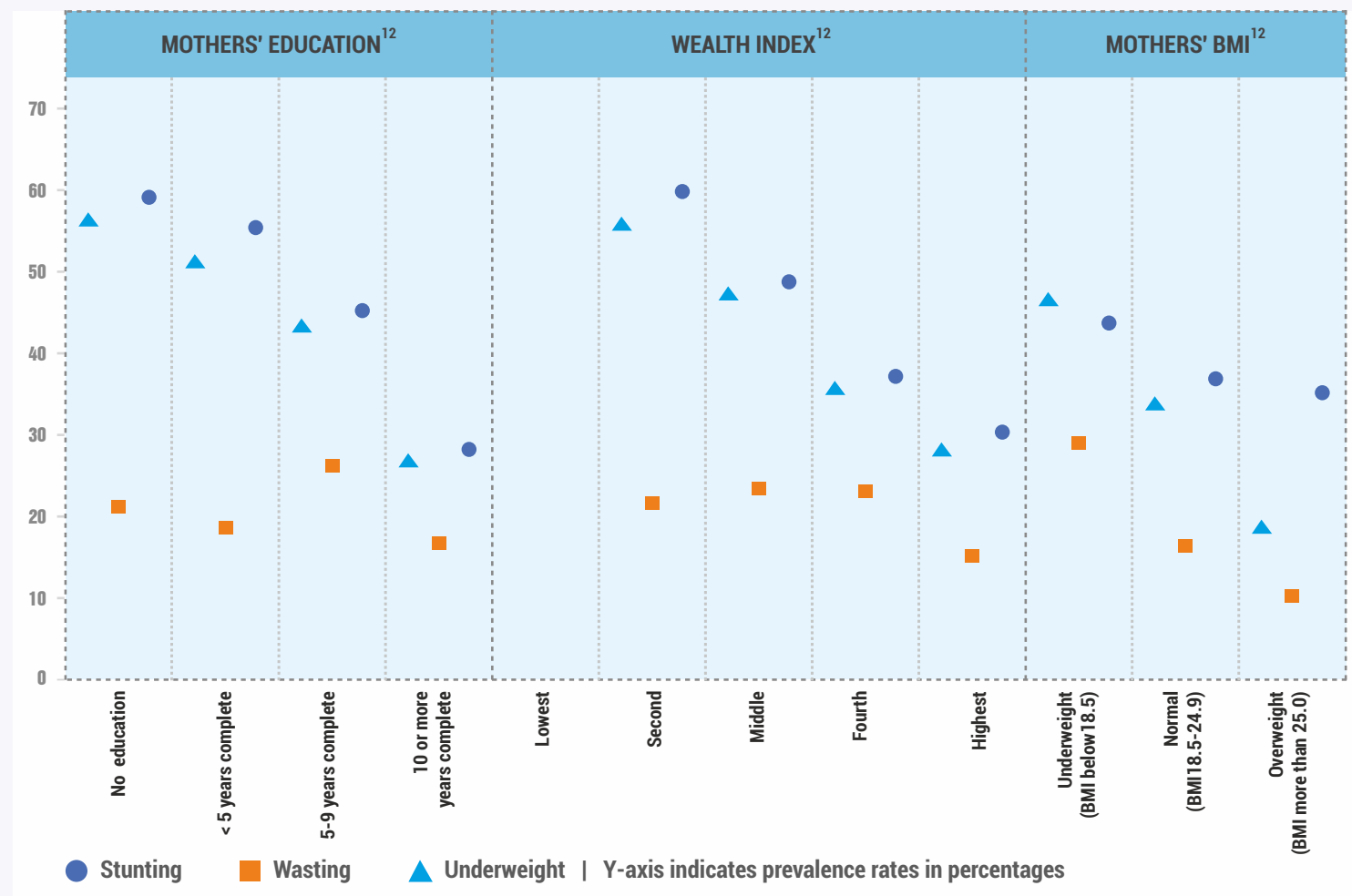
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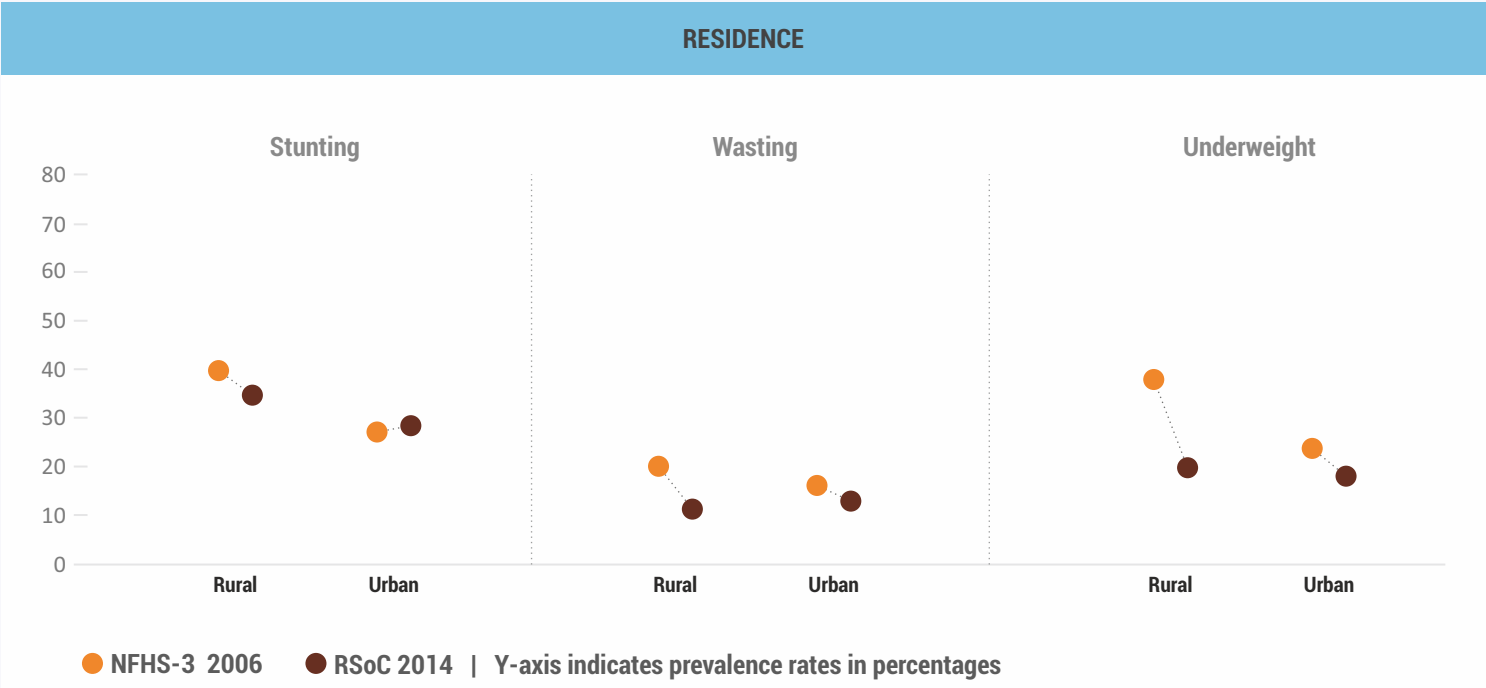
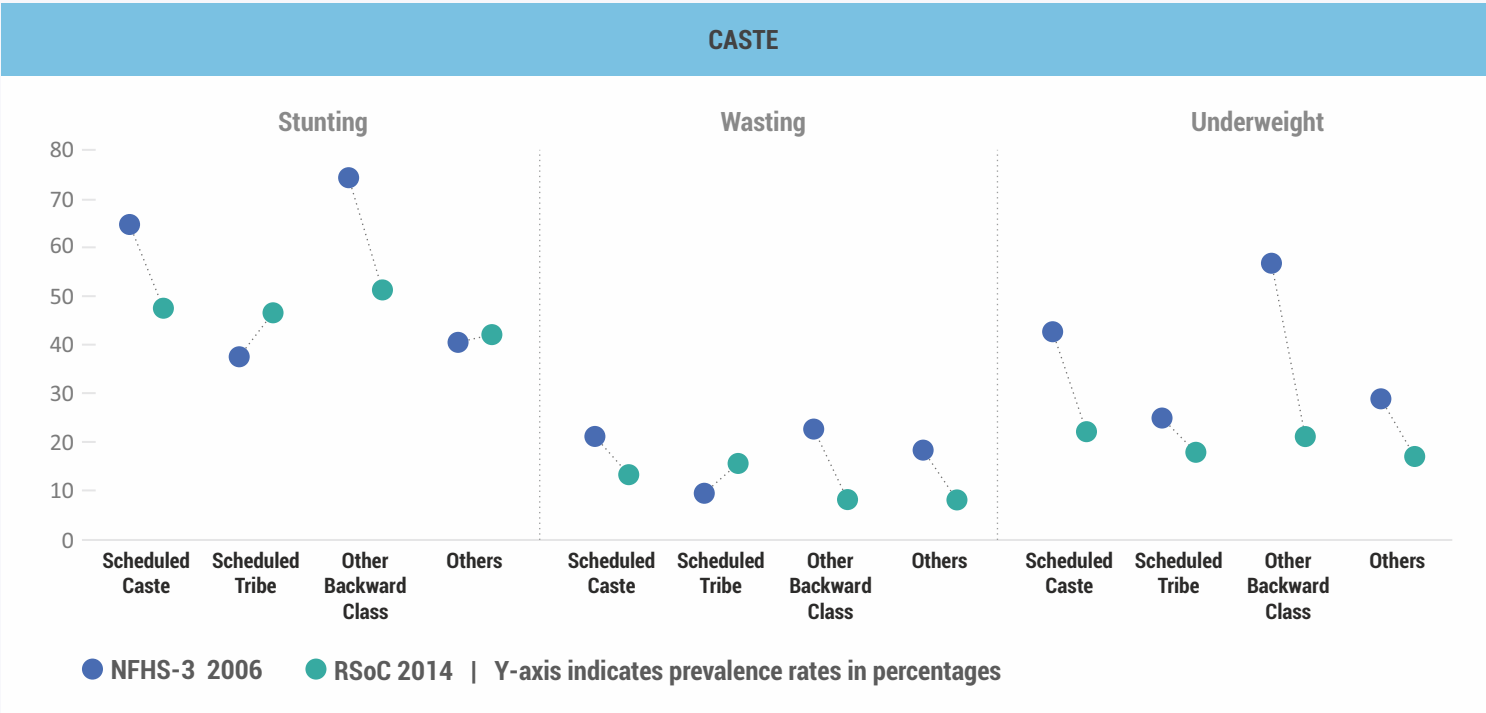


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In this section, child undernutrition outcomes are presented, along with key socioeconomic drivers that are known to be associated with child nutrition, such as caste, residence, mother's health and education, and household income.



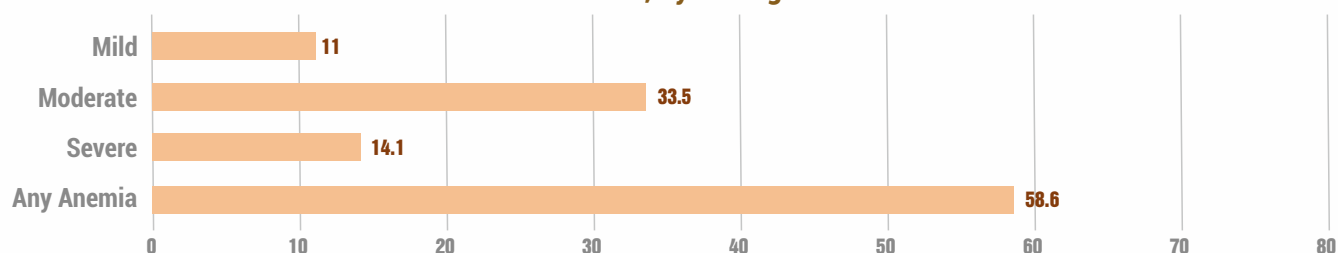
¹² Source : NFHS-3, 2006



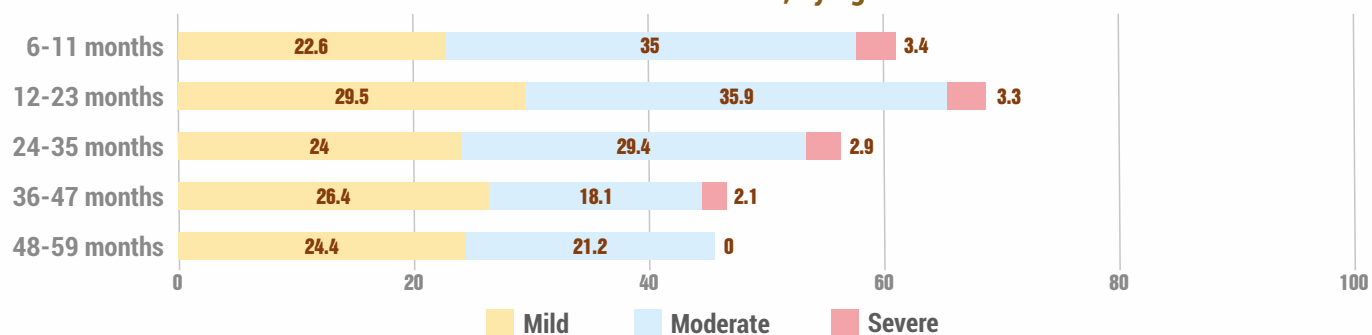
D. ANEMIA PREVALENCE

Anemia can impair physical and cognitive development among children and create long term impacts on productivity and wellbeing. This section features data on anemia prevalence by severity and age groups for children under 5.

Anemia Status, by hemoglobin level¹³



Anemia Prevalence, by age¹⁴



¹³ Source : DLHS-4, 2012-13

¹⁴ Source : NFHS-3, 2006

III. IMMEDIATE DETERMINANTS

A. INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES¹⁵

This section presents indicators for assessing IYCF practices as recommended by the WHO and revised in 2008. Following optimal IYCF practices during the first 1,000 days is crucial for early child survival and growth as well as long-term health and wellbeing.

Children aged 0-23 months breastfed immediately/within an hour of birth		50.1%
	Children aged 0-5 months who were exclusively breastfed	55.2%
	Children aged 6-8 months who were fed complementary foods	61.8%
	For breastfed children (6-23 months)- A. Fed minimum number of times. Note : At least twice a day for breastfed infants 6-8 months old and at least three times a day for breastfed children 9-23 months old B. Had minimum dietary diversity Note : Minimum dietary diversity refers to four or more food groups^B fed to children aged 6-23 months	46.4% 20.8%

B. CHILD HEALTH¹⁵

Prevalence of childhood illnesses (in children aged 0-59 months)

Had diarrhea in 15 days prior to survey	5.5%
Had fever in 15 days prior to survey	13.6%
Had symptoms of Acute Respiratory Infection (ARI) in 15 days prior to survey	7.1%

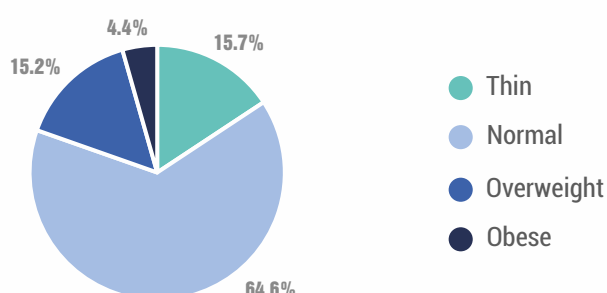
^B The 7 food groups include the following: i. grains, roots and tubers ii. legumes and nuts iii. dairy products (milk, yoghurt, cheese) iv. Flesh foods (meat, fish, poultry, and liver/organ meats) v. eggs vi. Vitamin-A rich fruits and vegetables vii. other fruits and vegetables.

C. NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

Maternal health and nutrition, as well as adolescent nutrition, have important consequences for intergenerational transmission of undernutrition. Data on Body Mass Index (BMI), anemia prevalence and height among women of reproductive age are presented in this section, as are data on adolescent BMI and anemia.

C.1. WOMEN 15-49 YEARS OLD¹⁶

BMI^c levels of women aged 15-49 years



^cBody Mass Index (BMI) is defined as the weight in kilograms by the square of the height in metres (kg/m²). It is a simple index of weight-for-height which is commonly used to classify underweight, overweight and obesity in adults. Range: BMI < 18.5 = total thin, BMI 18.5-24.9 = normal, BMI 25.0-29.9 = Overweight, BMI > 30.0 = Obese [per WHO Standards]



44%

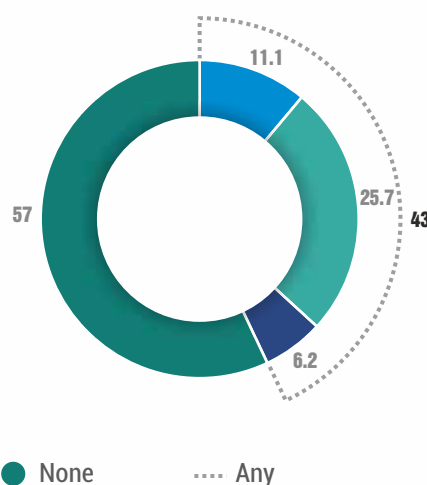
Women aged 15-49 years are anemic

7.3%

Women aged 15-49 years are severely anemic

C.2. PREGNANT WOMEN¹⁶

Anemia prevalence in pregnant women aged 15-49 years



● Mild

● Moderate

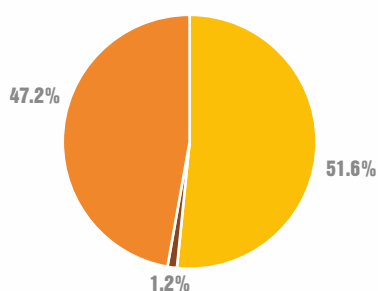
● Severe

● None

---- Any

C.3. ADOLESCENT GIRLS

BMI levels of adolescent girls aged 15-18 years¹⁷



● Normal

● Thin

● Overweight and Obese



42.7%

Adolescent girls aged 15-19 years are anemic¹⁶

0.7%

Adolescent girls aged 15-19 years are severely anemic¹⁶

¹⁶ Source : DLHS-4, 2012-13

¹⁷ Source : RSoC, 2014

^{17a} Source : NFHS-3, 2006

IV. UNDERLYING DETERMINANTS

A. SOCIAL STATUS OF WOMEN

Women's status is recognized to contribute in significant ways to improving nutrition. This section presents indicators that are representative of women's social status, including measures of education, age at marriage and first birth, employment, decision making and domestic violence. It also includes the Gender Empowerment Measure that captures gender inequality along three dimensions: political participation and decision-making power, economic participation and decision-making power, and power over economic resources.



Currently married women who have 10 or more years of schooling¹⁸ **52.7%**



9.8% Women aged 20-24 years who were married before the age of 18¹⁹ **22.3** Average age at marriage¹⁹

Gender Empowerment Measure^{D,20}

0.5

0.5

National Average²⁰



Female workforce participation rate²² **44.8%**

Currently married women who make decisions about²³:



31.9% Own healthcare



9% Major household purchase



33% Purchases for daily household needs



16.8% Visits to her family/friends/relatives



6.9% Women who have experienced any form of physical/sexual/emotional violence²³

28.6% Ever married women who justify hitting/wife-beating (for either of the reasons mentioned)²³

^D The Gender Empowerment Measure is a weighted average index based on indicators that are classified into three dimensions: a. political participation and decision-making power b. economic participation and decision-making power and c. power over economic resources. The index ranges from a minimum of 0 to a maximum of 1, with a higher score indicating greater empowerment of women. (More information available at <http://wcd.nic.in/publication/GDIGEReport/Part3.pdf>.)

¹⁸ Source : DLHS-4, 2012-13

¹⁹ Source : RSoC, 2014

²⁰ Source : MoWCD, 2006

²² Source : Women and Men in India, 16th Issue MoSPI, 2014

²³ Source : NFHS-3, 2006

B. WATER AND SANITATION

Poor hygiene and sanitation, by directly increasing exposure and susceptibility to infections, are associated with undernutrition among children. This section covers key indicators on access to safe drinking water and availability of sanitation facilities at the state level. It also includes the expenditure on toilet construction under the Total Sanitation Campaign.



97%

Households with access to improved sources of drinking water^{E, 24}

63.5%

Households using improved sanitation facility^{F, 24}



21.8%

Households practicing open defecation²⁴

3 M

Expenditure on toilets under Total Sanitation Campaign (TSC)^{G, 25}



1,065 M

National Average²⁵

C. AGRICULTURE AND FOOD SECURITY

Agriculture productivity and food security can affect household access to foods necessary for a healthy diet. Thus, this section presents indicators related to agricultural growth and food consumption patterns in the state, indicating the level of food security in the state relative to the national situation.



3%

Growth rate of agriculture from 2007-2012²⁶



0.5%

Share in India's total foodgrain production²⁷



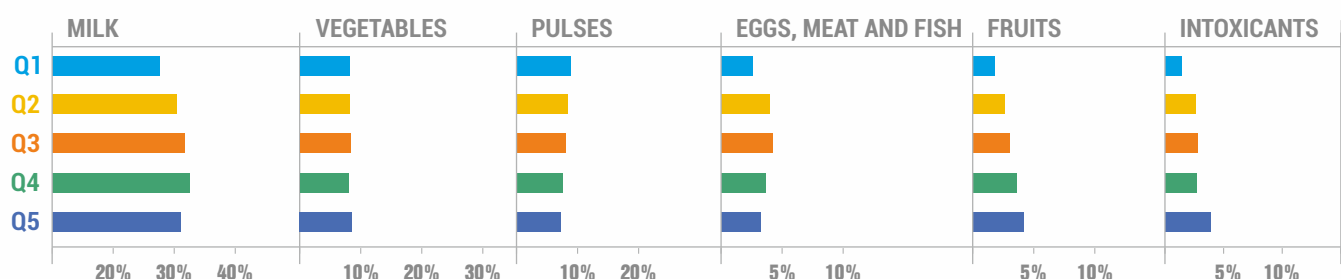
Mean Calorie intake per person per day (in Kcal)²⁸

RURAL

URBAN

	NA	2233		NA	2206
HIMACHAL PRADESH		INDIA AVG	HIMACHAL PRADESH		INDIA AVG

Expenditure on food items by income quintiles²⁸



^E Improved sources of drinking water include: piped water into dwelling, piped water to yard/plot, public tap or standpipe, tubewell or borehole, protected dug well, protected spring, and rainwater (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>).

^F Improved sanitation means households using improved toilets that include: flush toilet, piped sewer system, septic tank, flush/pour flush to pit latrine, ventilated improved pit latrine, pit latrine with slab, composting toilet, special case (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>); excludes those households who are using improved toilets but sharing toilet facilities with other households.

^G Besides toilet construction subsidies, this expenditure also includes funding other activities such as solid and liquid waste management, IEC activities for sustainable demand generation for sanitation facilities, assistance to production centers of sanitary materials and rural sanitary marts, provision of construction of community sanitary complexes, provision of sanitation facilities in govt. schools and Anganwadis in govt. buildings etc.

²⁴ Source : RSoC, 2014

²⁵ Source : Indiastat, Rajya Sabha Unstarred Question No. 2950, dated on 30.08.2011, 2011-12

²⁶ Source : Indiastat, compiled by datanet from Rajyasabha & Lok Sabha unstarred questions no. 3039, 4535. 2007-12

²⁷ Source : Indiastat, Ministry of Agriculture, Government of India 2011-2012

²⁸ Source : NSSO, 68th round-Nutritional Intake in India, 2011-12

V. STATUS OF NUTRITION-RELEVANT INTERVENTIONS

A. NUTRITION-SPECIFIC INTERVENTIONS

The financial resources allocated to, and spent on direct nutrition-specific interventions can determine the scale, coverage and quality of interventions to reach vulnerable target populations. These services, in India, are delivered both by the Integrated Child Development Scheme (ICDS) and the National Health Mission (NHM). This section includes data on the coverage of interventions delivered by these two key centrally-sponsored schemes that directly impact maternal and child nutrition and health. We also include here information on the human resources and service availability of these schemes and expenditures.

A.1. COVERAGE OF ICDS AND NHM:

The Integrated Child Development Services (ICDS) aims to improve the nutrition and health status of children under-six through a package of services (supplementary nutrition, immunization, health check-up, referral services, etc.) delivered through frontline workers at the Anganwadi Centres (AWCs). This section provides information on expenditure on ICDS and coverage of its supplementary nutrition programme (SNP). This section also covers critical services provided by the health system, including provision of care for pregnant women and child immunization. Immunization plays a crucial role in complementing actions to improve nutrition. The link between undernutrition and infectious diseases is cyclical, poor nutrition increases vulnerability to infections, which in turn worsen nutrition status. Data on immunization among children are presented by residence. Here, full immunization refers to children covered with BCG, measles and 3 doses each of DPT and polio.

Beneficiaries who availed supplementary food under ICDS²⁹

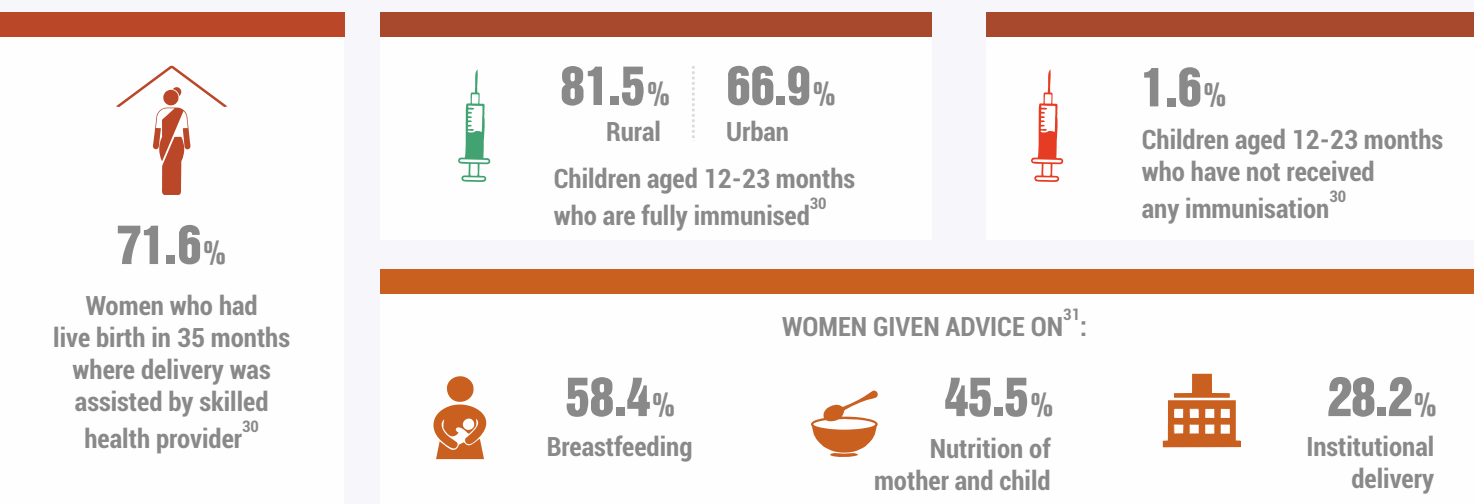
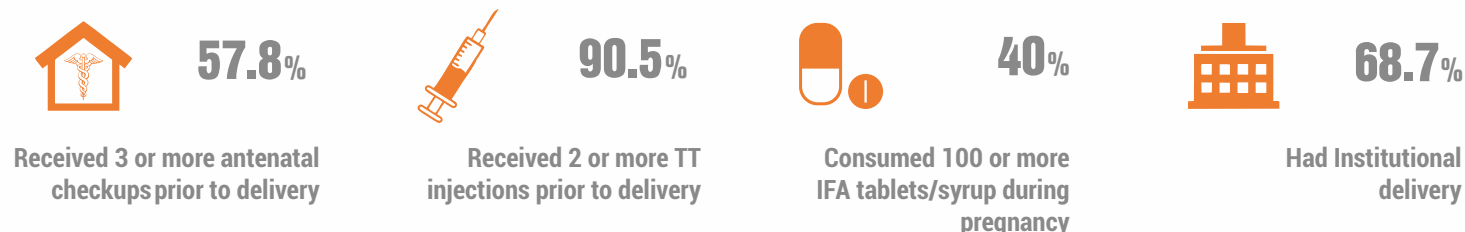
Children 6-35 months	70.3%
Children 36-71 months	42.2%
Pregnant women	65.7%
Lactating mothers	65.2%

Beneficiaries who received supplementary food for at least 21 days in the month prior to the survey

Children aged 6-35 months	43.4%
Children aged 36-71 months	42.1%
Pregnant women	37.9%
Lactating women	44%

²⁹ Source : RSoC, 2014

SERVICES PROVIDED TO WOMEN WHO HAD A LIVE BIRTH IN LAST 35 MONTHS³⁰



WOMEN GIVEN ADVICE ON³¹:



A.2. PERSONNEL CAPACITY OF ICDS AND NRHM:

This section features data on availability of healthcare personnel and services available to women of reproductive age (antenatal care, tetanus toxoid coverage, iron-folic acid supplementation coverage, institutional delivery and counseling). Household and individual access to health services can directly impact children's nutrition and welfare during the crucial first 1,000 days of life.

Availability of Anganwadi Centres and Workers (AWCs and AWWs) ^{H, 30}	Value
Pending or vacant Anganwadi workers to sanctioned number of workers*	4.1%
AWWs living in the AWC village/ward	82.2%
AWWs having 10 or more years of schooling	94.2%
Median age of AWWs	38 years
AWCs serving to population more than the stipulated norm	2.3%

Growth Monitoring ³⁰	Value
AWCs having functional baby weighing scale	87.3%
AWCs having functional adult weighing scale	11.4%
Available WHO growth chart at AWCs	93.5%

^H Number of AWCs surveyed for Himachal Pradesh as per RSoC 2014 is 165.

³⁰ Source : RSoC, 2014

³¹ Source : DLHS-4, 2012-13

* Source : MoWCD, 2012

Training and Comprehensive Knowledge ³²	Value
AWWs having correct knowledge of intake of food by pregnant women	94.2%
AWWs having correct knowledge of normal birth weight of children	89.6%
AWWs having correct knowledge of initiation of breastfeeding within one hour	98.5%
AWWs having correct knowledge of exclusive breastfeeding for the first six months	96.4%
AWWs having correct knowledge of appropriate age of child for complementary feeding	76.8%

Health Service Delivery Personnel	Value
ASHAs selected ³³	NA
Current density of ASHA as per Census 2011 rural population ³³	NA
Pending or vacant ANM positions sub centres & PHCs ³⁴	NA

A.3. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SPECIFIC INTERVENTIONS

Expenditure on Schemes (in million dollars)	In million USD	National Average
ICDS (ICDS general + SNP + training) (women and children) ³⁵	28	75
NRHM expenditure (Central Government) ³⁶	18.6	68.8
NRHM expenditure (State Government) ³⁶	14.9	9.3

B. NUTRITION-SENSITIVE INTERVENTIONS

This section includes information on expenditure and coverage of key centrally-sponsored schemes that indirectly impact maternal and child nutrition. These are: the Mid Day Meal Scheme (MDMS), Public Distribution System (PDS), and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

B.1. COVERAGE OF SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS

Coverage of Schemes	Value
MDMS (base: eligible children*) ³⁷	51%
PDS (base: rural and urban households reporting consumption) ³⁸	83.2%
MGNREGA (base: rural persons 18 years and above registered in MGNREG job card and demanded work during last 365 days) ³⁹	86.5%

* All children studying in primary & upper primary classes in schools supported under Sarva Shiksha Abhiyan and NCLP (National Child Labour Project) run by Ministry of Labour.

B.2. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS:

Expenditure on Schemes (in million dollars)	In million USD	National Average
MDMS ⁴⁰	13	47
PDS ⁴¹	170.5	475.3
MGNREGA ⁴²	83	214

³² Source : RSoC, 2014

³³ Source : NRHM, 2013

³⁴ Source : MoHFW, 2013

³⁵ Source : Lok Sabha Unstarred Question # 846 dated 27.02.2015, 2012-13

³⁶ Source : Lok Sabha Annexured Unstarred Question # 409 dated 6.12.2013, 2012-13

³⁷ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/lsq15/15/as216.htm 2011-12

³⁸ Source : Report No. 558, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

³⁹ Source : Report No. 554, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

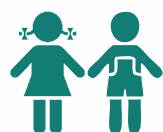
⁴⁰ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014, 2012-13

⁴¹ Source : Food Corporation of India 2013, 2012-13

⁴² Source : Lok Sabha Annexured Unstarred Question # 3835 dated 19.03.2015, 2012-13

FAST FACTS ON NUTRITION AND ITS DETERMINANTS IN JAMMU & KASHMIR

World Health Assembly Nutrition Targets



CHILDREN UNDER 5 YEARS

31.7%
Stunted¹
7.1%
Wasted¹

World Health Assembly Nutrition Targets


60.4%

 Infants 0-5 months old who are exclusively breastfed¹

16.2%

 Children under 3 years who have low birth weight (<2.5 kgs)²

52.1%

 Women 15-49 years old with anemia¹

47.4%

 Infants 6-8 months old who receive solid, semi-solid or soft foods²
16.9%

 Infants & young children 6-23 months old who achieve minimal diet diversity in complementary feeding²

Immediate Determinants


58.6%

 Children 6-59 months old with anemia¹

4.4%

 Children 6-59 months old who had diarrhea in 15 days prior to survey²

Immediate Determinants


24.9%

 Children 6-35 months old who received supplementary food under ICDS for 21 days in the month prior to survey²

59%

 Children 12-23 months old who are fully immunized²

57.7%

 Mothers of children under 36 months old who received three or more antenatal checkups²

Underlying Determinants


18.9%

 Currently married women with 10 or more years of schooling¹

16.8%

 Women aged 20-24 years who were married before the age of 18²

30.5%

 Adolescent girls 15-18 years old with low BMI (<18.5)²

Underlying Determinants


33.1%

 Households practicing open defecation²

10.4%

 Population below state-specific poverty line³

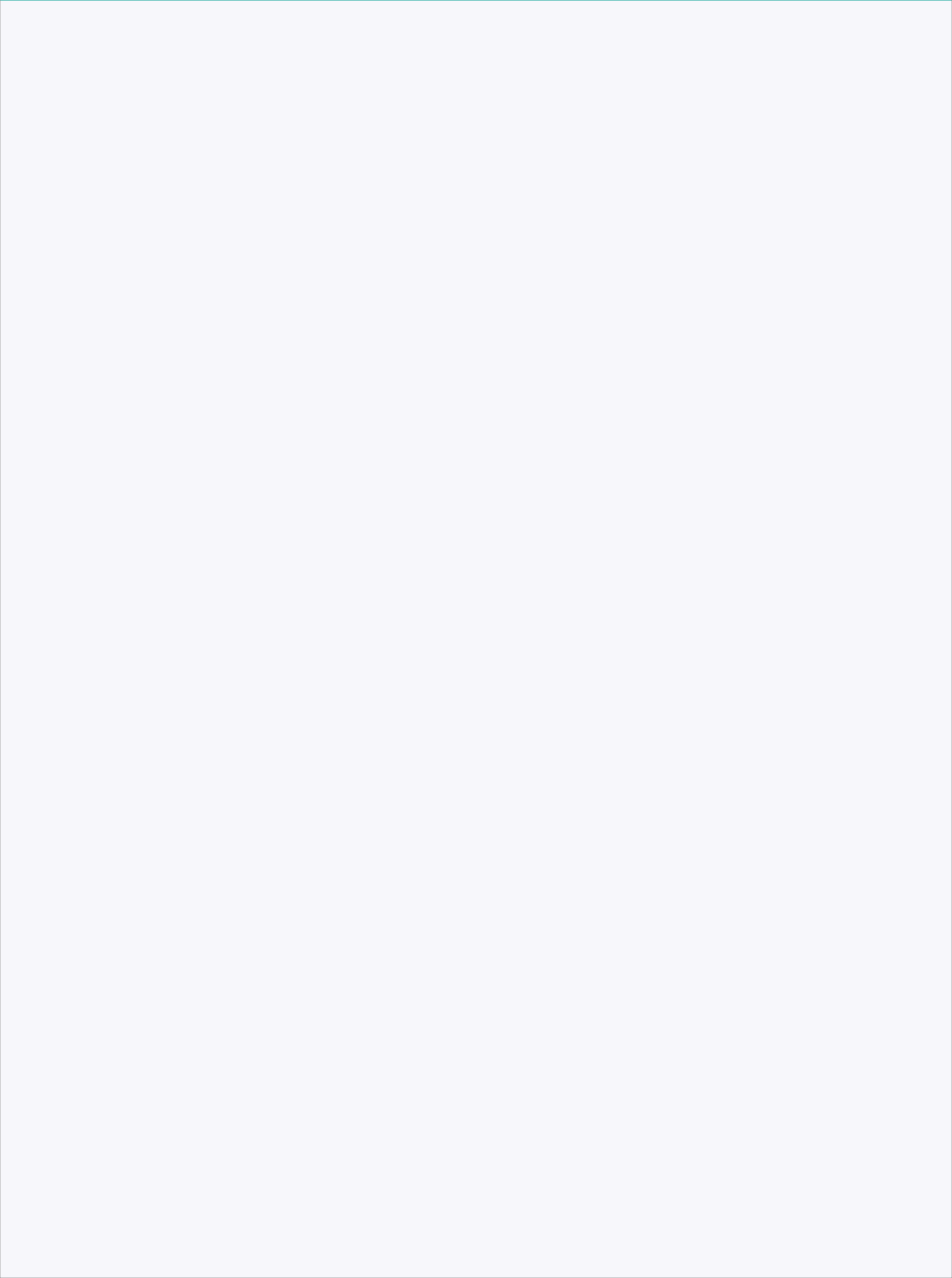
Does state have a high-level nutrition mission?

NO
¹ Source : RSoC, 2014

² Source : NFHS-3, 2006

³ Source : DLHS-3, 2007-08

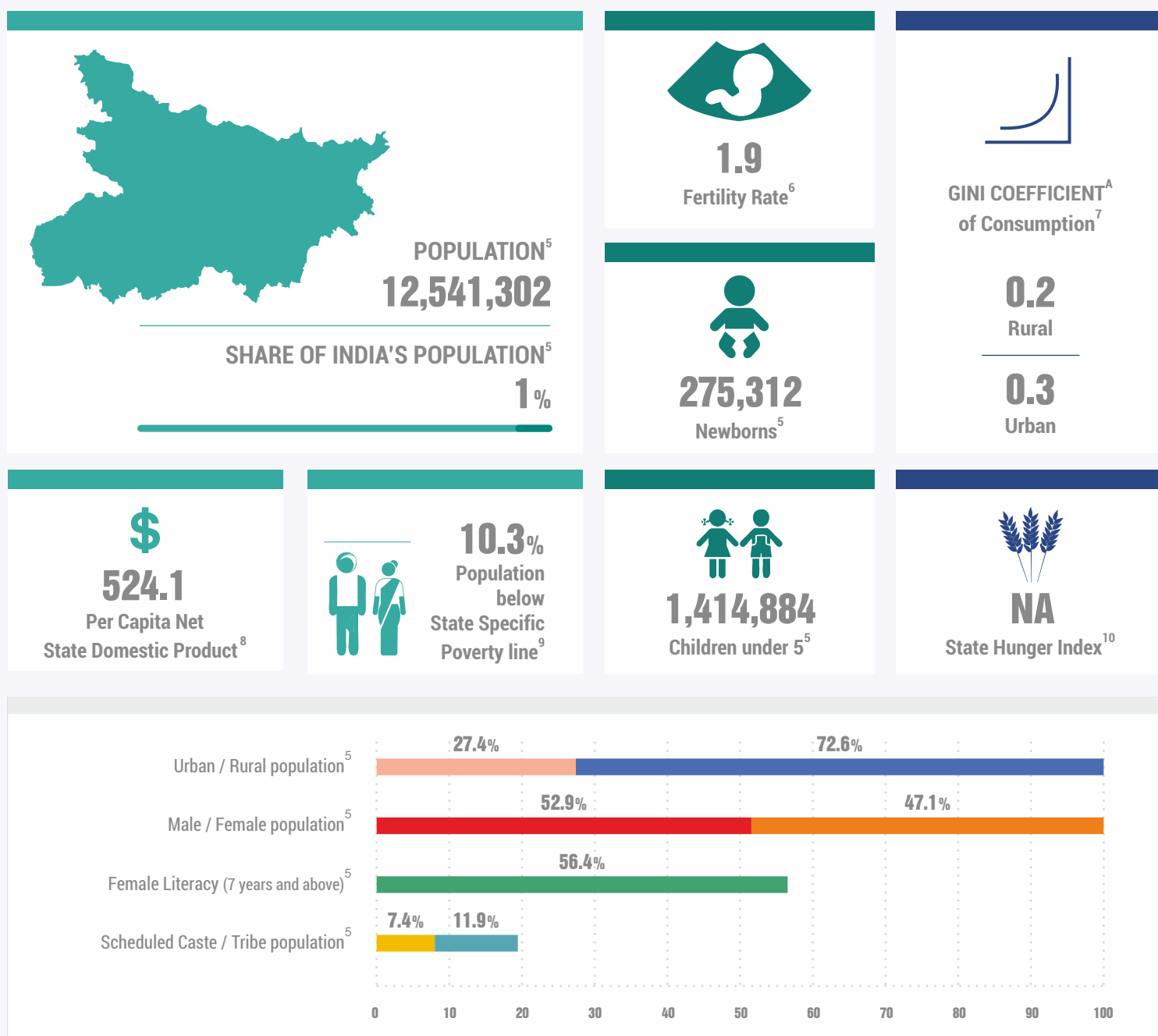
⁴ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Govt. of India



I. CONTEXT

A. DEMOGRAPHIC CONTEXT

This section highlights the demographic composition of the state in terms of male-female, rural-urban, and SC-ST ratios, literacy and fertility rates. In addition, it also includes the size of the population of newborns and children less than five years of age (as of the Census of India, 2011) to illustrate the size of the target population for nutrition-related interventions that need to reach this vulnerable population.



A : Gini coefficient is a measure of inequality of distribution. A Gini coefficient of 0 represents perfect equality, while a value of 100 implies perfect inequality. (See Appendix A for more information)

⁵ Source : Primary Census Abstract, Census, 2011

⁶ Source : SRS, 2013

⁷ Source : Planning Commission Estimates: NSSO 66th round-Employment and Unemployment Survey, 2009-10

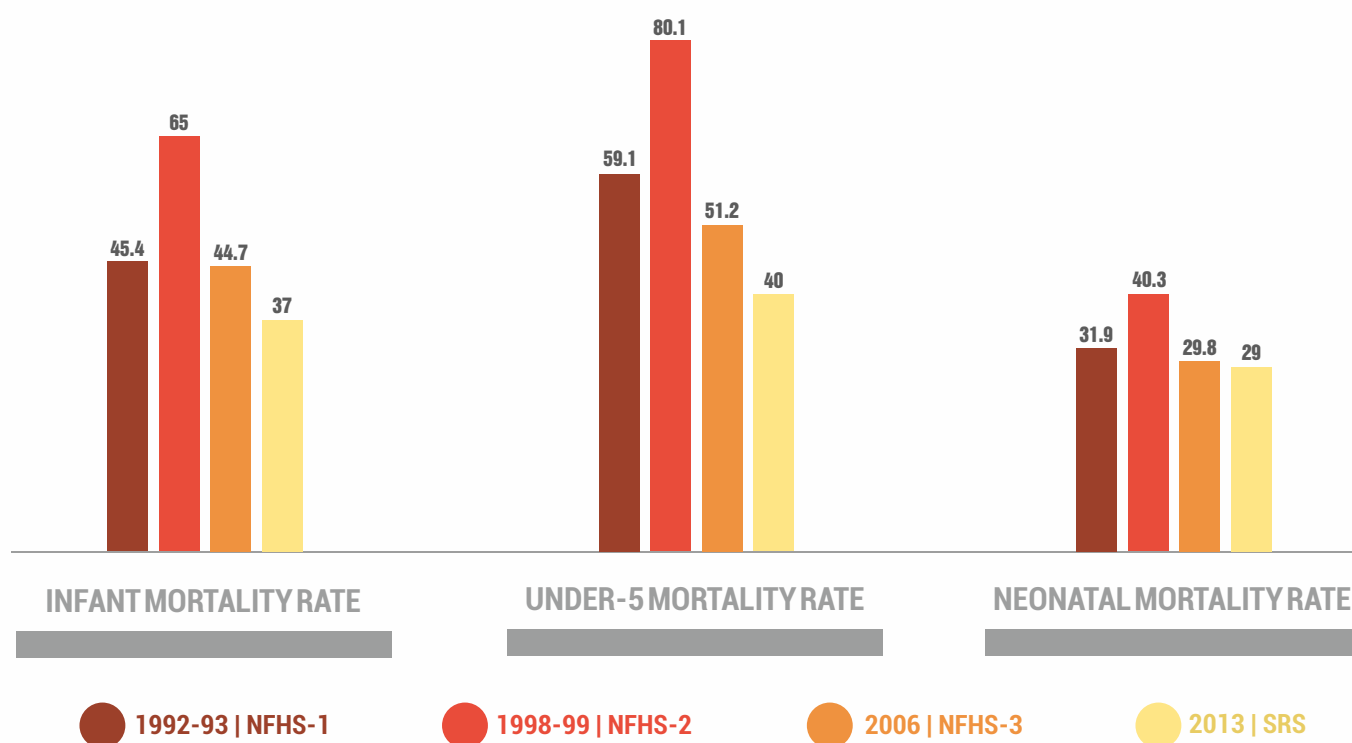
⁸ Source : Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14; http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82

⁹ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Government of India, 2011-12 : http://planningcommission.nic.in/news/pre_pov2307.pdf

¹⁰ Source : IFPRI, India State Hunger Index, 2009

B. CHILD MORTALITY PER THOUSAND LIVE BIRTHS

This section illustrates trends in mortality in neonates, infants and children under 5 years, since 1992. The purpose of this is to highlight the success achieved by individual states in averting deaths of children since the economic growth of the 1990s.



II. NUTRITIONAL STATUS AMONG CHILDREN

This section presents data on nutrition outcome indicators (stunting, wasting, and underweight) and anemia prevalence. Anthropometric measures for children under 5 (stunting, wasting, and underweight) are presented over time periods, by age groups and by background characteristics. This data aims to convey the prevalence and severity of undernutrition in the state.

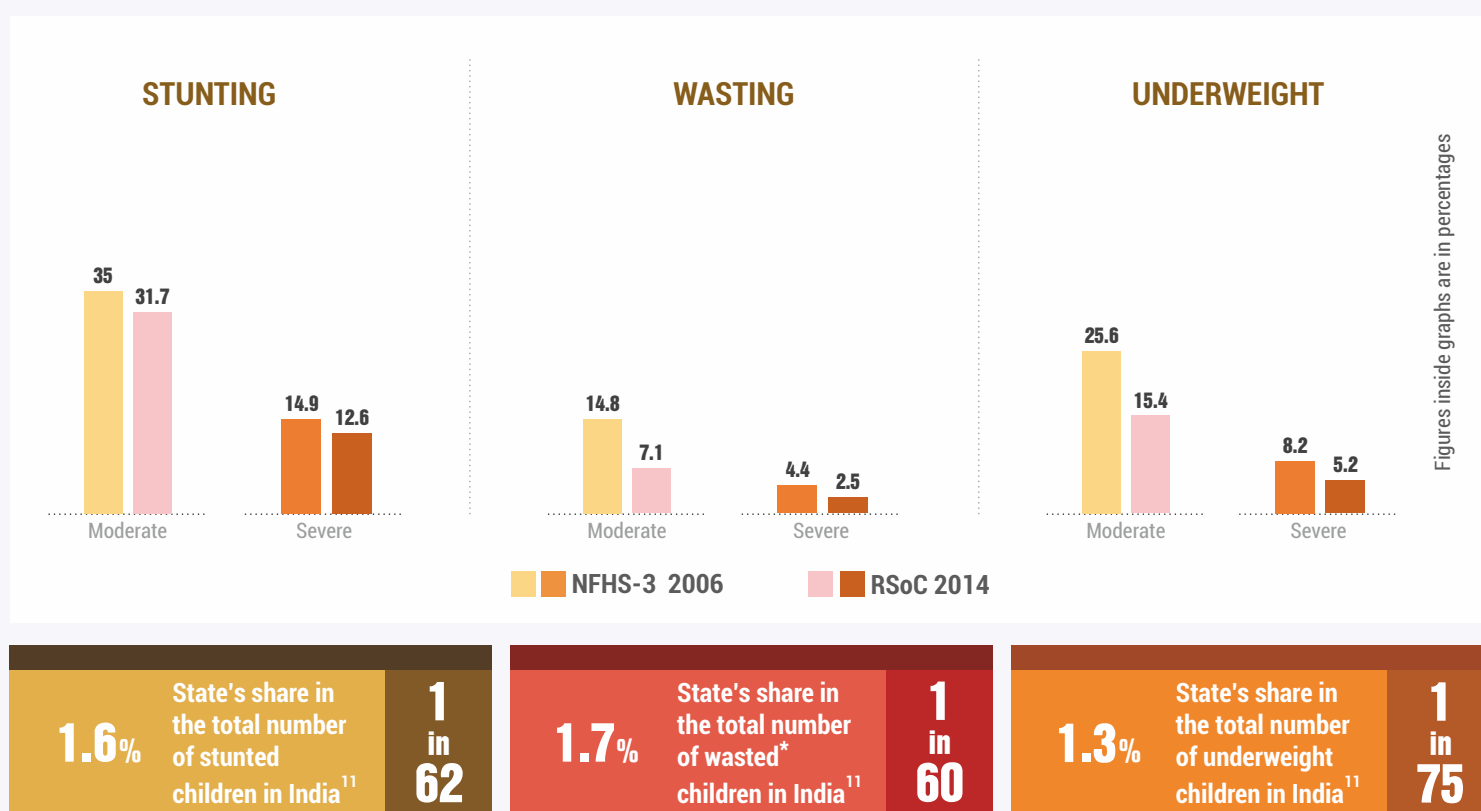
A. CHILD UNDERNUTRITION, BY TIME PERIOD

ANTHROPOMETRIC MEASURES

Stunting is inadequate height for age, which is indicative of chronic or cumulative nutritional deprivation in early childhood. A stunted child's height-for-age is below -2 standard deviations from the median height-for-age (termed HAZ) of the WHO Child Growth Standards, while a severely stunted child is below -3 standard deviations.

Wasting is inadequate weight for height, which points to acute or short-term undernutrition. A wasted child's weight-for-height (WHZ) is below -2 standard deviations from the WHO Child Growth Standards; a severely wasted child is below -3 standard deviations. (Another way to determine severe wasting or severe acute malnutrition is through a measurement of a child's mid-upper arm circumference (MUAC).

Underweight is inadequate weight for age, a composite indicator that encompasses stunting and wasting. An underweight child's weight-for-age (WAZ) is below -2 standard deviations from the WHO Child Growth Standards; again, a severely underweight child is below -3 standard deviations.

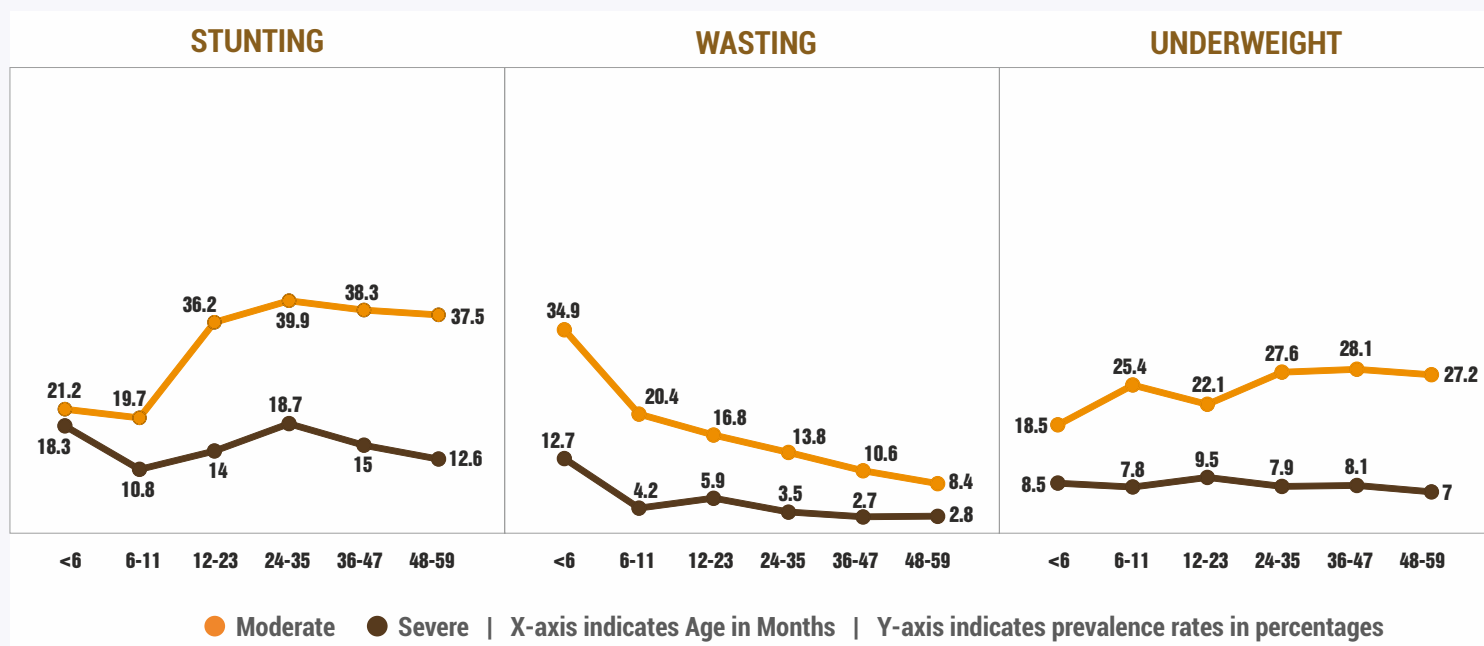


*Wasting is subject to seasonal variations either in food supply or disease prevalence and hence may not be comparable across groups of children measured at different times of the year within a survey round as well as between different survey rounds.

¹¹ Source : NFHS-3, 2006

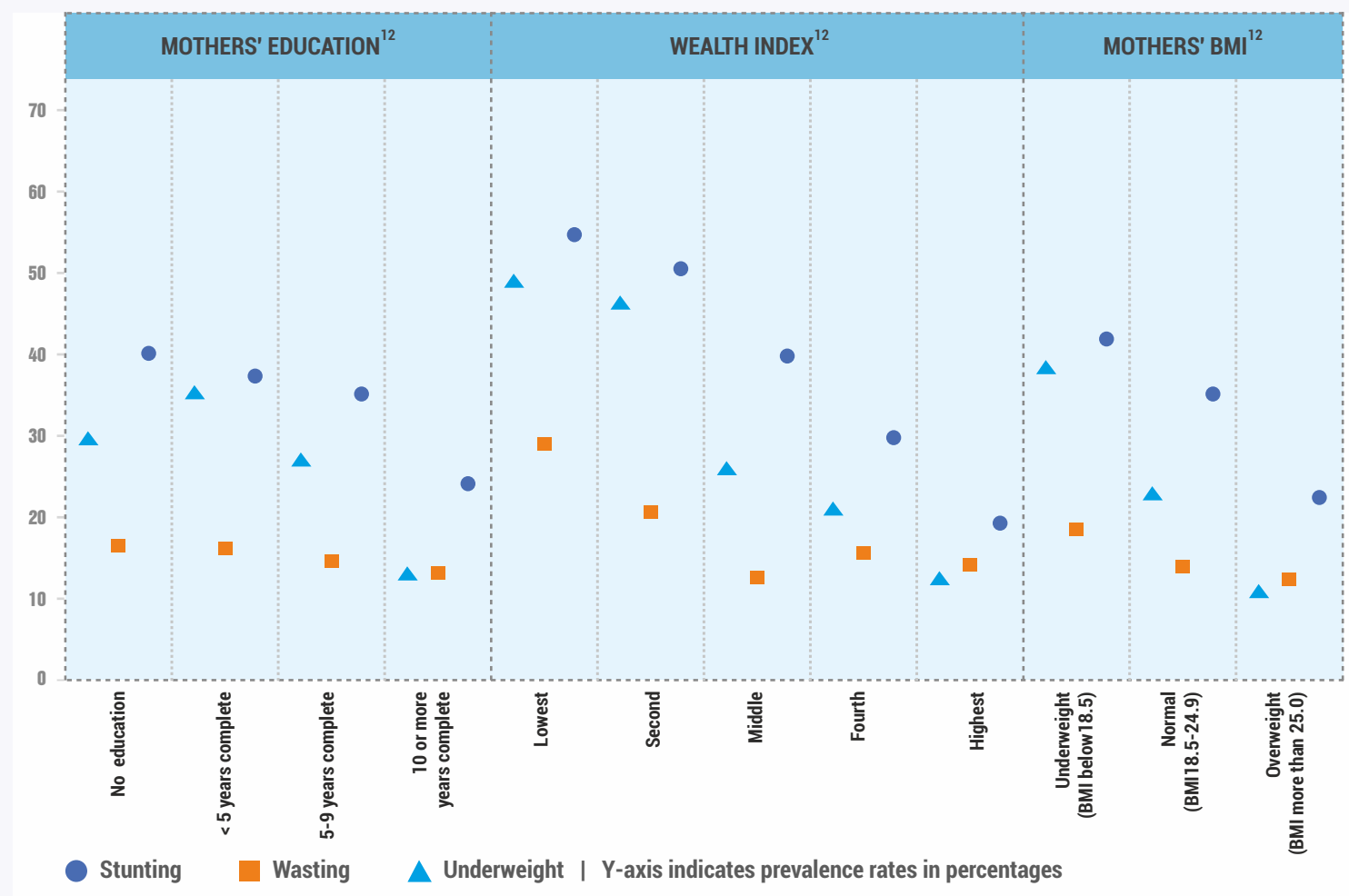
B. CHILD UNDERNUTRITION, BY AGE GROUPS¹²

Percentage of moderate (below -2 SD from the WHO growth standards) and severe (below -3 SD) stunting, wasting and underweight are available for 6 age groups among children under 5.



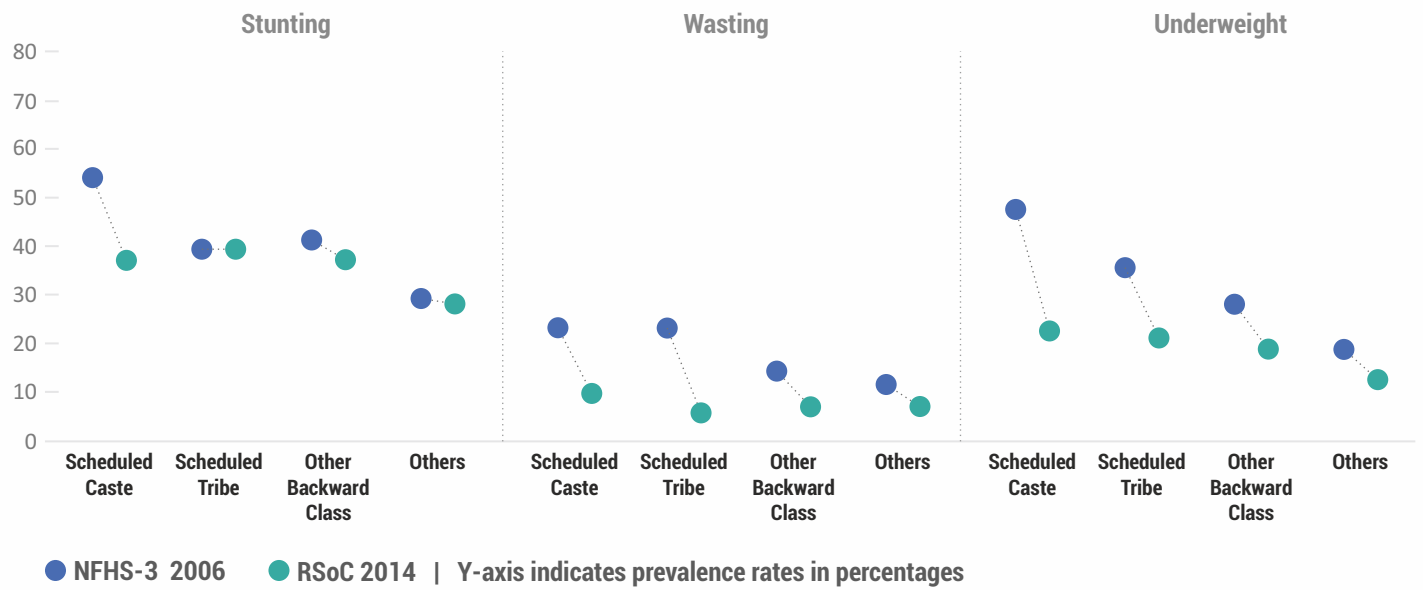
C. PREVALENCE OF CHILD UNDERNUTRITION, BY BACKGROUND CHARACTERISTICS

In this section, child undernutrition outcomes are presented, along with key socioeconomic drivers that are known to be associated with child nutrition, such as caste, residence, mother's health and education, and household income.

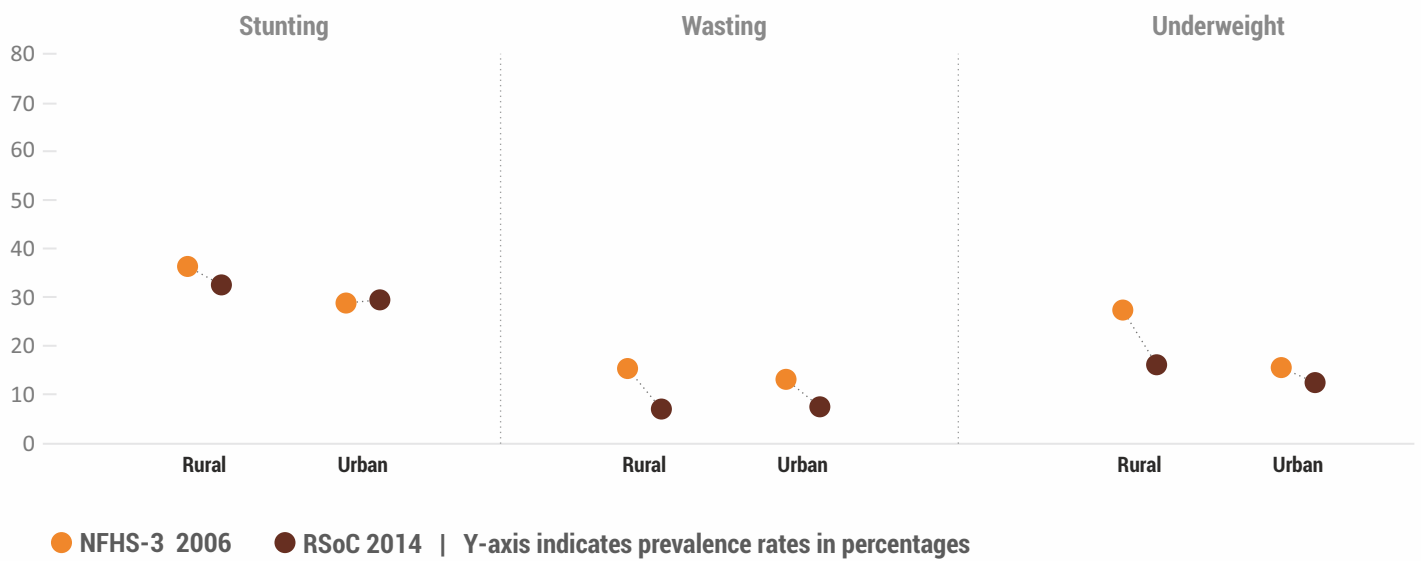


¹² Source : NFHS-3, 2006

CASTE

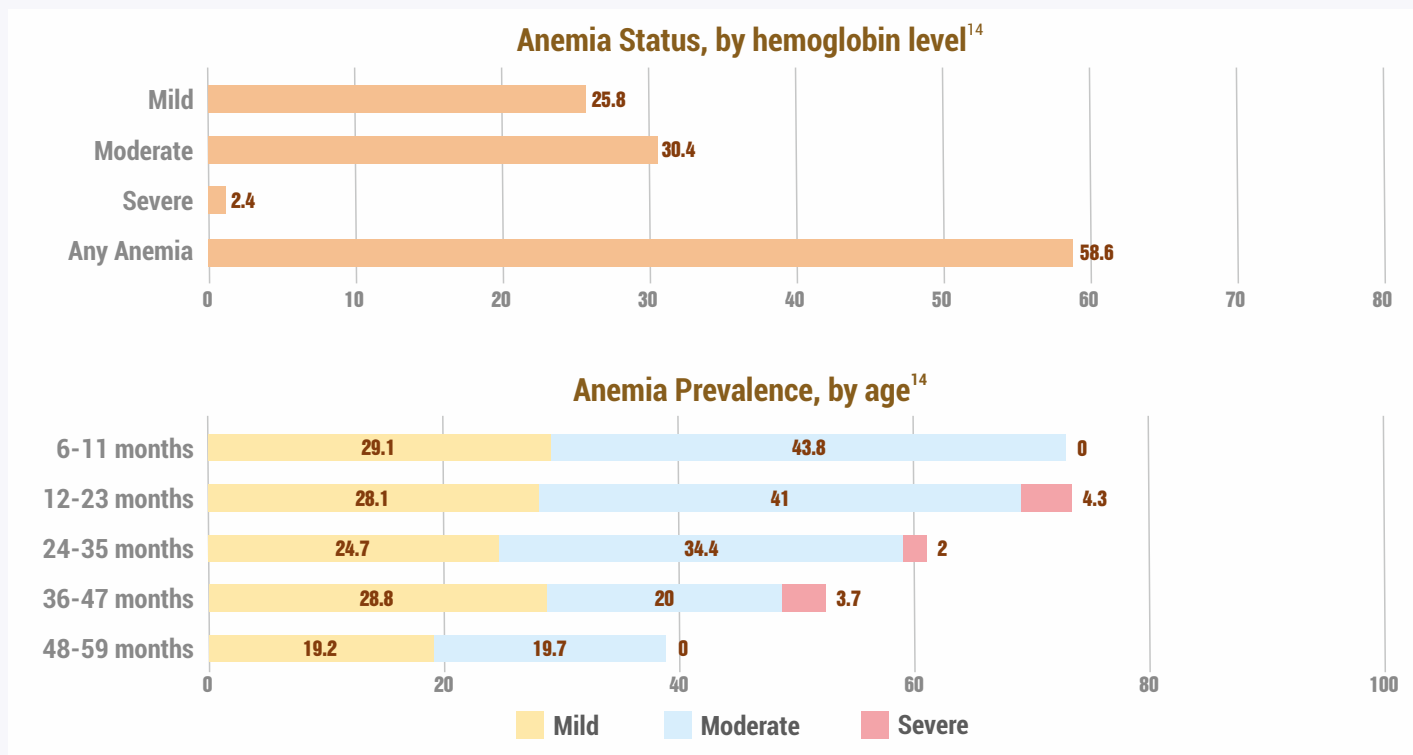


RESIDENCE



D. ANEMIA PREVALENCE

Anemia can impair physical and cognitive development among children and create long term impacts on productivity and wellbeing. This section features data on anemia prevalence by severity and age groups for children under 5.



¹⁴ Source : NFHS-3, 2006

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This section presents indicators for assessing IYCF practices as recommended by the WHO and revised in 2008. Following optimal IYCF practices during the first 1,000 days is crucial for early child survival and growth as well as long-term health and wellbeing.

Children aged 0-23 months breastfed immediately/within an hour of birth		20.8%
	Children aged 0-5 months who were exclusively breastfed	60.4%
	Children aged 6-8 months who were fed complementary foods	47.4%
	For breastfed children (6-23 months)- A. Fed minimum number of times. Note : At least twice a day for breastfed infants 6-8 months old and at least three times a day for breastfed children 9-23 months old B. Had minimum dietary diversity Note : Minimum dietary diversity refers to four or more food groups^B fed to children aged 6-23 months	41 % 16.9%

B. CHILD HEALTH¹⁵

Prevalence of childhood illnesses (in children aged 0-59 months)

Had diarrhea in 15 days prior to survey	4.4%
Had fever in 15 days prior to survey	12.2%
Had symptoms of Acute Respiratory Infection (ARI) in 15 days prior to survey	10.6%

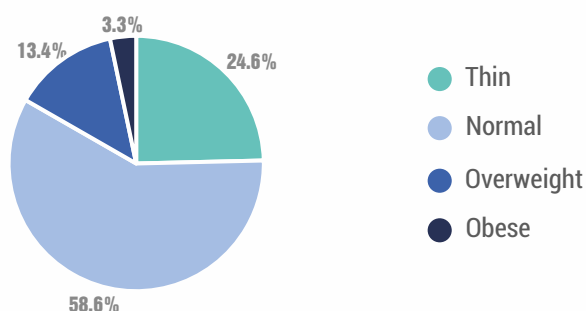
^B The 7 food groups include the following: i. grains, roots and tubers ii. legumes and nuts iii. dairy products (milk, yoghurt, cheese) iv. Flesh foods (meat, fish, poultry, and liver/organ meats) v. eggs vi. Vitamin-A rich fruits and vegetables vii. other fruits and vegetables.

C. NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

Maternal health and nutrition, as well as adolescent nutrition, have important consequences for intergenerational transmission of undernutrition. Data on Body Mass Index (BMI), anemia prevalence and height among women of reproductive age are presented in this section, as are data on adolescent BMI and anemia.

C.1. WOMEN 15-49 YEARS OLD¹⁶

BMI^c levels of women aged 15-49 years



^cBody Mass Index (BMI) is defined as the weight in kilograms by the square of the height in metres (kg/m²). It is a simple index of weight-for-height which is commonly used to classify underweight, overweight and obesity in adults. Range: BMI < 18.5 = total thin, BMI 18.5-24.9 = normal, BMI 25.0-29.9 = Overweight, BMI > 30.0 = Obese [per WHO Standards]



52.1%

Women aged 15-49 years are anemic

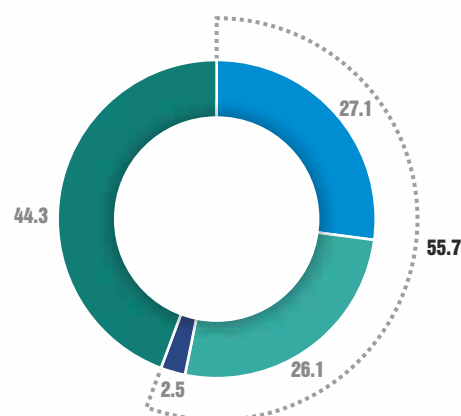
1.6%

Women aged 15-49 years are severely anemic

C.2. PREGNANT WOMEN¹⁶

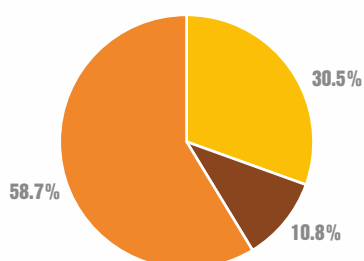
Anemia prevalence in pregnant women aged 15-49 years

● Mild ● Moderate ● Severe ● None ---- Any



C.3. ADOLESCENT GIRLS

BMI levels of adolescent girls aged 15-18 years¹⁷



● Normal ● Thin ● Overweight and Obese



53.4%

Adolescent girls aged 15-19 years are anemic¹⁶

1.2%

Adolescent girls aged 15-19 years are severely anemic¹⁶

¹⁶ Source : NFHS-3, 2006

¹⁷ Source : RSoC, 2014

IV. UNDERLYING DETERMINANTS

A. SOCIAL STATUS OF WOMEN

Women's status is recognized to contribute in significant ways to improving nutrition. This section presents indicators that are representative of women's social status, including measures of education, age at marriage and first birth, employment, decision making and domestic violence. It also includes the Gender Empowerment Measure that captures gender inequality along three dimensions: political participation and decision-making power, economic participation and decision-making power, and power over economic resources.



Currently married women who have 10 or more years of schooling¹⁸ **18.9%**



16.8% Women aged 20-24 years who were married before the age of 18¹⁹

23.1 Average age at marriage¹⁹

Gender Empowerment Measure^{D,20}

0.4

0.5

National Average²⁰



Female workforce participation rate²² **19.1%**

Currently married women who make decisions about²³:



16% Own healthcare



6.8% Major household purchase



21.4% Purchases for daily household needs



7.3% Visits to her family/friends/relatives



15.1% Women who have experienced any form of physical/sexual/emotional violence²³

65.1% Ever married women who justify hitting/wife-beating (for either of the reasons mentioned)²³

^D The Gender Empowerment Measure is a weighted average index based on indicators that are classified into three dimensions: a. political participation and decision-making power b. economic participation and decision-making power and c. power over economic resources. The index ranges from a minimum of 0 to a maximum of 1, with a higher score indicating greater empowerment of women. (More information available at <http://wcd.nic.in/publication/GDIGEReport/Part3.pdf>.)

¹⁸ Source : DLHS-3, 2007-08

¹⁹ Source : RSoC, 2014

²⁰ Source : MoWCD, 2006

²² Source : Women and Men in India, 16th Issue MoSPI, 2014

²³ Source : NFHS-3, 2006

B. WATER AND SANITATION

Poor hygiene and sanitation, by directly increasing exposure and susceptibility to infections, are associated with undernutrition among children. This section covers key indicators on access to safe drinking water and availability of sanitation facilities at the state level. It also includes the expenditure on toilet construction under the Total Sanitation Campaign.



86.7%

Households with access to improved sources of drinking water^{E, 24}

44.1%

Households using improved sanitation facility^{F, 24}



33.1%

Households practicing open defecation²⁴

5.5 M

Expenditure on toilets under Total Sanitation Campaign (TSC)^{G, 25}



1,065 M

National Average²⁵

C. AGRICULTURE AND FOOD SECURITY

Agriculture productivity and food security can affect household access to foods necessary for a healthy diet. Thus, this section presents indicators related to agricultural growth and food consumption patterns in the state, indicating the level of food security in the state relative to the national situation.



4.3%

Growth rate of agriculture from 2007-2012²⁶



0.6%

Share in India's total foodgrain production²⁷



Mean Calorie intake per person per day (in Kcal)²⁸

RURAL

URBAN

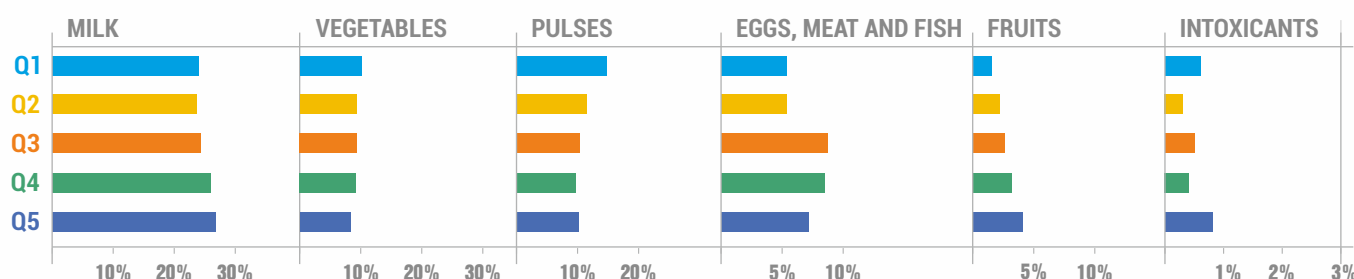
NA 2233

JAMMU & KASHMIR INDIA AVG

NA 2206

JAMMU & KASHMIR INDIA AVG

Expenditure on food items by income quintiles²⁸



^E Improved sources of drinking water include: piped water into dwelling, piped water to yard/plot, public tap or standpipe, tubewell or borehole, protected dug well, protected spring, and rainwater (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>).

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^G Besides toilet construction subsidies, this expenditure also includes funding other activities such as solid and liquid waste management, IEC activities for sustainable demand generation for sanitation facilities, assistance to production centers of sanitary materials and rural sanitary marts, provision of construction of community sanitary complexes, provision of sanitation facilities in govt. schools and Anganwadis in govt. buildings etc.

²⁴ Source : RSoC, 2014

²⁵ Source : Indiastat, Rajya Sabha Unstarred Question No. 2950, dated on 30.08.2011, 2011-12

²⁶ Source : Indiastat, compiled by datanet from Rajyasabha & Lok Sabha unstarred questions no. 3039, 4535. 2007-12

²⁷ Source : Indiastat, Ministry of Agriculture, Government of India 2011-2012

²⁸ Source : NSSO, 68th round-Nutritional Intake in India, 2011-12

V. STATUS OF NUTRITION-RELEVANT INTERVENTIONS

A. NUTRITION-SPECIFIC INTERVENTIONS

The financial resources allocated to, and spent on direct nutrition-specific interventions can determine the scale, coverage and quality of interventions to reach vulnerable target populations. These services, in India, are delivered both by the Integrated Child Development Scheme (ICDS) and the National Health Mission (NHM). This section includes data on the coverage of interventions delivered by these two key centrally-sponsored schemes that directly impact maternal and child nutrition and health. We also include here information on the human resources and service availability of these schemes and expenditures.

A.1. COVERAGE OF ICDS AND NHM:

The Integrated Child Development Services (ICDS) aims to improve the nutrition and health status of children under-six through a package of services (supplementary nutrition, immunization, health check-up, referral services, etc.) delivered through frontline workers at the Anganwadi Centres (AWCs). This section provides information on expenditure on ICDS and coverage of its supplementary nutrition programme (SNP). This section also covers critical services provided by the health system, including provision of care for pregnant women and child immunization. Immunization plays a crucial role in complementing actions to improve nutrition. The link between undernutrition and infectious diseases is cyclical, poor nutrition increases vulnerability to infections, which in turn worsen nutrition status. Data on immunization among children are presented by residence. Here, full immunization refers to children covered with BCG, measles and 3 doses each of DPT and polio.

Beneficiaries who availed supplementary food under ICDS²⁹

Children 6-35 months	28.8%
Children 36-71 months	28.5%
Pregnant women	14.9%
Lactating mothers	14.2%

Beneficiaries who received supplementary food for at least 21 days in the month prior to the survey

Children aged 6-35 months	24.9%
Children aged 36-71 months	18.9%
Pregnant women	NA
Lactating women	37%

²⁹ Source : RSoC, 2014

SERVICES PROVIDED TO WOMEN WHO HAD A LIVE BIRTH IN LAST 35 MONTHS³⁰



57.7%

Received 3 or more antenatal checkups prior to delivery



83.9%

Received 2 or more TT injections prior to delivery



23.1%

Consumed 100 or more IFA tablets/syrup during pregnancy



72.9%

Had Institutional delivery



74.9%

Women who had live birth in 35 months where delivery was assisted by skilled health provider³⁰



55.8%

Rural

70.3%

Urban

Children aged 12-23 months who are fully immunised³⁰



11%

Children aged 12-23 months who have not received any immunisation³⁰

WOMEN GIVEN ADVICE ON³¹:



75.5%

Breastfeeding



60.6%

Nutrition



48.8%

Institutional delivery

A.2. PERSONNEL CAPACITY OF ICDS AND NRHM:

This section features data on availability of healthcare personnel and services available to women of reproductive age (antenatal care, tetanus toxoid coverage, iron-folic acid supplementation coverage, institutional delivery and counseling). Household and individual access to health services can directly impact children's nutrition and welfare during the crucial first 1,000 days of life.

Availability of Anganwadi Centres and Workers (AWCs and AWWs) ^{H, 30}	Value
Pending or vacant Anganwadi workers to sanctioned number of workers ^{30a}	0.3%
AWWs living in the AWC village/ward	59.8%
AWWs having 10 or more years of schooling	88.4%
Median age of AWWs	36 years
AWCs serving to population more than the stipulated norm	2.6%

Growth Monitoring ³⁰	Value
AWCs having functional baby weighing scale	74%
AWCs having functional adult weighing scale	23.1%
Available WHO growth chart at AWCs	29.9%

^H Number of AWCs surveyed for Jammu and Kashmir as per RSoC 2014 is 209.

³⁰ Source : RSoC, 2014

^{30a} Source : MoWCD, 2012

³¹ Source : DLHS-3, 2007-08

Training and Comprehensive Knowledge ³²	Value
AWWs having correct knowledge of intake of food by pregnant women	85.3%
AWWs having correct knowledge of normal birth weight of children	76%
AWWs having correct knowledge of initiation of breastfeeding within one hour	90.5%
AWWs having correct knowledge of exclusive breastfeeding for the first six months	88.6%
AWWs having correct knowledge of appropriate age of child for complementary feeding	80.5%

Health Service Delivery Personnel	Value
ASHAs selected ³³	91%
Current density of ASHA as per Census 2011 rural population ³³	1 per 833 persons
Pending or vacant ANM positions sub centres & PHCs ³⁴	3.2%

A.3. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SPECIFIC INTERVENTIONS

Expenditure on Schemes (in million dollars)	In million USD	National Average
ICDS (ICDS general + SNP + training) (women and children) ³⁵	43	75
NRHM expenditure (Central Government) ³⁶	32.1	68.8
NRHM expenditure (State Government) ³⁶	16.5	9.3

B. NUTRITION-SENSITIVE INTERVENTIONS

This section includes information on expenditure and coverage of key centrally-sponsored schemes that indirectly impact maternal and child nutrition. These are: the Mid Day Meal Scheme (MDMS), Public Distribution System (PDS), and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

B.1. COVERAGE OF SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS

Coverage of Schemes	Value
MDMS (base: eligible children*) ³⁷	18.5%
PDS (base: rural and urban households reporting consumption) ³⁸	75.6%
MGNREGA (base: rural persons 18 years and above registered in MGNREG job card and demanded work during last 365 days) ³⁹	91.9%

* All children studying in primary & upper primary classes in schools supported under Sarva Shiksha Abhiyan and NCLP (National Child Labour Project) run by Ministry of Labour.

B.2. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS:

Expenditure on Schemes (in million dollars)	In million USD	National Average
MDMS ⁴⁰	15	47
PDS ⁴¹	286	475.3
MGNREGA ⁴²	142	214

³² Source : RSoC, 2014

³³ Source : NRHM, 2013

³⁴ Source : MoHFW, 2013

³⁵ Source : Lok Sabha Unstarred Question # 846 dated 27.02.2015, 2012-13

³⁶ Source : Lok Sabha Annexured Unstarred Question # 409 dated 6.12.2013, 2012-13

³⁷ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/lsq15/15/as216.htm 2011-12

³⁸ Source : Report No. 558, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

³⁹ Source : Report No. 554, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

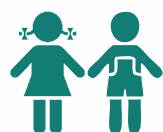
⁴⁰ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014, 2012-13

⁴¹ Source : Food Corporation of India 2013, 2012-13

⁴² Source : Lok Sabha Annexured Unstarred Question # 3835 dated 19.03.2015, 2012-13

FAST FACTS ON NUTRITION AND ITS DETERMINANTS IN JHARKHAND

World Health Assembly Nutrition Targets



CHILDREN UNDER 5 YEARS

47.4%
Stunted¹
15.6%
Wasted¹

World Health Assembly Nutrition Targets


64.3%

 Infants 0-5 months old who are exclusively breastfed¹

14.7%

 Children under 3 years who have low birth weight (<2.5 kgs)²

69.5%

 Women 15-49 years old with anemia¹

Immediate Determinants


53.7%

 Infants 6-8 months old who receive solid, semi-solid or soft foods²
17.8%

 Infants & young children 6-23 months old who achieve minimal diet diversity in complementary feeding²

70.3%

 Children 6-59 months old with anemia¹

5.5%

 Children 6-59 months old who had diarrhea in 15 days prior to survey²

Immediate Determinants


29.7%

 Children 6-35 months old who received supplementary food under ICDS for 21 days in the month prior to survey²

64.9%

 Children 12-23 months old who are fully immunized²

47.3%

 Mothers of children under 36 months old who received three or more antenatal checkups²

Underlying Determinants


11.4%

 Currently married women with 10 or more years of schooling¹

33.4%

 Women aged 20-24 years who were married before the age of 18²

43.3%

 Adolescent girls 15-18 years old with low BMI (<18.5)²

Underlying Determinants


75.6%

 Households practicing open defecation²

37%

 Population below state-specific poverty line³

Does state have a high-level nutrition mission?

YES
¹ Source : RSoC, 2014

² Source : NFHS-3, 2006

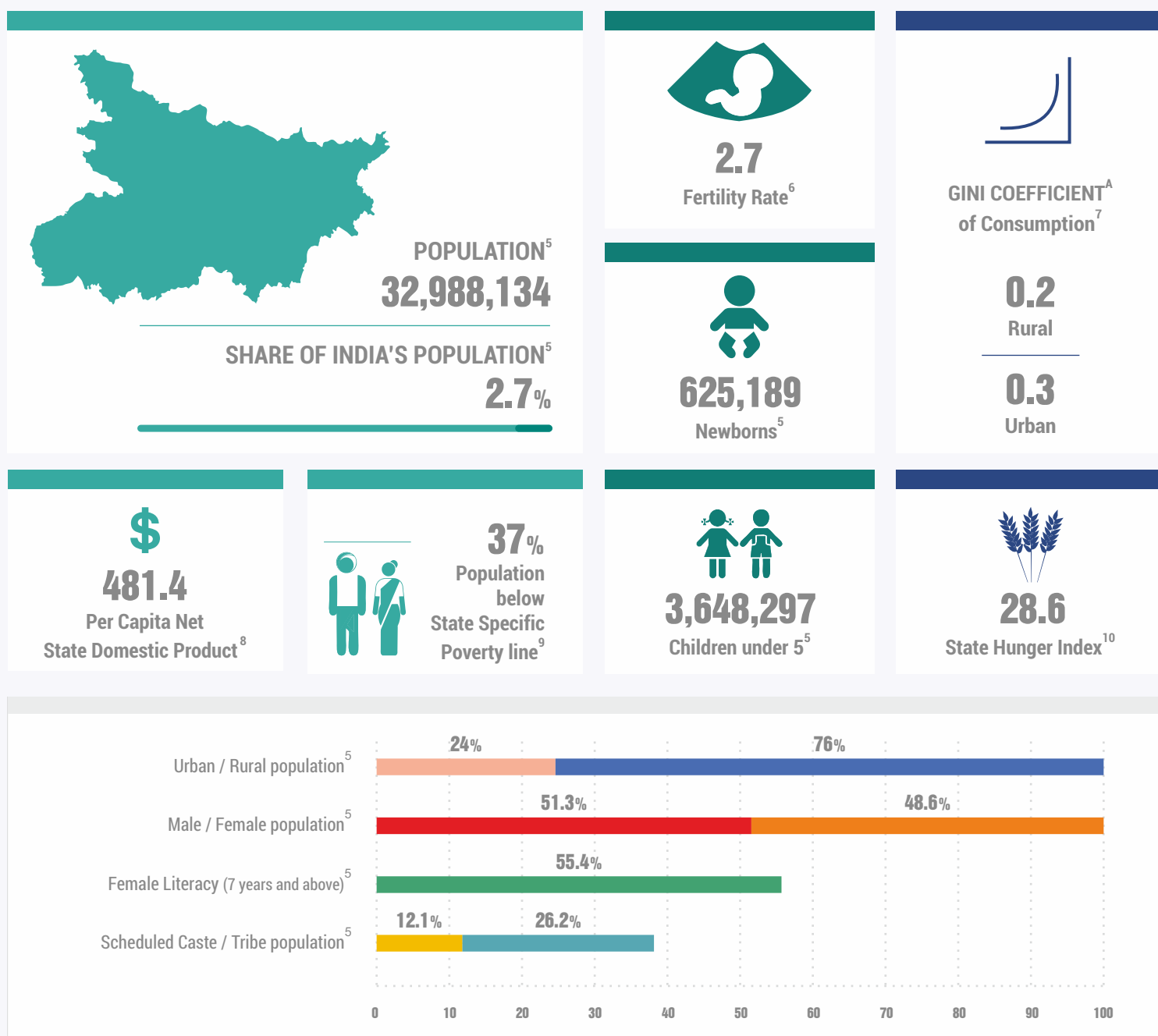
³ Source : DLHS-3, 2007-08

⁴ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Govt. of India

I. CONTEXT

A. DEMOGRAPHIC CONTEXT

This section highlights the demographic composition of the state in terms of male-female, rural-urban, and SC-ST ratios, literacy and fertility rates. In addition, it also includes the size of the population of newborns and children less than five years of age (as of the Census of India, 2011) to illustrate the size of the target population for nutrition-related interventions that need to reach this vulnerable population.



A : Gini coefficient is a measure of inequality of distribution. A Gini coefficient of 0 represents perfect equality, while a value of 100 implies perfect inequality. (See Appendix A for more information)

⁵ Source : Primary Census Abstract, Census, 2011

⁶ Source : SRS, 2013

⁷ Source : Planning Commission Estimates: NSSO 66th round-Employment and Unemployment Survey, 2009-10

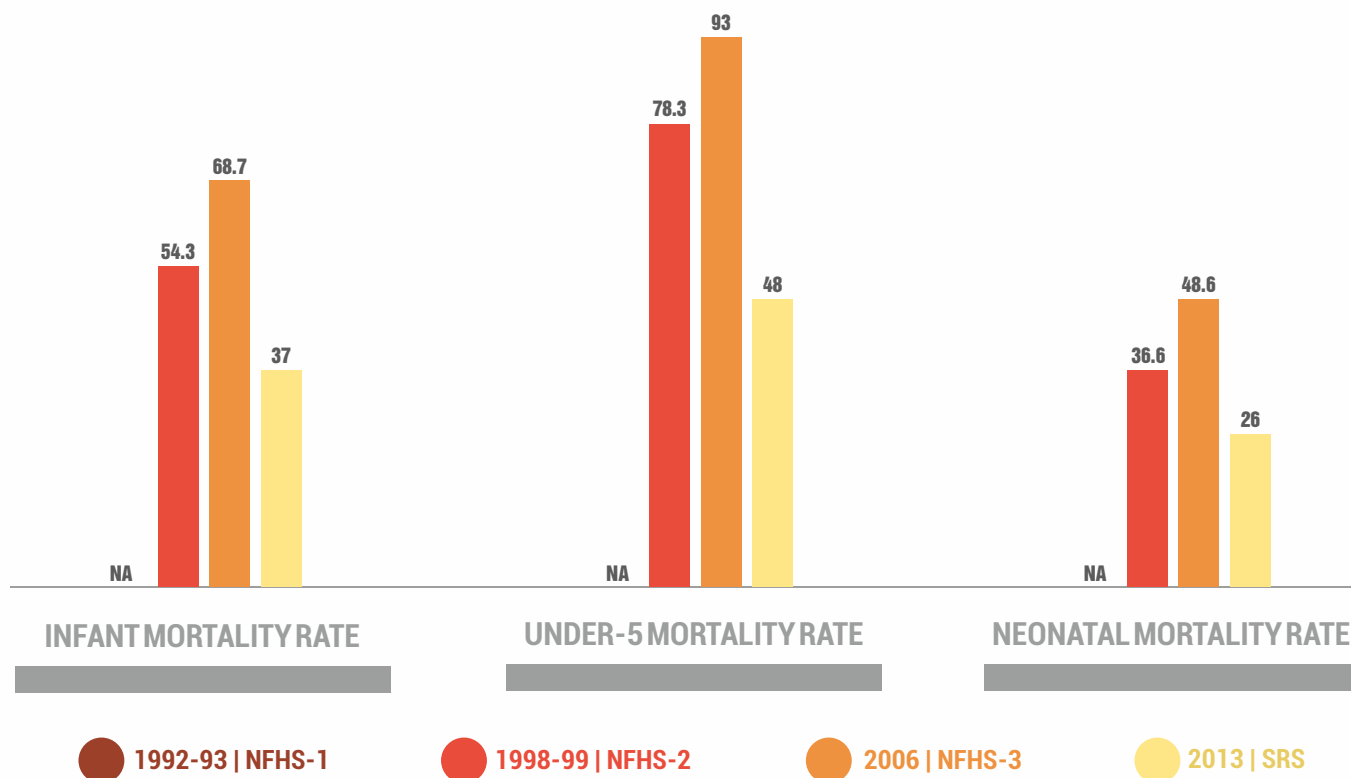
⁸ Source : Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14; http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82

⁹ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Government of India, 2011-12 : http://planningcommission.nic.in/news/pre_pov2307.pdf

¹⁰ Source : IFPRI, India State Hunger Index, 2009

B. CHILD MORTALITY PER THOUSAND LIVE BIRTHS

This section illustrates trends in mortality in neonates, infants and children under 5 years, since 1992. The purpose of this is to highlight the success achieved by individual states in averting deaths of children since the economic growth of the 1990s.



II. NUTRITIONAL STATUS AMONG CHILDREN

This section presents data on nutrition outcome indicators (stunting, wasting, and underweight) and anemia prevalence. Anthropometric measures for children under 5 (stunting, wasting, and underweight) are presented over time periods, by age groups and by background characteristics. This data aims to convey the prevalence and severity of undernutrition in the state.

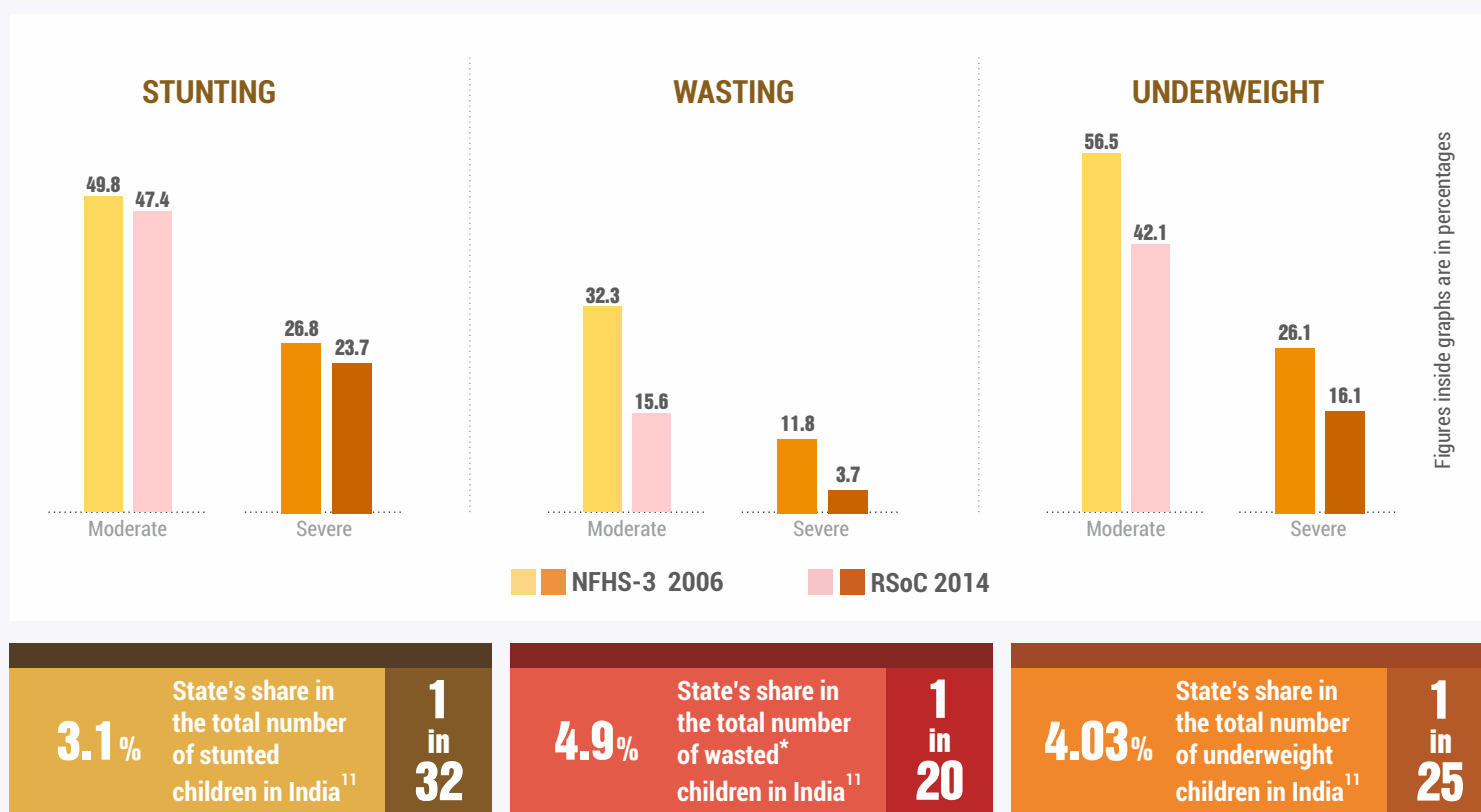
A. CHILD UNDERNUTRITION, BY TIME PERIOD

ANTHROPOMETRIC MEASURES

Stunting is inadequate height for age, which is indicative of chronic or cumulative nutritional deprivation in early childhood. A stunted child's height-for-age is below -2 standard deviations from the median height-for-age (termed HAZ) of the WHO Child Growth Standards, while a severely stunted child is below -3 standard deviations.

Wasting is inadequate weight for height, which points to acute or short-term undernutrition. A wasted child's weight-for-height (WHZ) is below -2 standard deviations from the WHO Child Growth Standards; a severely wasted child is below -3 standard deviations. (Another way to determine severe wasting or severe acute malnutrition is through a measurement of a child's mid-upper arm circumference (MUAC).

Underweight is inadequate weight for age, a composite indicator that encompasses stunting and wasting. An underweight child's weight-for-age (WAZ) is below -2 standard deviations from the WHO Child Growth Standards; again, a severely underweight child is below -3 standard deviations.

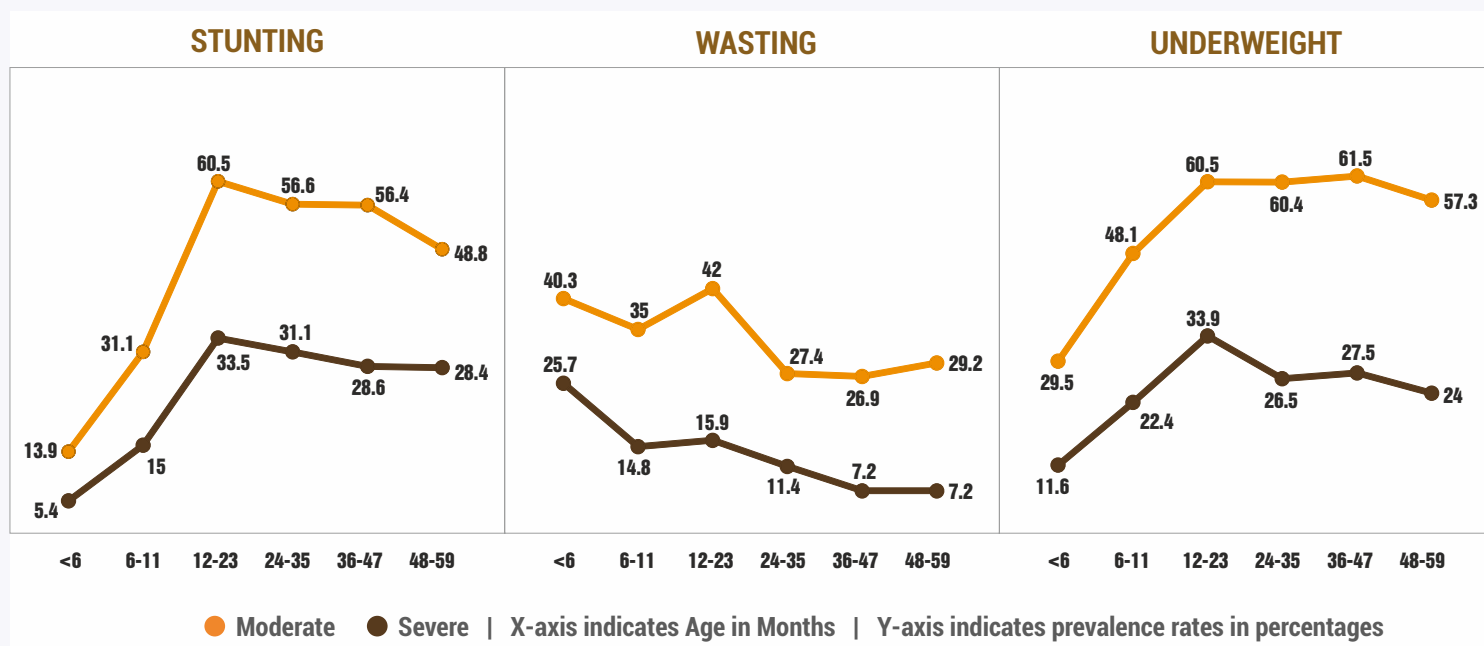


*Wasting is subject to seasonal variations either in food supply or disease prevalence and hence may not be comparable across groups of children measured at different times of the year within a survey round as well as between different survey rounds.

¹¹ Source : NFHS-3, 2006

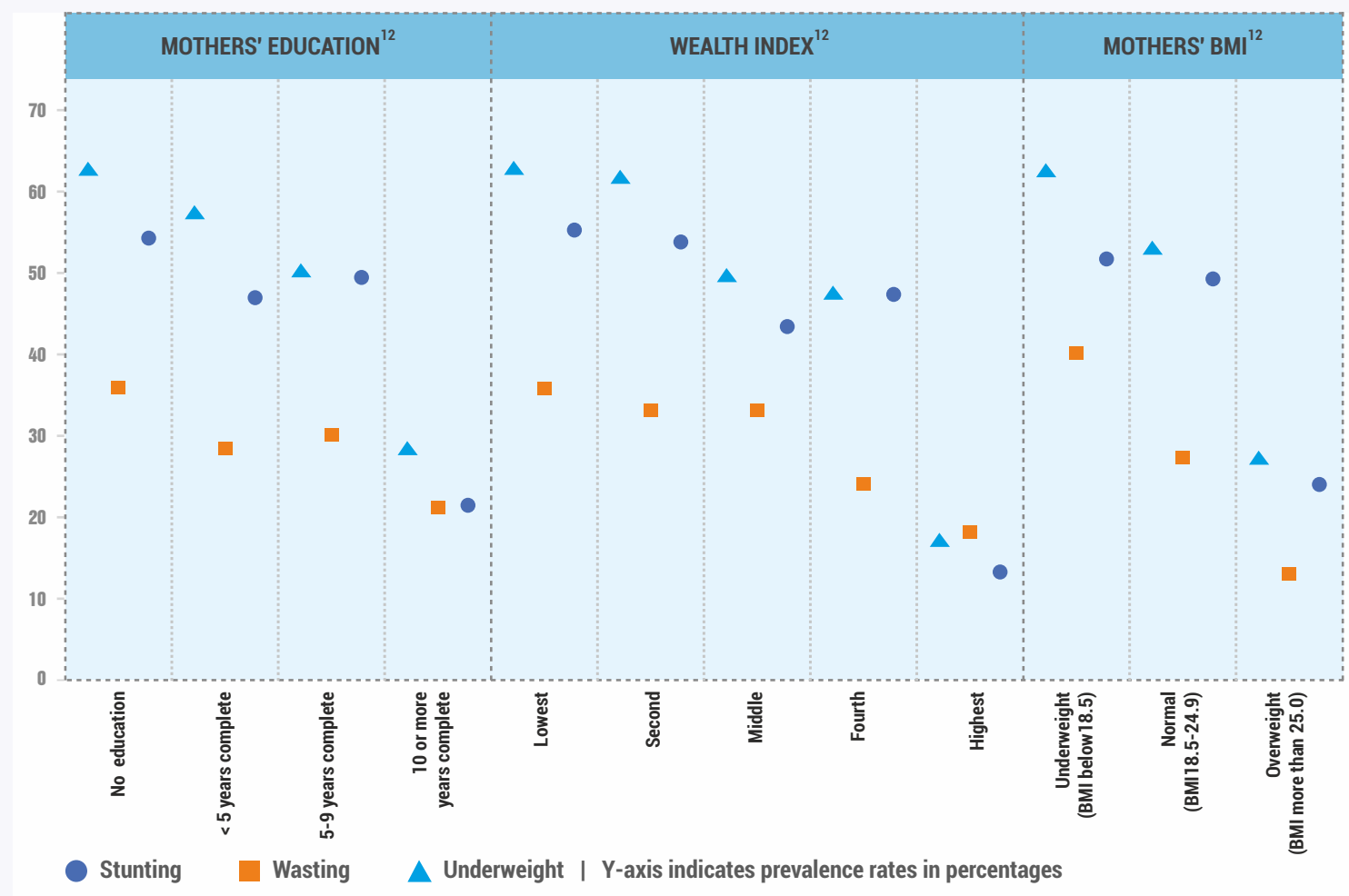
B. CHILD UNDERNUTRITION, BY AGE GROUPS¹²

Percentage of moderate (below -2 SD from the WHO growth standards) and severe (below -3 SD) stunting, wasting and underweight are available for 6 age groups among children under 5.



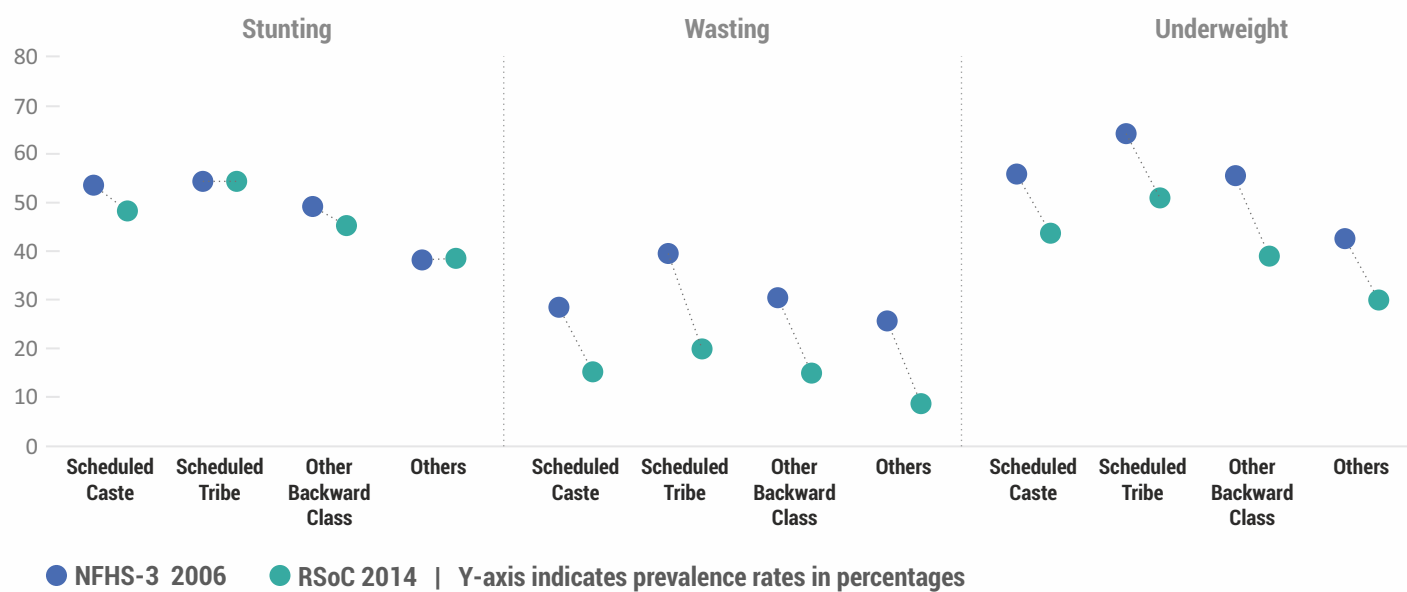
C. PREVALENCE OF CHILD UNDERNUTRITION, BY BACKGROUND CHARACTERISTICS

In this section, child undernutrition outcomes are presented, along with key socioeconomic drivers that are known to be associated with child nutrition, such as caste, residence, mother's health and education, and household income.

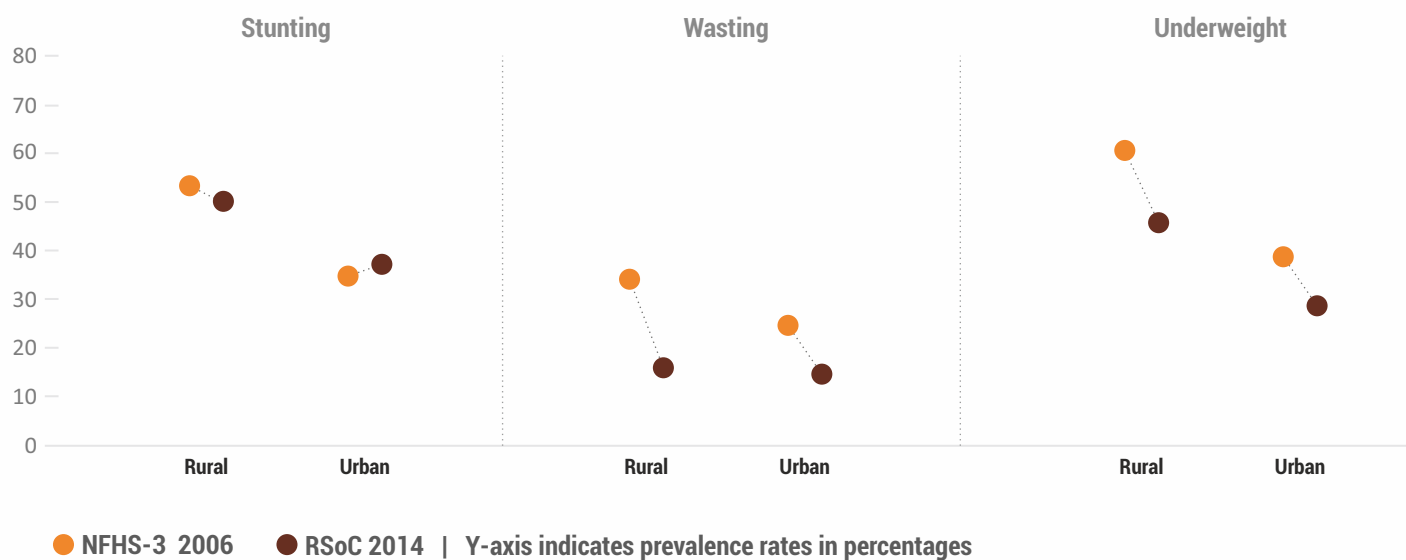


¹² Source : NFHS-3, 2006

CASTE

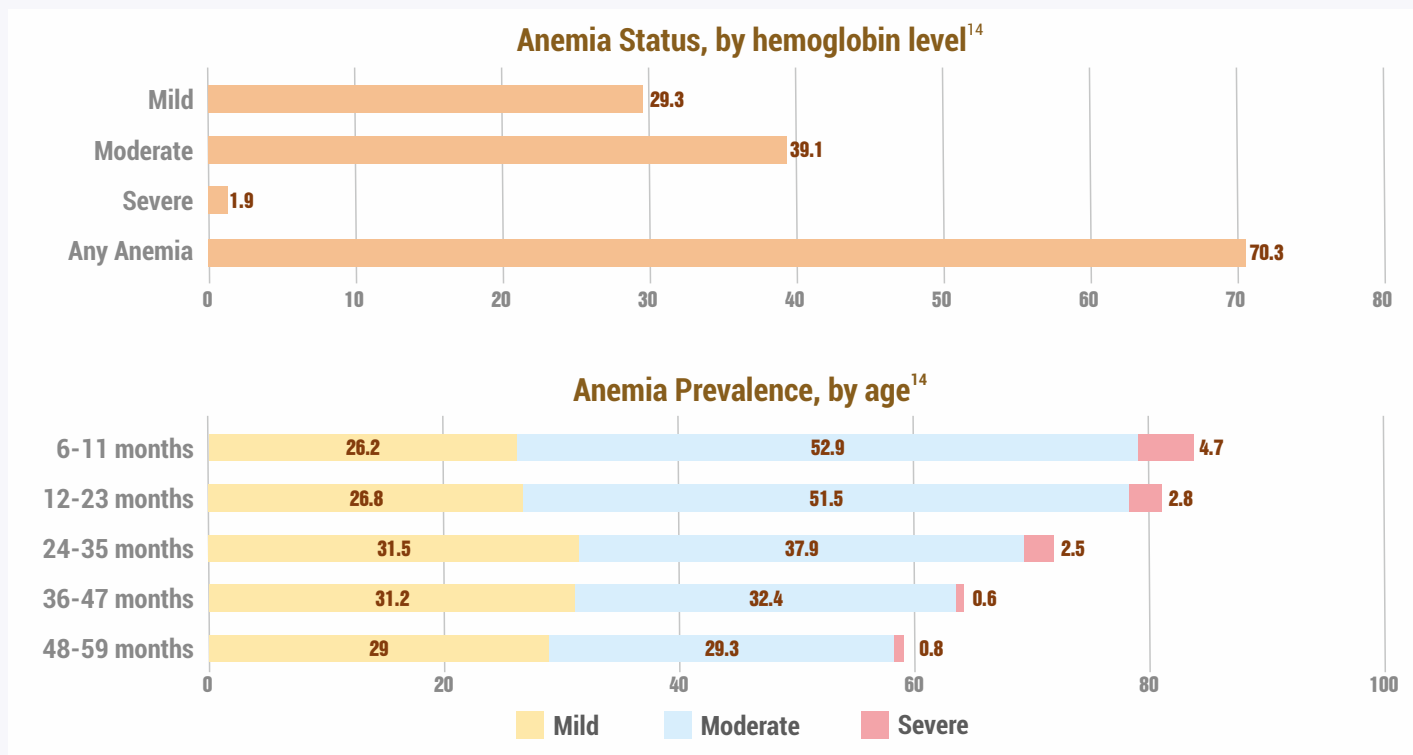


RESIDENCE



D. ANEMIA PREVALENCE

Anemia can impair physical and cognitive development among children and create long term impacts on productivity and wellbeing. This section features data on anemia prevalence by severity and age groups for children under 5.



¹⁴ Source : NFHS-3, 2006

III. IMMEDIATE DETERMINANTS

A. INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES¹⁵

This section presents indicators for assessing IYCF practices as recommended by the WHO and revised in 2008. Following optimal IYCF practices during the first 1,000 days is crucial for early child survival and growth as well as long-term health and wellbeing.

Children aged 0-23 months breastfed immediately/within an hour of birth		32.7%
	Children aged 0-5 months who were exclusively breastfed	64.3%
	Children aged 6-8 months who were fed complementary foods	53.7%
	For breastfed children (6-23 months)- A. Fed minimum number of times. Note : At least twice a day for breastfed infants 6-8 months old and at least three times a day for breastfed children 9-23 months old B. Had minimum dietary diversity Note : Minimum dietary diversity refers to four or more food groups^B fed to children aged 6-23 months	35.7% 17.8%

B. CHILD HEALTH¹⁵

Prevalence of childhood illnesses (in children aged 0-59 months)

Had diarrhea in 15 days prior to survey	5.5%
Had fever in 15 days prior to survey	16.1%
Had symptoms of Acute Respiratory Infection (ARI) in 15 days prior to survey	13.4%

^B The 7 food groups include the following: i. grains, roots and tubers ii. legumes and nuts iii. dairy products (milk, yoghurt, cheese) iv. Flesh foods (meat, fish, poultry, and liver/organ meats) v. eggs vi. Vitamin-A rich fruits and vegetables vii. other fruits and vegetables.

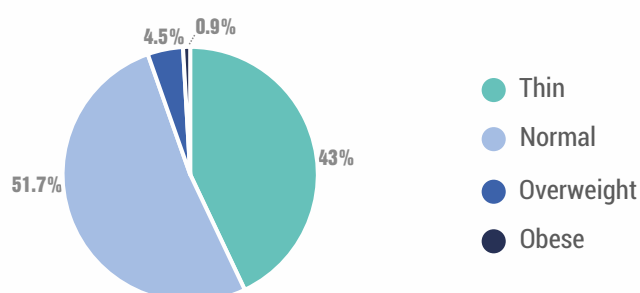
¹⁵ Source : RSoC, 2014

C. NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

Maternal health and nutrition, as well as adolescent nutrition, have important consequences for intergenerational transmission of undernutrition. Data on Body Mass Index (BMI), anemia prevalence and height among women of reproductive age are presented in this section, as are data on adolescent BMI and anemia.

C.1. WOMEN 15-49 YEARS OLD¹⁶

BMI^c levels of women aged 15-49 years



^cBody Mass Index (BMI) is defined as the weight in kilograms by the square of the height in metres (kg/m²). It is a simple index of weight-for-height which is commonly used to classify underweight, overweight and obesity in adults. Range: BMI < 18.5 = total thin, BMI 18.5-24.9 = normal, BMI 25.0-29.9 = Overweight, BMI > 30.0 = Obese [per WHO Standards]



69.5%

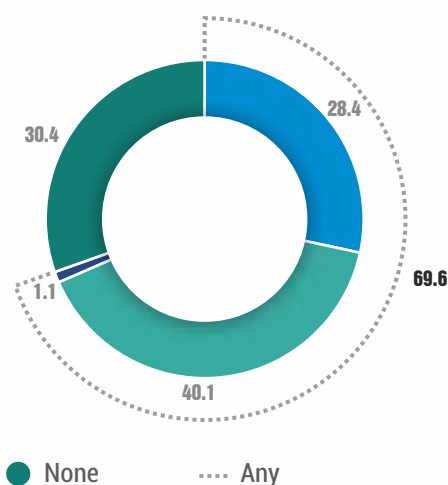
Women aged 15-49 years are anemic

1.3%

Women aged 15-49 years are severely anemic

C.2. PREGNANT WOMEN¹⁶

Anemia prevalence in pregnant women aged 15-49 years



● Mild

● Moderate

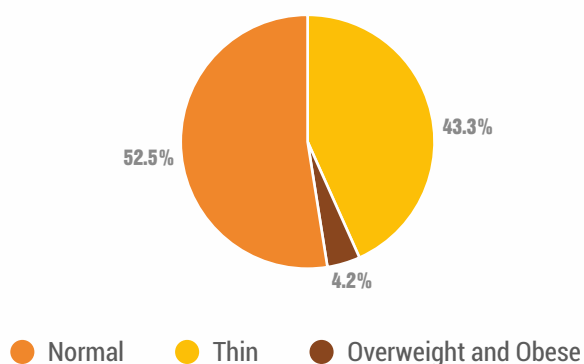
● Severe

● None

--- Any

C.3. ADOLESCENT GIRLS

BMI levels of adolescent girls aged 15-18 years¹⁷



67.2%

Adolescent girls aged 15-19 years are anemic¹⁶

0.8%

Adolescent girls aged 15-19 years are severely anemic¹⁶

¹⁶ Source : NFHS-3, 2006

¹⁷ Source : RSoC, 2014

IV. UNDERLYING DETERMINANTS

A. SOCIAL STATUS OF WOMEN

Women's status is recognized to contribute in significant ways to improving nutrition. This section presents indicators that are representative of women's social status, including measures of education, age at marriage and first birth, employment, decision making and domestic violence. It also includes the Gender Empowerment Measure that captures gender inequality along three dimensions: political participation and decision-making power, economic participation and decision-making power, and power over economic resources.



Currently married women who have 10 or more years of schooling¹⁸ **11.4%**



33.4% Women aged 20-24 years who were married before the age of 18¹⁹

19.8 Average age at marriage¹⁹

Gender Empowerment Measure^{D,20}

0.4

0.5

National Average²⁰



Female workforce participation rate²² **29.1%**

Currently married women who make decisions about²³:



12.3% Own healthcare



5.1% Major household purchase



25.5% Purchases for daily household needs



8.6% Visits to her family/friends/relatives



40.9% Women who have experienced any form of physical/sexual/emotional violence²³

51.4% Ever married women who justify hitting/wife-beating (for either of the reasons mentioned)²³

^D The Gender Empowerment Measure is a weighted average index based on indicators that are classified into three dimensions: a. political participation and decision-making power b. economic participation and decision-making power and c. power over economic resources. The index ranges from a minimum of 0 to a maximum of 1, with a higher score indicating greater empowerment of women. (More information available at <http://wcd.nic.in/publication/GDIGEReport/Part3.pdf>.)

¹⁸ Source : DLHS-3, 2007-08

¹⁹ Source : RSoC, 2014

²⁰ Source : MoWCD, 2006

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70%

Households with access to improved sources of drinking water^{E, 24}

15%

Households using improved sanitation facility^{F, 24}



75.6%

Households practicing open defecation²⁴

31.9 M

Expenditure on toilets under Total Sanitation Campaign (TSC)^{G, 25}



1,065 M

National Average²⁵

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Agriculture productivity and food security can affect household access to foods necessary for a healthy diet. Thus, this section presents indicators related to agricultural growth and food consumption patterns in the state, indicating the level of food security in the state relative to the national situation.



6.3%

Growth rate of agriculture from 2007-2012²⁶



1.6%

Share in India's total foodgrain production²⁷



Mean Calorie intake per person per day (in Kcal)²⁸

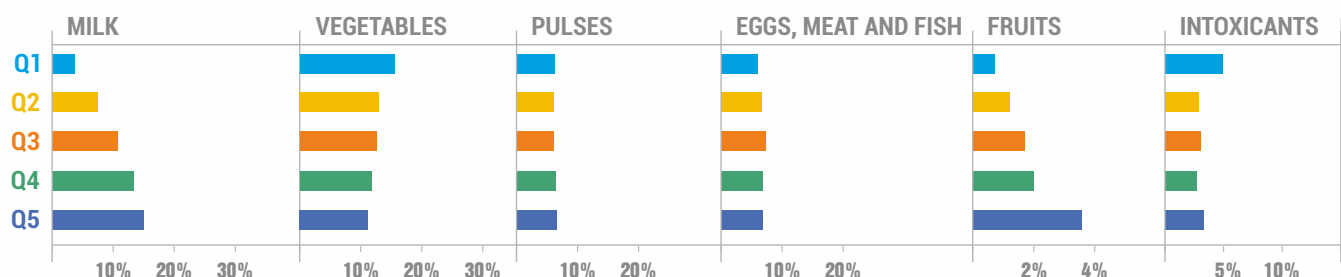
RURAL

2138 **2233**
BIHAR INDIA AVG

URBAN

2175 **2206**
BIHAR INDIA AVG

Expenditure on food items by income quintiles²⁸



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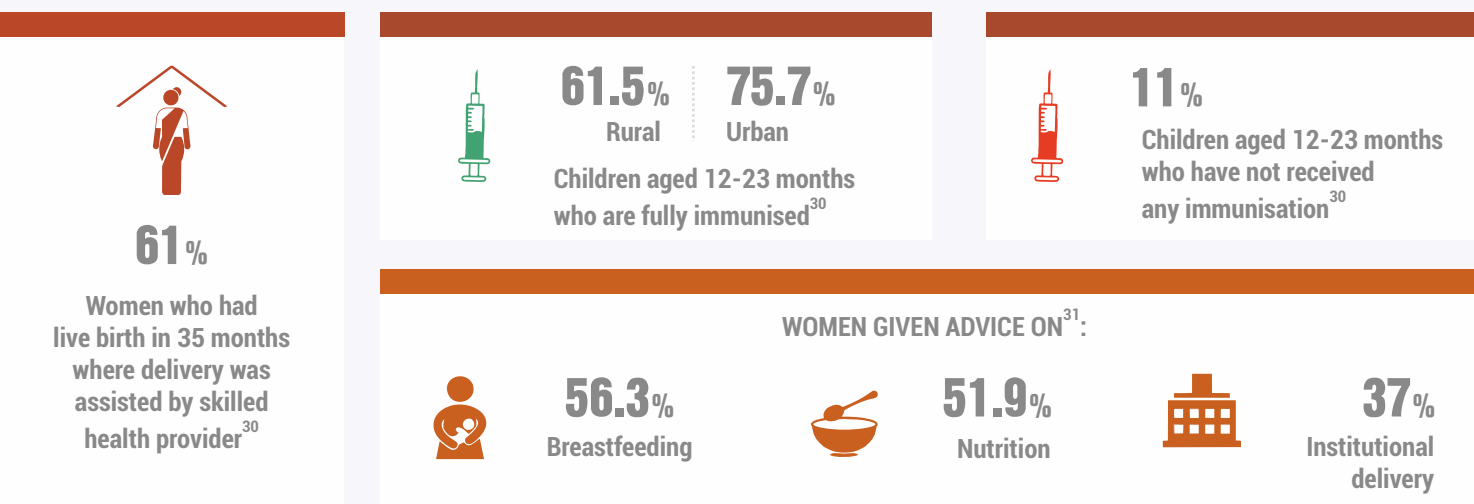
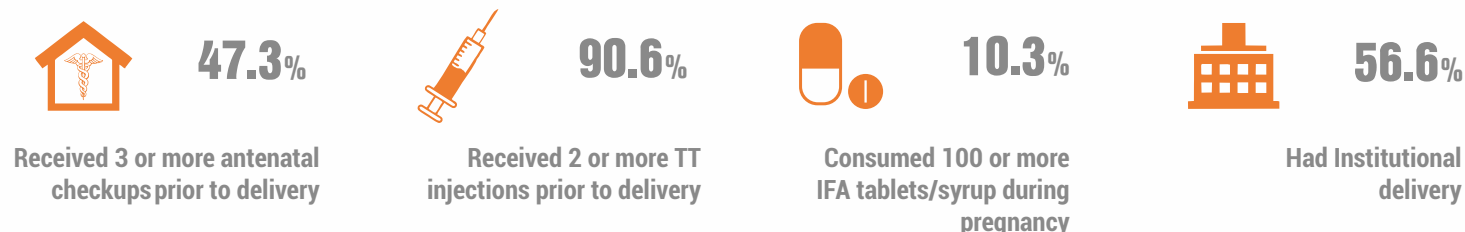
Children 6-35 months	59.3%
Children 36-71 months	27%
Pregnant women	47%
Lactating mothers	72.9%

Beneficiaries who received supplementary food for at least 21 days in the month prior to the survey

Children aged 6-35 months	29.7%
Children aged 36-71 months	25.8%
Pregnant women	21.6%
Lactating women	28.5%

²⁹ Source : RSoC, 2014

SERVICES PROVIDED TO WOMEN WHO HAD A LIVE BIRTH IN LAST 35 MONTHS³⁰



A.2. PERSONNEL CAPACITY OF ICDS AND NRHM:

This section features data on availability of healthcare personnel and services available to women of reproductive age (antenatal care, tetanus toxoid coverage, iron-folic acid supplementation coverage, institutional delivery and counseling). Household and individual access to health services can directly impact children's nutrition and welfare during the crucial first 1,000 days of life.

Availability of Anganwadi Centres and Workers (AWCs and AWWs) ^{H, 30}	Value
Pending or vacant Anganwadi workers to sanctioned number of workers ^{30a}	4.8%
AWWs living in the AWC village/ward	89%
AWWs having 10 or more years of schooling	91.1%
Median age of AWWs	35 years
AWCs serving to population more than the stipulated norm	57.3%

Growth Monitoring ³⁰	Value
AWCs having functional baby weighing scale	57.5%
AWCs having functional adult weighing scale	43.7%
Available WHO growth chart at AWCs	88.4%

^H Number of AWCs surveyed for Jharkhand as per RSoC 2014 is 139.

³⁰ Source : RSoC, 2014

^{30a} Source : MoWCD, 2012

³¹ Source : DLHS-3, 2007-08

Training and Comprehensive Knowledge ³²	Value
AWWs having correct knowledge of intake of food by pregnant women	89.3%
AWWs having correct knowledge of normal birth weight of children	80.7%
AWWs having correct knowledge of initiation of breastfeeding within one hour	94.6%
AWWs having correct knowledge of exclusive breastfeeding for the first six months	92.1%
AWWs having correct knowledge of appropriate age of child for complementary feeding	63.8%

Health Service Delivery Personnel	Value
ASHAs selected ³³	100%
Current density of ASHA as per Census 2011 rural population ³³	1 per 611 persons
Pending or vacant ANM positions sub centres & PHCs ³⁴	NA

A.3. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SPECIFIC INTERVENTIONS

Expenditure on Schemes (in million dollars)	In million USD	National Average
ICDS (ICDS general + SNP + training) (women and children) ³⁵	64	75
NRHM expenditure (Central Government) ³⁶	57.5	68.8
NRHM expenditure (State Government) ³⁶	10.6	9.3

B. NUTRITION-SENSITIVE INTERVENTIONS

This section includes information on expenditure and coverage of key centrally-sponsored schemes that indirectly impact maternal and child nutrition. These are: the Mid Day Meal Scheme (MDMS), Public Distribution System (PDS), and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

B.1. COVERAGE OF SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS

Coverage of Schemes	Value
MDMS (base: eligible children*) ³⁷	56.3%
PDS (base: rural and urban households reporting consumption) ³⁸	27.8%
MGNREGA (base: rural persons 18 years and above registered in MGNREG job card and demanded work during last 365 days) ³⁹	71.7%

* All children studying in primary & upper primary classes in schools supported under Sarva Shiksha Abhiyan and NCLP (National Child Labour Project) run by Ministry of Labour.

B.2. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS:

Expenditure on Schemes (in million dollars)	In million USD	National Average
MDMS ⁴⁰	46	47
PDS ⁴¹	467.5	475.3
MGNREGA ⁴²	192	214

³² Source : RSoC, 2014

³³ Source : NRHM, 2013

³⁴ Source : MoHFW, 2013

³⁵ Source : Lok Sabha Unstarred Question # 846 dated 27.02.2015, 2012-13

³⁶ Source : Lok Sabha Annexured Unstarred Question # 409 dated 6.12.2013, 2012-13

³⁷ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/lsq15/15/as216.htm 2011-12

³⁸ Source : Report No. 558, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

³⁹ Source : Report No. 554, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

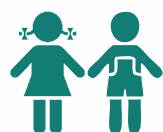
⁴⁰ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014, 2012-13

⁴¹ Source : Food Corporation of India 2013, 2012-13

⁴² Source : Lok Sabha Annexured Unstarred Question # 3835 dated 19.03.2015, 2012-13

FAST FACTS ON NUTRITION AND ITS DETERMINANTS IN KARNATAKA

World Health Assembly Nutrition Targets



CHILDREN UNDER 5 YEARS

34.2%
Stunted¹
17%
Wasted¹

World Health Assembly Nutrition Targets


55.1%

 Infants 0-5
months old who are
exclusively breastfed¹

17.2%

 Children under
3 years who have low
birth weight (<2.5 kgs)¹

62.5%

 Women
15-49 years old
with anemia²

Immediate Determinants


63.4%

 Infants 6-8 months old who receive solid, semi-solid or soft foods¹
21.8%

 Infants & young children 6-23 months old who achieve minimal diet diversity in
complementary feeding¹

75.9%

 Children 6-59 months
old with anemia²

9.3%

 Children 6-59 months old who
had diarrhea in 15 days prior
to survey¹

Immediate Determinants


40.3%

 Children 6-35 months old
who received supplementary
food under ICDS for 21 days
in the month prior to survey¹

79.4%

 Children 12-23
months old who are
fully immunized¹

87.9%

 Mothers of
children under 36 months
old who received three
or more antenatal checkups¹

Underlying Determinants


34%

 Currently
married women with 10
or more years of schooling²

26.3%

 Women aged 20-24
years who were
married before the age of 18¹

58%

 Adolescent girls
15-18 years old
with low BMI (<18.5)¹

Underlying Determinants


33.2%

 Households
practicing
open defecation¹

20.9%

 Population
below
state-specific poverty line³

 Does state have a
high-level nutrition mission?

YES
¹ Source : RSoC, 2014

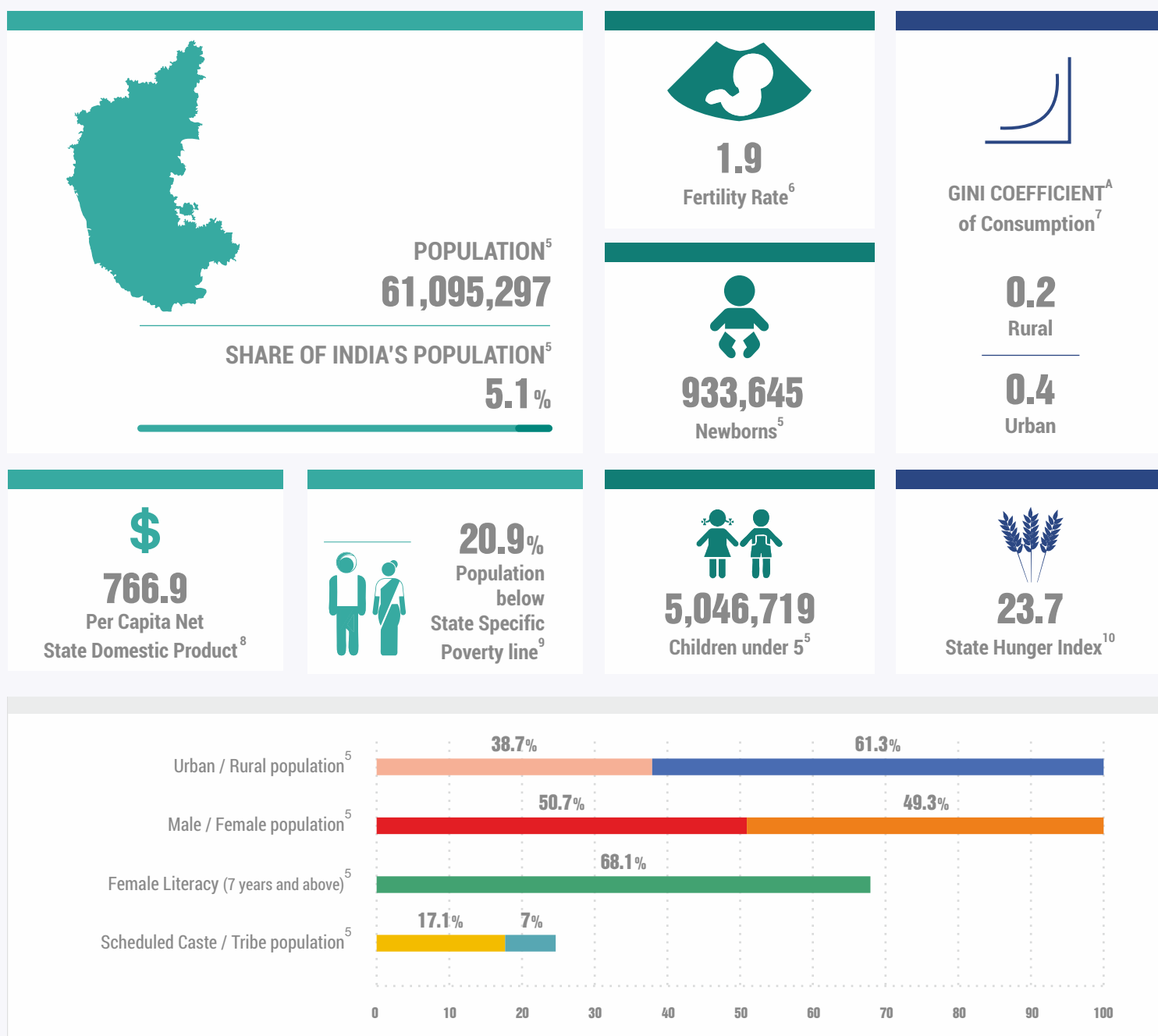
² Source : DLHS4, 2012-13

³ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Govt. of India

I. CONTEXT

A. DEMOGRAPHIC CONTEXT

This section highlights the demographic composition of the state in terms of male-female, rural-urban, and SC-ST ratios, literacy and fertility rates. In addition, it also includes the size of the population of newborns and children less than five years of age (as of the Census of India, 2011) to illustrate the size of the target population for nutrition-related interventions that need to reach this vulnerable population.



A : Gini coefficient is a measure of inequality of distribution. A Gini coefficient of 0 represents perfect equality, while a value of 100 implies perfect inequality. (See Appendix A for more information)

⁵ Source : Primary Census Abstract, Census, 2011

⁶ Source : SRS, 2013

⁷ Source : Planning Commission Estimates: NSSO 66th round-Employment and Unemployment Survey, 2009-10

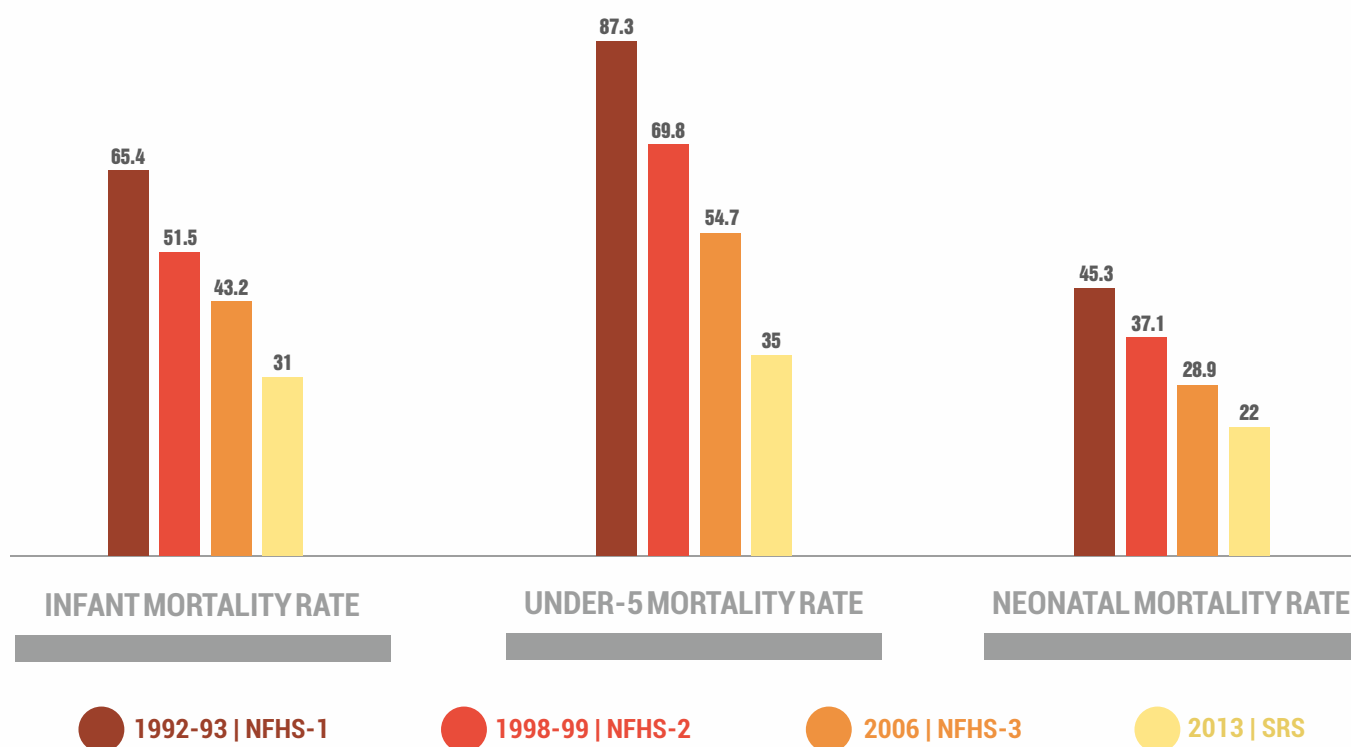
⁸ Source : Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14 : http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82

⁹ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Government of India, 2011-12 : http://planningcommission.nic.in/news/pre_pov2307.pdf

¹⁰ Source : IFPRI, India state hunger index, comparisons of hunger across states, 2009

B. CHILD MORTALITY PER THOUSAND LIVE BIRTHS

This section illustrates trends in mortality in neonates, infants and children under 5 years, since 1992. The purpose of this is to highlight the success achieved by individual states in averting deaths of children since the economic growth of the 1990s.



II. NUTRITIONAL STATUS AMONG CHILDREN

This section presents data on nutrition outcome indicators (stunting, wasting, and underweight) and anemia prevalence. Anthropometric measures for children under 5 (stunting, wasting, and underweight) are presented over time periods, by age groups and by background characteristics. This data aims to convey the prevalence and severity of undernutrition in the state.

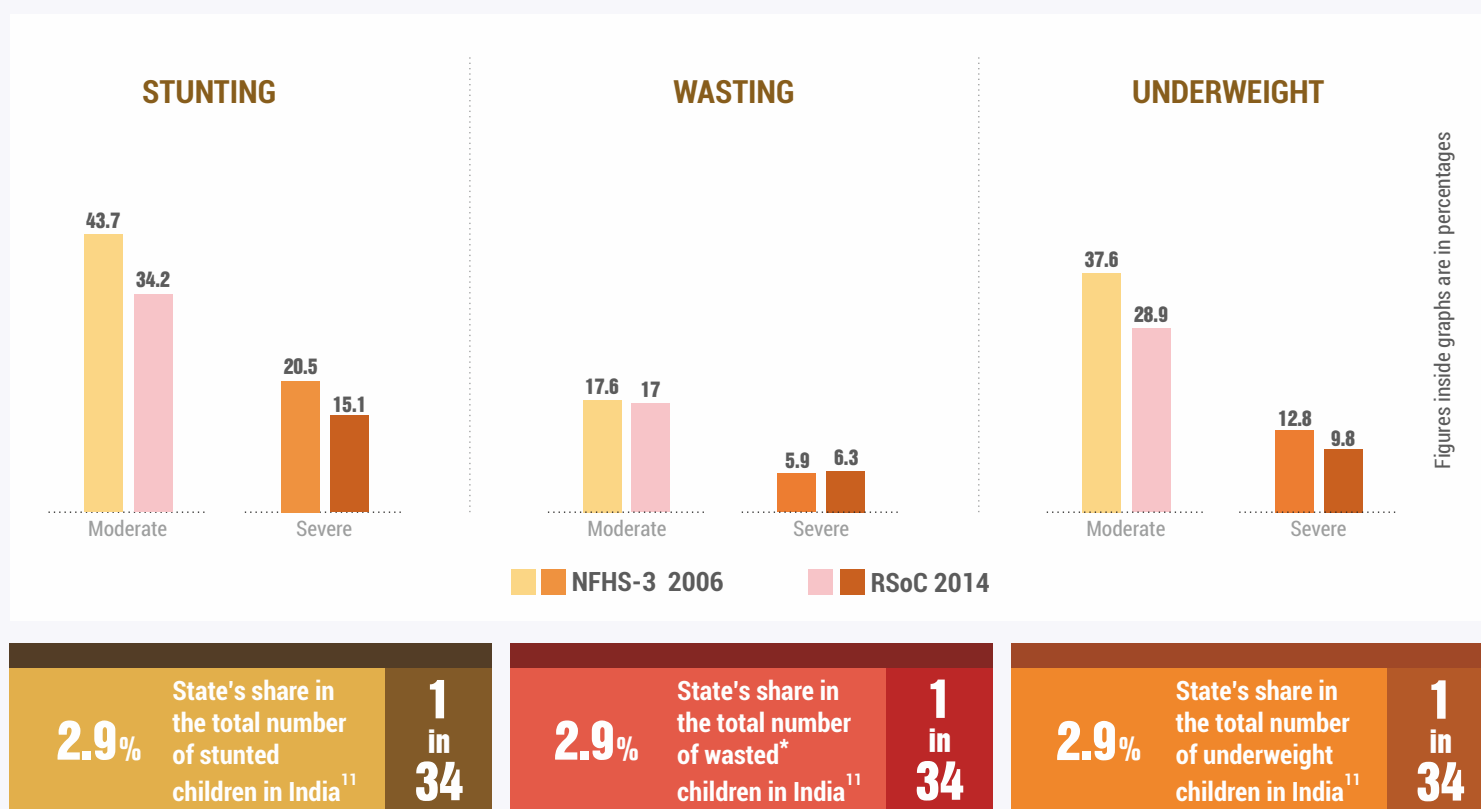
A. CHILD UNDERNUTRITION, BY TIME PERIOD

ANTHROPOMETRIC MEASURES

Stunting is inadequate height for age, which is indicative of chronic or cumulative nutritional deprivation in early childhood. A stunted child's height-for-age is below -2 standard deviations from the median height-for-age (termed HAZ) of the WHO Child Growth Standards, while a severely stunted child is below -3 standard deviations.

Wasting is inadequate weight for height, which points to acute or short-term undernutrition. A wasted child's weight-for-height (WHZ) is below -2 standard deviations from the WHO Child Growth Standards; a severely wasted child is below -3 standard deviations. (Another way to determine severe wasting or severe acute malnutrition is through a measurement of a child's mid-upper arm circumference (MUAC).

Underweight is inadequate weight for age, a composite indicator that encompasses stunting and wasting. An underweight child's weight-for-age (WAZ) is below -2 standard deviations from the WHO Child Growth Standards; again, a severely underweight child is below -3 standard deviations.

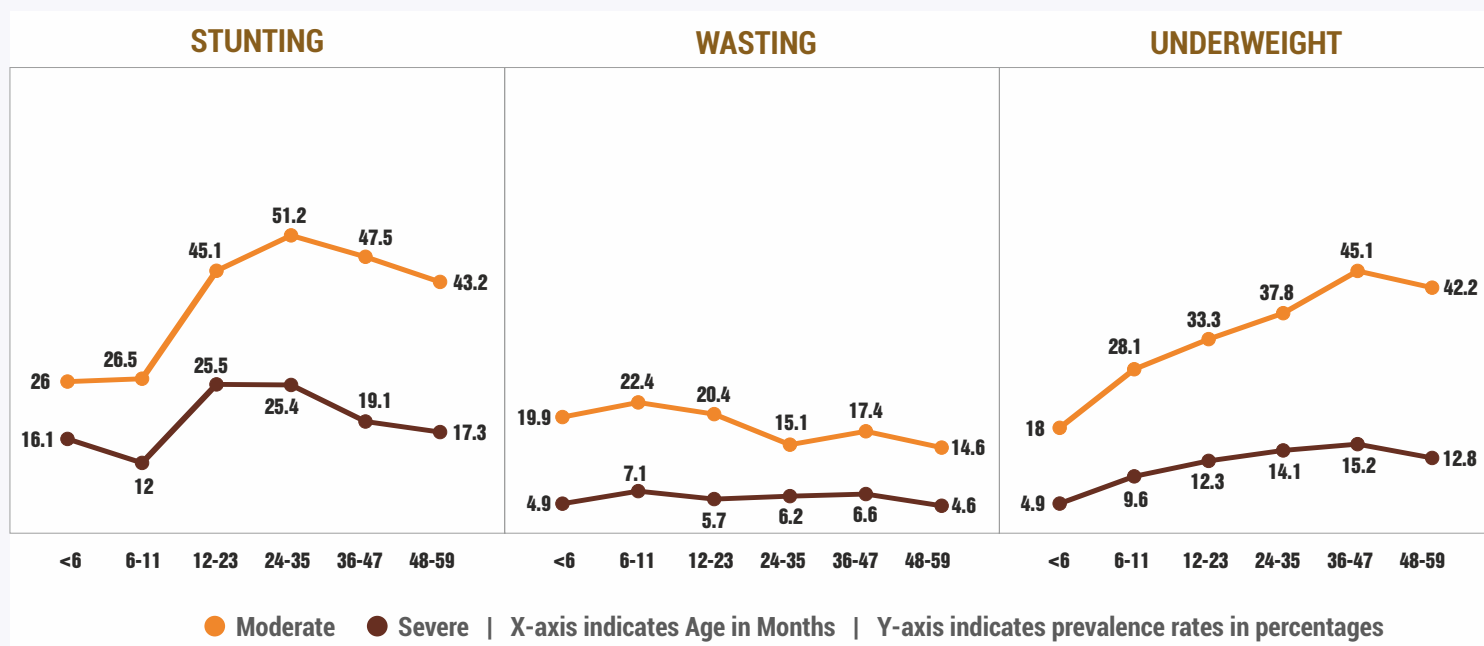


*Wasting is subject to seasonal variations either in food supply or disease prevalence and hence may not be comparable across groups of children measured at different times of the year within a survey round as well as between different survey rounds.

¹¹ Source : NFHS-3, 2006

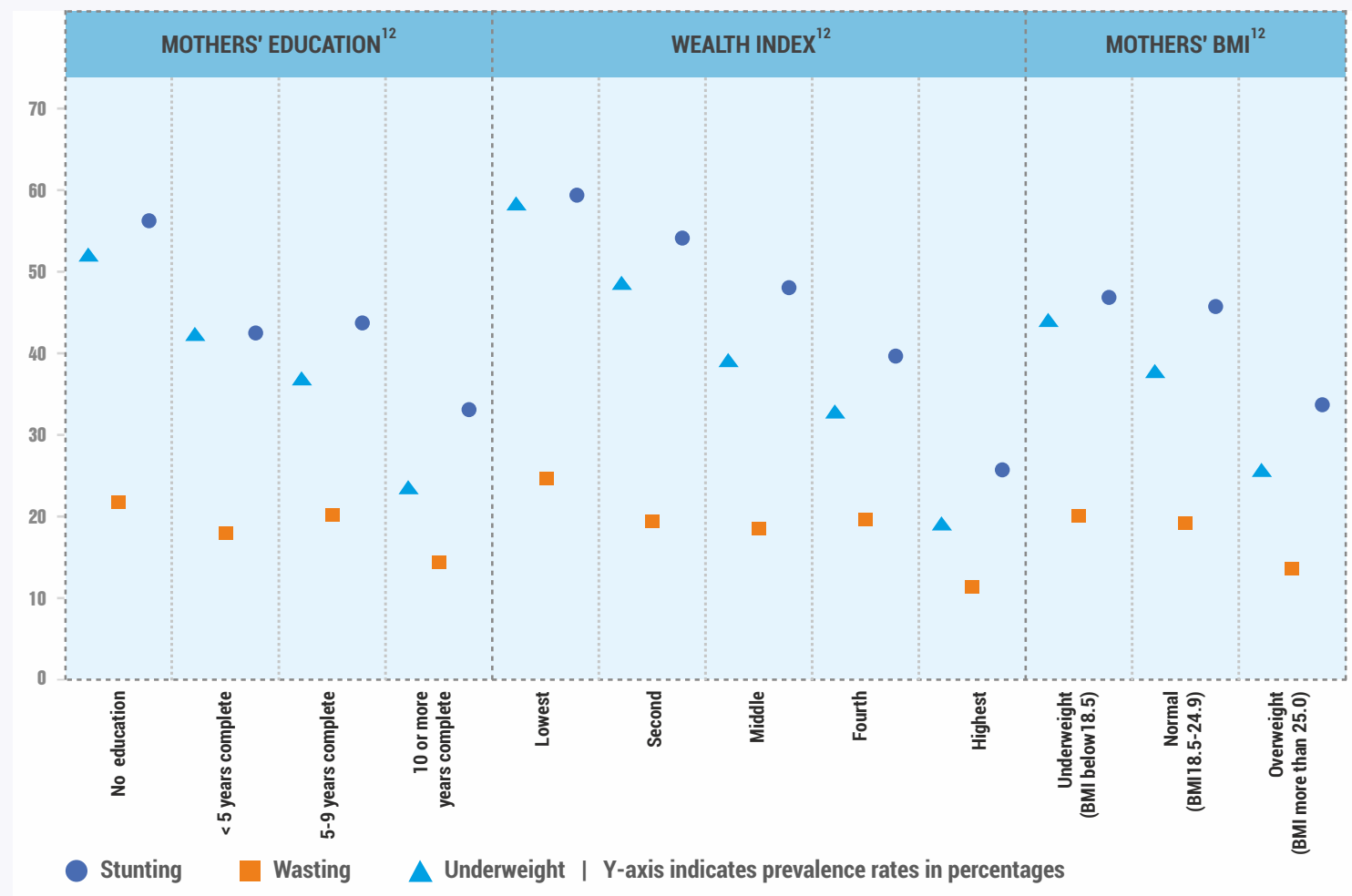
B. CHILD UNDERNUTRITION, BY AGE GROUPS¹²

Percentage of moderate (below -2 SD from the WHO growth standards) and severe (below -3 SD) stunting, wasting and underweight are available for 6 age groups among children under 5.



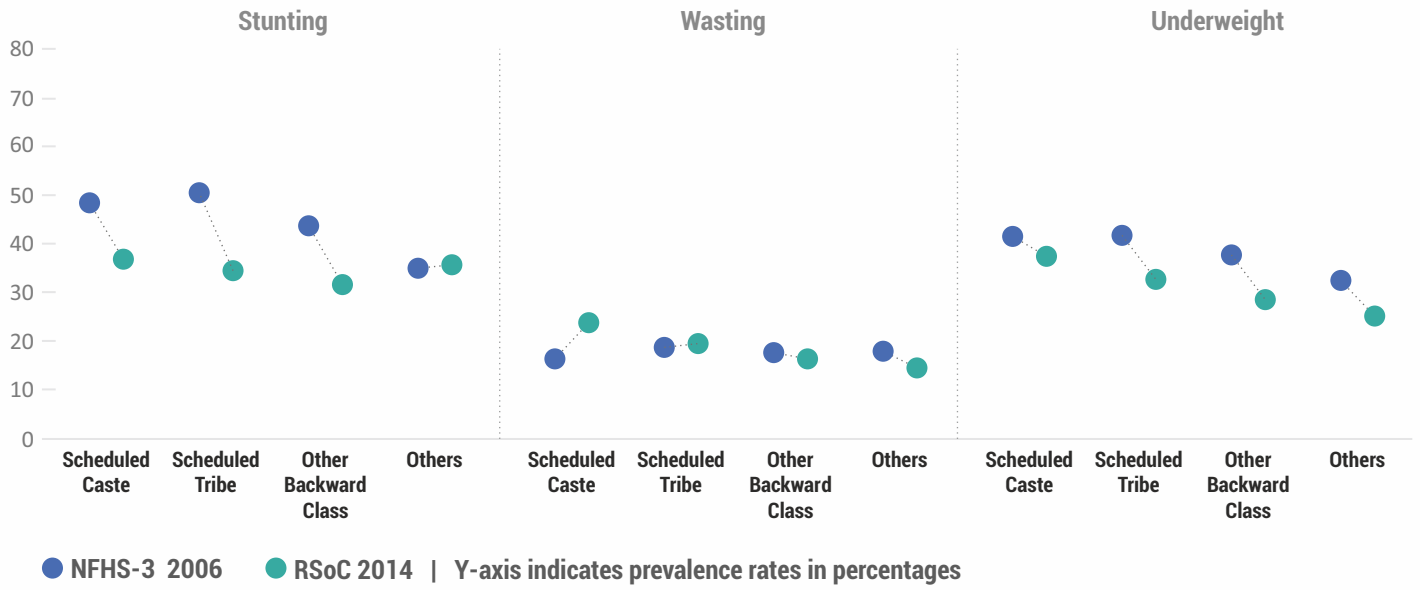
C. PREVALENCE OF CHILD UNDERNUTRITION, BY BACKGROUND CHARACTERISTICS

In this section, child undernutrition outcomes are presented, along with key socioeconomic drivers that are known to be associated with child nutrition, such as caste, residence, mother's health and education, and household income.

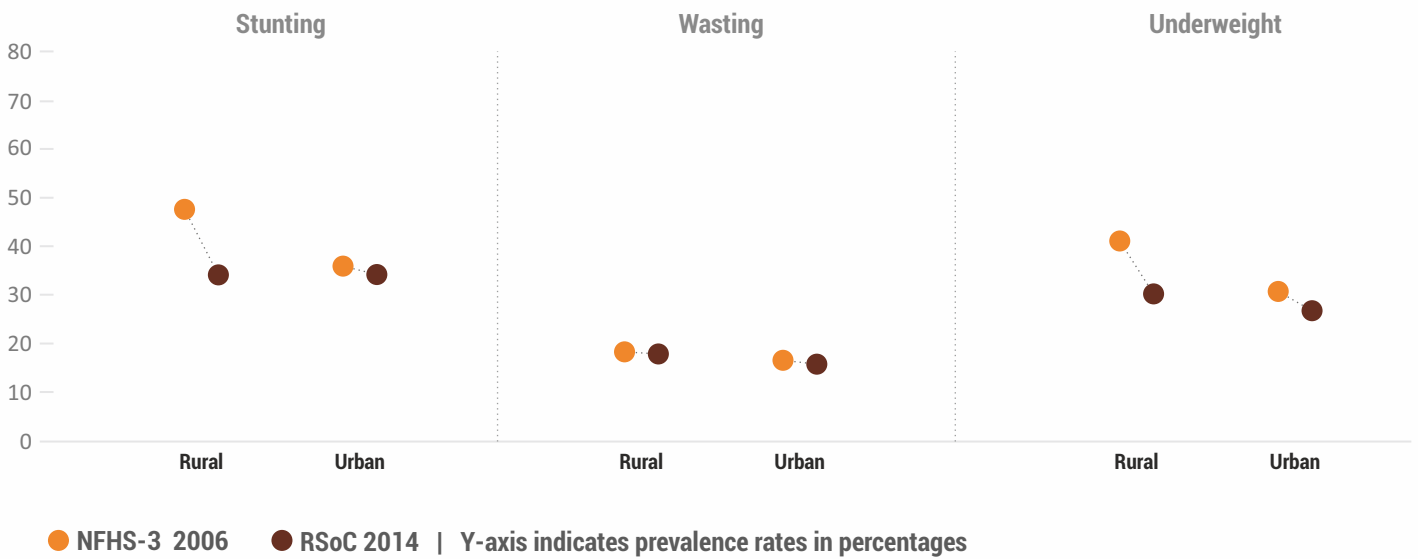


¹² Source : NFHS-3, 2006

CASTE

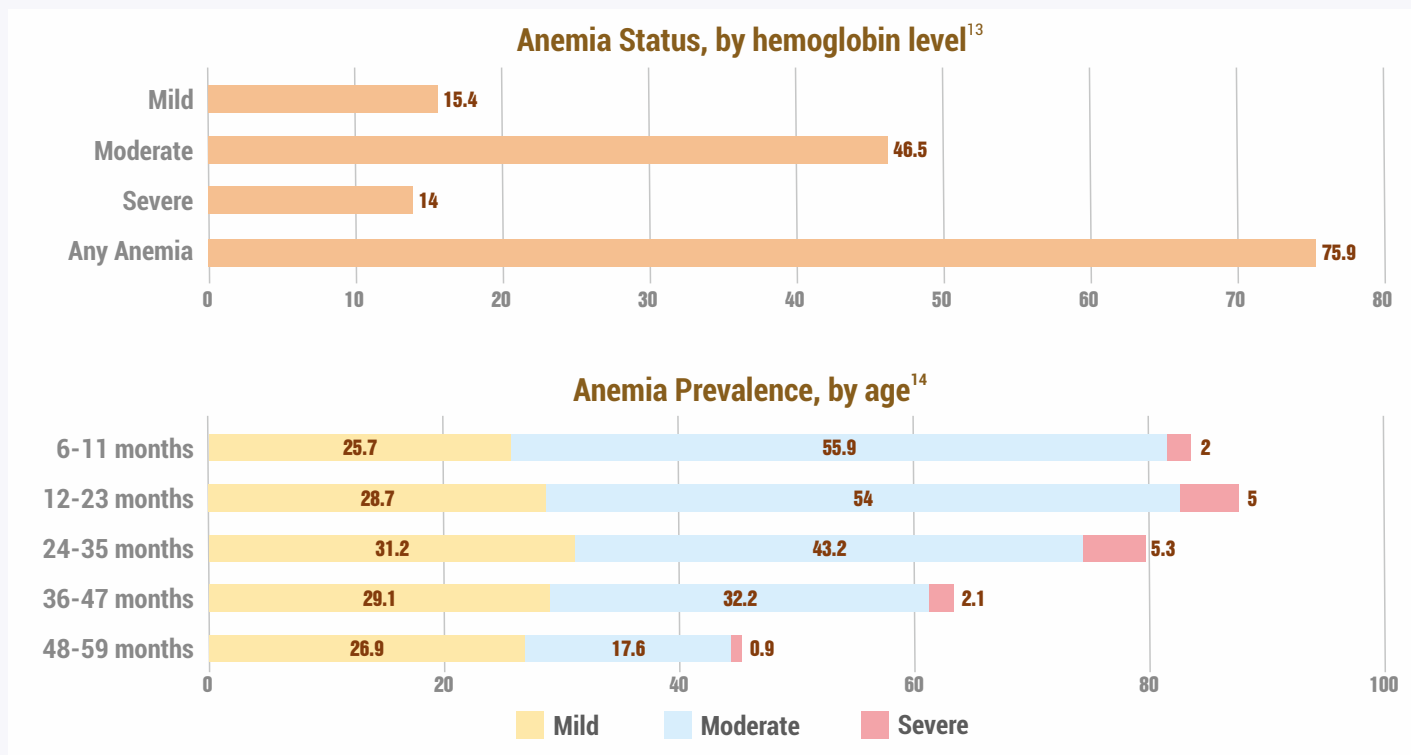


RESIDENCE



D. ANEMIA PREVALENCE

Anemia can impair physical and cognitive development among children and create long term impacts on productivity and wellbeing. This section features data on anemia prevalence by severity and age groups for children under 5.



¹³ Source : DLHS-4, 2012-13

¹⁴ Source : NFHS-3, 2006

III. IMMEDIATE DETERMINANTS

A. INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES¹⁵

This section presents indicators for assessing IYCF practices as recommended by the WHO and revised in 2008. Following optimal IYCF practices during the first 1,000 days is crucial for early child survival and growth as well as long-term health and wellbeing.

Children aged 0-23 months breastfed immediately/within an hour of birth		45.4%
	Children aged 0-5 months who were exclusively breastfed	55.1%
	Children aged 6-8 months who were fed complementary foods	63.4%
	For breastfed children (6-23 months)- A. Fed minimum number of times. Note : At least twice a day for breastfed infants 6-8 months old and at least three times a day for breastfed children 9-23 months old B. Had minimum dietary diversity Note : Minimum dietary diversity refers to four or more food groups^B fed to children aged 6-23 months	44.3% 21.8%

B. CHILD HEALTH¹⁵

Prevalence of childhood illnesses (in children aged 0-59 months)

Had diarrhea in 15 days prior to survey	9.3%
Had fever in 15 days prior to survey	14.6%
Had symptoms of Acute Respiratory Infection (ARI) in 15 days prior to survey	5.7%

^B The 7 food groups include the following: i. grains, roots and tubers ii. legumes and nuts iii. dairy products (milk, yoghurt, cheese) iv. Flesh foods (meat, fish, poultry, and liver/organ meats) v. eggs vi. Vitamin-A rich fruits and vegetables vii. other fruits and vegetables.

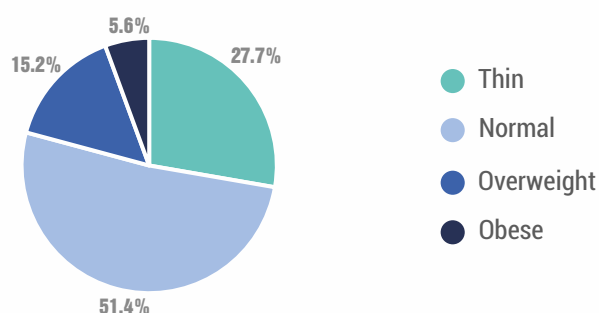
¹⁵ Source : RSoC, 2014

C. NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

Maternal health and nutrition, as well as adolescent nutrition, have important consequences for intergenerational transmission of undernutrition. Data on Body Mass Index (BMI), anemia prevalence and height among women of reproductive age are presented in this section, as are data on adolescent BMI and anemia.

C.1. WOMEN 15-49 YEARS OLD¹⁶

BMI^c levels of women aged 15-49 years



^cBody Mass Index (BMI) is defined as the weight in kilograms by the square of the height in metres (kg/m²). It is a simple index of weight-for-height which is commonly used to classify underweight, overweight and obesity in adults. Range: BMI < 18.5 = total thin, BMI 18.5-24.9 = normal, BMI 25.0-29.9 = Overweight, BMI > 30.0 = Obese [per WHO Standards]



62.5%

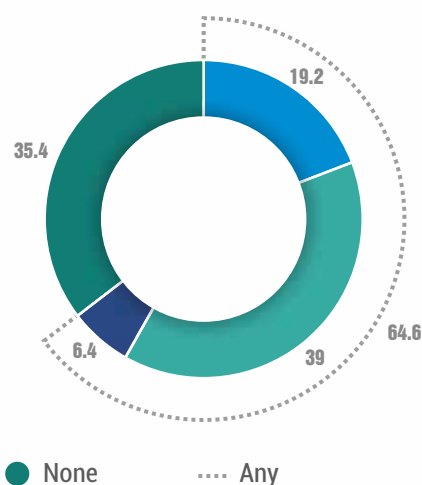
Women aged 15-49 years are anemic

6.9%

Women aged 15-49 years are severely anemic

C.2. PREGNANT WOMEN¹⁶

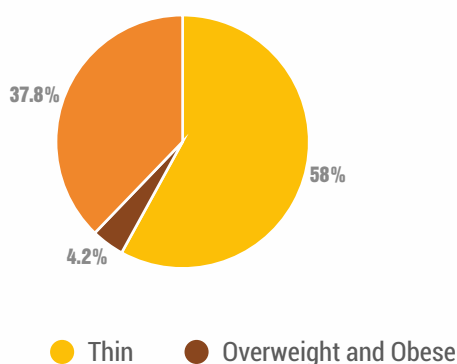
Anemia prevalence in pregnant women aged 15-49 years



● Mild ● Moderate ● Severe ● None ---- Any

C.3. ADOLESCENT GIRLS

BMI levels of adolescent girls aged 15-18 years¹⁷



51.3%

Adolescent girls aged 15-19 years are anemic^{17a}

1.3%

Adolescent girls aged 15-19 years are severely anemic^{17a}

¹⁶ Source : DLHS-4, 2012-13

¹⁷ Source : RSoC, 2014

^{17a} Source : NFHS-3, 2006

IV. UNDERLYING DETERMINANTS

A. SOCIAL STATUS OF WOMEN

Women's status is recognized to contribute in significant ways to improving nutrition. This section presents indicators that are representative of women's social status, including measures of education, age at marriage and first birth, employment, decision making and domestic violence. It also includes the Gender Empowerment Measure that captures gender inequality along three dimensions: political participation and decision-making power, economic participation and decision-making power, and power over economic resources.



Currently married women who have 10 or more years of schooling¹⁸ **34%**



26.3% Women aged 20-24 years who were married before the age of 18¹⁹

22.4 Average age at marriage¹⁹

Gender Empowerment Measure^{D,20}

0.5

0.5

National Average²⁰



Female workforce participation rate²² **31.9%**

Currently married women who make decisions about²³:



19.9% Own healthcare



12.9% Major household purchase



33.7% Purchases for daily household needs



15.3% Visits to her family/friends/relatives



21.5% Women who have experienced any form of physical/sexual/emotional violence²³

68.9% Ever married women who justify hitting/wife-beating (for either of the reasons mentioned)²³

^D The Gender Empowerment Measure is a weighted average index based on indicators that are classified into three dimensions: a. political participation and decision-making power b. economic participation and decision-making power and c. power over economic resources. The index ranges from a minimum of 0 to a maximum of 1, with a higher score indicating greater empowerment of women. (More information available at <http://wcd.nic.in/publication/GDIGEReport/Part3.pdf>.)

¹⁸ Source : DLHS-4, 2012-13

¹⁹ Source : RSoC, 2014

²⁰ Source : MoWCD, 2006

²² Source : Women and Men in India, 16th Issue MoSPI, 2014

²³ Source : NFHS-3, 2006

B. WATER AND SANITATION

Poor hygiene and sanitation, by directly increasing exposure and susceptibility to infections, are associated with undernutrition among children. This section covers key indicators on access to safe drinking water and availability of sanitation facilities at the state level. It also includes the expenditure on toilet construction under the Total Sanitation Campaign.



95%

Households with access to improved sources of drinking water^{E, 24}

55.5%

Households using improved sanitation facility^{F, 24}



33.2%

Households practicing open defecation²⁴

39 M

Expenditure on toilets under Total Sanitation Campaign (TSC)^{G, 25}



1,065 M

National Average²⁵

C. AGRICULTURE AND FOOD SECURITY

Agriculture productivity and food security can affect household access to foods necessary for a healthy diet. Thus, this section presents indicators related to agricultural growth and food consumption patterns in the state, indicating the level of food security in the state relative to the national situation.



5.4%

Growth rate of agriculture from 2007-2012²⁶



4.6%

Share in India's total foodgrain production²⁷



Mean Calorie intake per person per day (in Kcal)²⁸

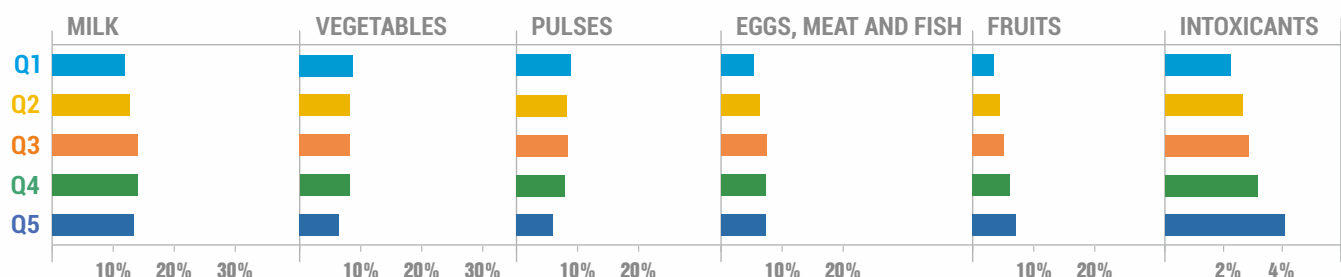
RURAL

2,164 KARNATAKA 2233 INDIA AVG

URBAN

2,245 KARNATAKA 2206 INDIA AVG

Expenditure on food items by income quintiles²⁸



^E Improved sources of drinking water include: piped water into dwelling, piped water to yard/plot, public tap or standpipe, tubewell or borehole, protected dug well, protected spring, and rainwater (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>).

^F Improved sanitation means households using improved toilets that include: flush toilet, piped sewer system, septic tank, flush/pour flush to pit latrine, ventilated improved pit latrine, pit latrine with slab, composting toilet, special case (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>); excludes those households who are using improved toilets but sharing toilet facilities with other households.

^G Besides toilet construction subsidies, this expenditure also includes funding other activities such as solid and liquid waste management, IEC activities for sustainable demand generation for sanitation facilities, assistance to production centers of sanitary materials and rural sanitary marts, provision of construction of community sanitary complexes, provision of sanitation facilities in govt. schools and Anganwadis in govt. buildings etc.

²⁴ Source : RSoC, 2014

²⁵ Source : Indiastat, Rajya Sabha Unstarred Question No. 2950, dated on 30.08.2011, 2011-12

²⁶ Source : Indiastat, compiled by datanet from Rajyasabha & Lok Sabha unstarred questions no. 3039, 4535. 2007-12

²⁷ Source : Indiastat, Ministry of Agriculture, Government of India 2011-2012

²⁸ Source : NSSO, 68th round-Nutritional Intake in India, 2011-12

V. STATUS OF NUTRITION-RELEVANT INTERVENTIONS

A. NUTRITION-SPECIFIC INTERVENTIONS

The financial resources allocated to, and spent on direct nutrition-specific interventions can determine the scale, coverage and quality of interventions to reach vulnerable target populations. These services, in India, are delivered both by the Integrated Child Development Scheme (ICDS) and the National Health Mission (NHM). This section includes data on the coverage of interventions delivered by these two key centrally-sponsored schemes that directly impact maternal and child nutrition and health. We also include here information on the human resources and service availability of these schemes and expenditures.

A.1. COVERAGE OF ICDS AND NHM:

The Integrated Child Development Services (ICDS) aims to improve the nutrition and health status of children under-six through a package of services (supplementary nutrition, immunization, health check-up, referral services, etc.) delivered through frontline workers at the Anganwadi Centres (AWCs). This section provides information on expenditure on ICDS and coverage of its supplementary nutrition programme (SNP). This section also covers critical services provided by the health system, including provision of care for pregnant women and child immunization. Immunization plays a crucial role in complementing actions to improve nutrition. The link between undernutrition and infectious diseases is cyclical, poor nutrition increases vulnerability to infections, which in turn worsen nutrition status. Data on immunization among children are presented by residence. Here, full immunization refers to children covered with BCG, measles and 3 doses each of DPT and polio.

Beneficiaries who availed supplementary food under ICDS²⁹

Children 6-35 months	56.3%
Children 36-71 months	47.1%
Pregnant women	48.8%
Lactating mothers	52.3%

Beneficiaries who received supplementary food for at least 21 days in the month prior to the survey

Children aged 6-35 months	40.3%
Children aged 36-71 months	51.8%
Pregnant women	40.7%
Lactating women	37.6%

²⁹ Source : RSoC, 2014

SERVICES PROVIDED TO WOMEN WHO HAD A LIVE BIRTH IN LAST 35 MONTHS³⁰



87.9%

Received 3 or more antenatal checkups prior to delivery



93.2%

Received 2 or more TT injections prior to delivery



34.1%

Consumed 100 or more IFA tablets/syrup during pregnancy



92%

Had Institutional delivery



92.6%

Women who had live birth in 35 months where delivery was assisted by skilled health provider³⁰



78.9%

Rural

80.2%

Urban

Children aged 12-23 months who are fully immunised³⁰



2.4%

Children aged 12-23 months who have not received any immunisation³⁰

WOMEN GIVEN ADVICE ON³¹:



65.3%

Breastfeeding



54.3%

Nutrition of mother and child



35.9%

Institutional delivery

A.2. PERSONNEL CAPACITY OF ICDS AND NRHM:

This section features data on availability of healthcare personnel and services available to women of reproductive age (antenatal care, tetanus toxoid coverage, iron-folic acid supplementation coverage, institutional delivery and counseling). Household and individual access to health services can directly impact children's nutrition and welfare during the crucial first 1,000 days of life.

Availability of Anganwadi Centres and Workers (AWCs and AWWs) ^{H, 30}	Value
Pending or vacant Anganwadi workers to sanctioned number of workers ^{30a}	4.3%
AWWs living in the AWC village/ward	60.8%
AWWs having 10 or more years of schooling	92.8%
Median age of AWWs	40 years
AWCs serving to population more than the stipulated norm	51.7%

Growth Monitoring ³⁰	Value
AWCs having functional baby weighing scale	90.8%
AWCs having functional adult weighing scale	74.9%
Available WHO growth chart at AWCs	99.1%

^H Number of AWCs surveyed for Karnataka as per RSoC 2014 is 154.

³⁰ Source : RSoC, 2014

^{30a} Source : MoWCD, 2012

³¹ Source : DLHS-4, 2012-13

Training and Comprehensive Knowledge ³²	Value
AWWs having correct knowledge of intake of food by pregnant women	94.2%
AWWs having correct knowledge of normal birth weight of children	87%
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Health Service Delivery Personnel	Value
ASHAs selected ³³	79%
Current density of ASHA as per Census 2011 rural population ³³	1 per 1212 persons
Pending or vacant ANM positions sub centres & PHCs ³⁴	0%

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PDS (base: rural and urban households reporting consumption) ³⁸	59.7%
MGNREGA (base: rural persons 18 years and above registered in MGNREG job card and demanded work during last 365 days) ³⁹	64.9%

* All children studying in primary & upper primary classes in schools supported under Sarva Shiksha Abhiyan and NCLP (National Child Labour Project) run by Ministry of Labour.

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³² Source : RSoC, 2014

³³ Source : NRHM, 2013

³⁴ Source : MoHFW, 2013

³⁵ Source : Lok Sabha Unstarred Question # 846 dated 27.02.2015, 2012-13

³⁶ Source : Lok Sabha Annexured Unstarred Question # 409 dated 6.12.2013, 2012-13

³⁷ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/lsq15/15/as216.htm 2011-12

³⁸ Source : Report No. 558, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

³⁹ Source : Report No. 554, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

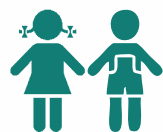
⁴⁰ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014, 2012-13

⁴¹ Source : Food Corporation of India 2013, 2012-13

⁴² Source : Lok Sabha Annexured Unstarred Question # 3835 dated 19.03.2015, 2012-13

FAST FACTS ON NUTRITION AND ITS DETERMINANTS IN KERALA

World Health Assembly Nutrition Targets



CHILDREN UNDER 5 YEARS

19.4%
Stunted¹
15.5%
Wasted¹

World Health Assembly Nutrition Targets


58.6%

 Infants 0-5
months old who are
exclusively breastfed¹

13%

 Children under
3 years who have low
birth weight (<2.5 kgs)¹

32.7%

 Women
15-49 years old
with anemia²

Immediate Determinants


72.6%

 Infants 6-8 months old who receive solid, semi-solid or soft foods¹
36.6%

 Infants & young children 6-23 months old who achieve minimal diet diversity in
complementary feeding¹

48.5%

 Children 6-59 months
old with anemia²

3.6%

 Children 6-59 months old who
had diarrhea in 15 days prior
to survey¹

Immediate Determinants


24.2%

 Children 6-35 months old
who received supplementary
food under ICDS for 21 days
in the month prior to survey¹

83%

 Children 12-23
months old who are
fully immunized¹

87.8%

 Mothers of
children under 36 months
old who received three
or more antenatal checkups¹

Underlying Determinants


70.8%

 Currently
married women with 10
or more years of schooling²

7.1%

 Women aged 20-24
years who were
married before the age of 18¹

34.8%

 Adolescent girls
15-18 years old
with low BMI (<18.5)¹

Underlying Determinants


1.9%

 Households
practicing
open defecation¹

7.1%

 Population
below
state-specific poverty line³

 Does state have a
high-level nutrition mission?

NO
¹ Source : RSoC, 2014

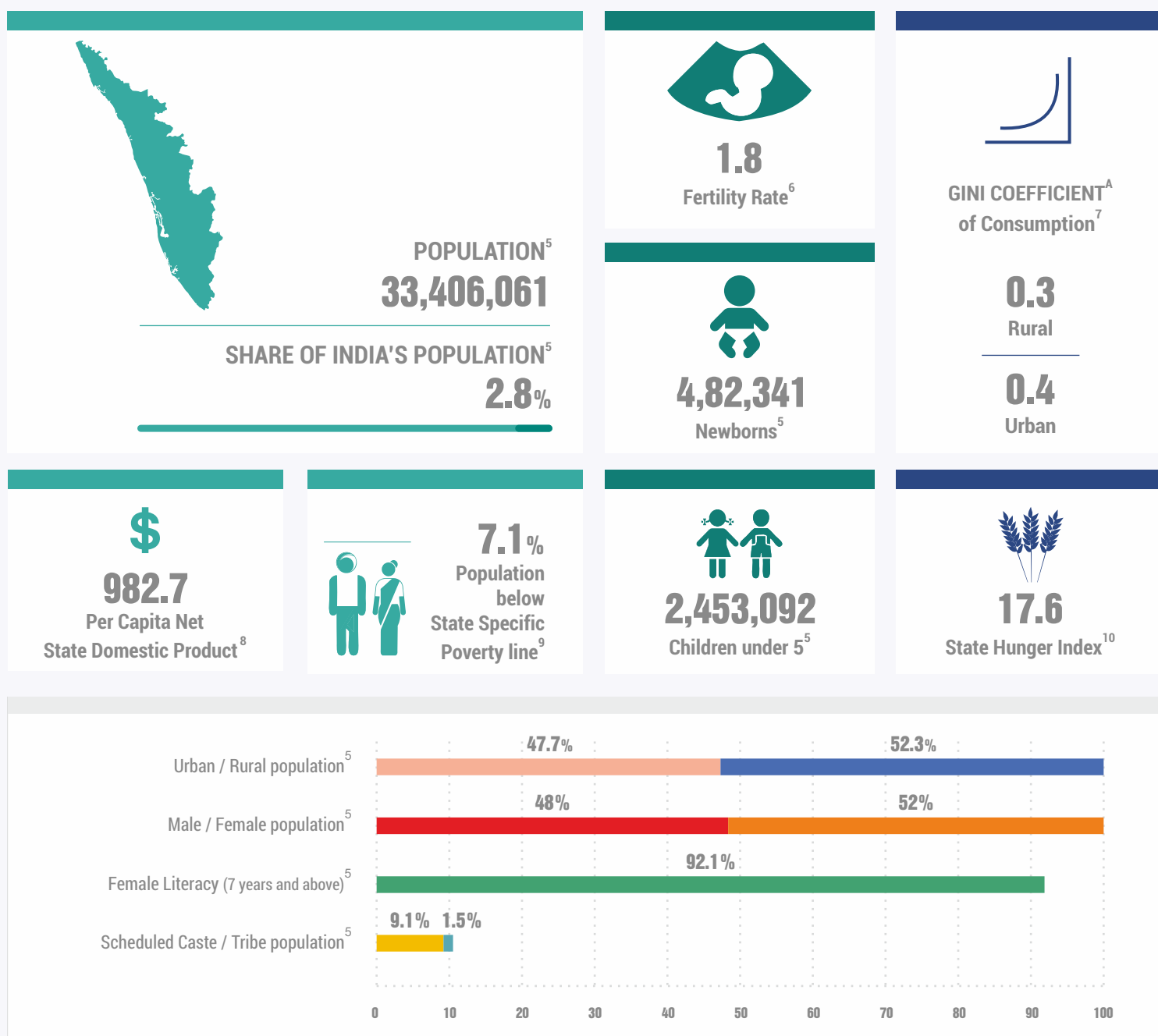
² Source : DLHS4, 2012-13

³ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Govt. of India

I. CONTEXT

A. DEMOGRAPHIC CONTEXT

This section highlights the demographic composition of the state in terms of male-female, rural-urban, and SC-ST ratios, literacy and fertility rates. In addition, it also includes the size of the population of newborns and children less than five years of age (as of the Census of India, 2011) to illustrate the size of the target population for nutrition-related interventions that need to reach this vulnerable population.



A : Gini coefficient is a measure of inequality of distribution. A Gini coefficient of 0 represents perfect equality, while a value of 100 implies perfect inequality. (See Appendix A for more information)

⁵ Source : Primary Census Abstract, Census, 2011

⁶ Source : SRS, 2013

⁷ Source : Planning Commission Estimates: NSSO 66th round-Employment and Unemployment Survey, 2009-10

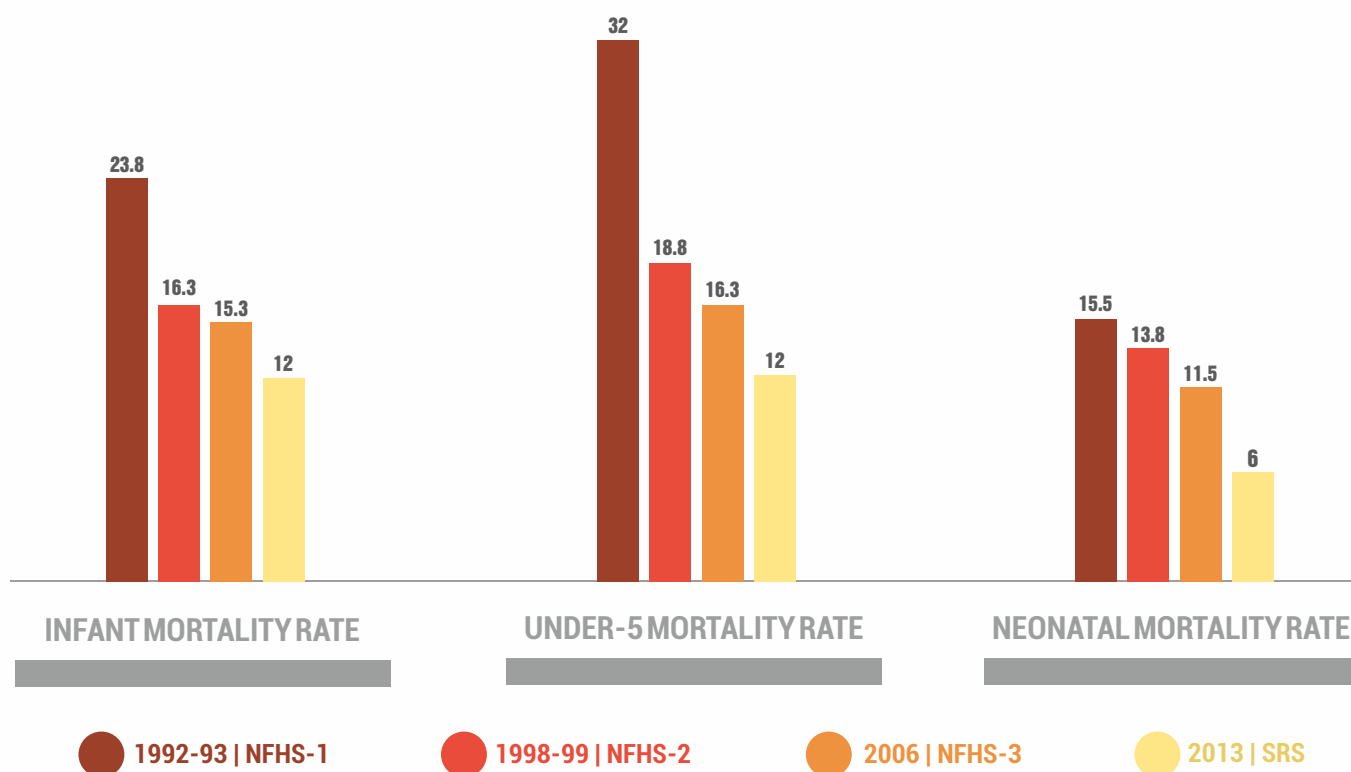
⁸ Source : Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14 : http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82

⁹ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Government of India, 2011-12 : http://planningcommission.nic.in/news/pre_pov2307.pdf

¹⁰ Source : IFPRI, India state hunger index, comparisons of hunger across states, 2009

B. CHILD MORTALITY PER THOUSAND LIVE BIRTHS

This section illustrates trends in mortality in neonates, infants and children under 5 years, since 1992. The purpose of this is to highlight the success achieved by individual states in averting deaths of children since the economic growth of the 1990s.



II. NUTRITIONAL STATUS AMONG CHILDREN

This section presents data on nutrition outcome indicators (stunting, wasting, and underweight) and anemia prevalence. Anthropometric measures for children under 5 (stunting, wasting, and underweight) are presented over time periods, by age groups and by background characteristics. This data aims to convey the prevalence and severity of undernutrition in the state.

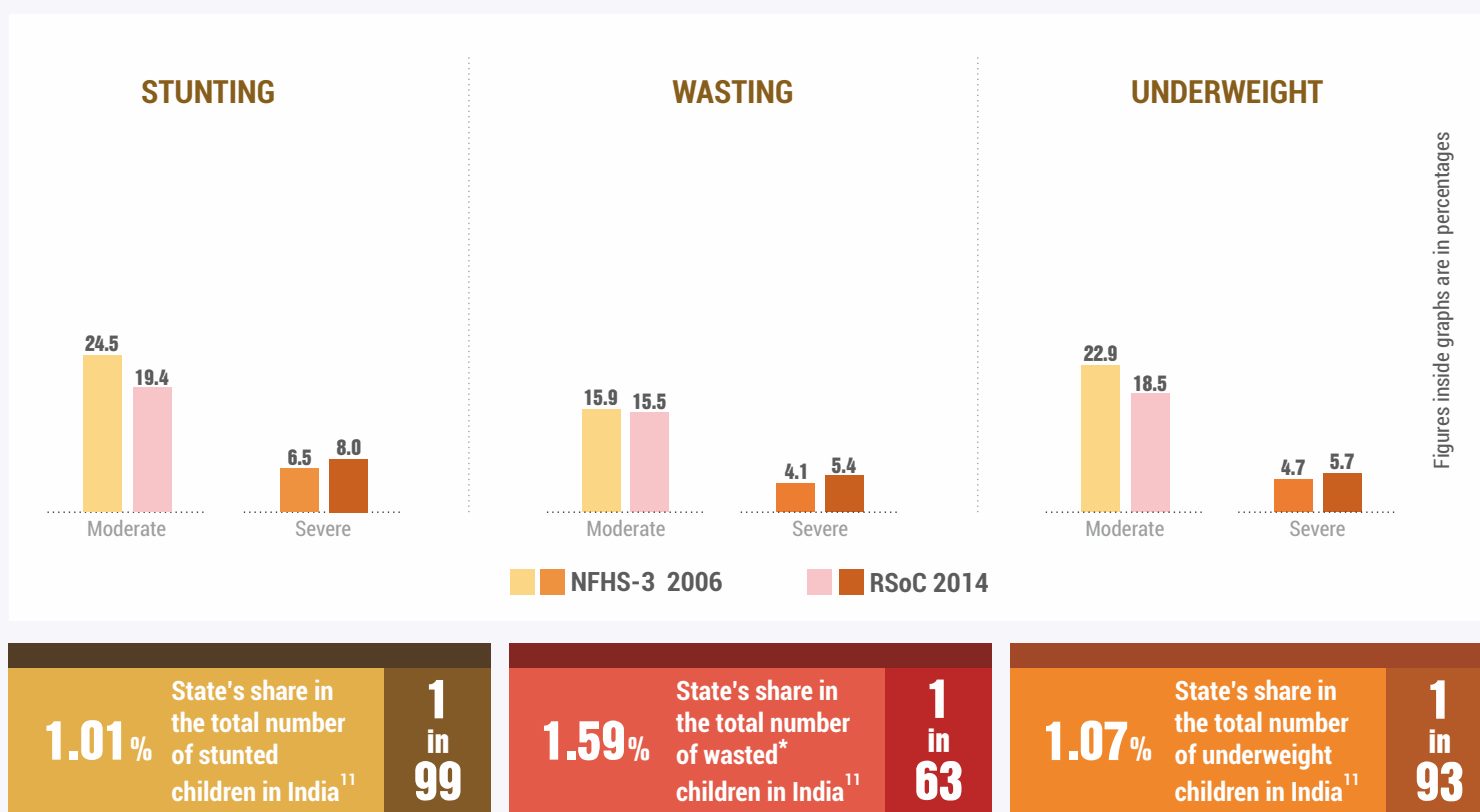
A. CHILD UNDERNUTRITION, BY TIME PERIOD

ANTHROPOMETRIC MEASURES

Stunting is inadequate height for age, which is indicative of chronic or cumulative nutritional deprivation in early childhood. A stunted child's height-for-age is below -2 standard deviations from the median height-for-age (termed HAZ) of the WHO Child Growth Standards, while a severely stunted child is below -3 standard deviations.

Wasting is inadequate weight for height, which points to acute or short-term undernutrition. A wasted child's weight-for-height (WHZ) is below -2 standard deviations from the WHO Child Growth Standards; a severely wasted child is below -3 standard deviations. (Another way to determine severe wasting or severe acute malnutrition is through a measurement of a child's mid-upper arm circumference (MUAC).

Underweight is inadequate weight for age, a composite indicator that encompasses stunting and wasting. An underweight child's weight-for-age (WAZ) is below -2 standard deviations from the WHO Child Growth Standards; again, a severely underweight child is below -3 standard deviations.

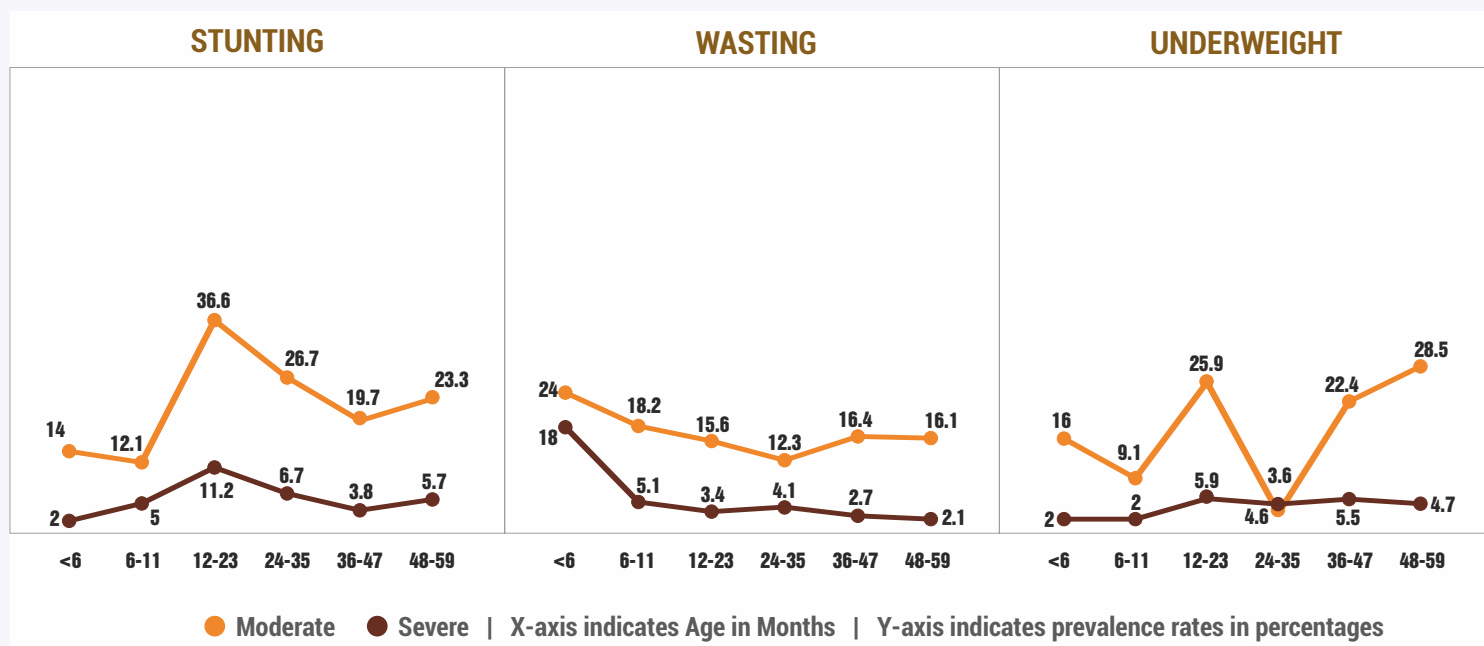


*Wasting is subject to seasonal variations either in food supply or disease prevalence and hence may not be comparable across groups of children measured at different times of the year within a survey round as well as between different survey rounds.

¹¹ Source : NFHS-3, 2006

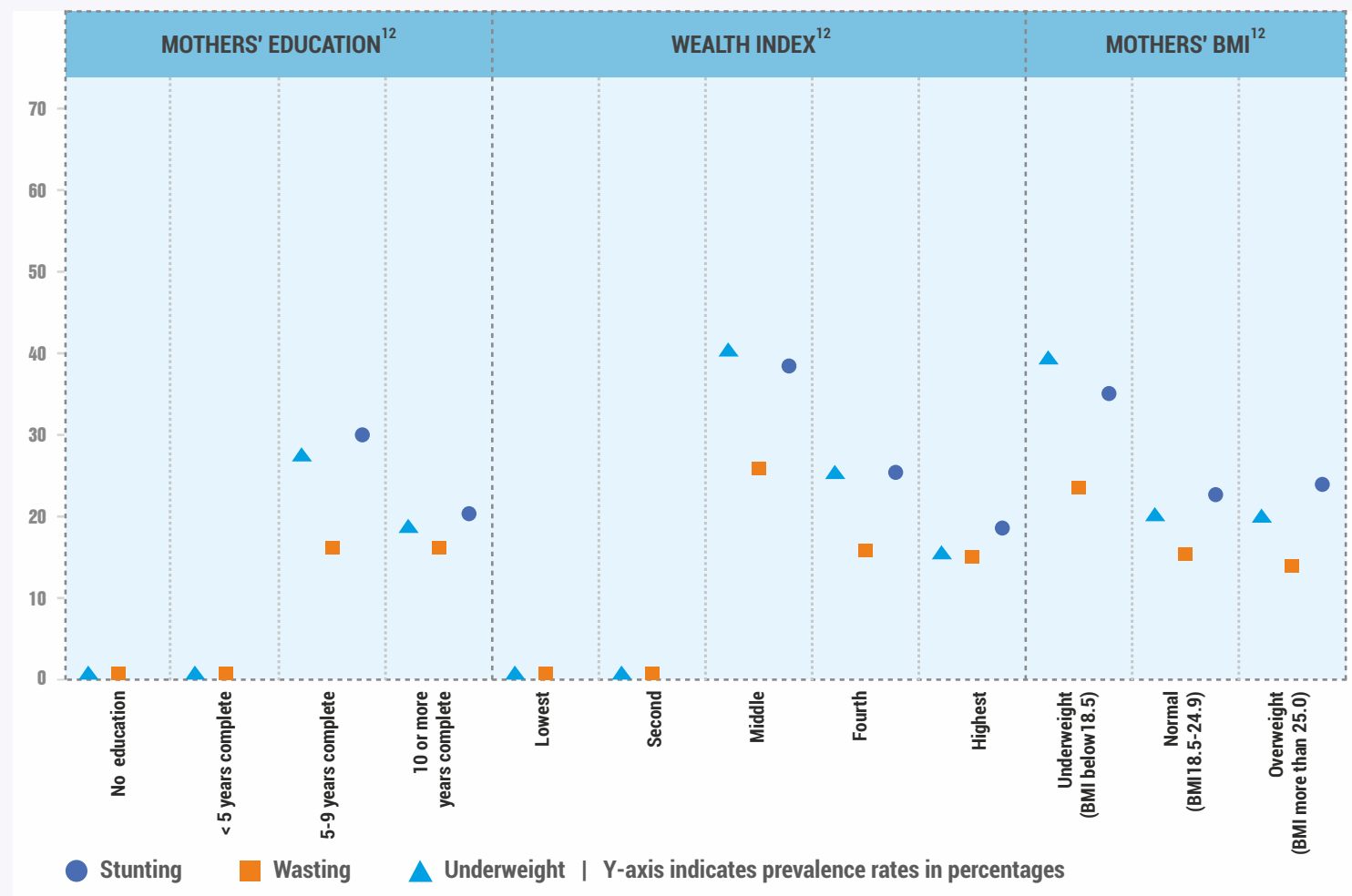
B. CHILD UNDERNUTRITION, BY AGE GROUPS¹²

Percentage of moderate (below -2 SD from the WHO growth standards) and severe (below -3 SD) stunting, wasting and underweight are available for 6 age groups among children under 5.



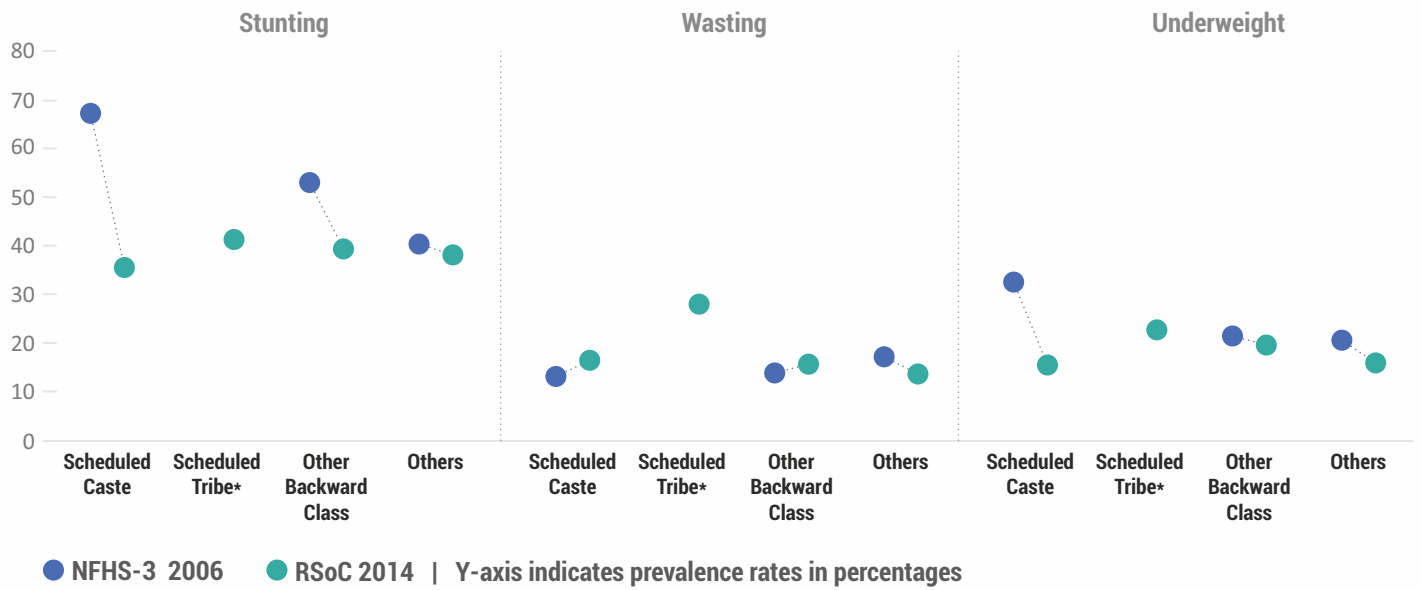
C. PREVALENCE OF CHILD UNDERNUTRITION, BY BACKGROUND CHARACTERISTICS

In this section, child undernutrition outcomes are presented, along with key socioeconomic drivers that are known to be associated with child nutrition, such as caste, residence, mother's health and education, and household income.



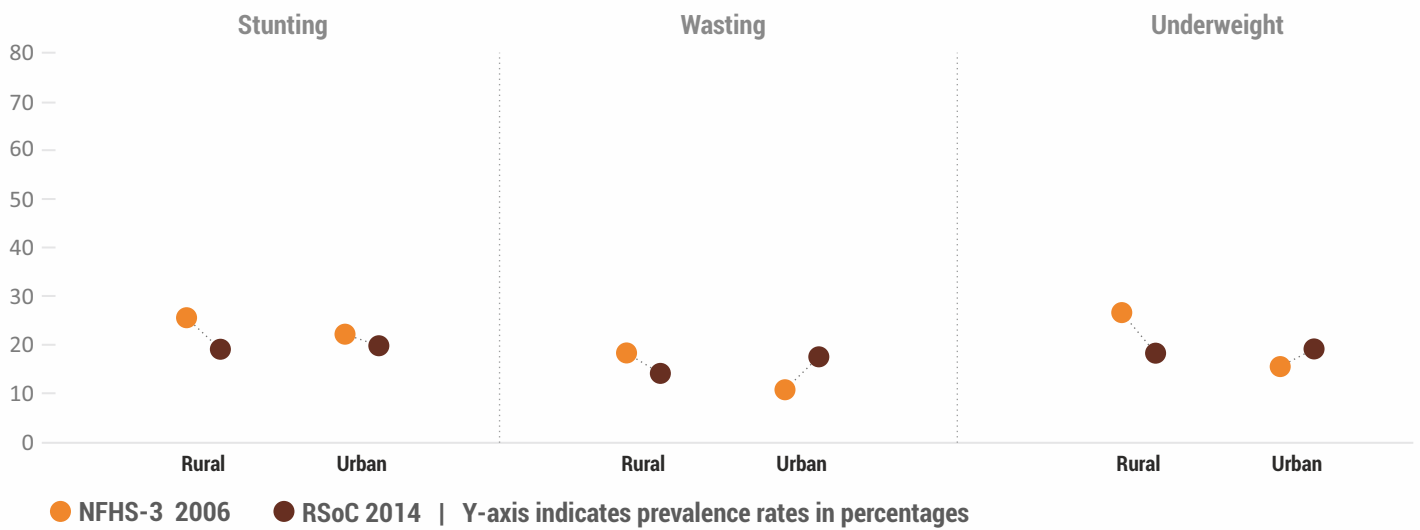
¹² Source : NFHS-3, 2006

CASTE



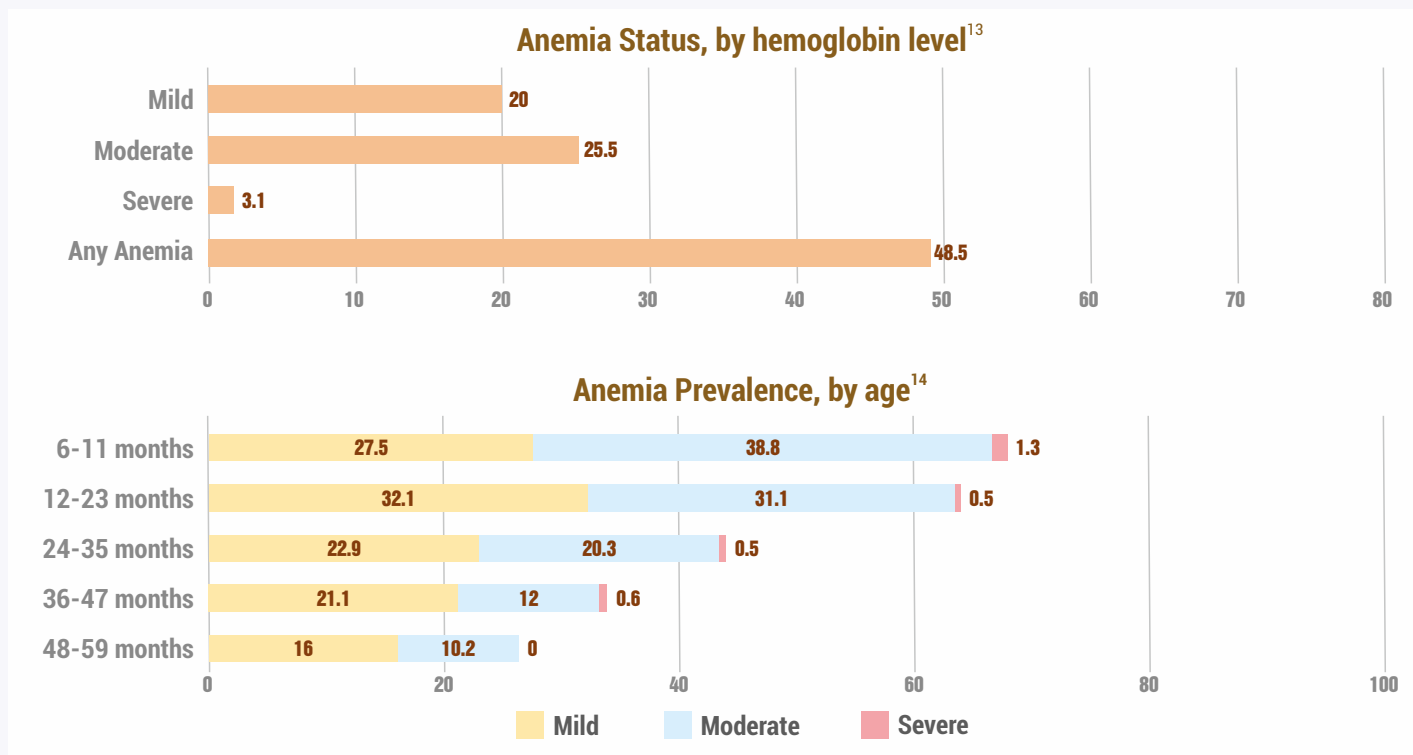
*Data for Scheduled Tribes is not available in NFHS-3 for this state

RESIDENCE



D. ANEMIA PREVALENCE

Anemia can impair physical and cognitive development among children and create long term impacts on productivity and wellbeing. This section features data on anemia prevalence by severity and age groups for children under 5.



¹³ Source : DLHS-4, 2012-13

¹⁴ Source : NFHS-3, 2006

III. IMMEDIATE DETERMINANTS

A. INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES¹⁵

This section presents indicators for assessing IYCF practices as recommended by the WHO and revised in 2008. Following optimal IYCF practices during the first 1,000 days is crucial for early child survival and growth as well as long-term health and wellbeing.

Children aged 0-23 months breastfed immediately/within an hour of birth		66.6%
	Children aged 0-5 months who were exclusively breastfed	58.6%
	Children aged 6-8 months who were fed complementary foods	72.6%
	For breastfed children (6-23 months)- A. Fed minimum number of times. Note : At least twice a day for breastfed infants 6-8 months old and at least three times a day for breastfed children 9-23 months old B. Had minimum dietary diversity Note : Minimum dietary diversity refers to four or more food groups^B fed to children aged 6-23 months	38.1% 36.6%

B. CHILD HEALTH¹⁵

Prevalence of childhood illnesses (in children aged 0-59 months)

Had diarrhea in 15 days prior to survey	3.6%
Had fever in 15 days prior to survey	9.8%
Had symptoms of Acute Respiratory Infection (ARI) in 15 days prior to survey	2.5%

^B The 7 food groups include the following: i. grains, roots and tubers ii. legumes and nuts iii. dairy products (milk, yoghurt, cheese) iv. Flesh foods (meat, fish, poultry, and liver/organ meats) v. eggs vi. Vitamin-A rich fruits and vegetables vii. other fruits and vegetables.

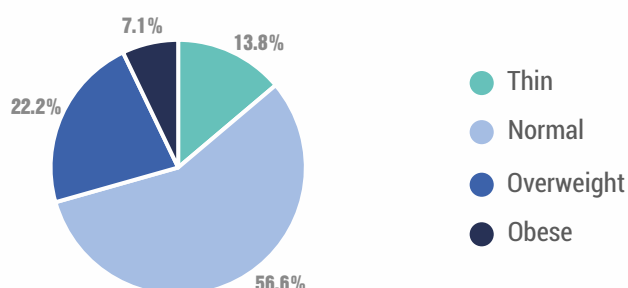
¹⁵ Source : RSoC, 2014

C. NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

Maternal health and nutrition, as well as adolescent nutrition, have important consequences for intergenerational transmission of undernutrition. Data on Body Mass Index (BMI), anemia prevalence and height among women of reproductive age are presented in this section, as are data on adolescent BMI and anemia.

C.1. WOMEN 15-49 YEARS OLD¹⁶

BMI^c levels of women aged 15-49 years



^cBody Mass Index (BMI) is defined as the weight in kilograms by the square of the height in metres (kg/m²). It is a simple index of weight-for-height which is commonly used to classify underweight, overweight and obesity in adults. Range: BMI < 18.5 = total thin, BMI 18.5-24.9 = normal, BMI 25.0-29.9 = Overweight, BMI > 30.0 = Obese [per WHO Standards]



32.7%

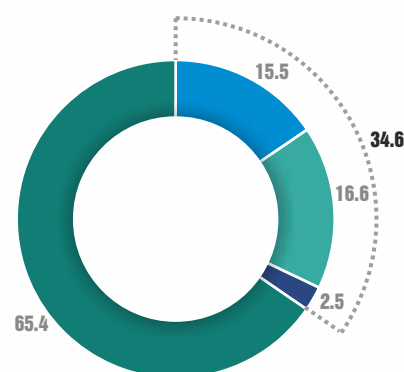
Women aged 15-49 years are anemic

2.4%

Women aged 15-49 years are severely anemic

C.2. PREGNANT WOMEN¹⁶

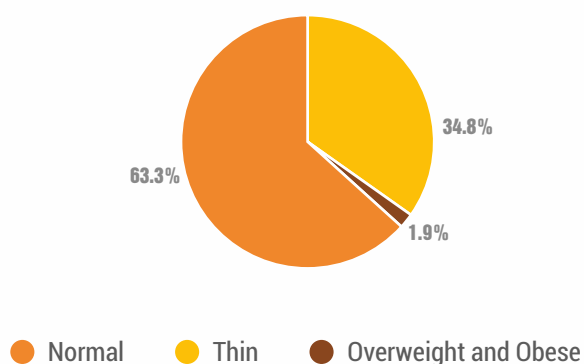
Anemia prevalence in pregnant women aged 15-49 years



● Mild ● Moderate ● Severe ● None ---- Any

C.3. ADOLESCENT GIRLS

BMI levels of adolescent girls aged 15-18 years¹⁷



34.7%

Adolescent girls aged 15-19 years are anemic^{17a}

0.8%

Adolescent girls aged 15-19 years are severely anemic^{17a}

¹⁶ Source : DLHS-4, 2012-13

¹⁷ Source : RSoC, 2014

^{17a} Source : NFHS-3, 2006

IV. UNDERLYING DETERMINANTS

A. SOCIAL STATUS OF WOMEN

Women's status is recognized to contribute in significant ways to improving nutrition. This section presents indicators that are representative of women's social status, including measures of education, age at marriage and first birth, employment, decision making and domestic violence. It also includes the Gender Empowerment Measure that captures gender inequality along three dimensions: political participation and decision-making power, economic participation and decision-making power, and power over economic resources.



Currently married women who have 10 or more years of schooling¹⁸ **70.8%**



7.1% Women aged 20-24 years who were married before the age of 18¹⁹ **25.1** Average age at marriage¹⁹

Gender Empowerment Measure^{D,20}

0.5

0.5

National Average²⁰



Female workforce participation rate²² **18.2%**

Currently married women who make decisions about²³:



29.2% Own healthcare



13% Major household purchase



30.3% Purchases for daily household needs



13.7% Visits to her family/friends/relatives



19.8% Women who have experienced any form of physical/sexual/emotional violence²³

65.8% Ever married women who justify hitting/wife-beating (for either of the reasons mentioned)²³

^D The Gender Empowerment Measure is a weighted average index based on indicators that are classified into three dimensions: a. political participation and decision-making power b. economic participation and decision-making power and c. power over economic resources. The index ranges from a minimum of 0 to a maximum of 1, with a higher score indicating greater empowerment of women. (More information available at <http://wcd.nic.in/publication/GDIGEReport/Part3.pdf>.)

¹⁸ Source : DLHS-4, 2012-13

¹⁹ Source : RSoC, 2014

²⁰ Source : MoWCD, 2006

²² Source : Women and Men in India, 16th Issue MoSPI, 2014

²³ Source : NFHS-3, 2006

B. WATER AND SANITATION

Poor hygiene and sanitation, by directly increasing exposure and susceptibility to infections, are associated with undernutrition among children. This section covers key indicators on access to safe drinking water and availability of sanitation facilities at the state level. It also includes the expenditure on toilet construction under the Total Sanitation Campaign.



51.8%

Households with access to improved sources of drinking water^{E, 24}

91.4%

Households using improved sanitation facility^{F, 24}



1.9%

Households practicing open defecation²⁴

21 M

Expenditure on toilets under Total Sanitation Campaign (TSC)^{G, 25}



1,065 M

National Average²⁵

C. AGRICULTURE AND FOOD SECURITY

Agriculture productivity and food security can affect household access to foods necessary for a healthy diet. Thus, this section presents indicators related to agricultural growth and food consumption patterns in the state, indicating the level of food security in the state relative to the national situation.



0.3%

Growth rate of agriculture from 2007-2012²⁶



0.2%

Share in India's total foodgrain production²⁷



Mean Calorie intake per person per day (in Kcal)²⁸

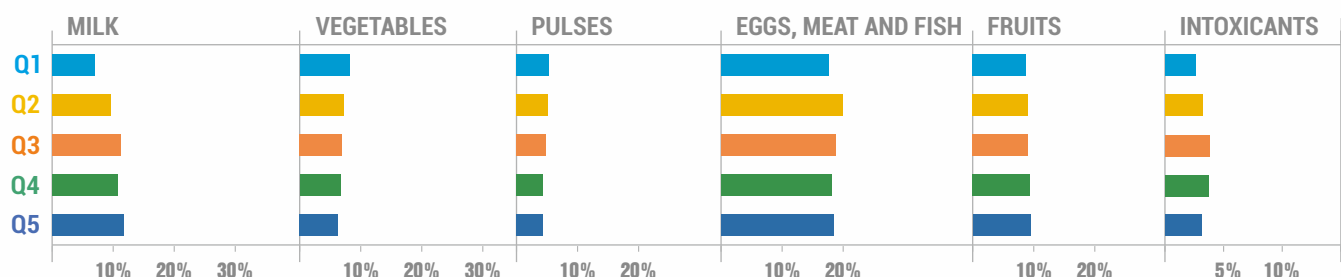
RURAL

2162 **2233**
KERALA INDIA AVG

URBAN

2198 **2206**
KERALA INDIA AVG

Expenditure on food items by income quintiles²⁸



^E Improved sources of drinking water include: piped water into dwelling, piped water to yard/plot, public tap or standpipe, tubewell or borehole, protected dug well, protected spring, and rainwater (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>).

^F Improved sanitation means households using improved toilets that include: flush toilet, piped sewer system, septic tank, flush/pour flush to pit latrine, ventilated improved pit latrine, pit latrine with slab, composting toilet, special case (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>); excludes those households who are using improved toilets but sharing toilet facilities with other households.

^G Besides toilet construction subsidies, this expenditure also includes funding other activities such as solid and liquid waste management, IEC activities for sustainable demand generation for sanitation facilities, assistance to production centers of sanitary materials and rural sanitary marts, provision of construction of community sanitary complexes, provision of sanitation facilities in govt. schools and Anganwadis in govt. buildings etc.

²⁴ Source : RSoC, 2014

²⁵ Source : Indiastat, Rajya Sabha Unstarred Question No. 2950, dated on 30.08.2011, 2011-12

²⁶ Source : Indiastat, compiled by datanet from Rajyasabha & Lok Sabha unstarred questions no. 3039, 4535. 2007-12

²⁷ Source : Indiastat, Ministry of Agriculture, Government of India 2011-2012

²⁸ Source : NSSO, 68th round-Nutritional Intake in India, 2011-12

V. STATUS OF NUTRITION-RELEVANT INTERVENTIONS

A. NUTRITION-SPECIFIC INTERVENTIONS

The financial resources allocated to, and spent on direct nutrition-specific interventions can determine the scale, coverage and quality of interventions to reach vulnerable target populations. These services, in India, are delivered both by the Integrated Child Development Scheme (ICDS) and the National Health Mission (NHM). This section includes data on the coverage of interventions delivered by these two key centrally-sponsored schemes that directly impact maternal and child nutrition and health. We also include here information on the human resources and service availability of these schemes and expenditures.

A.1. COVERAGE OF ICDS AND NHM:

The Integrated Child Development Services (ICDS) aims to improve the nutrition and health status of children under-six through a package of services (supplementary nutrition, immunization, health check-up, referral services, etc.) delivered through frontline workers at the Anganwadi Centres (AWCs). This section provides information on expenditure on ICDS and coverage of its supplementary nutrition programme (SNP). This section also covers critical services provided by the health system, including provision of care for pregnant women and child immunization. Immunization plays a crucial role in complementing actions to improve nutrition. The link between undernutrition and infectious diseases is cyclical, poor nutrition increases vulnerability to infections, which in turn worsen nutrition status. Data on immunization among children are presented by residence. Here, full immunization refers to children covered with BCG, measles and 3 doses each of DPT and polio.

Beneficiaries who availed supplementary food under ICDS²⁹

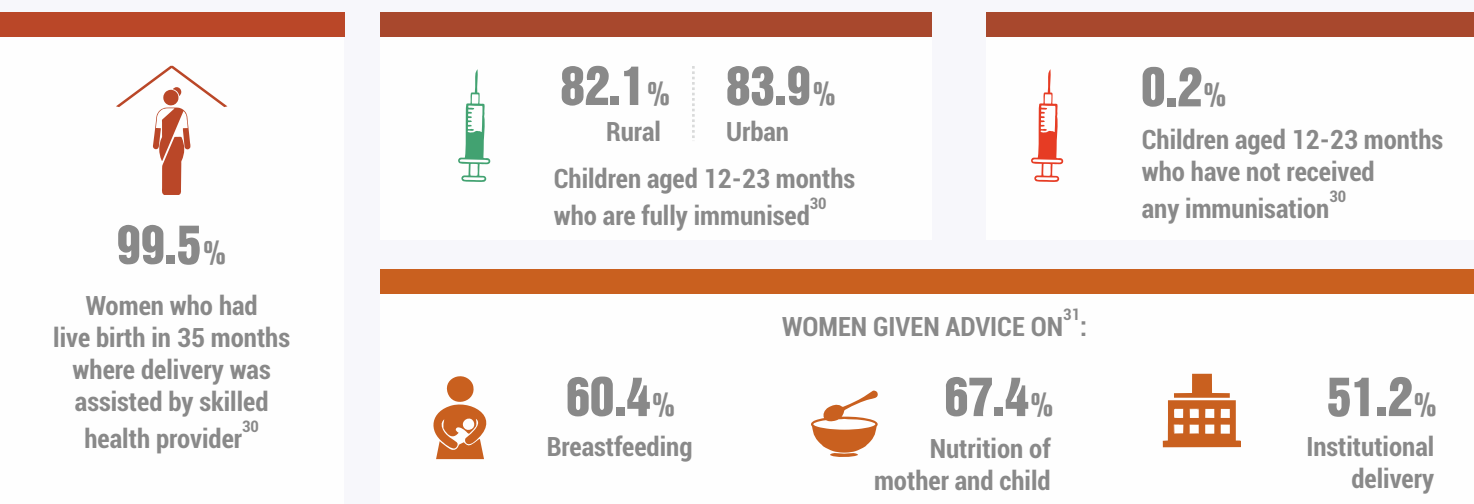
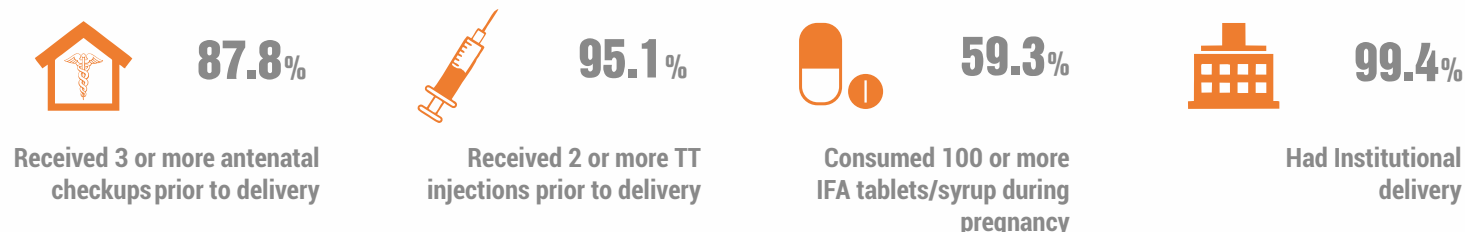
Children 6-35 months	43.2%
Children 36-71 months	36.4%
Pregnant women	23%
Lactating mothers	15%

Beneficiaries who received supplementary food for at least 21 days in the month prior to the survey

Children aged 6-35 months	24.2%
Children aged 36-71 months	33.7%
Pregnant women	28%
Lactating women	NA

²⁹ Source : RSoC, 2014

SERVICES PROVIDED TO WOMEN WHO HAD A LIVE BIRTH IN LAST 35 MONTHS³⁰



WOMEN GIVEN ADVICE ON³¹:



A.2. PERSONNEL CAPACITY OF ICDS AND NRHM:

This section features data on availability of healthcare personnel and services available to women of reproductive age (antenatal care, tetanus toxoid coverage, iron-folic acid supplementation coverage, institutional delivery and counseling). Household and individual access to health services can directly impact children's nutrition and welfare during the crucial first 1,000 days of life.

Availability of Anganwadi Centres and Workers (AWCs and AWWs) ^{H, 30}	Value
Pending or vacant Anganwadi workers to sanctioned number of workers ^{30a}	0.2%
AWWs living in the AWC village/ward	44.9%
AWWs having 10 or more years of schooling	95%
Median age of AWWs	46 years
AWCs serving to population more than the stipulated norm	89.7%

Growth Monitoring ³⁰	Value
AWCs having functional baby weighing scale	97.7%
AWCs having functional adult weighing scale	85.2%
Available WHO growth chart at AWCs	99.1%

^H Number of AWCs surveyed for Kerala as per RSoC 2014 is 109.

³⁰ Source : RSoC, 2014

^{30a} Source : MoWCD, 2012

³¹ Source : DLHS-4, 2012-13

Training and Comprehensive Knowledge ³²	Value
AWWs having correct knowledge of intake of food by pregnant women	92.7%
AWWs having correct knowledge of normal birth weight of children	83.8%
AWWs having correct knowledge of initiation of breastfeeding within one hour	96.8%
AWWs having correct knowledge of exclusive breastfeeding for the first six months	86.8%
AWWs having correct knowledge of appropriate age of child for complementary feeding	68.5%

Health Service Delivery Personnel	Value
ASHAs selected ³³	97%
Current density of ASHA as per Census 2011 rural population ³³	1 per 548 persons
Pending or vacant ANM positions sub centres & PHCs ³⁴	0%

A.3. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SPECIFIC INTERVENTIONS

Expenditure on Schemes (in million dollars)	In million USD	National Average
ICDS (ICDS general + SNP + training) (women and children) ³⁵	46	75
NRHM expenditure (Central Government) ³⁶	79.1	68.8
NRHM expenditure (State Government) ³⁶	3.8	9.3

B. NUTRITION-SENSITIVE INTERVENTIONS

This section includes information on expenditure and coverage of key centrally-sponsored schemes that indirectly impact maternal and child nutrition. These are: the Mid Day Meal Scheme (MDMS), Public Distribution System (PDS), and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

B.1. COVERAGE OF SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS

Coverage of Schemes	Value
MDMS (base: eligible children*) ³⁷	30.3%
PDS (base: rural and urban households reporting consumption) ³⁸	77.1 %
MGNREGA (base: rural persons 18 years and above registered in MGNREG job card and demanded work during last 365 days) ³⁹	94%

* All children studying in primary & upper primary classes in schools supported under Sarva Shiksha Abhiyan and NCLP (National Child Labour Project) run by Ministry of Labour.

B.2. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS:

Expenditure on Schemes (in million dollars)	In million USD	National Average
MDMS ⁴⁰	32	47
PDS ⁴¹	605.7	475.3
MGNREGA ⁴²	236	214

³² Source : RSoC, 2014

³³ Source : NRHM, 2013

³⁴ Source : MoHFW, 2013

³⁵ Source : Lok Sabha Unstarred Question # 846 dated 27.02.2015, 2012-13

³⁶ Source : Lok Sabha Annexured Unstarred Question # 409 dated 6.12.2013, 2012-13

³⁷ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/lsq15/15/as216.htm 2011-12

³⁸ Source : Report No. 558, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

³⁹ Source : Report No. 554, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

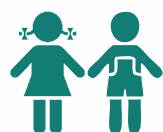
⁴⁰ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014, 2012-13

⁴¹ Source : Food Corporation of India 2013, 2012-13

⁴² Source : Lok Sabha Annexured Unstarred Question # 3835 dated 19.03.2015, 2012-13

FAST FACTS ON NUTRITION AND ITS DETERMINANTS IN MADHYA PRADESH

World Health Assembly Nutrition Targets



CHILDREN UNDER 5 YEARS

41.5%
Stunted¹17.5%
Wasted¹

World Health Assembly Nutrition Targets



74.8%

Infants 0-5
months old who are
exclusively breastfed¹

23.1%

Children under
3 years who have low
birth weight (<2.5 kgs)²

56%

Women
15-49 years old
with anemia¹

Immediate Determinants



46.3%

Infants 6-8 months old who receive solid, semi-solid or soft foods²

20.9%

Infants & young children 6-23 months old who achieve minimal diet diversity in complementary feeding²

Immediate Determinants



74.1%

Children 6-59 months
old with anemia¹

5.6%

Children 6-59 months old who
had diarrhea in 15 days prior
to survey²

Underlying Determinants



27.2%

Children 6-35 months old
who received supplementary
food under ICDS for 21 days
in the month prior to survey²

53.5%

Children 12-23
months old who are
fully immunized²

41.7%

Mothers of
children under 36 months
old who received three
or more antenatal checkups²

Underlying Determinants



10.8%

Currently
married women with 10
or more years of schooling¹

31.5%

Women aged 20-24
years who were
married before the age of 18²

45.8%

Adolescent girls
15-18 years old
with low BMI (<18.5)²

63.4%

Households
practicing
open defecation²

31.7%

Population
below
state-specific poverty line³Does state have a
high-level nutrition mission?

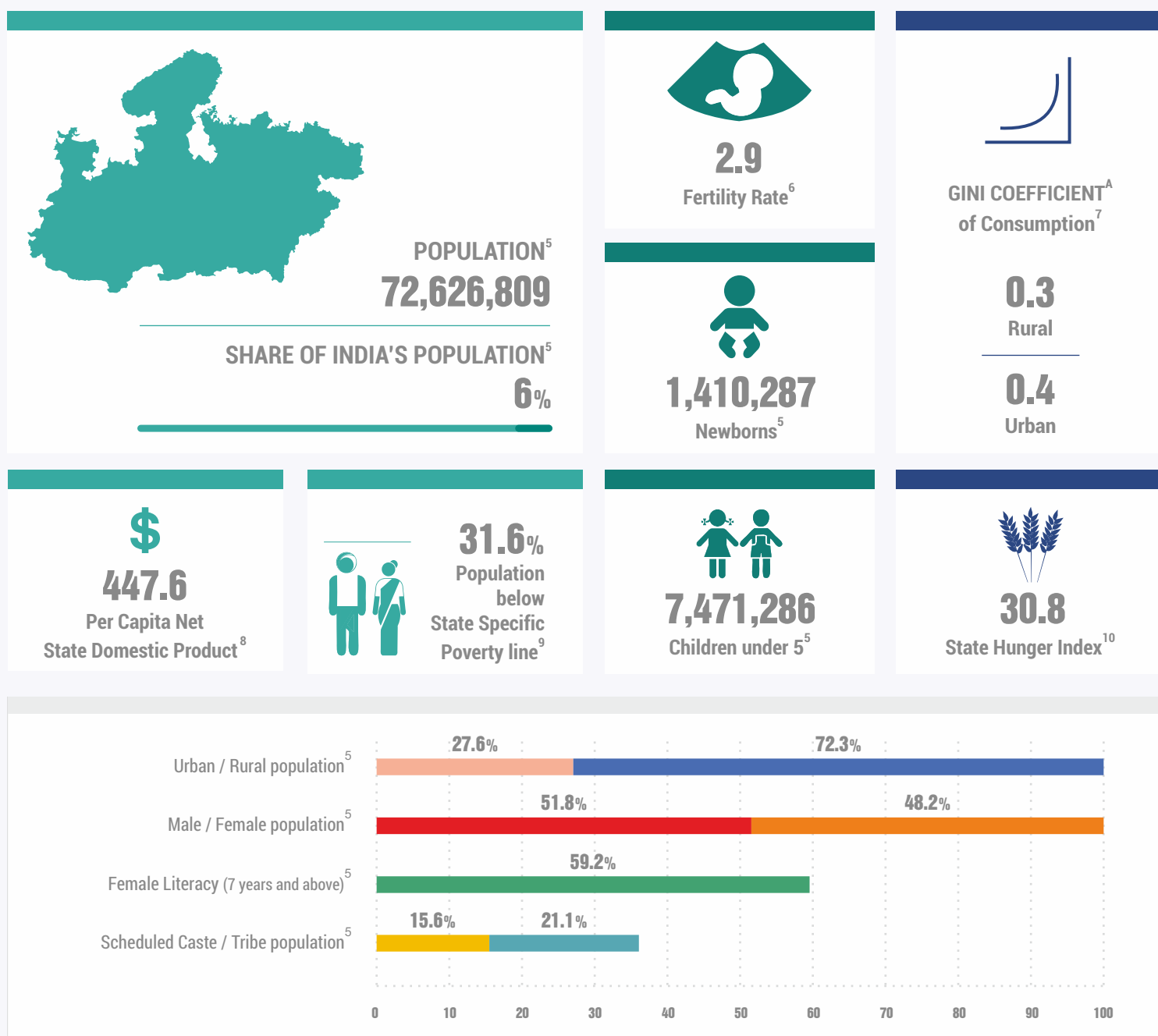
YES

¹ Source : RSoC, 2014² Source : NFHS-3, 2006³ Source : DLHS-3, 2007-08⁴ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Govt. of India

I. CONTEXT

A. DEMOGRAPHIC CONTEXT

This section highlights the demographic composition of the state in terms of male-female, rural-urban, and SC-ST ratios, literacy and fertility rates. In addition, it also includes the size of the population of newborns and children less than five years of age (as of the Census of India, 2011) to illustrate the size of the target population for nutrition-related interventions that need to reach this vulnerable population.



A : Gini coefficient is a measure of inequality of distribution. A Gini coefficient of 0 represents perfect equality, while a value of 100 implies perfect inequality. (See Appendix A for more information)

⁵ Source : Primary Census Abstract, Census, 2011

⁶ Source : SRS, 2013

⁷ Source : Planning Commission Estimates: NSSO 66th round-Employment and Unemployment Survey, 2009-10

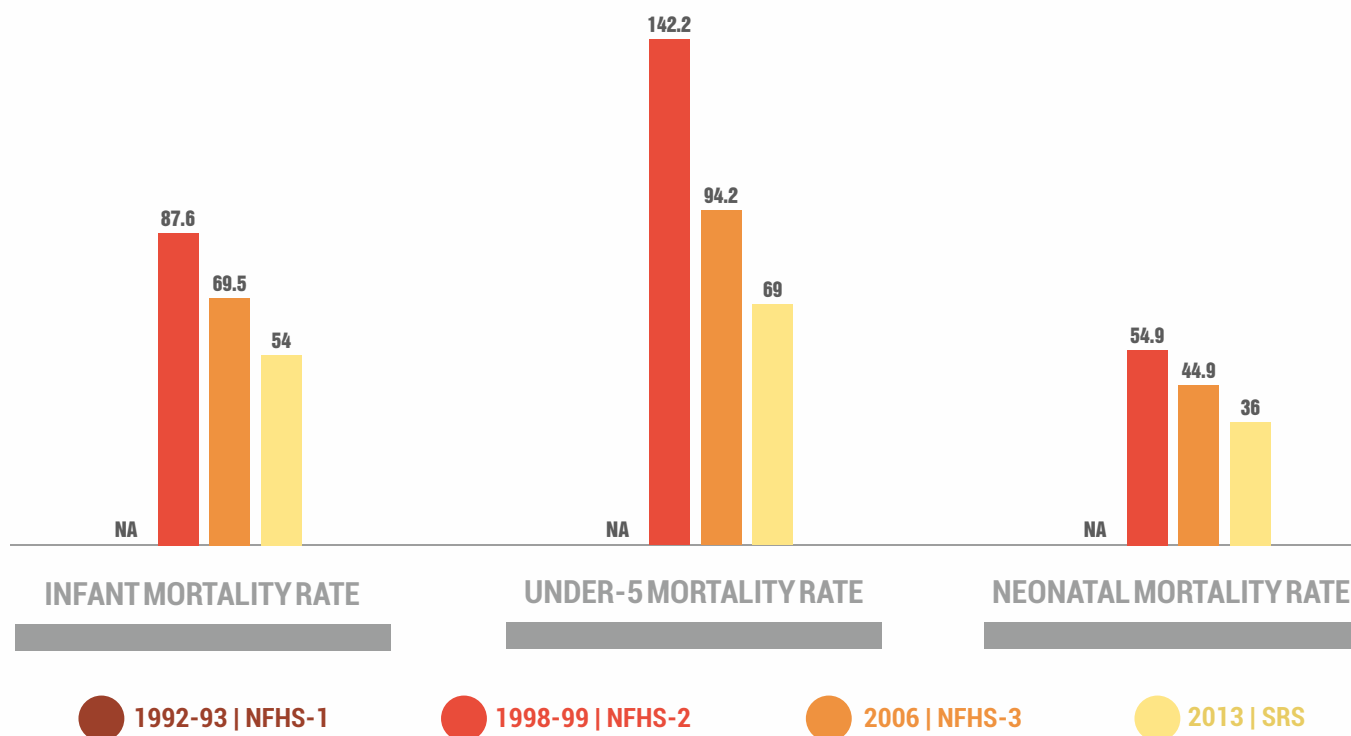
⁸ Source : Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14; http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82

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This section illustrates trends in mortality in neonates, infants and children under 5 years, since 1992. The purpose of this is to highlight the success achieved by individual states in averting deaths of children since the economic growth of the 1990s.



II. NUTRITIONAL STATUS AMONG CHILDREN

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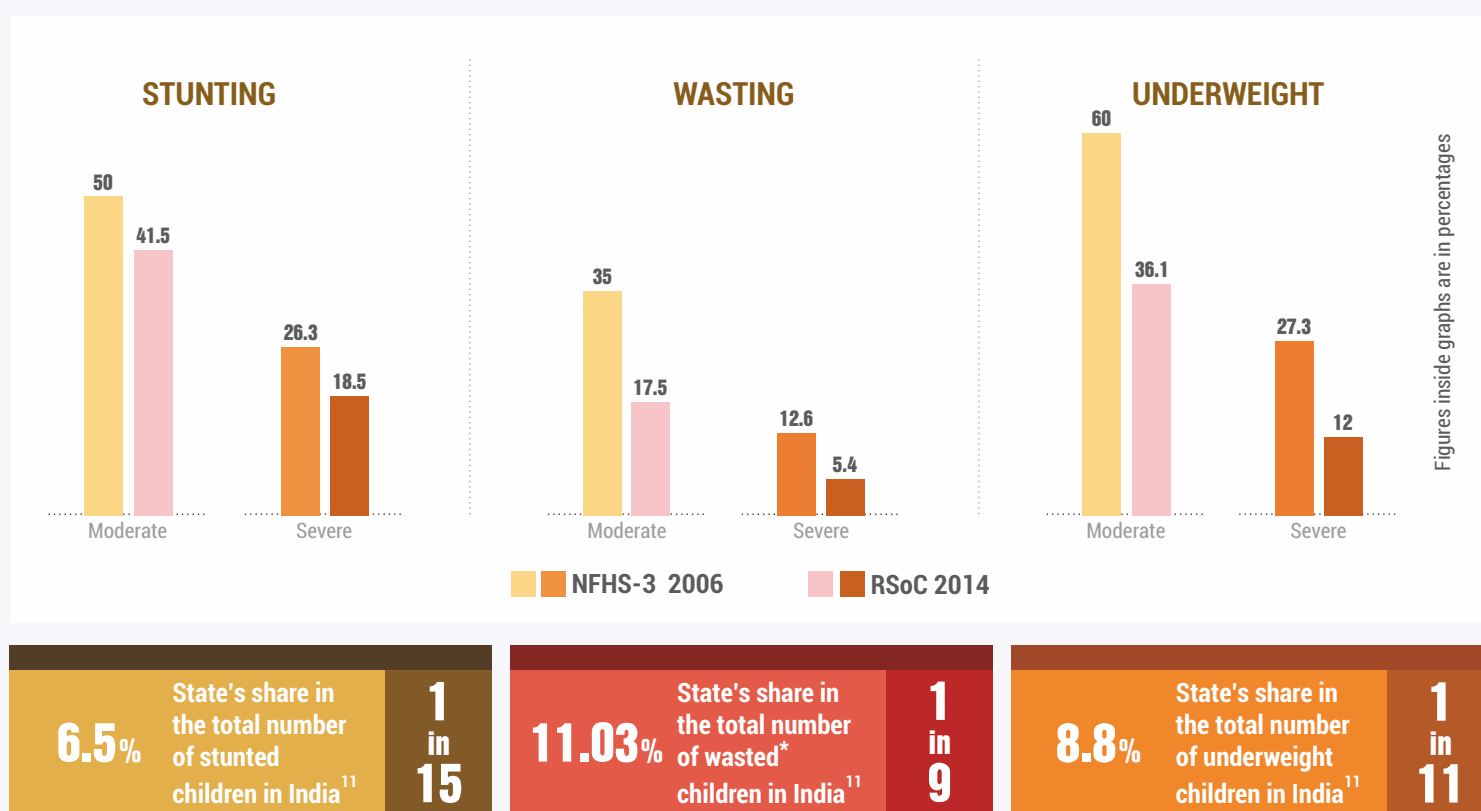
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ANTHROPOMETRIC MEASURES

Stunting is inadequate height for age, which is indicative of chronic or cumulative nutritional deprivation in early childhood. A stunted child's height-for-age is below -2 standard deviations from the median height-for-age (termed HAZ) of the WHO Child Growth Standards, while a severely stunted child is below -3 standard deviations.

Wasting is inadequate weight for height, which points to acute or short-term undernutrition. A wasted child's weight-for-height (WHZ) is below -2 standard deviations from the WHO Child Growth Standards; a severely wasted child is below -3 standard deviations. (Another way to determine severe wasting or severe acute malnutrition is through a measurement of a child's mid-upper arm circumference (MUAC).

Underweight is inadequate weight for age, a composite indicator that encompasses stunting and wasting. An underweight child's weight-for-age (WAZ) is below -2 standard deviations from the WHO Child Growth Standards; again, a severely underweight child is below -3 standard deviations.

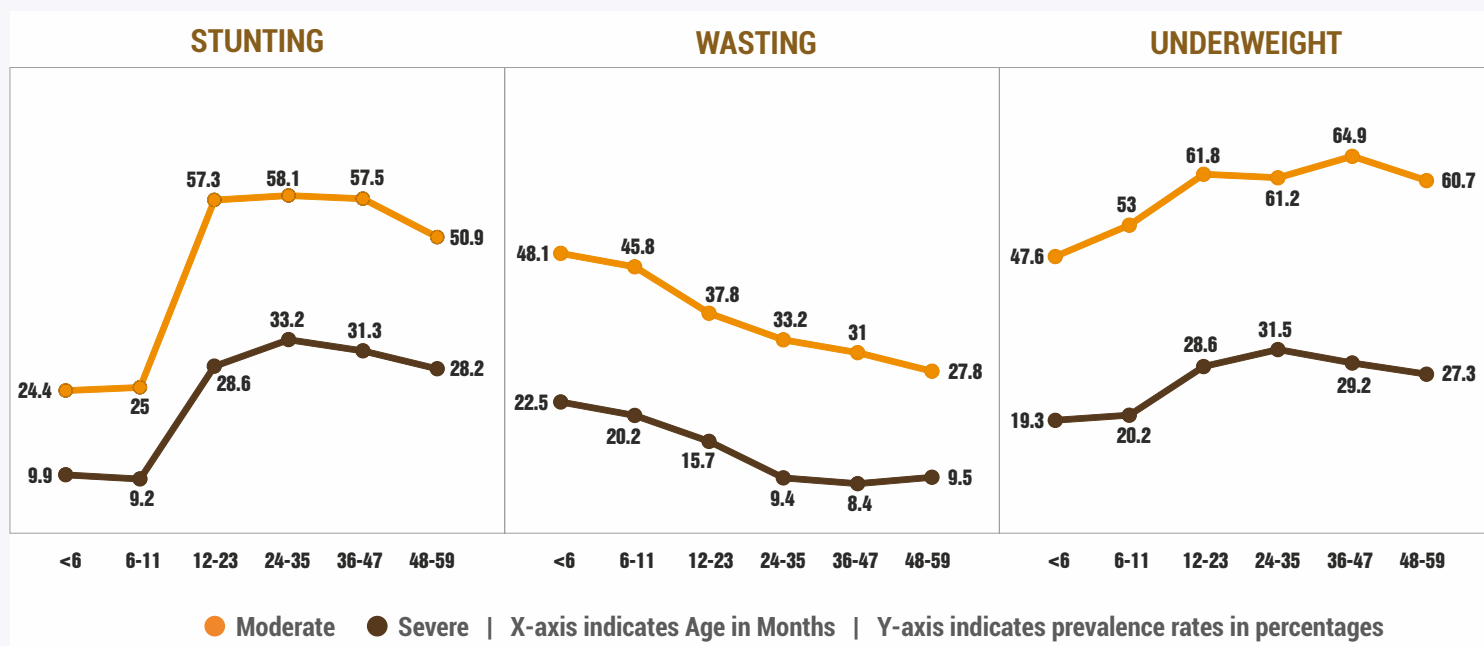


*Wasting is subject to seasonal variations either in food supply or disease prevalence and hence may not be comparable across groups of children measured at different times of the year within a survey round as well as between different survey rounds.

¹¹ Source : NFHS-3, 2006

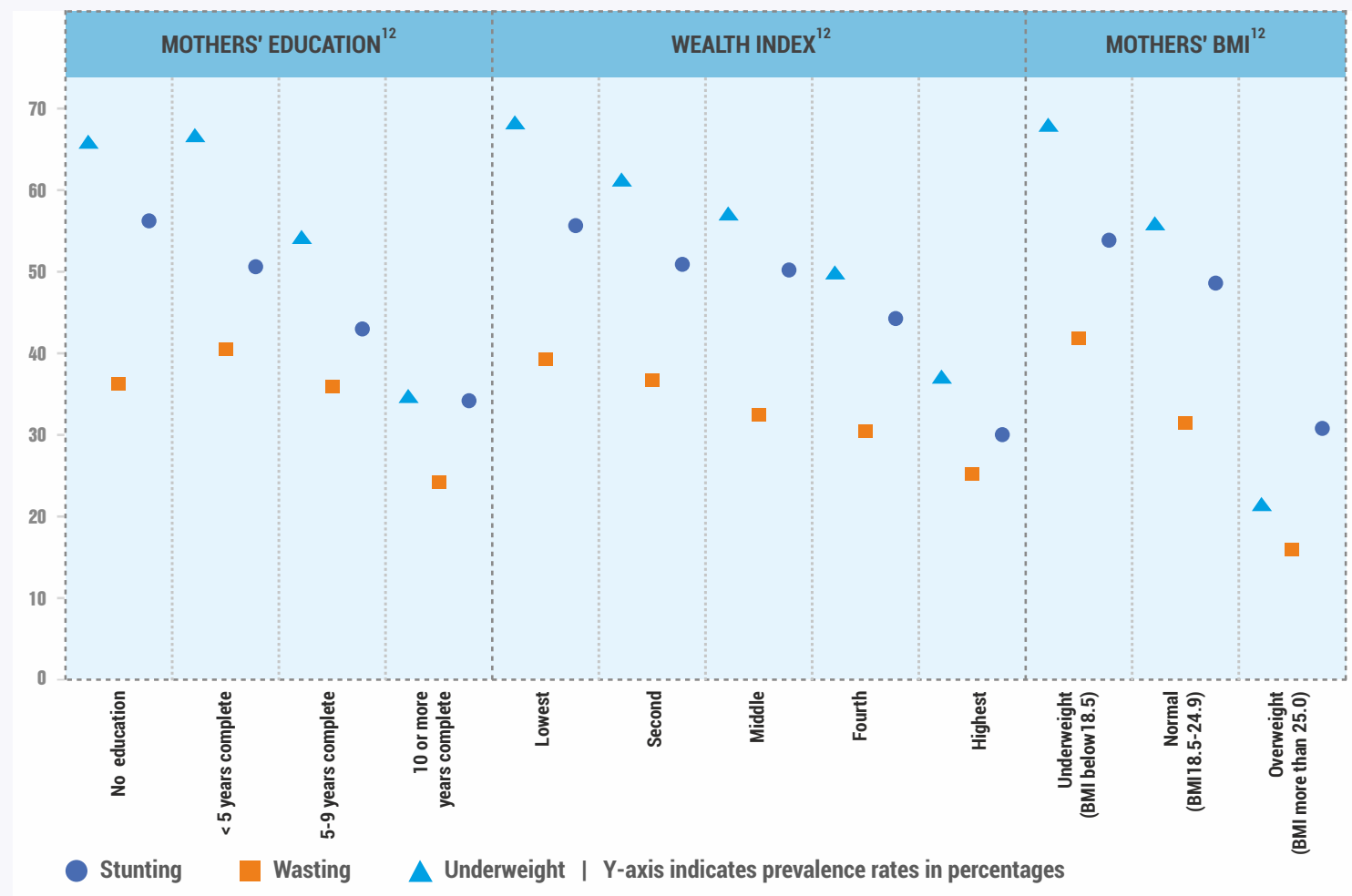
B. CHILD UNDERNUTRITION, BY AGE GROUPS¹²

Percentage of moderate (below -2 SD from the WHO growth standards) and severe (below -3 SD) stunting, wasting and underweight are available for 6 age groups among children under 5.



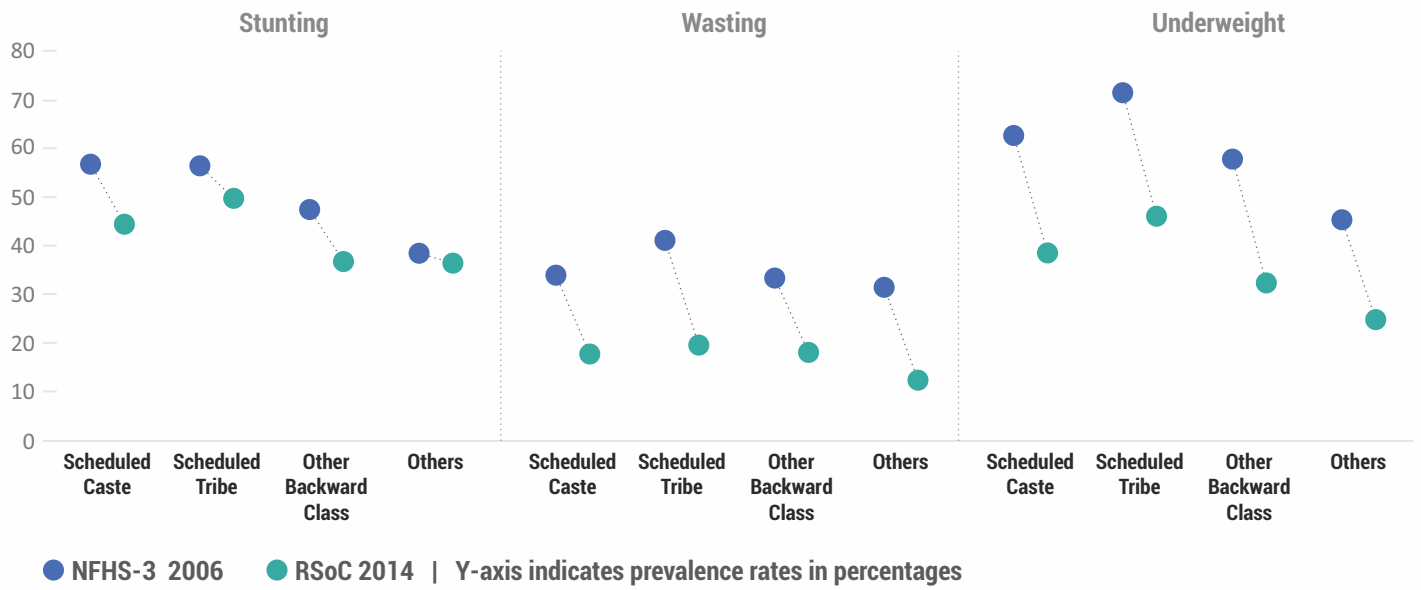
C. PREVALENCE OF CHILD UNDERNUTRITION, BY BACKGROUND CHARACTERISTICS

In this section, child undernutrition outcomes are presented, along with key socioeconomic drivers that are known to be associated with child nutrition, such as caste, residence, mother's health and education, and household income.

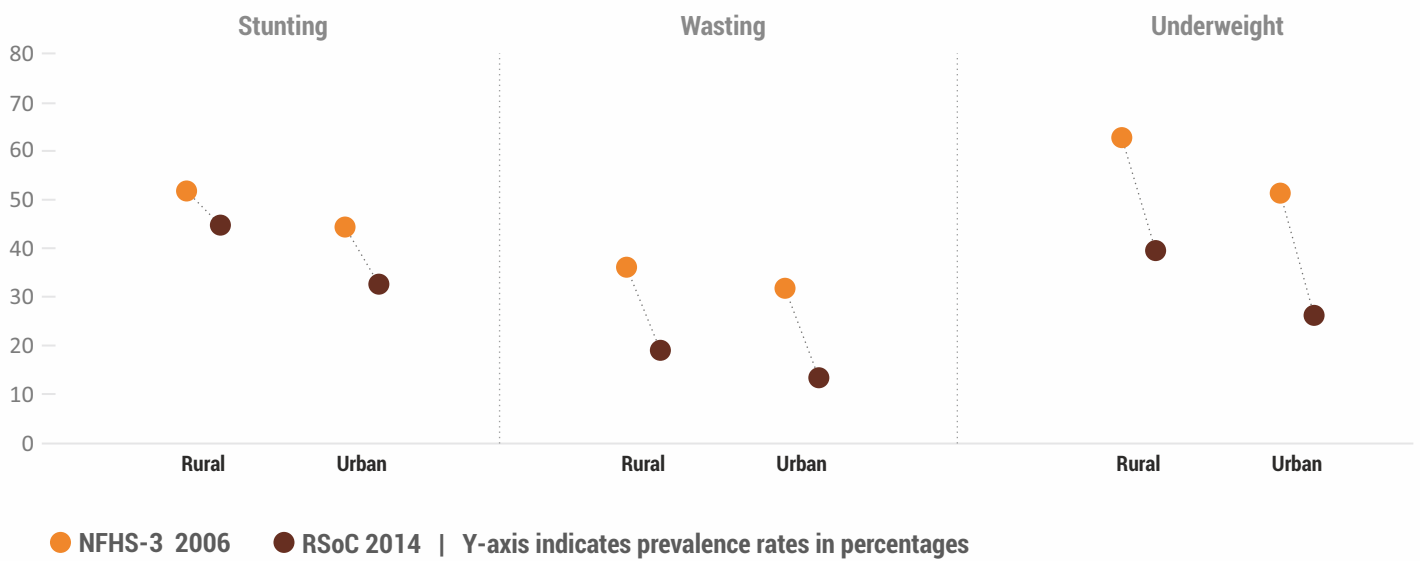


¹² Source : NFHS-3, 2006

CASTE

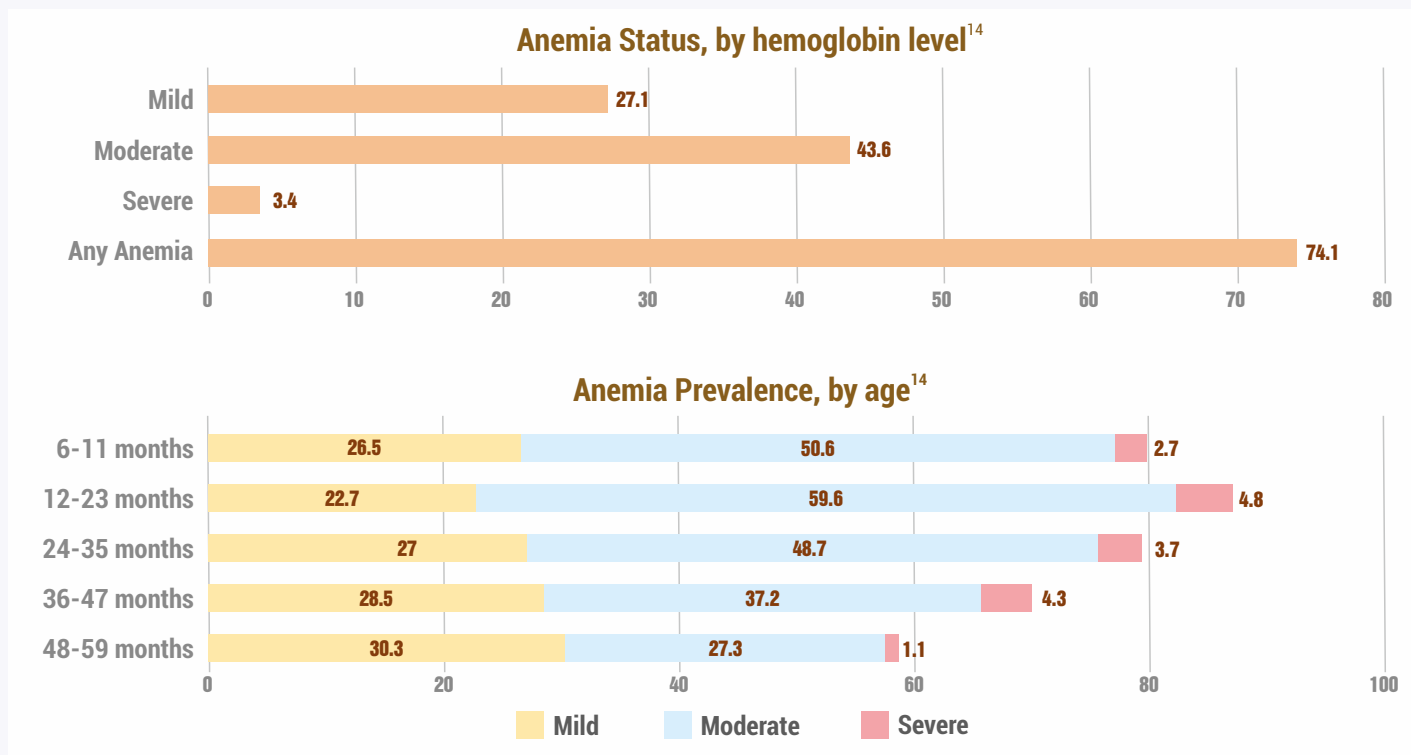


RESIDENCE



D. ANEMIA PREVALENCE

Anemia can impair physical and cognitive development among children and create long term impacts on productivity and wellbeing. This section features data on anemia prevalence by severity and age groups for children under 5.



¹⁴ Source : NFHS-3, 2006

III. IMMEDIATE DETERMINANTS

A. INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES¹⁵

This section presents indicators for assessing IYCF practices as recommended by the WHO and revised in 2008. Following optimal IYCF practices during the first 1,000 days is crucial for early child survival and growth as well as long-term health and wellbeing.

Children aged 0-23 months breastfed immediately/within an hour of birth		43.1%
	Children aged 0-5 months who were exclusively breastfed	74.8%
	Children aged 6-8 months who were fed complementary foods	46.3%
	For breastfed children (6-23 months)- A. Fed minimum number of times. Note : At least twice a day for breastfed infants 6-8 months old and at least three times a day for breastfed children 9-23 months old B. Had minimum dietary diversity Note : Minimum dietary diversity refers to four or more food groups^B fed to children aged 6-23 months	37.8% 20.9%

B. CHILD HEALTH¹⁵

Prevalence of childhood illnesses (in children aged 0-59 months)

Had diarrhea in 15 days prior to survey	5.6%
Had fever in 15 days prior to survey	10%
Had symptoms of Acute Respiratory Infection (ARI) in 15 days prior to survey	10.4%

^B The 7 food groups include the following: i. grains, roots and tubers ii. legumes and nuts iii. dairy products (milk, yoghurt, cheese) iv. Flesh foods (meat, fish, poultry, and liver/organ meats) v. eggs vi. Vitamin-A rich fruits and vegetables vii. other fruits and vegetables.

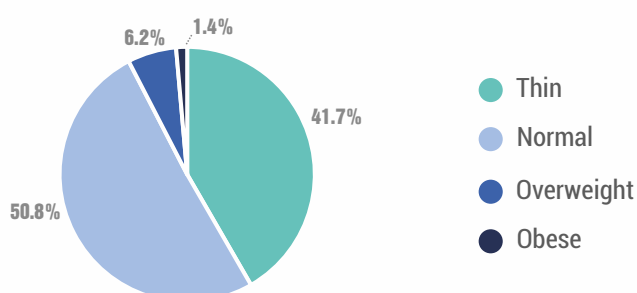
¹⁵ Source : RSoC, 2014

C. NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

Maternal health and nutrition, as well as adolescent nutrition, have important consequences for intergenerational transmission of undernutrition. Data on Body Mass Index (BMI), anemia prevalence and height among women of reproductive age are presented in this section, as are data on adolescent BMI and anemia.

C.1. WOMEN 15-49 YEARS OLD¹⁶

BMI^c levels of women aged 15-49 years



^cBody Mass Index (BMI) is defined as the weight in kilograms by the square of the height in metres (kg/m²). It is a simple index of weight-for-height which is commonly used to classify underweight, overweight and obesity in adults. Range: BMI < 18.5 = total thin, BMI 18.5-24.9 = normal, BMI 25.0-29.9 = Overweight, BMI > 30.0 = Obese [per WHO Standards]



56%

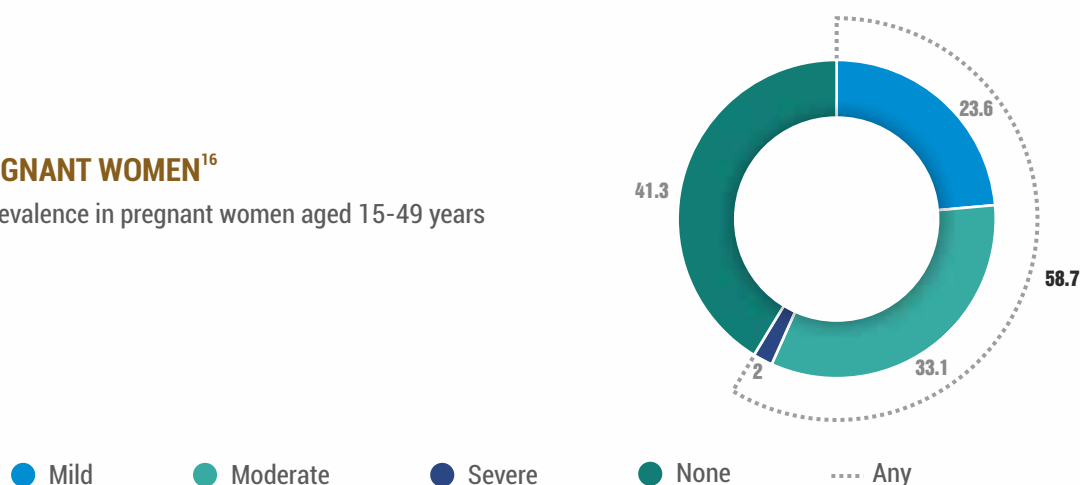
Women aged 15-49 years are anemic

1%

Women aged 15-49 years are severely anemic

C.2. PREGNANT WOMEN¹⁶

Anemia prevalence in pregnant women aged 15-49 years



● Mild

● Moderate

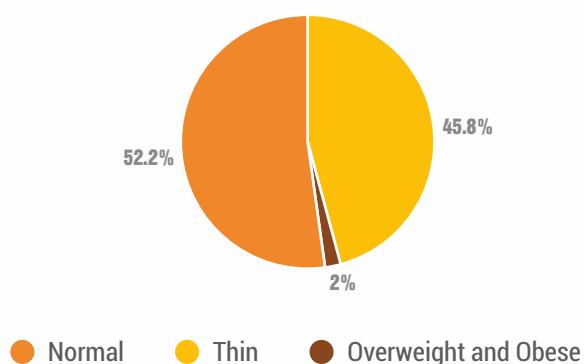
● Severe

● None

--- Any

C.3. ADOLESCENT GIRLS

BMI levels of adolescent girls aged 15-18 years¹⁷



52.1%

Adolescent girls aged 15-19 years are anemic¹⁶

1.1%

Adolescent girls aged 15-19 years are severely anemic¹⁶

¹⁶ Source : NFHS-3, 2006

¹⁷ Source : RSoC, 2014

IV. UNDERLYING DETERMINANTS

A. SOCIAL STATUS OF WOMEN

Women's status is recognized to contribute in significant ways to improving nutrition. This section presents indicators that are representative of women's social status, including measures of education, age at marriage and first birth, employment, decision making and domestic violence. It also includes the Gender Empowerment Measure that captures gender inequality along three dimensions: political participation and decision-making power, economic participation and decision-making power, and power over economic resources.



Currently married women who have 10 or more years of schooling¹⁸ **10.8%**



31.5% Women aged 20-24 years who were married before the age of 18¹⁹

21.2 Average age at marriage¹⁹

Gender Empowerment Measure^{D,20}

0.5

0.5

National Average²⁰



Female workforce participation rate²² **32.6%**

Currently married women who make decisions about²³:



21.6% Own healthcare



4.7% Major household purchase



30.4% Purchases for daily household needs



6.2% Visits to her family/friends/relatives



49.1% Women who have experienced any form of physical/sexual/emotional violence²³

52.9% Ever married women who justify hitting/wife-beating (for either of the reasons mentioned)²³

^D The Gender Empowerment Measure is a weighted average index based on indicators that are classified into three dimensions: a. political participation and decision-making power b. economic participation and decision-making power and c. power over economic resources. The index ranges from a minimum of 0 to a maximum of 1, with a higher score indicating greater empowerment of women. (More information available at <http://wcd.nic.in/publication/GDIGEReport/Part3.pdf>.)

¹⁸ Source : DLHS-3, 2007-08

¹⁹ Source : RSoC, 2014

²⁰ Source : MoWCD, 2006

²² Source : Women and Men in India, 16th Issue MoSPI, 2014

²³ Source : NFHS-3, 2006

B. WATER AND SANITATION

Poor hygiene and sanitation, by directly increasing exposure and susceptibility to infections, are associated with undernutrition among children. This section covers key indicators on access to safe drinking water and availability of sanitation facilities at the state level. It also includes the expenditure on toilet construction under the Total Sanitation Campaign.



87.7%

Households with access to improved sources of drinking water^{E, 24}

29.5%

Households using improved sanitation facility^{F, 24}



63.4%

Households practicing open defecation²⁴

78.8 M

Expenditure on toilets under Total Sanitation Campaign (TSC)^{G, 25}



1,065 M

National Average²⁵

C. AGRICULTURE AND FOOD SECURITY

Agriculture productivity and food security can affect household access to foods necessary for a healthy diet. Thus, this section presents indicators related to agricultural growth and food consumption patterns in the state, indicating the level of food security in the state relative to the national situation.



4.4%

Growth rate of agriculture from 2007-2012²⁶



7.9%

Share in India's total foodgrain production²⁷



Mean Calorie intake per person per day (in Kcal)²⁸

RURAL

URBAN

2234

2233

2209

2206

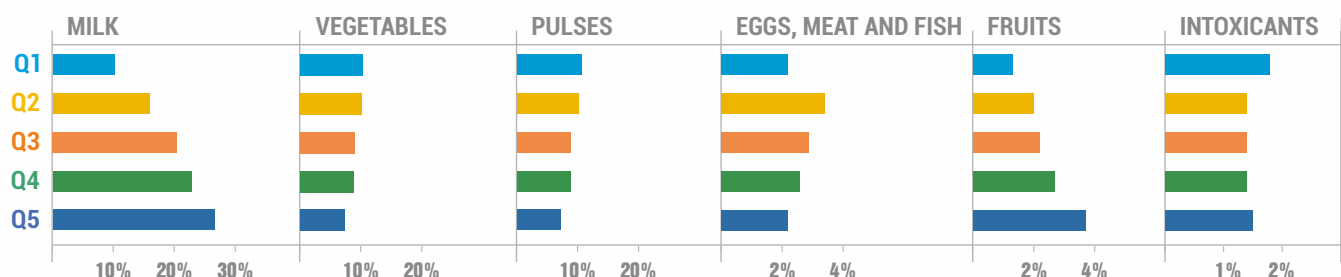
MADHYA PRADESH

INDIA AVG

MADHYA PRADESH

INDIA AVG

Expenditure on food items by income quintiles²⁸



^E Improved sources of drinking water include: piped water into dwelling, piped water to yard/plot, public tap or standpipe, tubewell or borehole, protected dug well, protected spring, and rainwater (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>).

^F Improved sanitation means households using improved toilets that include: flush toilet, piped sewer system, septic tank, flush/pour flush to pit latrine, ventilated improved pit latrine, pit latrine with slab, composting toilet, special case (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>); excludes those households who are using improved toilets but sharing toilet facilities with other households.

^G Besides toilet construction subsidies, this expenditure also includes funding other activities such as solid and liquid waste management, IEC activities for sustainable demand generation for sanitation facilities, assistance to production centers of sanitary materials and rural sanitary marts, provision of construction of community sanitary complexes, provision of sanitation facilities in govt. schools and Anganwadis in govt. buildings etc.

²⁴ Source : RSoC, 2014

²⁵ Source : Indiastat, Rajya Sabha Unstarred Question No. 2950, dated on 30.08.2011, 2011-12

²⁶ Source : Indiastat, compiled by datanet from Rajyasabha & Lok Sabha unstarred questions no. 3039, 4535. 2007-12

²⁷ Source : Indiastat, Ministry of Agriculture, Government of India 2011-2012

²⁸ Source : NSSO, 68th round-Nutritional Intake in India, 2011-12

V. STATUS OF NUTRITION-RELEVANT INTERVENTIONS

A. NUTRITION-SPECIFIC INTERVENTIONS

The financial resources allocated to, and spent on direct nutrition-specific interventions can determine the scale, coverage and quality of interventions to reach vulnerable target populations. These services, in India, are delivered both by the Integrated Child Development Scheme (ICDS) and the National Health Mission (NHM). This section includes data on the coverage of interventions delivered by these two key centrally-sponsored schemes that directly impact maternal and child nutrition and health. We also include here information on the human resources and service availability of these schemes and expenditures.

A.1. COVERAGE OF ICDS AND NHM:

The Integrated Child Development Services (ICDS) aims to improve the nutrition and health status of children under-six through a package of services (supplementary nutrition, immunization, health check-up, referral services, etc.) delivered through frontline workers at the Anganwadi Centres (AWCs). This section provides information on expenditure on ICDS and coverage of its supplementary nutrition programme (SNP). This section also covers critical services provided by the health system, including provision of care for pregnant women and child immunization. Immunization plays a crucial role in complementing actions to improve nutrition. The link between undernutrition and infectious diseases is cyclical, poor nutrition increases vulnerability to infections, which in turn worsen nutrition status. Data on immunization among children are presented by residence. Here, full immunization refers to children covered with BCG, measles and 3 doses each of DPT and polio.

Beneficiaries who availed supplementary food under ICDS²⁹

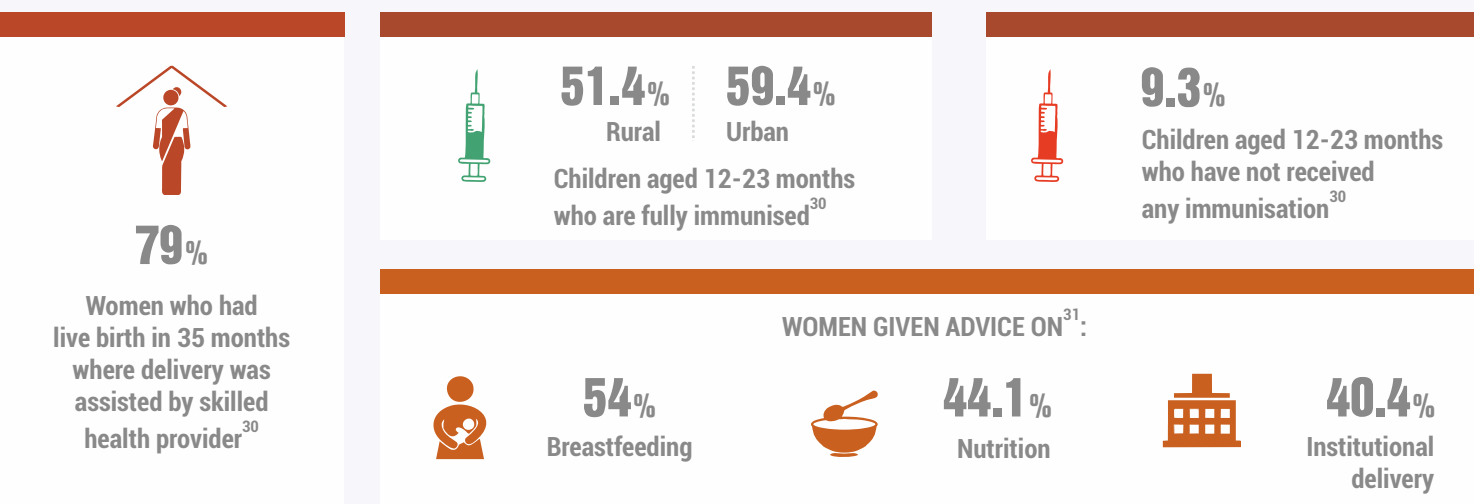
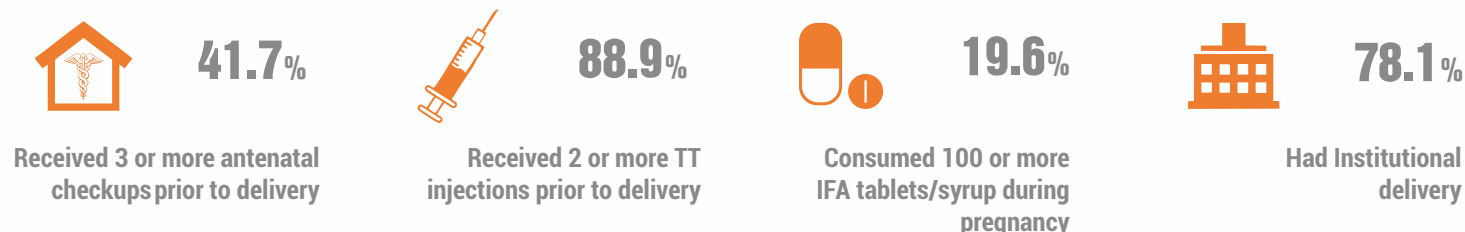
Children 6-35 months	63.5%
Children 36-71 months	47.5%
Pregnant women	47.7%
Lactating mothers	54%

Beneficiaries who received supplementary food for at least 21 days in the month prior to the survey

Children aged 6-35 months	27.2%
Children aged 36-71 months	20.1%
Pregnant women	24.4%
Lactating women	30.3%

²⁹ Source : RSoC, 2014

SERVICES PROVIDED TO WOMEN WHO HAD A LIVE BIRTH IN LAST 35 MONTHS³⁰



A.2. PERSONNEL CAPACITY OF ICDS AND NRHM:

This section features data on availability of healthcare personnel and services available to women of reproductive age (antenatal care, tetanus toxoid coverage, iron-folic acid supplementation coverage, institutional delivery and counseling). Household and individual access to health services can directly impact children's nutrition and welfare during the crucial first 1,000 days of life.

Availability of Anganwadi Centres and Workers (AWCs and AWWs) ^{H, 30}	Value
Pending or vacant Anganwadi workers to sanctioned number of workers ^{30a}	1.5%
AWWs living in the AWC village/ward	80.4%
AWWs having 10 or more years of schooling	70%
Median age of AWWs	35 years
AWCs serving to population more than the stipulated norm	58.1%

Growth Monitoring ³⁰	Value
AWCs having functional baby weighing scale	78.8%
AWCs having functional adult weighing scale	47.8%
Available WHO growth chart at AWCs	95.6%

^H Number of AWCs surveyed for Madhya Pradesh as per RSoC 2014 is 232.

³⁰ Source : RSoC, 2014

^{30a} Source : MoWCD, 2012

³¹ Source : DLHS-3, 2007-08

Training and Comprehensive Knowledge ³²	Value
AWWs having correct knowledge of intake of food by pregnant women	94.4%
AWWs having correct knowledge of normal birth weight of children	86.1%
AWWs having correct knowledge of initiation of breastfeeding within one hour	98.4%
AWWs having correct knowledge of exclusive breastfeeding for the first six months	98.1%
AWWs having correct knowledge of appropriate age of child for complementary feeding	89.8%

Health Service Delivery Personnel	Value
ASHAs selected ³³	99%
Current density of ASHA as per Census 2011 rural population ³³	1 per 935 persons
Pending or vacant ANM positions sub centres & PHCs ³⁴	0%

A.3. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SPECIFIC INTERVENTIONS

Expenditure on Schemes (in million dollars)	In million USD	National Average
ICDS (ICDS general + SNP + training) (women and children) ³⁵	245	75
NRHM expenditure (Central Government) ³⁶	152.6	68.8
NRHM expenditure (State Government) ³⁶	31.5	9.3

B. NUTRITION-SENSITIVE INTERVENTIONS

This section includes information on expenditure and coverage of key centrally-sponsored schemes that indirectly impact maternal and child nutrition. These are: the Mid Day Meal Scheme (MDMS), Public Distribution System (PDS), and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

B.1. COVERAGE OF SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS

Coverage of Schemes	Value
MDMS (base: eligible children*) ³⁷	47.4%
PDS (base: rural and urban households reporting consumption) ³⁸	36.6%
MGNREGA (base: rural persons 18 years and above registered in MGNREG job card and demanded work during last 365 days) ³⁹	64.8%

* All children studying in primary & upper primary classes in schools supported under Sarva Shiksha Abhiyan and NCLP (National Child Labour Project) run by Ministry of Labour.

B.2. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS:

Expenditure on Schemes (in million dollars)	In million USD	National Average
MDMS ⁴⁰	130	47
PDS ⁴¹	786.7	475.3
MGNREGA ⁴²	518	214

³² Source : RSoC, 2014

³³ Source : NRHM, 2013

³⁴ Source : MoHFW, 2013

³⁵ Source : Lok Sabha Unstarred Question # 846 dated 27.02.2015, 2012-13

³⁶ Source : Lok Sabha Annexured Unstarred Question # 409 dated 6.12.2013, 2012-13

³⁷ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/lsq15/15/as216.htm 2011-12

³⁸ Source : Report No. 558, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

³⁹ Source : Report No. 554, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

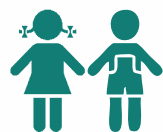
⁴⁰ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014, 2012-13

⁴¹ Source : Food Corporation of India 2013, 2012-13

⁴² Source : Lok Sabha Annexured Unstarred Question # 3835 dated 19.03.2015, 2012-13

FAST FACTS ON NUTRITION AND ITS DETERMINANTS IN MAHARASHTRA

World Health Assembly Nutrition Targets



CHILDREN UNDER 5 YEARS

35.4%
Stunted¹

18.6%
Wasted¹

World Health Assembly Nutrition Targets



73.4%

Infants 0-5 months old who are exclusively breastfed¹



20.6%

Children under 3 years who have low birth weight (<2.5 kgs)¹



65.3%

Women 15-49 years old with anemia²

Immediate Determinants



53.4%

Infants 6-8 months old who receive solid, semi-solid or soft foods¹

19.2%

Infants & young children 6-23 months old who achieve minimal diet diversity in complementary feeding¹



73.7%

Children 6-59 months old with anemia²



12.5%

Children 6-59 months old who had diarrhea in 15 days prior to survey¹

Immediate Determinants



35.1%

Children 6-35 months old who received supplementary food under ICDS for 21 days in the month prior to survey¹



77.4%

Children 12-23 months old who are fully immunized¹



73.3%

Mothers of children under 36 months old who received three or more antenatal checkups¹

Underlying Determinants



43.4%

Currently married women with 10 or more years of schooling²



20.3%

Women aged 20-24 years who were married before the age of 18¹



54.2%

Adolescent girls 15-18 years old with low BMI (<18.5)¹

Underlying Determinants



36.5%

Households practicing open defecation¹



17.4%

Population below state-specific poverty line³

Does state have a high-level nutrition mission?

YES

¹ Source : RSoC, 2014

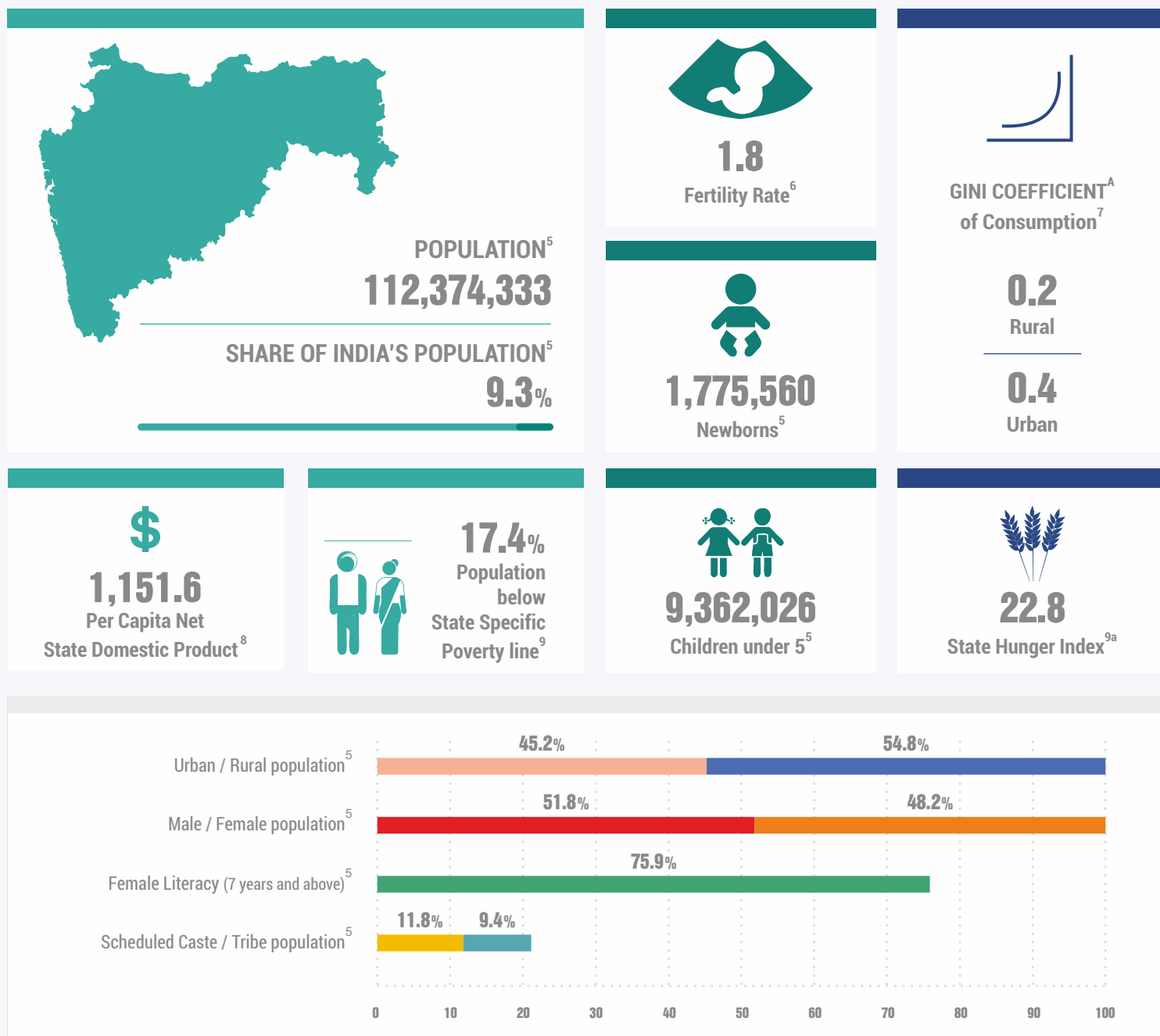
² Source : DLHS4, 2012-13

³ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Govt. of India

I. CONTEXT

A. DEMOGRAPHIC CONTEXT

This section highlights the demographic composition of the state in terms of male-female, rural-urban, and SC-ST ratios, literacy and fertility rates. In addition, it also includes the size of the population of newborns and children less than five years of age (as of the Census of India, 2011) to illustrate the size of the target population for nutrition-related interventions that need to reach this vulnerable population.



A : Gini coefficient is a measure of inequality of distribution. A Gini coefficient of 0 represents perfect equality, while a value of 100 implies perfect inequality. (See Appendix A for more information)

⁵ Source : Primary Census Abstract, Census, 2011

⁶ Source : SRS, 2013

⁷ Source : Planning Commission Estimates: NSSO 66th round-Employment and Unemployment Survey, 2009-10

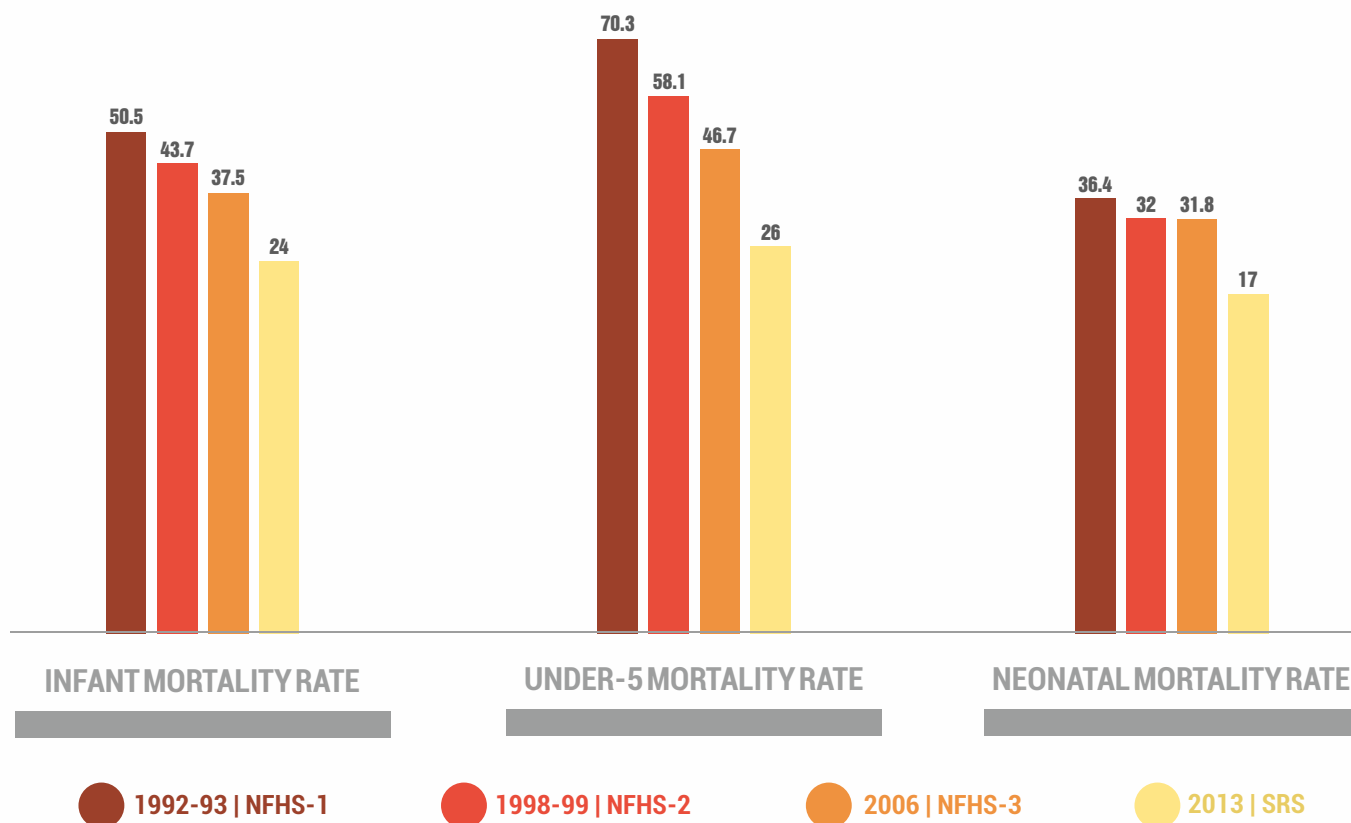
⁸ Source : Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14; http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82

⁹ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Government of India, 2011-12 : http://planningcommission.nic.in/news/pre_pov2307.pdf

^{9a} Source : IFPRI, India State Hunger Index, 2009

B. CHILD MORTALITY PER THOUSAND LIVE BIRTHS

This section illustrates trends in mortality in neonates, infants and children under 5 years, since 1992. The purpose of this is to highlight the success achieved by individual states in averting deaths of children since the economic growth of the 1990s.



II. NUTRITIONAL STATUS AMONG CHILDREN

This section presents data on nutrition outcome indicators (stunting, wasting, and underweight) and anemia prevalence. Anthropometric measures for children under 5 (stunting, wasting, and underweight) are presented over time periods, by age groups and by background characteristics. This data aims to convey the prevalence and severity of undernutrition in the state.

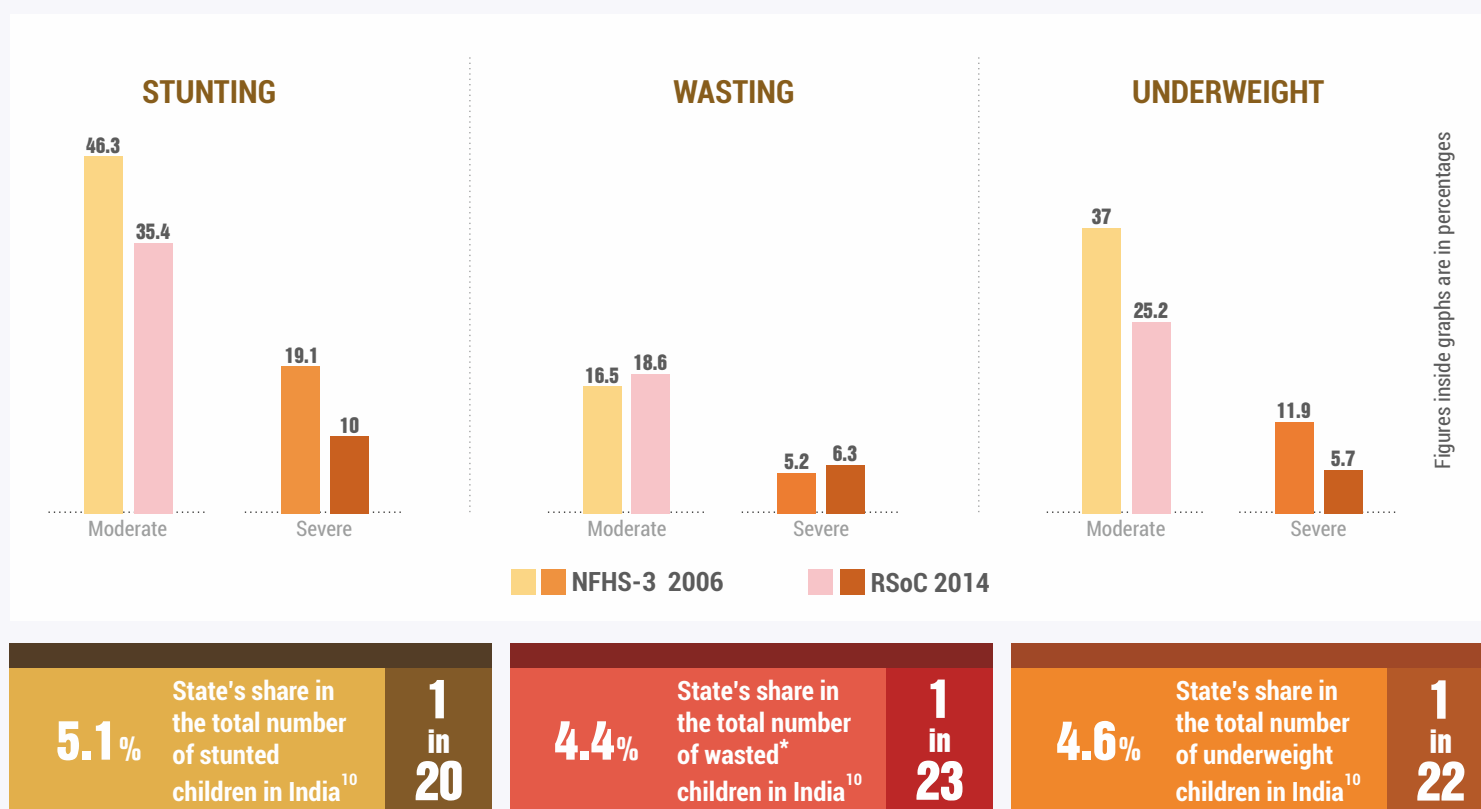
A. CHILD UNDERNUTRITION, BY TIME PERIOD

ANTHROPOMETRIC MEASURES

Stunting is inadequate height for age, which is indicative of chronic or cumulative nutritional deprivation in early childhood. A stunted child's height-for-age is below -2 standard deviations from the median height-for-age (termed HAZ) of the WHO Child Growth Standards, while a severely stunted child is below -3 standard deviations.

Wasting is inadequate weight for height, which points to acute or short-term undernutrition. A wasted child's weight-for-height (WHZ) is below -2 standard deviations from the WHO Child Growth Standards; a severely wasted child is below -3 standard deviations. (Another way to determine severe wasting or severe acute malnutrition is through a measurement of a child's mid-upper arm circumference (MUAC).

Underweight is inadequate weight for age, a composite indicator that encompasses stunting and wasting. An underweight child's weight-for-age (WAZ) is below -2 standard deviations from the WHO Child Growth Standards; again, a severely underweight child is below -3 standard deviations.

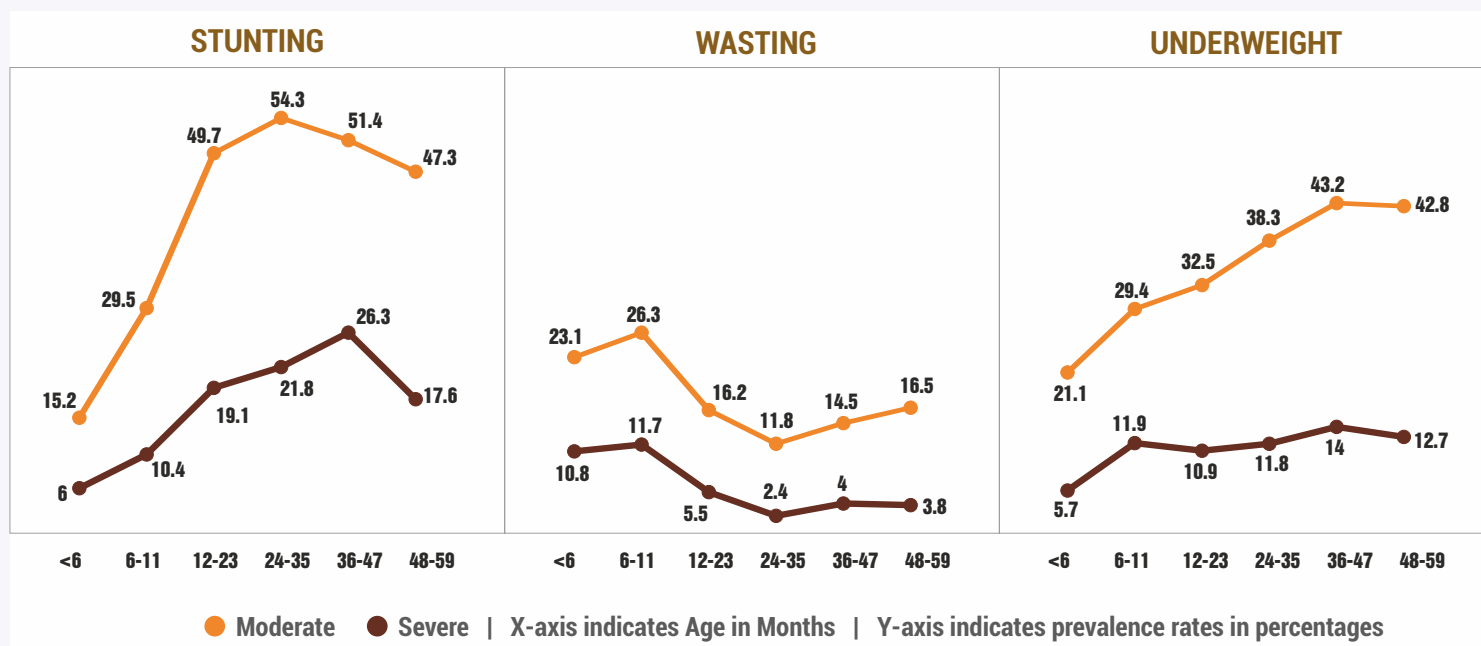


*Wasting is subject to seasonal variations either in food supply or disease prevalence and hence may not be comparable across groups of children measured at different times of the year within a survey round as well as between different survey rounds.

¹⁰ Source : NFHS-3, 2006

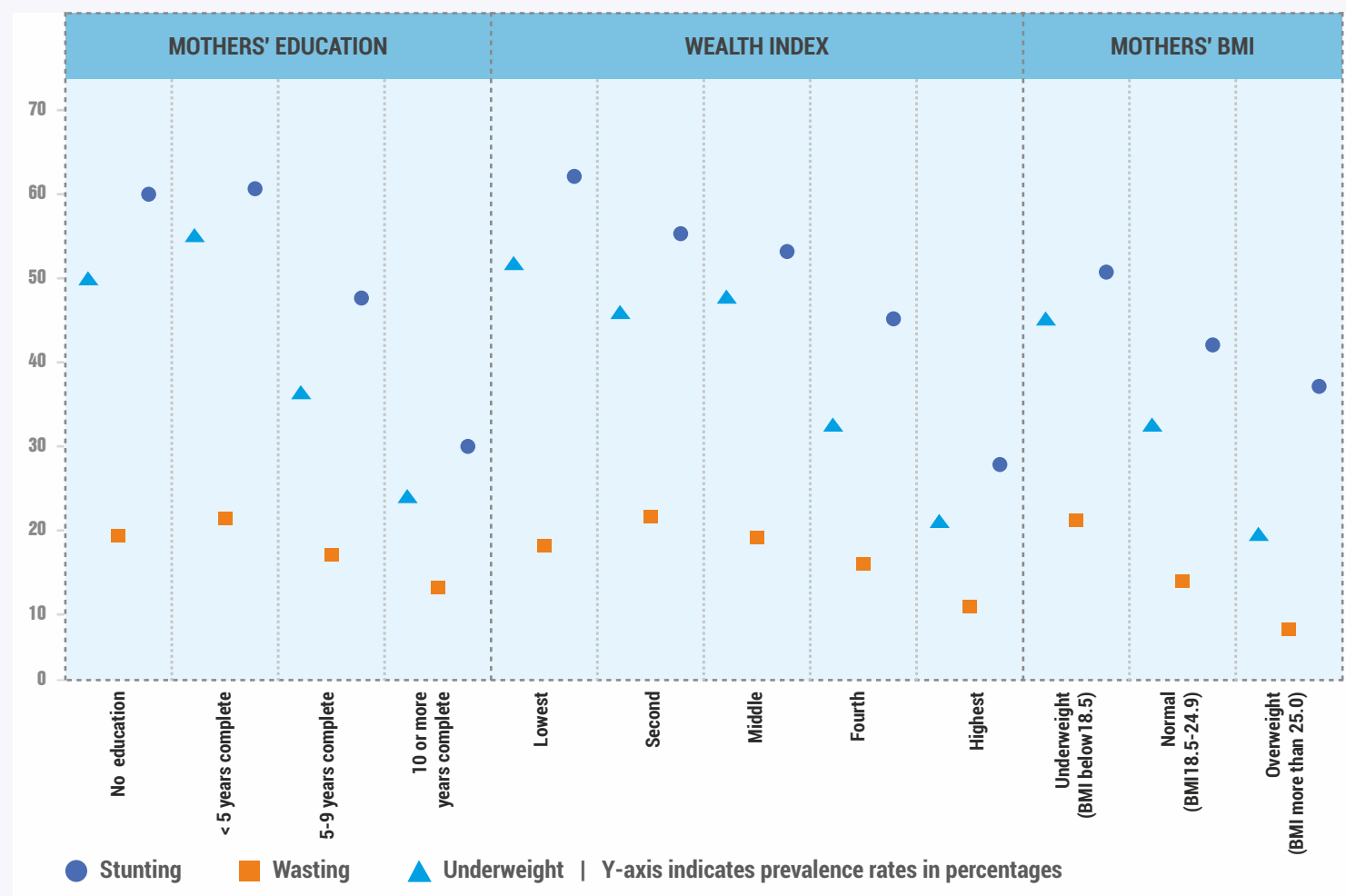
B. CHILD UNDERNUTRITION, BY AGE GROUPS¹¹

Percentage of moderate (below -2 SD from the WHO growth standards) and severe (below -3 SD) stunting, wasting and underweight are available for 6 age groups among children under 5.

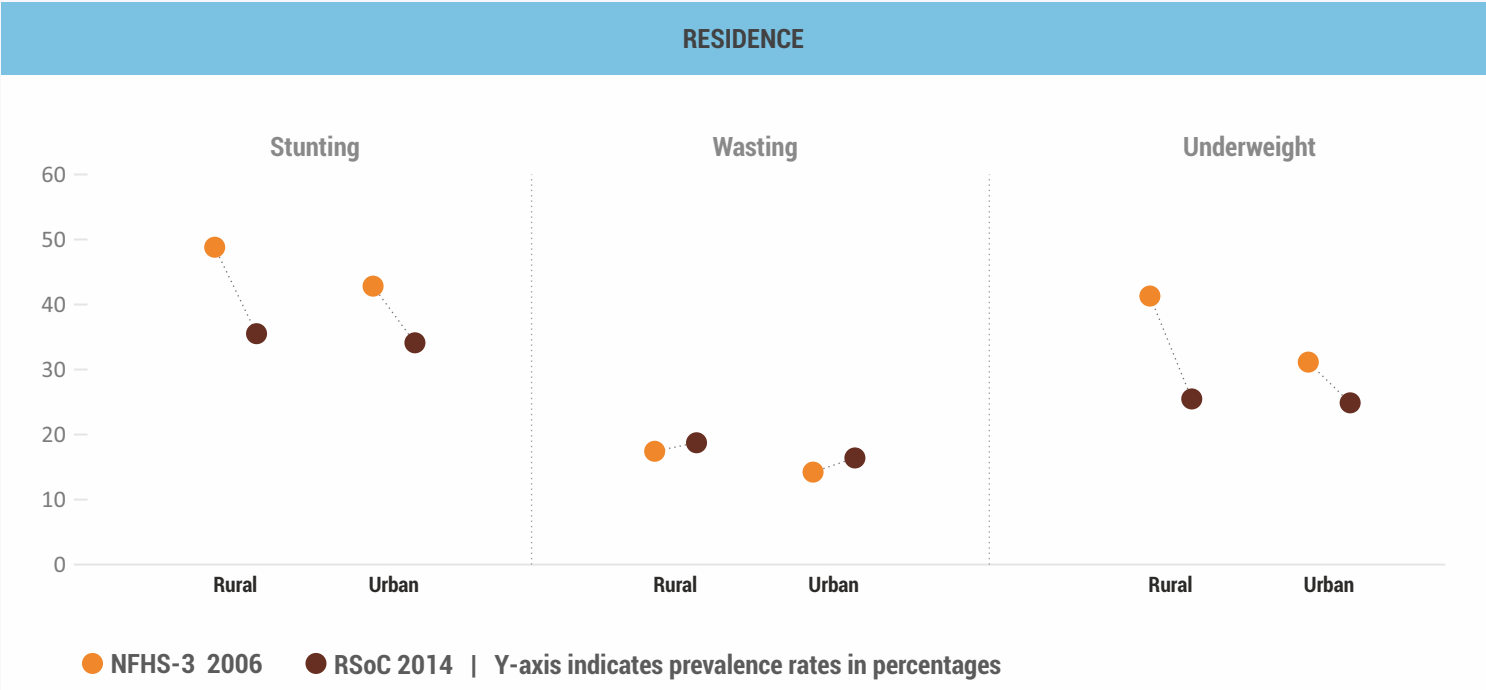
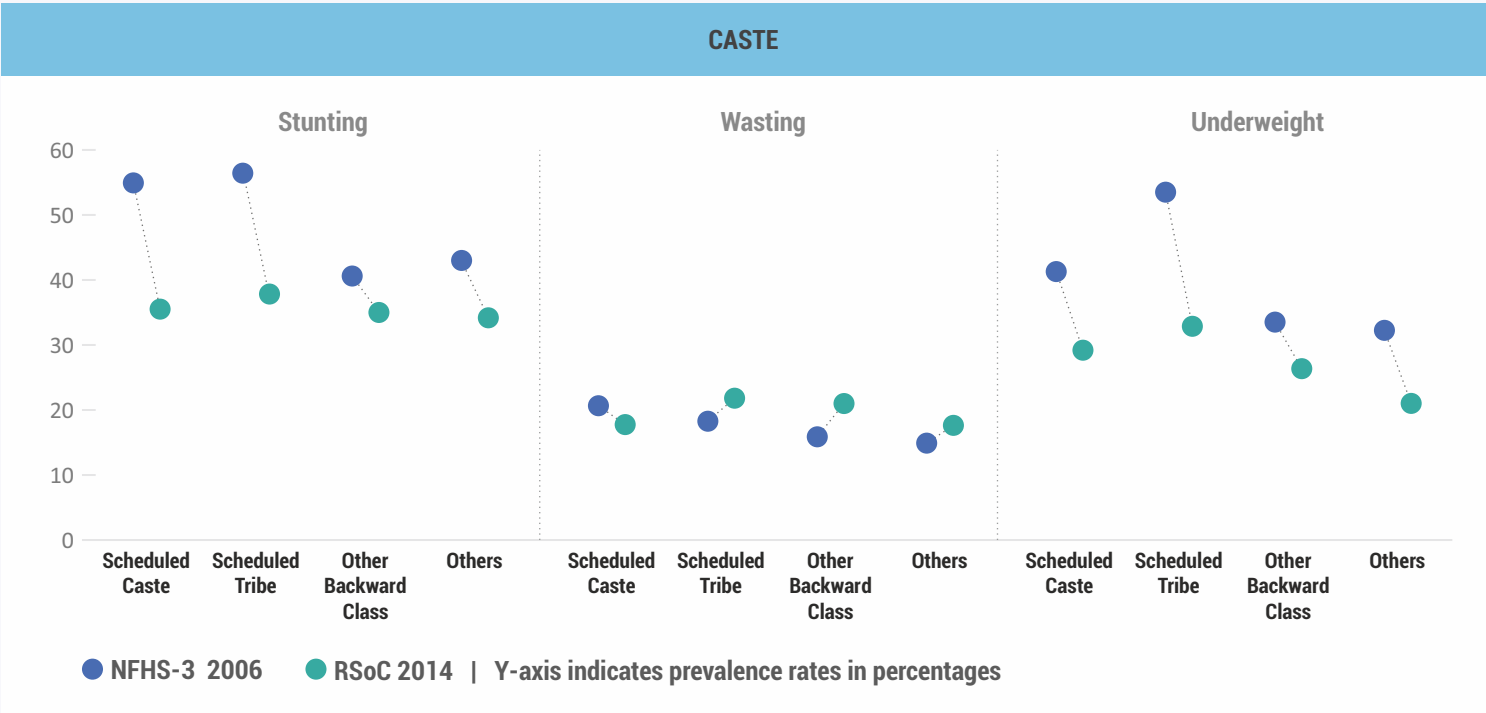


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In this section, child undernutrition outcomes are presented, along with key socioeconomic drivers that are known to be associated with child nutrition, such as caste, residence, mother's health and education, and household income.

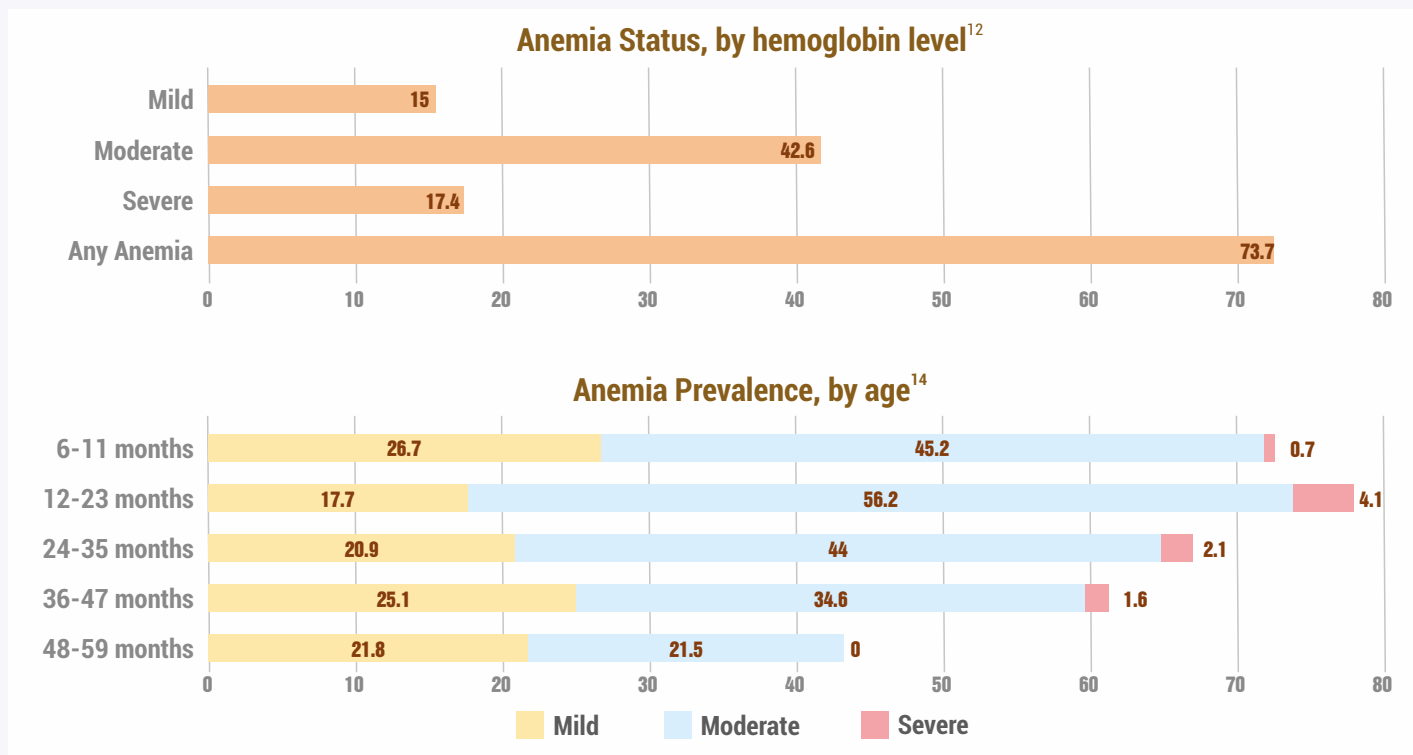


¹¹ Source : NFHS-3, 2006



D. ANEMIA PREVALENCE

Anemia can impair physical and cognitive development among children and create long term impacts on productivity and wellbeing. This section features data on anemia prevalence by severity and age groups for children under 5.



¹² Source : DLHS-4, 2012-13

¹³ Source : NFHS-3, 2006

III. IMMEDIATE DETERMINANTS

A. INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES¹⁴

This section presents indicators for assessing IYCF practices as recommended by the WHO and revised in 2008. Following optimal IYCF practices during the first 1,000 days is crucial for early child survival and growth as well as long-term health and wellbeing.

Children aged 0-23 months breastfed immediately/within an hour of birth		55.9%
	Children aged 0-5 months who were exclusively breastfed	73.4%
	Children aged 6-8 months who were fed complementary foods	53.4%
	For breastfed children (6-23 months)- A. Fed minimum number of times. Note : At least twice a day for breastfed infants 6-8 months old and at least three times a day for breastfed children 9-23 months old B. Had minimum dietary diversity Note : Minimum dietary diversity refers to four or more food groups^B fed to children aged 6-23 months	34%

B. CHILD HEALTH¹⁴

Prevalence of childhood illnesses (in children aged 0-59 months)

Had diarrhea in 15 days prior to survey	12.5%
Had fever in 15 days prior to survey	17.5%
Had symptoms of Acute Respiratory Infection (ARI) in 15 days prior to survey	10.1%

^B The 7 food groups include the following: i. grains, roots and tubers ii. legumes and nuts iii. dairy products (milk, yoghurt, cheese) iv. Flesh foods (meat, fish, poultry, and liver/organ meats) v. eggs vi. Vitamin-A rich fruits and vegetables vii. other fruits and vegetables.

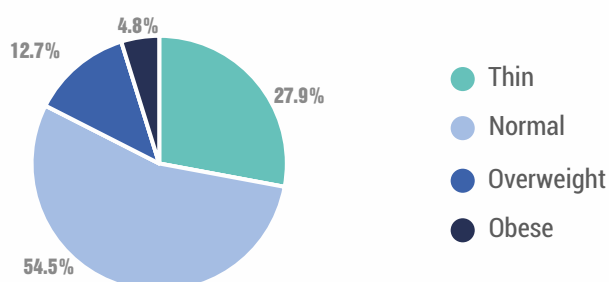
¹⁴ Source : RSoC, 2014

C. NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

Maternal health and nutrition, as well as adolescent nutrition, have important consequences for intergenerational transmission of undernutrition. Data on Body Mass Index (BMI), anemia prevalence and height among women of reproductive age are presented in this section, as are data on adolescent BMI and anemia.

C.1. WOMEN 15-49 YEARS OLD¹⁵

BMI^c levels of women aged 15-49 years



^cBody Mass Index (BMI) is defined as the weight in kilograms by the square of the height in metres (kg/m²). It is a simple index of weight-for-height which is commonly used to classify underweight, overweight and obesity in adults. Range: BMI < 18.5 = total thin, BMI 18.5-24.9 = normal, BMI 25.0-29.9 = Overweight, BMI > 30.0 = Obese [per WHO Standards]



65.3%

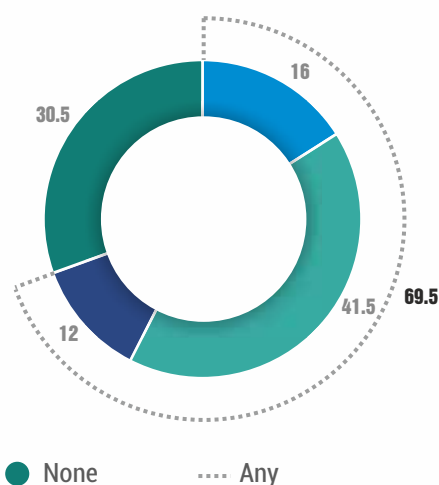
Women aged 15-49 years are anemic

9.9%

Women aged 15-49 years are severely anemic

C.2. PREGNANT WOMEN¹⁵

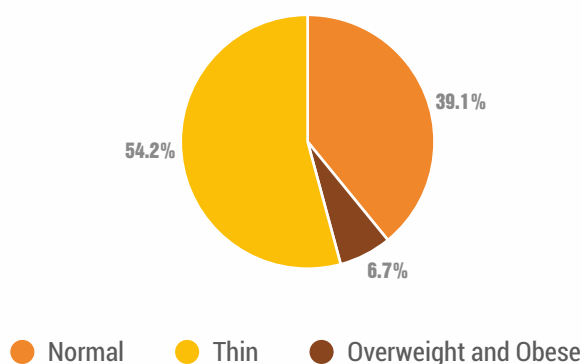
Anemia prevalence in pregnant women aged 15-49 years



● Mild ● Moderate ● Severe ● None ---- Any

C.3. ADOLESCENT GIRLS

BMI levels of adolescent girls aged 15-18 years¹⁶



51.7%

Adolescent girls aged 15-19 years are anemic^{15a}

1.7%

Adolescent girls aged 15-19 years are severely anemic^{15a}

¹⁵ Source : DLHS-4, 2012-13

^{15a} Source : NFHS-3, 2006

¹⁶ Source : RSoC, 2014

IV. UNDERLYING DETERMINANTS

A. SOCIAL STATUS OF WOMEN

Women's status is recognized to contribute in significant ways to improving nutrition. This section presents indicators that are representative of women's social status, including measures of education, age at marriage and first birth, employment, decision making and domestic violence. It also includes the Gender Empowerment Measure that captures gender inequality along three dimensions: political participation and decision-making power, economic participation and decision-making power, and power over economic resources.



Currently married women who have 10 or more years of schooling¹⁷ **43.4%**



20.3% Women aged 20-24 years who were married before the age of 18¹⁹ **22** Average age at marriage¹⁹

Gender Empowerment Measure^{D,19}

0.5

0.5

National Average¹⁹



Female workforce participation rate²² **31.1%**

Currently married women who make decisions about²²:



33.9% Own healthcare



5.5% Major household purchase



36% Purchases for daily household needs



12.7% Visits to her family/friends/relatives



33.4% Women who have experienced any form of physical/sexual/emotional violence²²

53% Ever married women who justify hitting/wife-beating (for either of the reasons mentioned)²²

^D The Gender Empowerment Measure is a weighted average index based on indicators that are classified into three dimensions: a. political participation and decision-making power b. economic participation and decision-making power and c. power over economic resources. The index ranges from a minimum of 0 to a maximum of 1, with a higher score indicating greater empowerment of women. (More information available at <http://wcd.nic.in/publication/GDIGEReport/Part3.pdf>.)

¹⁸ Source : DLHS-4, 2012-13

¹⁹ Source : RSoC, 2014

²⁰ Source : MoWCD, 2006

²² Source : Women and Men in India, 16th Issue MoSPI, 2014

²³ Source : NFHS-3, 2006

B. WATER AND SANITATION

Poor hygiene and sanitation, by directly increasing exposure and susceptibility to infections, are associated with undernutrition among children. This section covers key indicators on access to safe drinking water and availability of sanitation facilities at the state level. It also includes the expenditure on toilet construction under the Total Sanitation Campaign.



95.1%

Households with access to improved sources of drinking water^{E, 23}

43.5%

Households using improved sanitation facility^{F, 23}



36.5%

Households practicing open defecation²³

51.4 M

Expenditure on toilets under Total Sanitation Campaign (TSC)^{G, 24}



1065 M

National Average²⁴

C. AGRICULTURE AND FOOD SECURITY

Agriculture productivity and food security can affect household access to foods necessary for a healthy diet. Thus, this section presents indicators related to agricultural growth and food consumption patterns in the state, indicating the level of food security in the state relative to the national situation.



4.4%

Growth rate of agriculture from 2007-2012²⁵



4.8%

Share in India's total foodgrain production²⁶



Mean Calorie intake per person per day (in Kcal)²⁷

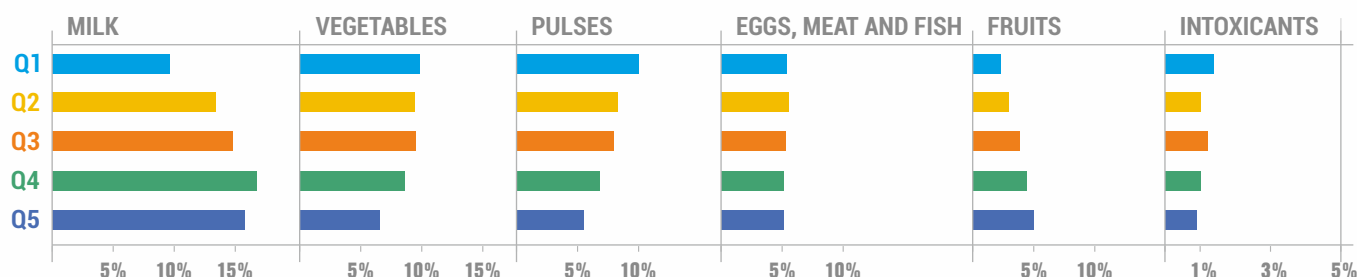
RURAL

URBAN

2260 **2233**
MAHARASHTRA INDIA AVG

2227 **2206**
MAHARASHTRA INDIA AVG

Expenditure on food items by income quintiles²⁷



^E Improved sources of drinking water include: piped water into dwelling, piped water to yard/plot, public tap or standpipe, tubewell or borehole, protected dug well, protected spring, and rainwater (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>).

^F Improved sanitation means households using improved toilets that include: flush toilet, piped sewer system, septic tank, flush/pour flush to pit latrine, ventilated improved pit latrine, pit latrine with slab, composting toilet, special case (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>); excludes those households who are using improved toilets but sharing toilet facilities with other households.

^G Besides toilet construction subsidies, this expenditure also includes funding other activities such as solid and liquid waste management, IEC activities for sustainable demand generation for sanitation facilities, assistance to production centers of sanitary materials and rural sanitary marts, provision of construction of community sanitary complexes, provision of sanitation facilities in govt. schools and Anganwadis in govt. buildings etc.

²³ Source : RSoC, 2014

²⁴ Source : Indiastat, Rajya Sabha Unstarred Question No. 2950, dated on 30.08.2011, 2011-12

²⁵ Source : Indiastat, compiled by datanet from Rajyasabha & Lok Sabha unstarred questions no. 3039, 4535. 2007-12

²⁶ Source : Indiastat, Ministry of Agriculture, Government of India 2011-2012

²⁷ Source : NSS 68th Round 2011-12

V. STATUS OF NUTRITION-RELEVANT INTERVENTIONS

A. NUTRITION-SPECIFIC INTERVENTIONS

The financial resources allocated to, and spent on direct nutrition-specific interventions can determine the scale, coverage and quality of interventions to reach vulnerable target populations. These services, in India, are delivered both by the Integrated Child Development Scheme (ICDS) and the National Health Mission (NHM). This section includes data on the coverage of interventions delivered by these two key centrally-sponsored schemes that directly impact maternal and child nutrition and health. We also include here information on the human resources and service availability of these schemes and expenditures.

A.1. COVERAGE OF ICDS AND NHM:

The Integrated Child Development Services (ICDS) aims to improve the nutrition and health status of children under-six through a package of services (supplementary nutrition, immunization, health check-up, referral services, etc.) delivered through frontline workers at the Anganwadi Centres (AWCs). This section provides information on expenditure on ICDS and coverage of its supplementary nutrition programme (SNP). This section also covers critical services provided by the health system, including provision of care for pregnant women and child immunization. Immunization plays a crucial role in complementing actions to improve nutrition. The link between undernutrition and infectious diseases is cyclical, poor nutrition increases vulnerability to infections, which in turn worsen nutrition status. Data on immunization among children are presented by residence. Here, full immunization refers to children covered with BCG, measles and 3 doses each of DPT and polio.

Beneficiaries who availed supplementary food under ICDS²⁹

Children 6-35 months	51.4%
Children 36-71 months	60.7%
Pregnant women	47.4%
Lactating mothers	42%

Beneficiaries who received supplementary food for at least 21 days in the month prior to the survey

Children aged 6-35 months	35.1%
Children aged 36-71 months	39.2%
Pregnant women	19%
Lactating women	27.3%

²⁸ Source : RSoC, 2014

SERVICES PROVIDED TO WOMEN WHO HAD A LIVE BIRTH IN LAST 35 MONTHS³⁰



73.3%

Received 3 or more antenatal checkups prior to delivery



89.9%

Received 2 or more TT injections prior to delivery



28.7%

Consumed 100 or more IFA tablets/syrup during pregnancy



90.3%

Had Institutional delivery



93%

Women who had live birth in 35 months where delivery was assisted by skilled health provider²⁹



75.6% Rural **79.6%** Urban

Children aged 12-23 months who are fully immunised²⁹



1.4%

Children aged 12-23 months who have not received any immunisation²⁹

WOMEN GIVEN ADVICE ON³⁰:



45.1%
Breastfeeding



27%
Nutrition of mother and child



19.2%
Institutional delivery

A.2. PERSONNEL CAPACITY OF ICDS AND NRHM:

This section features data on availability of healthcare personnel and services available to women of reproductive age (antenatal care, tetanus toxoid coverage, iron-folic acid supplementation coverage, institutional delivery and counseling). Household and individual access to health services can directly impact children's nutrition and welfare during the crucial first 1,000 days of life.

Availability of Anganwadi Centres and Workers (AWCs and AWWs) ^{H, 29}	Value
Pending or vacant Anganwadi workers to sanctioned number of workers ^{29a}	7.7%
AWWs living in the AWC village/ward	78.9%
AWWs having 10 or more years of schooling	87.2%
Median age of AWWs	40 years
AWCs serving to population more than the stipulated norm	43.5%

Growth Monitoring ²⁹	Value
AWCs having functional baby weighing scale	89.2%
AWCs having functional adult weighing scale	67.7%
Available WHO growth chart at AWCs	98.7%

^H Number of AWCs surveyed for Maharashtra as per RSoC 2014 is 237.

²⁹ Source : RSoC, 2014

^{29a} Source : MoWCD, 2012

³⁰ Source : DLHS-4, 2012-13

Training and Comprehensive Knowledge ³¹	Value
AWWs having correct knowledge of intake of food by pregnant women	98.3%
AWWs having correct knowledge of normal birth weight of children	76.5%
AWWs having correct knowledge of initiation of breastfeeding within one hour	95.9%
AWWs having correct knowledge of exclusive breastfeeding for the first six months	100%
AWWs having correct knowledge of appropriate age of child for complementary feeding	98.8%

Health Service Delivery Personnel	Value
ASHAs selected ³²	99.9%
Current density of ASHA as per Census 2011 rural population ³²	1 per 1045 persons
Pending or vacant ANM positions sub centres & PHCs ³³	0%

A.3. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SPECIFIC INTERVENTIONS

Expenditure on Schemes (in million dollars)	In million USD	National Average
ICDS (ICDS general + SNP + training) (women and children) ³⁴	233	75
NRHM expenditure (Central Government) ³⁵	228.7	68.8
NRHM expenditure (State Government) ³⁵	40.6	9.3

B. NUTRITION-SENSITIVE INTERVENTIONS

This section includes information on expenditure and coverage of key centrally-sponsored schemes that indirectly impact maternal and child nutrition. These are: the Mid Day Meal Scheme (MDMS), Public Distribution System (PDS), and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

B.1. COVERAGE OF SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS

Coverage of Schemes	Value
MDMS (base: eligible children*) ³⁷	41.8%
PDS (base: rural and urban households reporting consumption) ³⁸	31%
MGNREGA (base: rural persons 18 years and above registered in MGNREG job card and demanded work during last 365 days) ³⁹	41.8%

* All children studying in primary & upper primary classes in schools supported under Sarva Shiksha Abhiyan and NCLP (National Child Labour Project) run by Ministry of Labour.

B.2. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS:

Expenditure on Schemes (in million dollars)	In million USD	National Average
MDMS ⁴⁰	157	47
PDS ⁴¹	1517	475.3
MGNREGA ⁴²	362	214

³¹ Source : RSoC, 2014

³² Source : NRHM, 2013

³³ Source : MoHFW, 2013

³⁴ Source : Lok Sabha Unstarred Question # 846 dated 27.02.2015, 2012-13

³⁵ Source : Lok Sabha Annexured Unstarred Question # 409 dated 6.12.2013, 2012-13

³⁶ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/lsq15/15/as216.htm 2011-12

³⁷ Source : Report No. 558, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

³⁸ Source : Report No. 554, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

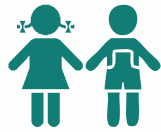
³⁹ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014, 2012-13

⁴⁰ Source : Food Corporation of India 2013, 2012-13

⁴¹ Source : Lok Sabha Annexured Unstarred Question # 3835 dated 19.03.2015, 2012-13

FAST FACTS ON NUTRITION AND ITS DETERMINANTS IN MANIPUR

World Health Assembly Nutrition Targets



CHILDREN UNDER 5 YEARS

33.2%
Stunted¹
7.1%
Wasted¹

World Health Assembly Nutrition Targets


66.8%

 Infants 0-5 months old who are exclusively breastfed¹

7.3%

 Children under 3 years who have low birth weight (<2.5 kgs)¹

65.3%

 Women 15-49 years old with anemia²

Immediate Determinants


83%

 Infants 6-8 months old who receive solid, semi-solid or soft foods¹
22.5%

 Infants & young children 6-23 months old who achieve minimal diet diversity in complementary feeding¹

72.4% Children 6-59 months old with anemia²

16.5%

 Children 6-59 months old who had diarrhea in 15 days prior to survey¹

Immediate Determinants


0%

 Children 6-35 months old who received supplementary food under ICDS for 21 days in the month prior to survey¹

55.2%

 Children 12-23 months old who are fully immunized¹

79.4%

 Mothers of children under 36 months old who received three or more antenatal checkups¹

Underlying Determinants


38.5%

 Currently married women with 10 or more years of schooling²

22.9%

 Women aged 20-24 years who were married before the age of 18¹

21.9%

 Adolescent girls 15-18 years old with low BMI (<18.5)¹

Underlying Determinants


12.6%

 Households practicing open defecation¹

36.9%

 Population below state-specific poverty line³

Does state have a high-level nutrition mission?

NO
¹ Source : RSoC, 2014

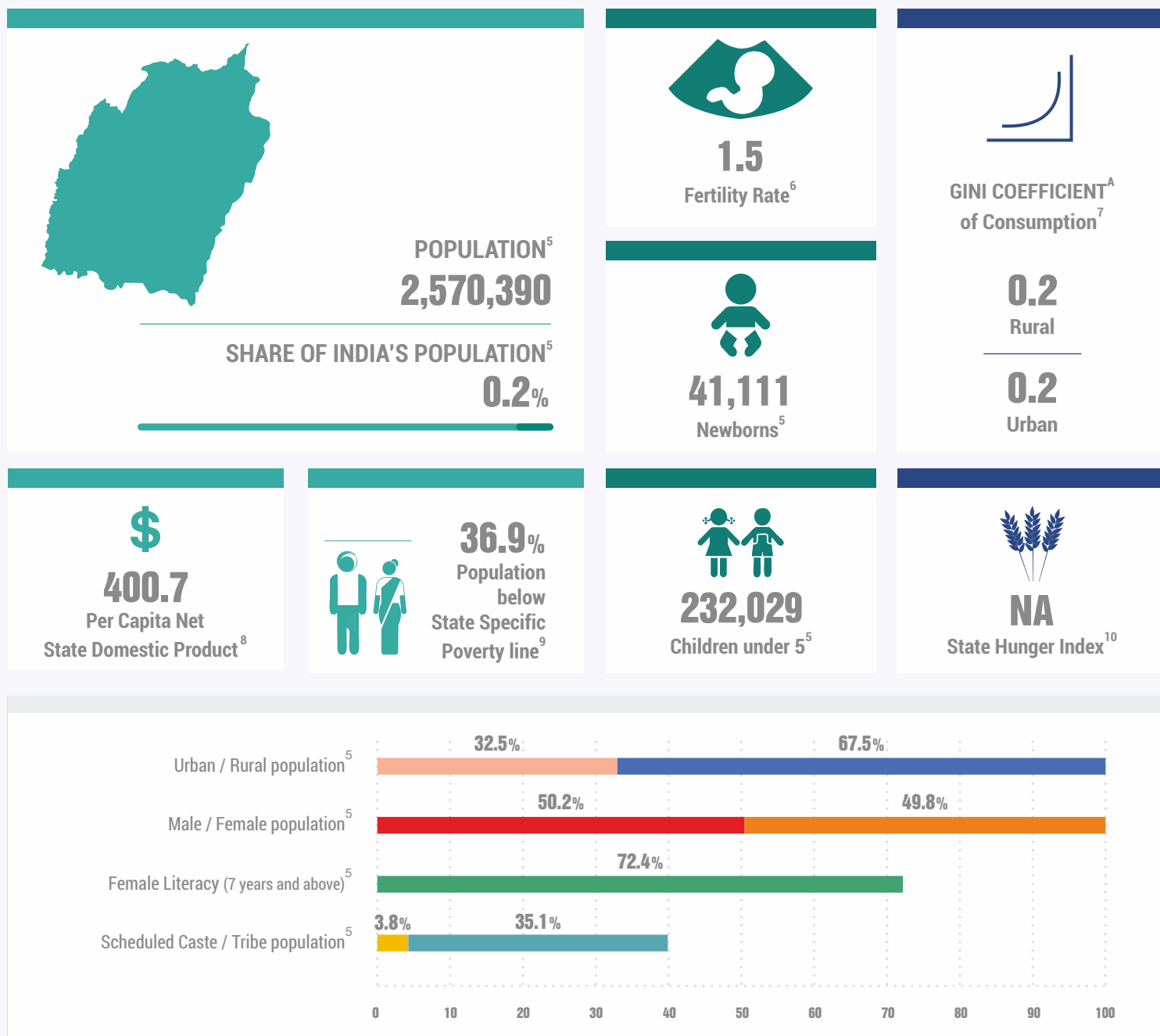
² Source : DLHS4, 2012-13

³ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Govt. of India

I. CONTEXT

A. DEMOGRAPHIC CONTEXT

This section highlights the demographic composition of the state in terms of male-female, rural-urban, and SC-ST ratios, literacy and fertility rates. In addition, it also includes the size of the population of newborns and children less than five years of age (as of the Census of India, 2011) to illustrate the size of the target population for nutrition-related interventions that need to reach this vulnerable population.



A : Gini coefficient is a measure of inequality of distribution. A Gini coefficient of 0 represents perfect equality, while a value of 100 implies perfect inequality. (See Appendix A for more information)

⁵ Source : Primary Census Abstract, Census, 2011

⁶ Source : SRS, 2009

⁷ Source : Planning Commission Estimates: NSSO 66th round-Employment and Unemployment Survey, 2009-10

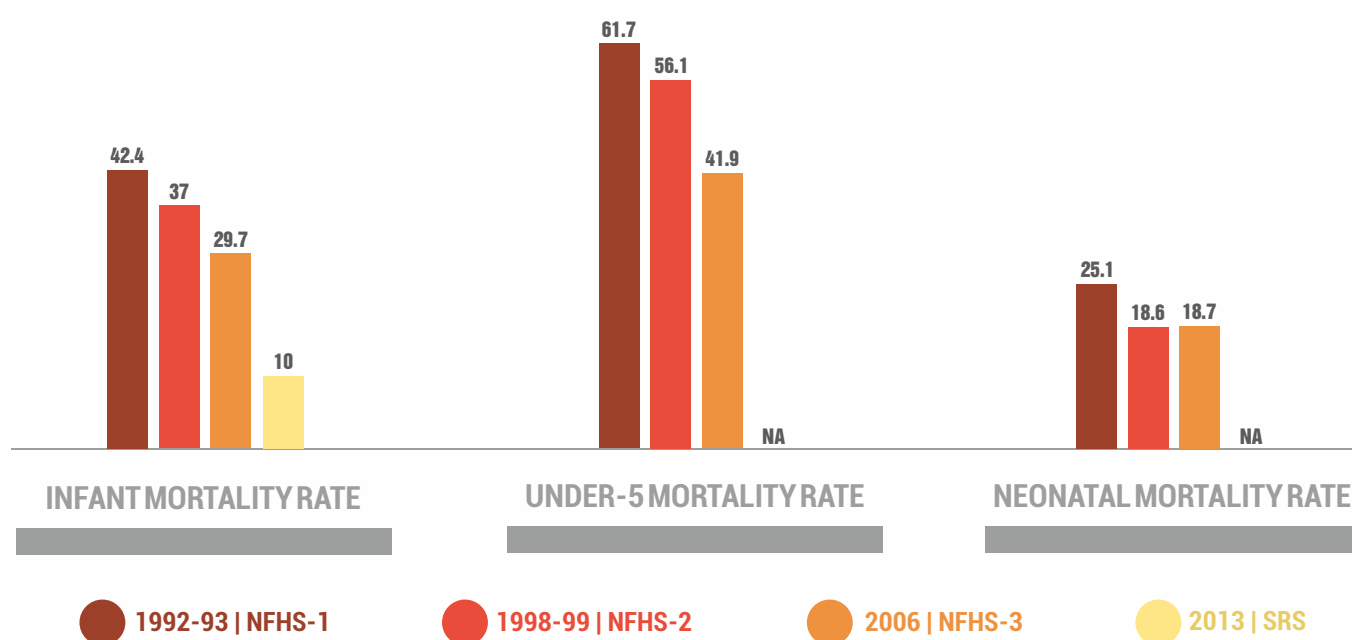
⁸ Source : Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14 : http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82

⁹ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Government of India, 2011-12 : http://planningcommission.nic.in/news/pre_pov2307.pdf

¹⁰ Source : IFPRI, India State Hunger Index, 2009

B. CHILD MORTALITY PER THOUSAND LIVE BIRTHS

This section illustrates trends in mortality in neonates, infants and children under 5 years, since 1992. The purpose of this is to highlight the success achieved by individual states in averting deaths of children since the economic growth of the 1990s.



II. NUTRITIONAL STATUS AMONG CHILDREN

This section presents data on nutrition outcome indicators (stunting, wasting, and underweight) and anemia prevalence. Anthropometric measures for children under 5 (stunting, wasting, and underweight) are presented over time periods, by age groups and by background characteristics. This data aims to convey the prevalence and severity of undernutrition in the state.

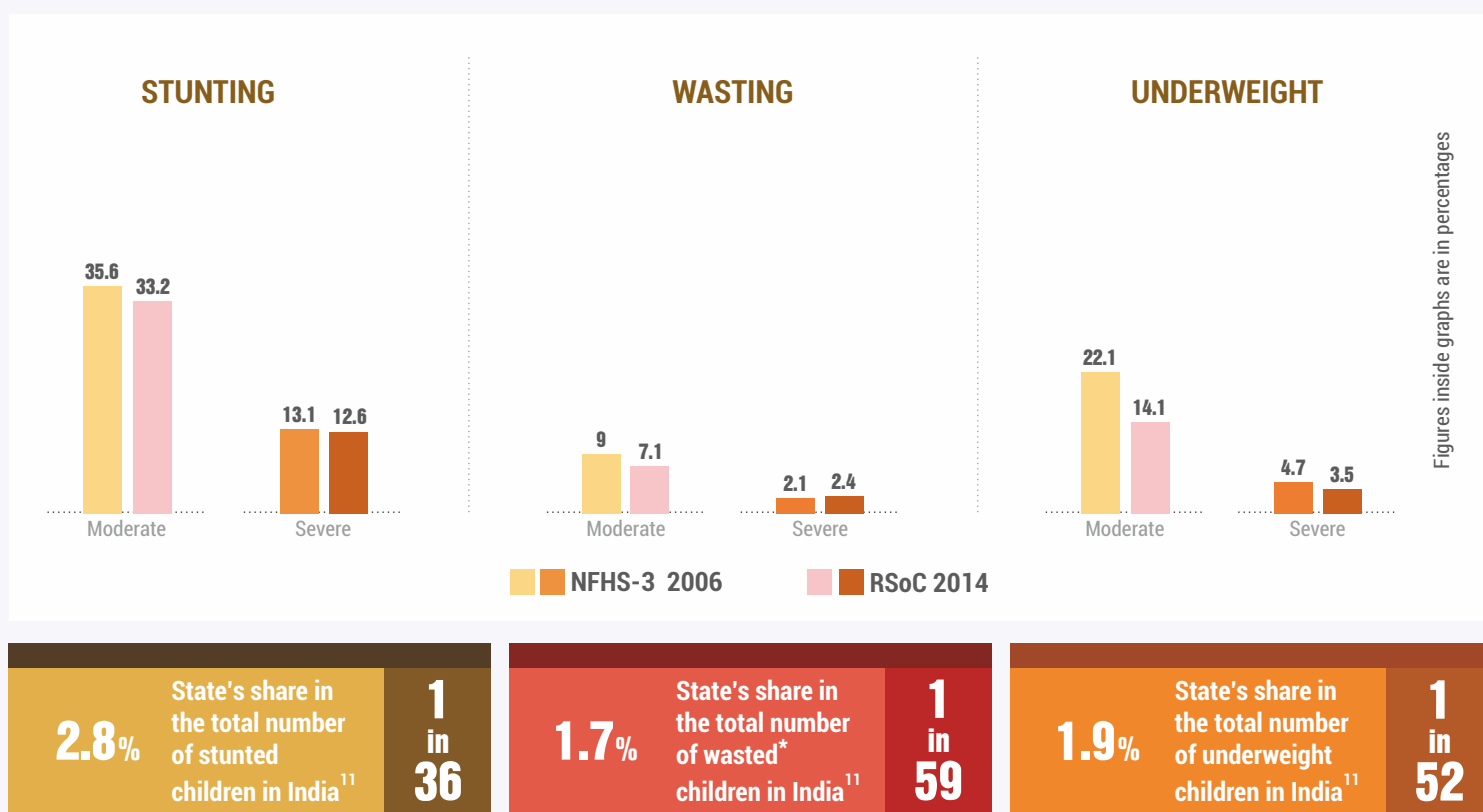
A. CHILD UNDERNUTRITION, BY TIME PERIOD

ANTHROPOMETRIC MEASURES

Stunting is inadequate height for age, which is indicative of chronic or cumulative nutritional deprivation in early childhood. A stunted child's height-for-age is below -2 standard deviations from the median height-for-age (termed HAZ) of the WHO Child Growth Standards, while a severely stunted child is below -3 standard deviations.

Wasting is inadequate weight for height, which points to acute or short-term undernutrition. A wasted child's weight-for-height (WHZ) is below -2 standard deviations from the WHO Child Growth Standards; a severely wasted child is below -3 standard deviations. (Another way to determine severe wasting or severe acute malnutrition is through a measurement of a child's mid-upper arm circumference (MUAC).

Underweight is inadequate weight for age, a composite indicator that encompasses stunting and wasting. An underweight child's weight-for-age (WAZ) is below -2 standard deviations from the WHO Child Growth Standards; again, a severely underweight child is below -3 standard deviations.

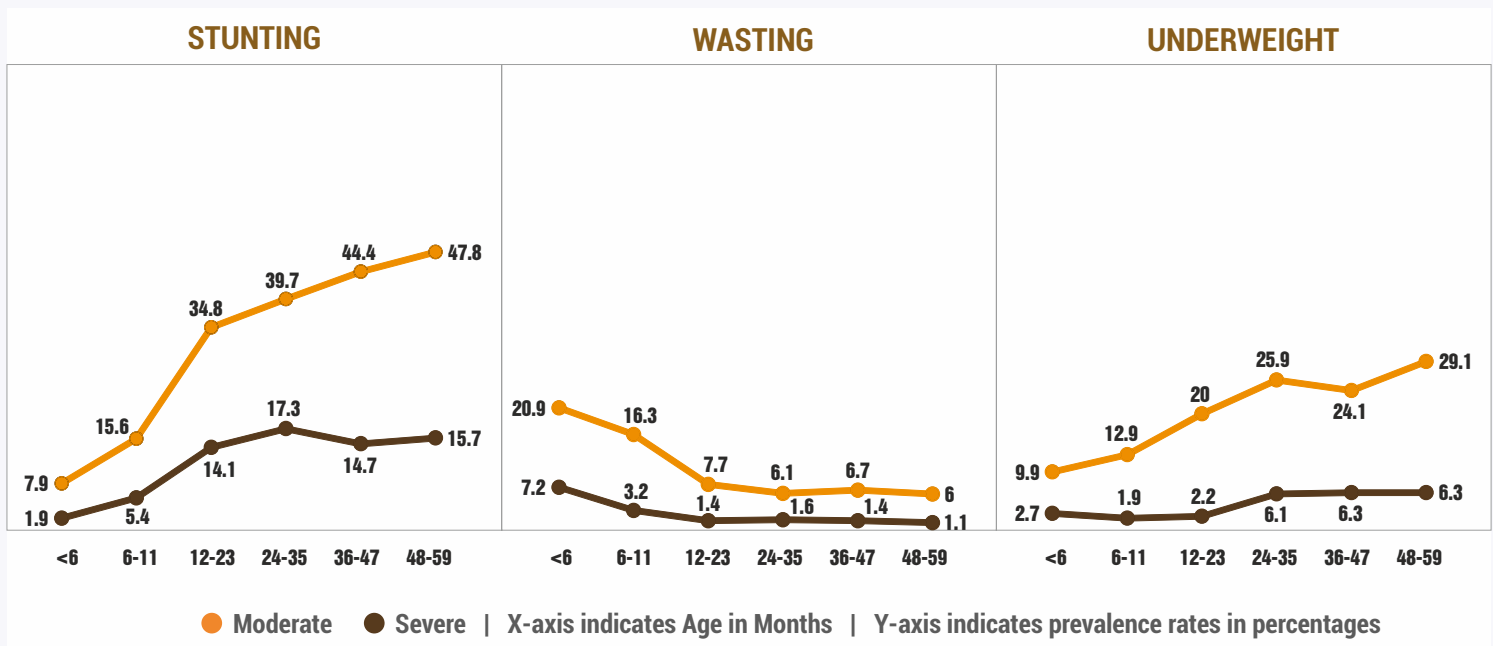


*Wasting is subject to seasonal variations either in food supply or disease prevalence and hence may not be comparable across groups of children measured at different times of the year within a survey round as well as between different survey rounds.

¹¹ Source : NFHS-3, 2006

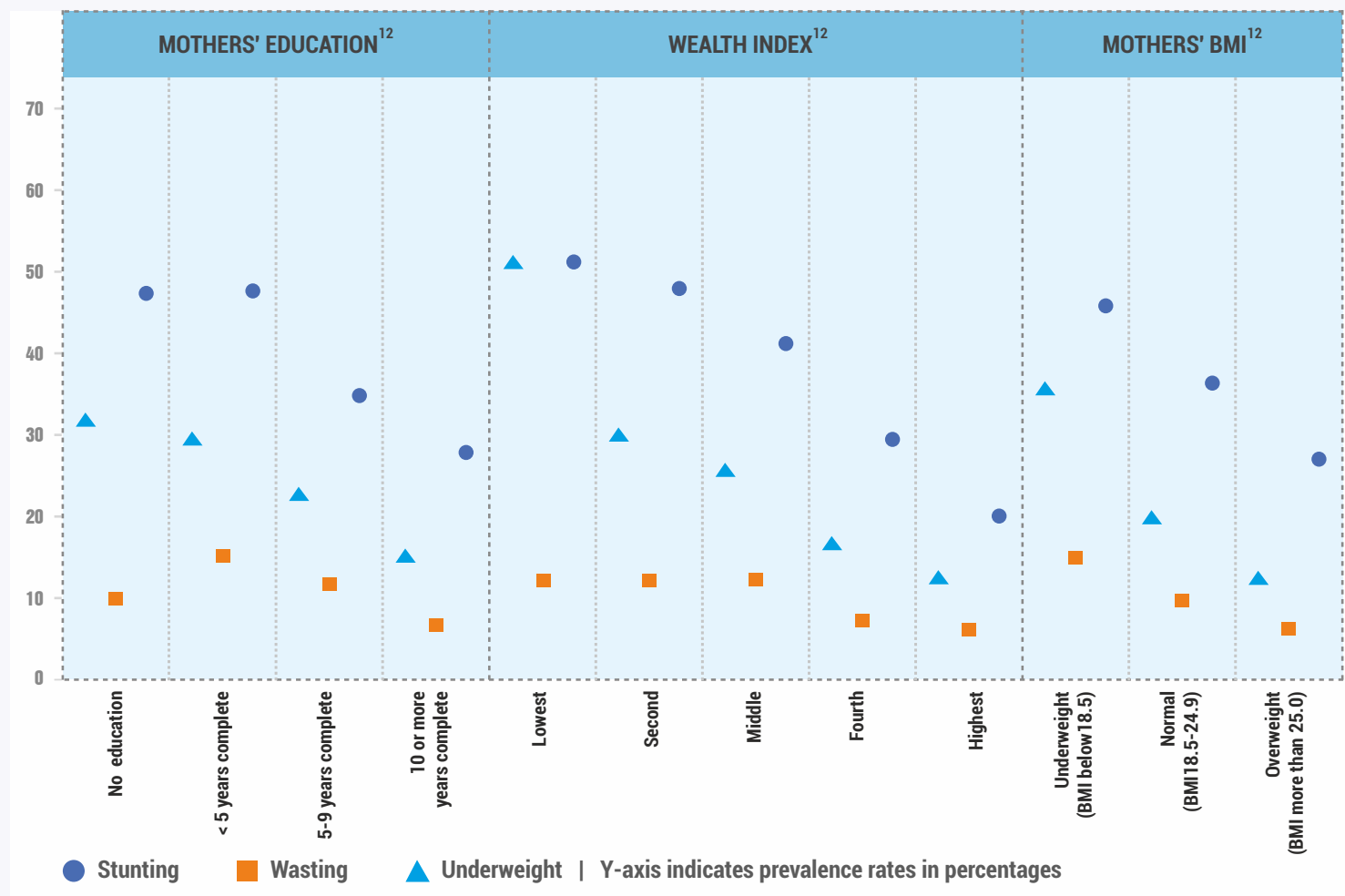
B. CHILD UNDERNUTRITION, BY AGE GROUPS¹²

Percentage of moderate (below -2 SD from the WHO growth standards) and severe (below -3 SD) stunting, wasting and underweight are available for 6 age groups among children under 5.



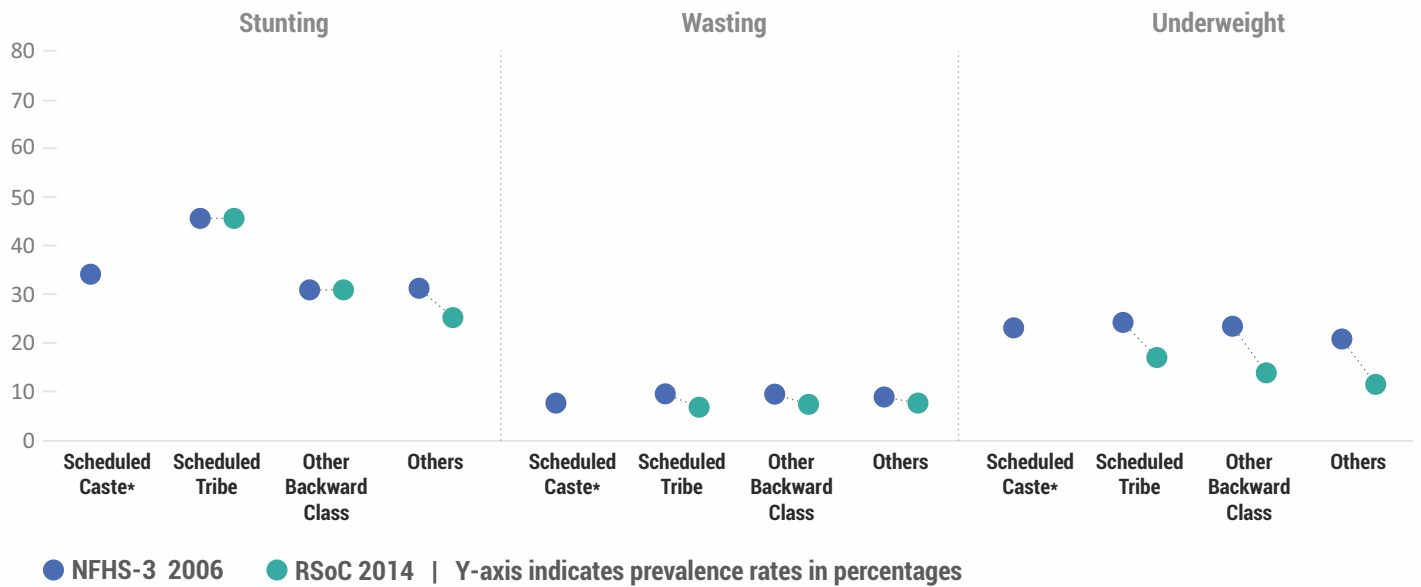
C. PREVALENCE OF CHILD UNDERNUTRITION, BY BACKGROUND CHARACTERISTICS

In this section, child undernutrition outcomes are presented, along with key socioeconomic drivers that are known to be associated with child nutrition, such as caste, residence, mother's health and education, and household income.

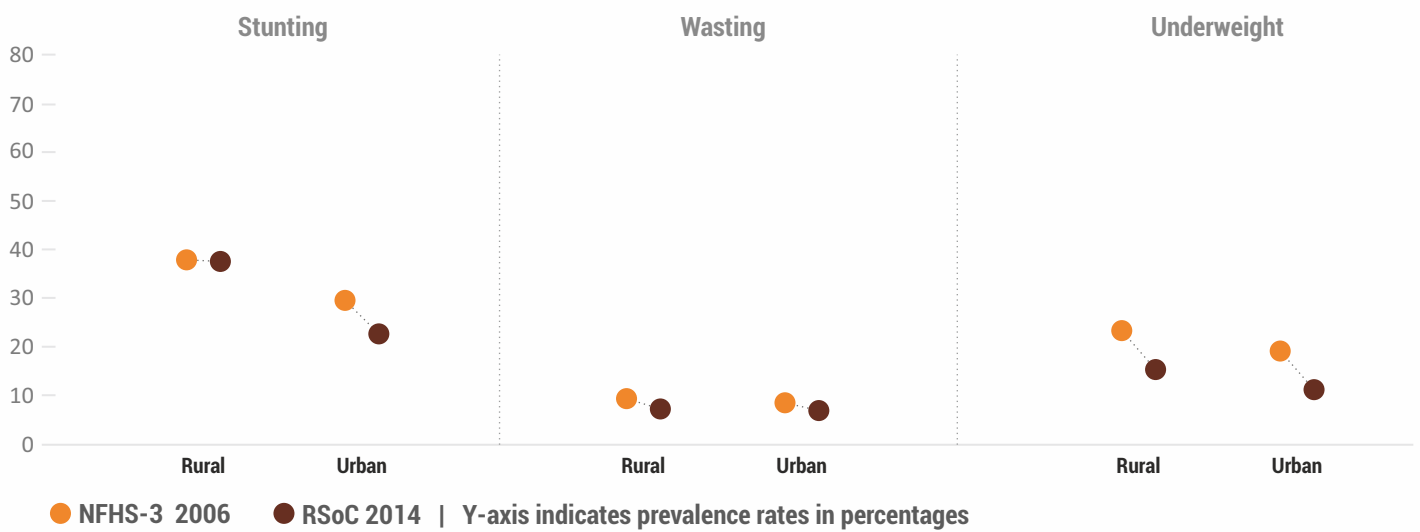


¹² Source : NFHS-3, 2006

CASTE

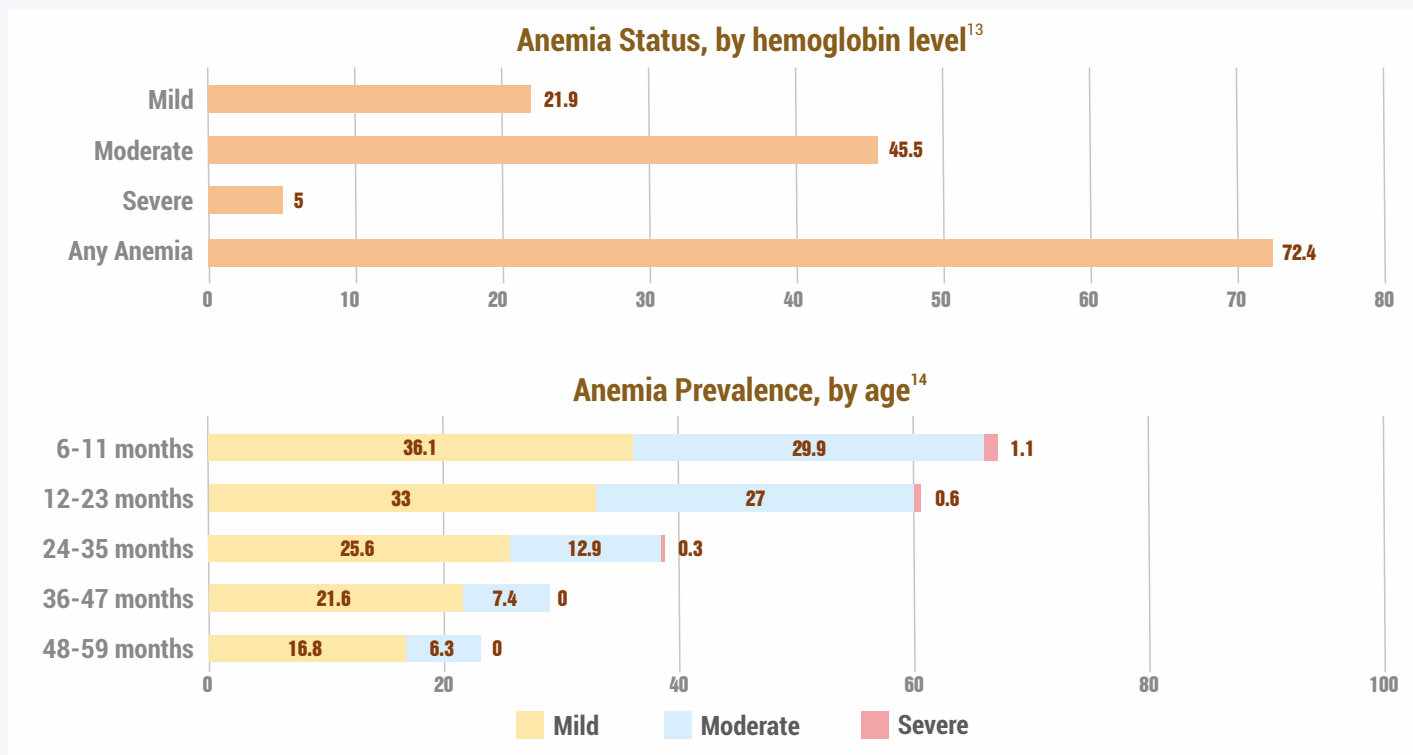


RESIDENCE



D. ANEMIA PREVALENCE

Anemia can impair physical and cognitive development among children and create long term impacts on productivity and wellbeing. This section features data on anemia prevalence by severity and age groups for children under 5.



¹³ Source : DLHS-4, 2012-13

¹⁴ Source : NFHS-3, 2006

III. IMMEDIATE DETERMINANTS

A. INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES¹⁵

This section presents indicators for assessing IYCF practices as recommended by the WHO and revised in 2008. Following optimal IYCF practices during the first 1,000 days is crucial for early child survival and growth as well as long-term health and wellbeing.

Children aged 0-23 months breastfed immediately/within an hour of birth		58.2%
	Children aged 0-5 months who were exclusively breastfed	66.8%
	Children aged 6-8 months who were fed complementary foods	83%
	For breastfed children (6-23 months)- A. Fed minimum number of times. Note : At least twice a day for breastfed infants 6-8 months old and at least three times a day for breastfed children 9-23 months old B. Had minimum dietary diversity Note : Minimum dietary diversity refers to four or more food groups^B fed to children aged 6-23 months	29.7% 22.5%

B. CHILD HEALTH¹⁵

Prevalence of childhood illnesses (in children aged 0-59 months)

Had diarrhea in 15 days prior to survey	16.5%
Had fever in 15 days prior to survey	15%
Had symptoms of Acute Respiratory Infection (ARI) in 15 days prior to survey	6.7%

^B The 7 food groups include the following: i. grains, roots and tubers ii. legumes and nuts iii. dairy products (milk, yoghurt, cheese) iv. Flesh foods (meat, fish, poultry, and liver/organ meats) v. eggs vi. Vitamin-A rich fruits and vegetables vii. other fruits and vegetables.

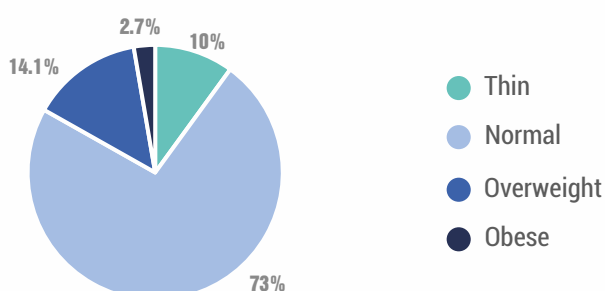
¹⁵ Source : RSoC, 2014

C. NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

Maternal health and nutrition, as well as adolescent nutrition, have important consequences for intergenerational transmission of undernutrition. Data on Body Mass Index (BMI), anemia prevalence and height among women of reproductive age are presented in this section, as are data on adolescent BMI and anemia.

C.1. WOMEN 15-49 YEARS OLD¹⁶

BMI^c levels of women aged 15-49 years



^cBody Mass Index (BMI) is defined as the weight in kilograms by the square of the height in metres (kg/m²). It is a simple index of weight-for-height which is commonly used to classify underweight, overweight and obesity in adults. Range: BMI < 18.5 = total thin, BMI 18.5-24.9 = normal, BMI 25.0-29.9 = Overweight, BMI > 30.0 = Obese [per WHO Standards]



65.3%

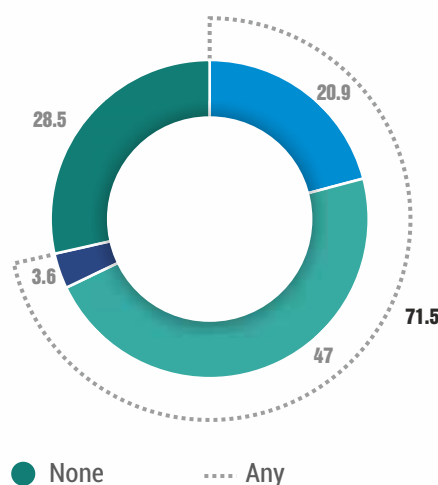
Women aged 15-49 years are anemic

2.8%

Women aged 15-49 years are severely anemic

C.2. PREGNANT WOMEN¹⁶

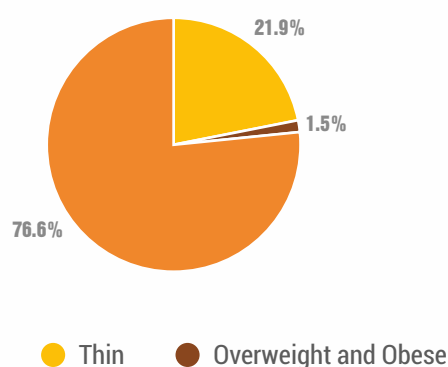
Anemia prevalence in pregnant women aged 15-49 years



● Mild ● Moderate ● Severe ● None ---- Any

C.3. ADOLESCENT GIRLS

BMI levels of adolescent girls aged 15-18 years¹⁷



30.4%

Adolescent girls aged 15-19 years are anemic¹⁶

0%

Adolescent girls aged 15-19 years are severely anemic¹⁶

¹⁶ Source : DLHS-4, 2012-13

¹⁷ Source : RSoC, 2014

^{17a} Source : NFHS-3, 2006

IV. UNDERLYING DETERMINANTS

A. SOCIAL STATUS OF WOMEN

Women's status is recognized to contribute in significant ways to improving nutrition. This section presents indicators that are representative of women's social status, including measures of education, age at marriage and first birth, employment, decision making and domestic violence. It also includes the Gender Empowerment Measure that captures gender inequality along three dimensions: political participation and decision-making power, economic participation and decision-making power, and power over economic resources.



Currently married women who have 10 or more years of schooling¹⁸ **38.5%**



22.9% Women aged 20-24 years who were married before the age of 18¹⁹

24 Average age at marriage¹⁹

Gender Empowerment Measure^{D,20}

0.4

0.5

National Average²⁰



Female workforce participation rate²² **38.6%**

Currently married women who make decisions about²³:



17.6% Own healthcare



2.9% Major household purchase



55.7% Purchases for daily household needs



15.9% Visits to her family/friends/relatives



46.2% Women who have experienced any form of physical/sexual/emotional violence²³

89% Ever married women who justify hitting/wife-beating (for either of the reasons mentioned)²³

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48.1%

Households with access to improved sources of drinking water^{E, 24}

41.5%

Households using improved sanitation facility^{F, 24}



12.6%

Households practicing open defecation²⁴

1.9 M

Expenditure on toilets under Total Sanitation Campaign (TSC)^{G, 25}



1,065 M

National Average²⁵

C. AGRICULTURE AND FOOD SECURITY

Agriculture productivity and food security can affect household access to foods necessary for a healthy diet. Thus, this section presents indicators related to agricultural growth and food consumption patterns in the state, indicating the level of food security in the state relative to the national situation.



1.2%

Growth rate of agriculture from 2007-2012²⁶



0.3%

Share in India's total foodgrain production²⁷



Mean Calorie intake per person per day (in Kcal)²⁸

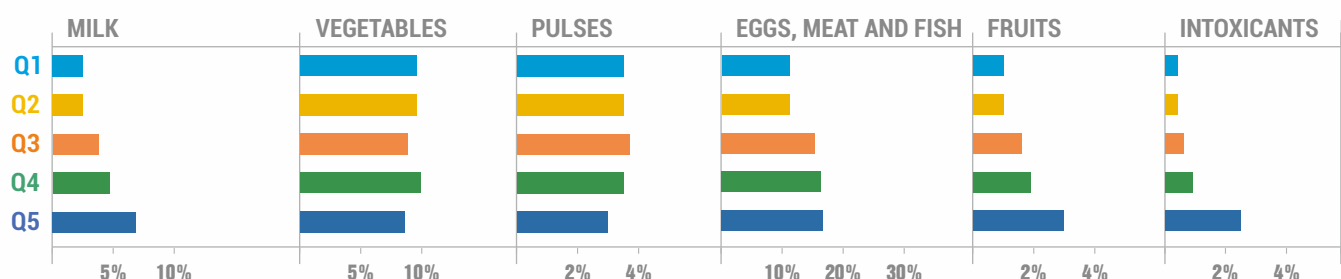
RURAL

NA 2233
MANIPUR INDIA AVG

URBAN

NA 2206
MANIPUR INDIA AVG

Expenditure on food items by income quintiles²⁸



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Beneficiaries who availed supplementary food under ICDS²⁹

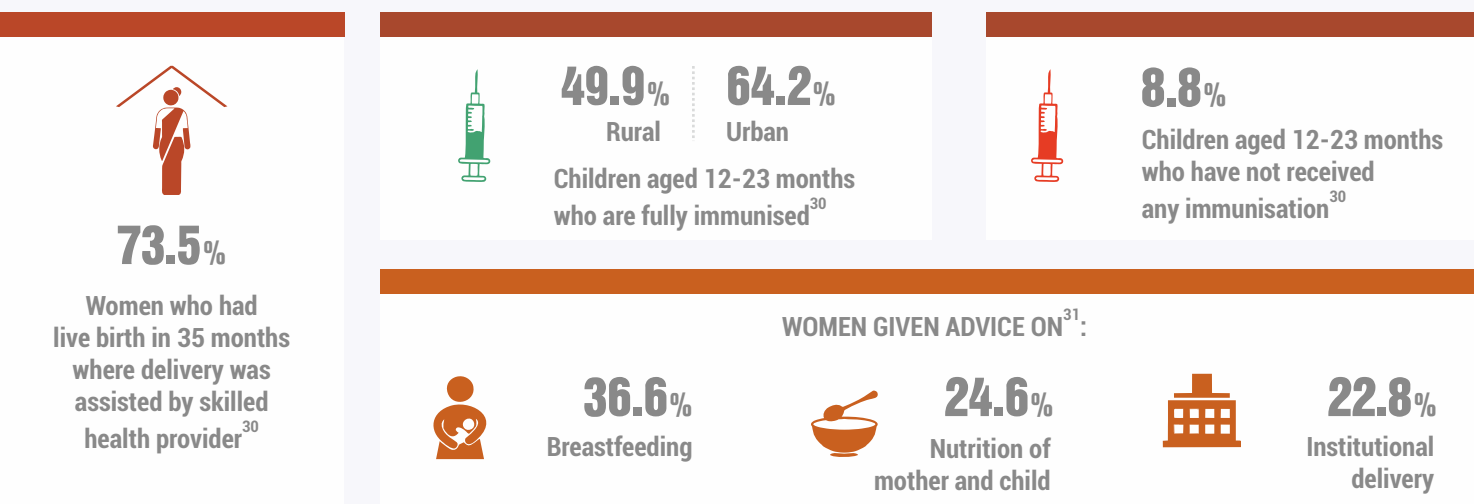
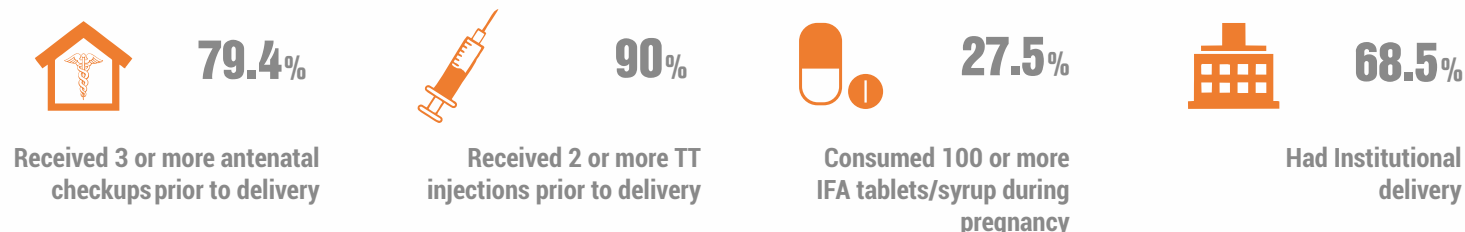
Children 6-35 months	44.3%
Children 36-71 months	70.6%
Pregnant women	44.3%
Lactating mothers	25.8%

Beneficiaries who received supplementary food for at least 21 days in the month prior to the survey

Children aged 6-35 months	0%
Children aged 36-71 months	5.9%
Pregnant women	5%
Lactating women	0%

²⁹ Source : RSoC, 2014

SERVICES PROVIDED TO WOMEN WHO HAD A LIVE BIRTH IN LAST 35 MONTHS³⁰



WOMEN GIVEN ADVICE ON³¹:



A.2. PERSONNEL CAPACITY OF ICDS AND NRHM:

This section features data on availability of healthcare personnel and services available to women of reproductive age (antenatal care, tetanus toxoid coverage, iron-folic acid supplementation coverage, institutional delivery and counseling). Household and individual access to health services can directly impact children's nutrition and welfare during the crucial first 1,000 days of life.

Availability of Anganwadi Centres and Workers (AWCs and AWWs) ^{H, 30}	Value
Pending or vacant Anganwadi workers to sanctioned number of workers*	10.7%
AWWs living in the AWC village/ward	95.5%
AWWs having 10 or more years of schooling	91.4%
Median age of AWWs	43 years
AWCs serving to population more than the stipulated norm	1.3%

Growth Monitoring ³⁰	Value
AWCs having functional baby weighing scale	3.6%
AWCs having functional adult weighing scale	0%
Available WHO growth chart at AWCs	61.3%

^H Number of AWCs surveyed for Manipur as per RSoC 2014 is 232.

³⁰ Source : RSoC, 2014

³¹ Source : DLHS-4, 2012-13

* Source : MoWCD, 2012

Training and Comprehensive Knowledge ³²	Value
AWWs having correct knowledge of intake of food by pregnant women	95.4%
AWWs having correct knowledge of normal birth weight of children	84.7%
AWWs having correct knowledge of initiation of breastfeeding within one hour	97%
AWWs having correct knowledge of exclusive breastfeeding for the first six months	85.8%
AWWs having correct knowledge of appropriate age of child for complementary feeding	92.7%

Health Service Delivery Personnel	Value
ASHAs selected ³³	100%
Current density of ASHA as per Census 2011 rural population ³³	1 per 490 persons
Pending or vacant ANM positions sub centres & PHCs ³⁴	8.5%

A.3. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SPECIFIC INTERVENTIONS

Expenditure on Schemes (in million dollars)	In million USD	National Average
ICDS (ICDS general + SNP + training) (women and children) ³⁵	13	75
NRHM expenditure (Central Government) ³⁶	4.2	68.8
NRHM expenditure (State Government) ³⁶	6.6	9.3

B. NUTRITION-SENSITIVE INTERVENTIONS

This section includes information on expenditure and coverage of key centrally-sponsored schemes that indirectly impact maternal and child nutrition. These are: the Mid Day Meal Scheme (MDMS), Public Distribution System (PDS), and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

B.1. COVERAGE OF SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS

Coverage of Schemes	Value
MDMS (base: eligible children*) ³⁷	7.9%
PDS (base: rural and urban households reporting consumption) ³⁸	5.6%
MGNREGA (base: rural persons 18 years and above registered in MGNREG job card and demanded work during last 365 days) ³⁹	98.9%

* All children studying in primary & upper primary classes in schools supported under Sarva Shiksha Abhiyan and NCLP (National Child Labour Project) run by Ministry of Labour.

B.2. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS:

Expenditure on Schemes (in million dollars)	In million USD	National Average
MDMS ⁴⁰	3	47
PDS ⁴¹	65.7	475.3
MGNREGA ⁴²	100	214

³² Source : RSoC, 2014

³³ Source : NRHM, 2013

³⁴ Source : MoHFW, 2013

³⁵ Source : Lok Sabha Unstarred Question # 846 dated 27.02.2015, 2012-13

³⁶ Source : Lok Sabha Annexured Unstarred Question # 409 dated 6.12.2013, 2012-13

³⁷ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/lsq15/15/as216.htm 2011-12

³⁸ Source : Report No. 558, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

³⁹ Source : Report No. 554, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

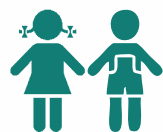
⁴⁰ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014, 2012-13

⁴¹ Source : Food Corporation of India 2013, 2012-13

⁴² Source : Lok Sabha Annexured Unstarred Question # 3835 dated 19.03.2015, 2012-13

FAST FACTS ON NUTRITION AND ITS DETERMINANTS IN MEGHALAYA

World Health Assembly Nutrition Targets



CHILDREN UNDER 5 YEARS

42.9%
Stunted¹
13.1%
Wasted¹

World Health Assembly Nutrition Targets


54.9%

 Infants 0-5
months old who are
exclusively breastfed¹

10.4%

 Children under
3 years who have low
birth weight (<2.5 kgs)¹

53.9%

 Women
15-49 years old
with anemia²

Immediate Determinants


65.2%

 Infants 6-8 months old who receive solid, semi-solid or soft foods¹
28.7%

 Infants & young children 6-23 months old who achieve minimal diet diversity in
complementary feeding¹

70.7%

 Children 6-59 months
old with anemia²

3.1%

 Children 6-59 months old who
had diarrhea in 15 days prior
to survey¹

Immediate Determinants


77%

 Children 6-35 months old
who received supplementary
food under ICDS for 21 days
in the month prior to survey¹

44.6%

 Children 12-23
months old who are
fully immunized¹

70.6%

 Mothers of
children under 36 months
old who received three
or more antenatal checkups¹

Underlying Determinants


21.1%

 Currently
married women with 10
or more years of schooling²

23.3%

 Women aged 20-24
years who were
married before the age of 18¹

19.7%

 Adolescent girls
15-18 years old
with low BMI (<18.5)¹

Underlying Determinants


30.6%

 Households
practicing
open defecation¹

11.9%

 Population
below
state-specific poverty line³

 Does state have a
high-level nutrition mission?

NO
¹ Source : RSoC, 2014

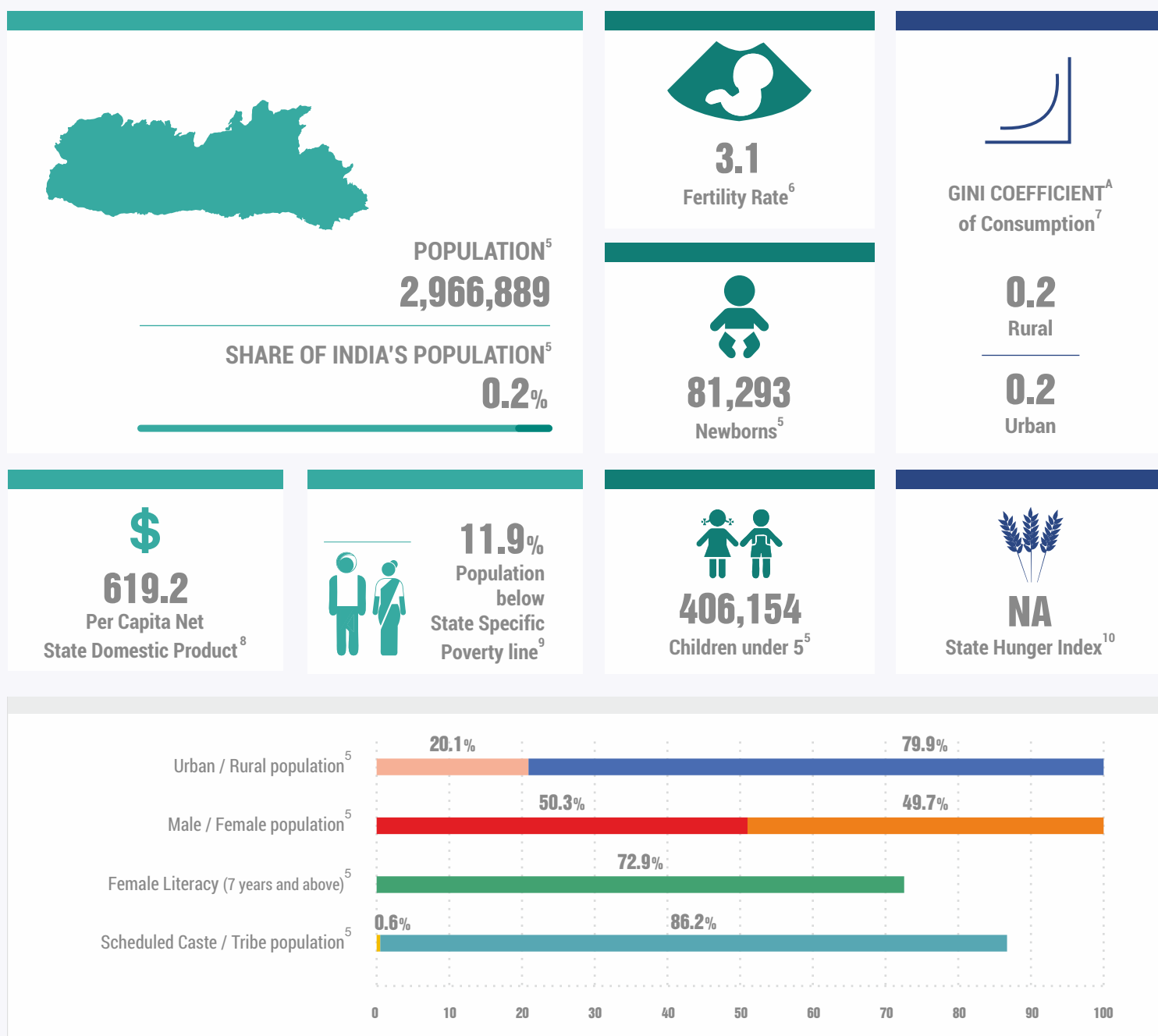
² Source : DLHS4, 2012-13

³ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Govt. of India

I. CONTEXT

A. DEMOGRAPHIC CONTEXT

This section highlights the demographic composition of the state in terms of male-female, rural-urban, and SC-ST ratios, literacy and fertility rates. In addition, it also includes the size of the population of newborns and children less than five years of age (as of the Census of India, 2011) to illustrate the size of the target population for nutrition-related interventions that need to reach this vulnerable population.



A : Gini coefficient is a measure of inequality of distribution. A Gini coefficient of 0 represents perfect equality, while a value of 100 implies perfect inequality. (See Appendix A for more information)

⁵ Source : Primary Census Abstract, Census, 2011

⁶ Source : SRS, 2009

⁷ Source : Planning Commission Estimates: NSSO 66th round-Employment and Unemployment Survey, 2009-10

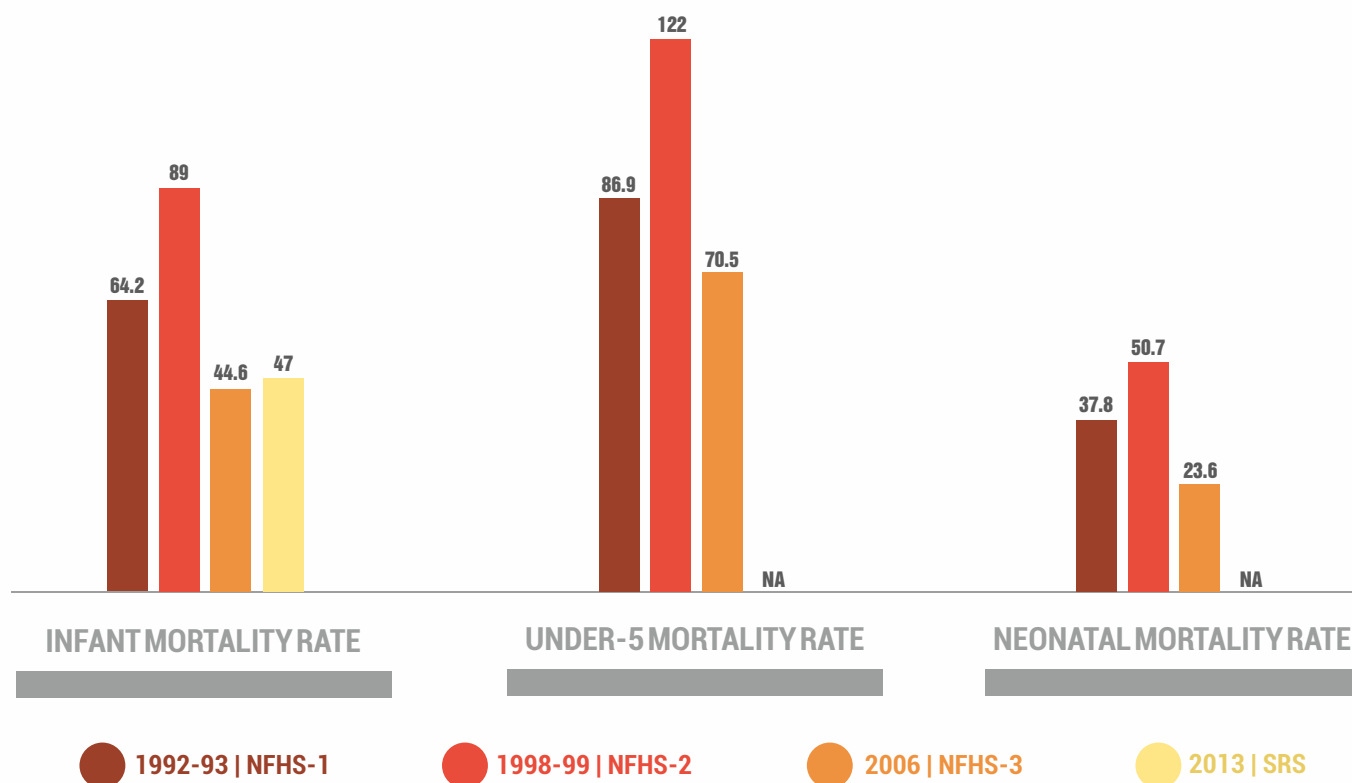
⁸ Source : Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14 : http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82

⁹ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Government of India, 2011-12 : http://planningcommission.nic.in/news/pre_pov2307.pdf

¹⁰ Source : IFPRI, India State Hunger Index, 2009

B. CHILD MORTALITY PER THOUSAND LIVE BIRTHS

This section illustrates trends in mortality in neonates, infants and children under 5 years, since 1992. The purpose of this is to highlight the success achieved by individual states in averting deaths of children since the economic growth of the 1990s.



II. NUTRITIONAL STATUS AMONG CHILDREN

This section presents data on nutrition outcome indicators (stunting, wasting, and underweight) and anemia prevalence. Anthropometric measures for children under 5 (stunting, wasting, and underweight) are presented over time periods, by age groups and by background characteristics. This data aims to convey the prevalence and severity of undernutrition in the state.

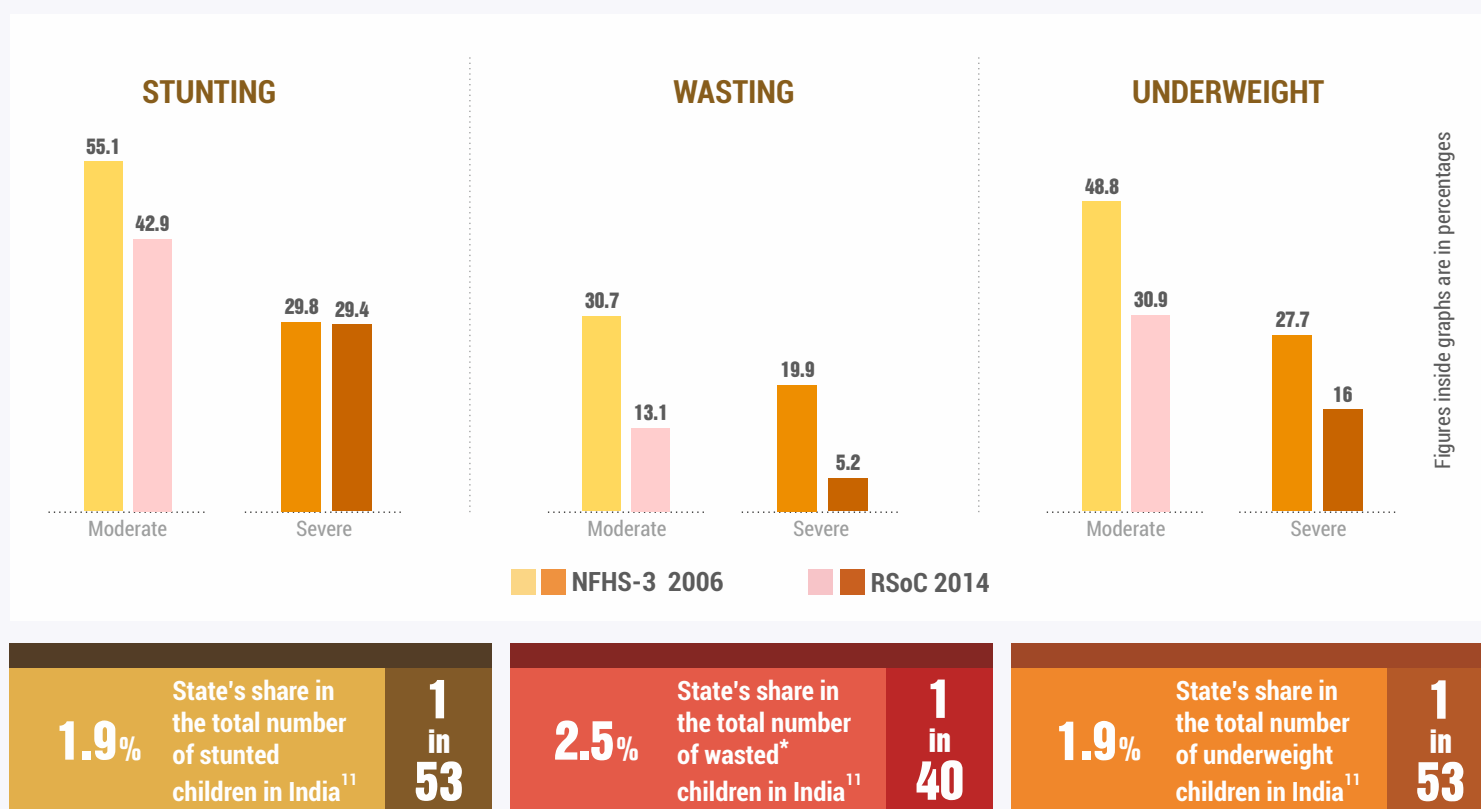
A. CHILD UNDERNUTRITION, BY TIME PERIOD

ANTHROPOMETRIC MEASURES

Stunting is inadequate height for age, which is indicative of chronic or cumulative nutritional deprivation in early childhood. A stunted child's height-for-age is below -2 standard deviations from the median height-for-age (termed HAZ) of the WHO Child Growth Standards, while a severely stunted child is below -3 standard deviations.

Wasting is inadequate weight for height, which points to acute or short-term undernutrition. A wasted child's weight-for-height (WHZ) is below -2 standard deviations from the WHO Child Growth Standards; a severely wasted child is below -3 standard deviations. (Another way to determine severe wasting or severe acute malnutrition is through a measurement of a child's mid-upper arm circumference (MUAC).

Underweight is inadequate weight for age, a composite indicator that encompasses stunting and wasting. An underweight child's weight-for-age (WAZ) is below -2 standard deviations from the WHO Child Growth Standards; again, a severely underweight child is below -3 standard deviations.

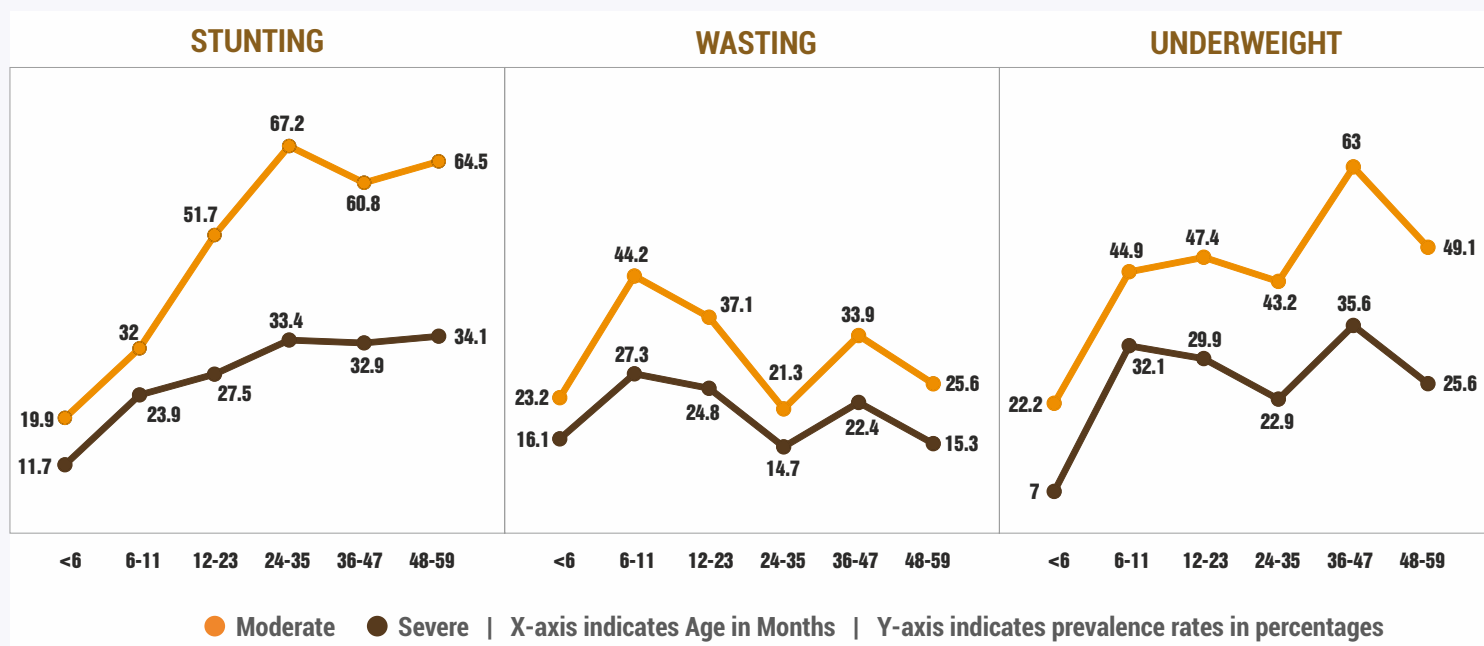


*Wasting is subject to seasonal variations either in food supply or disease prevalence and hence may not be comparable across groups of children measured at different times of the year within a survey round as well as between different survey rounds.

¹¹ Source : NFHS-3, 2006

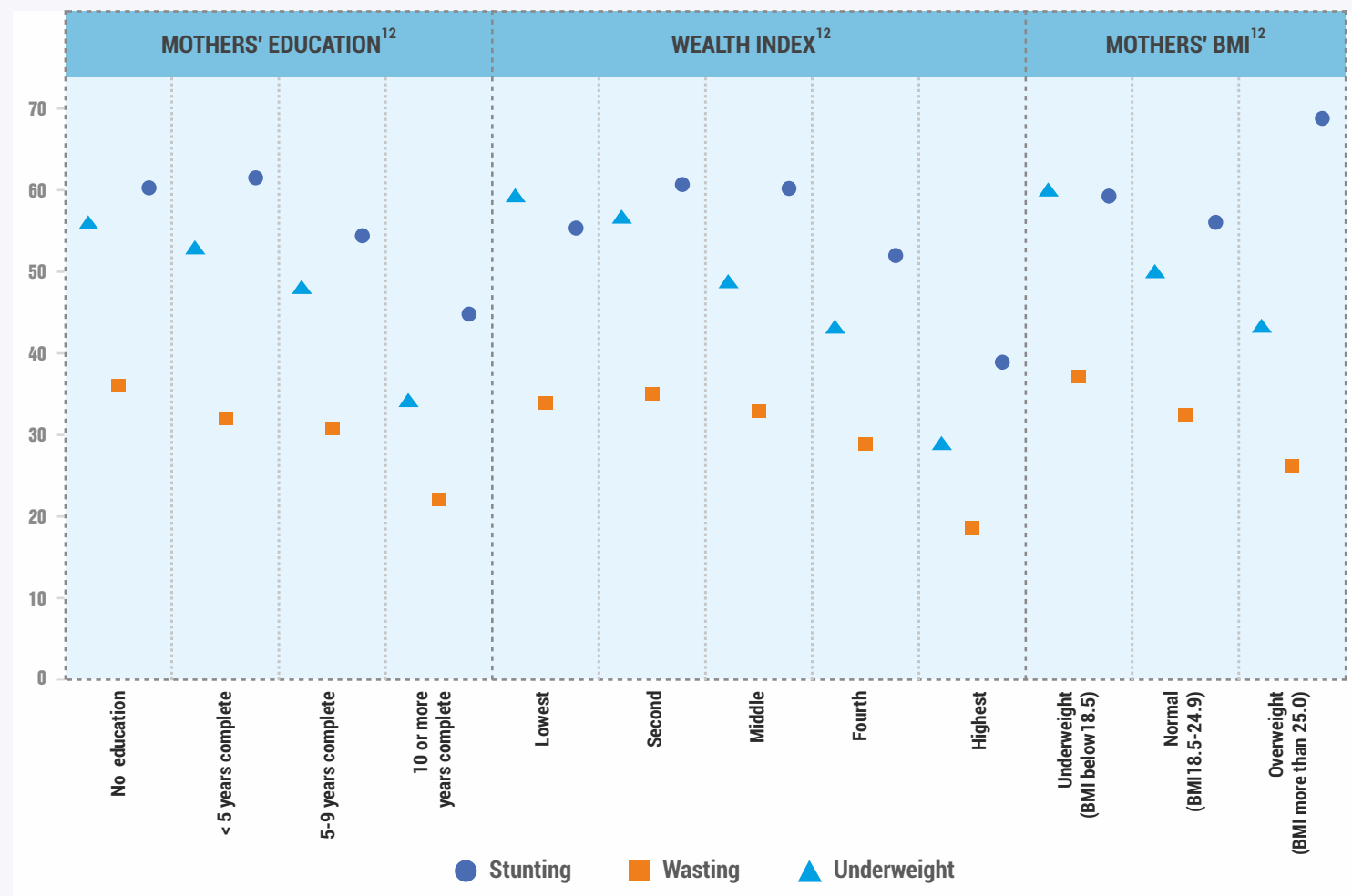
B. CHILD UNDERNUTRITION, BY AGE GROUPS¹²

Percentage of moderate (below -2 SD from the WHO growth standards) and severe (below -3 SD) stunting, wasting and underweight are available for 6 age groups among children under 5.



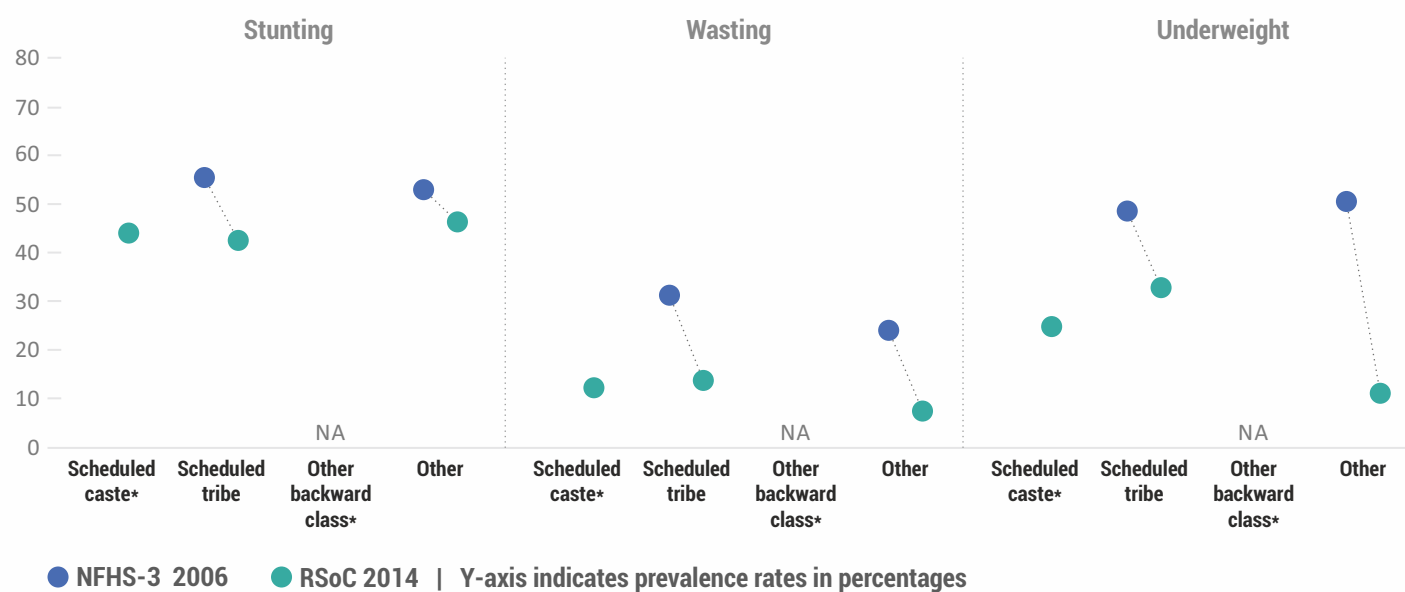
C. PREVALENCE OF CHILD UNDERNUTRITION, BY BACKGROUND CHARACTERISTICS

In this section, child undernutrition outcomes are presented, along with key socioeconomic drivers that are known to be associated with child nutrition, such as caste, residence, mother's health and education, and household income.



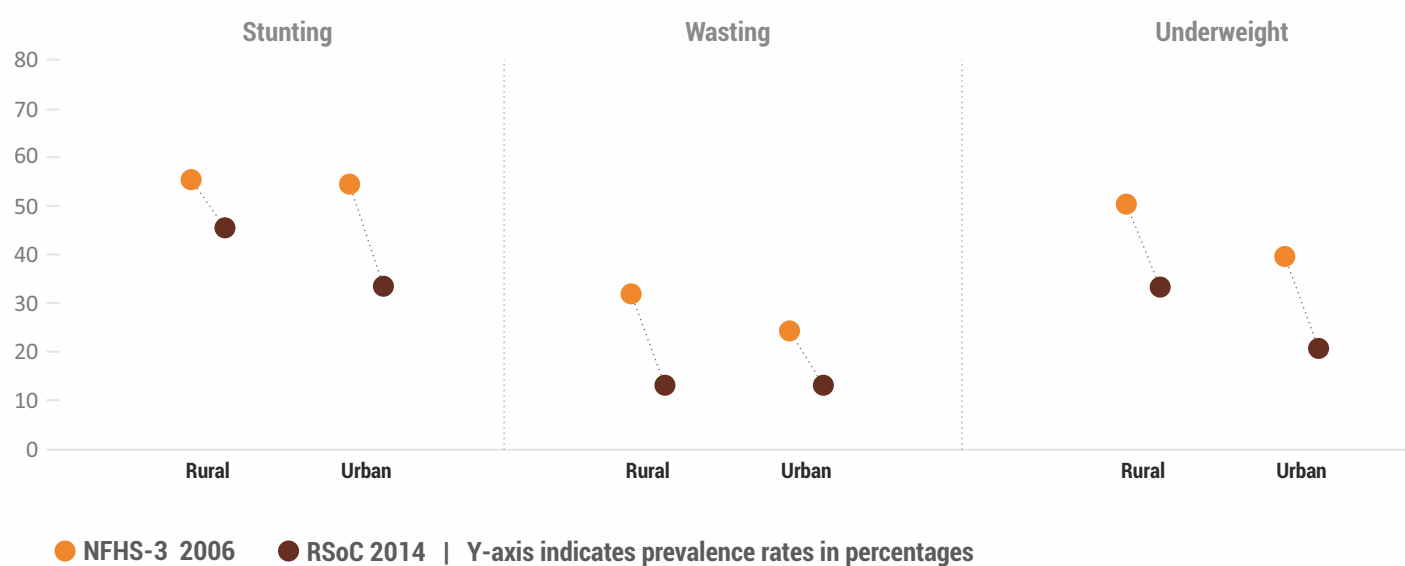
¹² Source : NFHS 3, 2006

CASTE



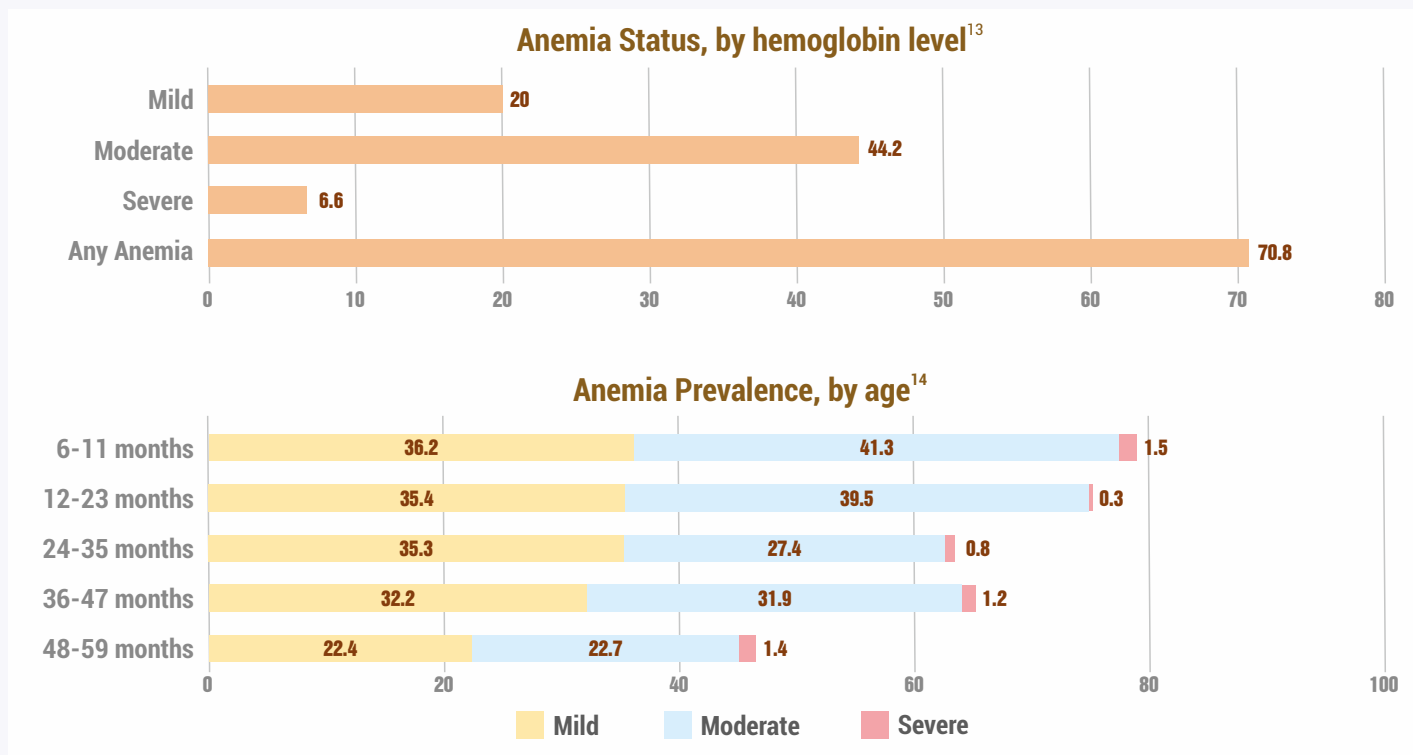
*Data for Scheduled Caste and Other Backward Class is not available in NFHS-3 for this state

RESIDENCE



D. ANEMIA PREVALENCE

Anemia can impair physical and cognitive development among children and create long term impacts on productivity and wellbeing. This section features data on anemia prevalence by severity and age groups for children under 5.



¹³ Source : DLHS-4, 2012-13

¹⁴ Source : NFHS-3, 2006

III. IMMEDIATE DETERMINANTS

A. INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES¹⁵

This section presents indicators for assessing IYCF practices as recommended by the WHO and revised in 2008. Following optimal IYCF practices during the first 1,000 days is crucial for early child survival and growth as well as long-term health and wellbeing.

Children aged 0-23 months breastfed immediately/within an hour of birth		65.1%
	Children aged 0-5 months who were exclusively breastfed	54.9%
	Children aged 6-8 months who were fed complementary foods	65.2%
	For breastfed children (6-23 months)- A. Fed minimum number of times. Note : At least twice a day for breastfed infants 6-8 months old and at least three times a day for breastfed children 9-23 months old B. Had minimum dietary diversity Note : Minimum dietary diversity refers to four or more food groups^B fed to children aged 6-23 months	36.3% 28.7%

B. CHILD HEALTH¹⁵

Prevalence of childhood illnesses (in children aged 0-59 months)

Had diarrhea in 15 days prior to survey	3.1%
Had fever in 15 days prior to survey	8.1%
Had symptoms of Acute Respiratory Infection (ARI) in 15 days prior to survey	1.9%

^B The 7 food groups include the following: i. grains, roots and tubers ii. legumes and nuts iii. dairy products (milk, yoghurt, cheese) iv. Flesh foods (meat, fish, poultry, and liver/organ meats) v. eggs vi. Vitamin-A rich fruits and vegetables vii. other fruits and vegetables.

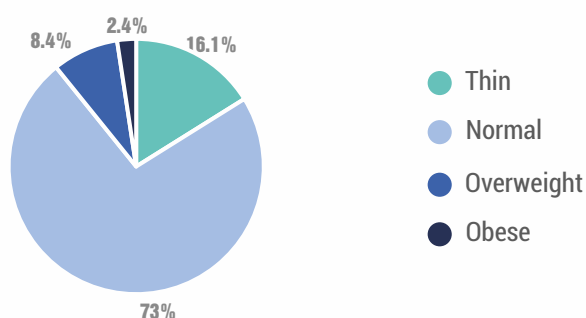
¹⁵ Source : RSoC, 2014

C. NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

Maternal health and nutrition, as well as adolescent nutrition, have important consequences for intergenerational transmission of undernutrition. Data on Body Mass Index (BMI), anemia prevalence and height among women of reproductive age are presented in this section, as are data on adolescent BMI and anemia.

C.1. WOMEN 15-49 YEARS OLD¹⁶

BMI^c levels of women aged 15-49 years



^cBody Mass Index (BMI) is defined as the weight in kilograms by the square of the height in metres (kg/m²). It is a simple index of weight-for-height which is commonly used to classify underweight, overweight and obesity in adults. Range: BMI < 18.5 = total thin, BMI 18.5-24.9 = normal, BMI 25.0-29.9 = Overweight, BMI > 30.0 = Obese [per WHO Standards]



53.9%

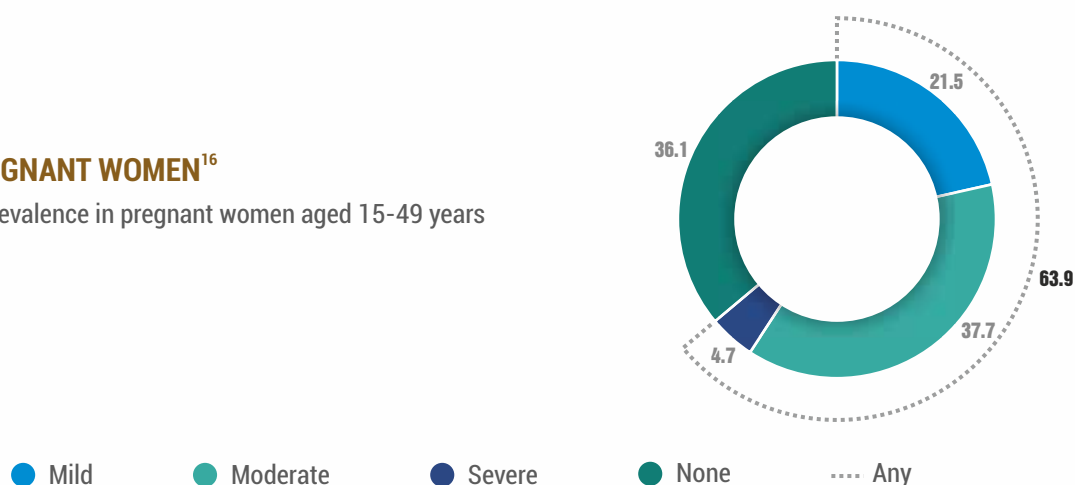
Women aged 15-49 years are anemic

3.7%

Women aged 15-49 years are severely anemic

C.2. PREGNANT WOMEN¹⁶

Anemia prevalence in pregnant women aged 15-49 years



● Mild

● Moderate

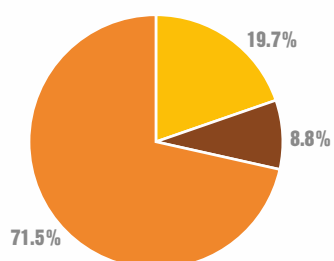
● Severe

● None

--- Any

C.3. ADOLESCENT GIRLS

BMI levels of adolescent girls aged 15-18 years¹⁷



● Normal

● Thin

● Overweight and Obese



46.5%

Adolescent girls aged 15-19 years are anemic¹⁶

1.2%

Adolescent girls aged 15-19 years are severely anemic¹⁶

¹⁶ Source : DLHS-4, 2012-13

¹⁷ Source : RSoC, 2014

^{17a} Source : NFHS-3, 2006

IV. UNDERLYING DETERMINANTS

A. SOCIAL STATUS OF WOMEN

Women's status is recognized to contribute in significant ways to improving nutrition. This section presents indicators that are representative of women's social status, including measures of education, age at marriage and first birth, employment, decision making and domestic violence. It also includes the Gender Empowerment Measure that captures gender inequality along three dimensions: political participation and decision-making power, economic participation and decision-making power, and power over economic resources.



Currently married women who have 10 or more years of schooling¹⁸ **21.1%**



23.3% Women aged 20-24 years who were married before the age of 18¹⁹

21.6 Average age at marriage¹⁹

Gender Empowerment Measure^{D,20}

0.3

0.5

National Average²⁰



Female workforce participation rate²² **40.7%**

Currently married women who make decisions about²³:



23.8% Own healthcare



16% Major household purchase



36.1% Purchases for daily household needs



8.2% Visits to her family/friends/relatives



15% Women who have experienced any form of physical/sexual/emotional violence²³

55.9% Ever married women who justify hitting/wife-beating (for either of the reasons mentioned)²³

^D The Gender Empowerment Measure is a weighted average index based on indicators that are classified into three dimensions: a. political participation and decision-making power b. economic participation and decision-making power and c. power over economic resources. The index ranges from a minimum of 0 to a maximum of 1, with a higher score indicating greater empowerment of women. (More information available at <http://wcd.nic.in/publication/GDIGEReport/Part3.pdf>.)

¹⁸ Source : DLHS-4, 2012-13

¹⁹ Source : RSoC, 2014

²⁰ Source : MoWCD, 2006

²² Source : Women and Men in India, 16th Issue MoSPI, 2014

²³ Source : NFHS-3, 2006

B. WATER AND SANITATION

Poor hygiene and sanitation, by directly increasing exposure and susceptibility to infections, are associated with undernutrition among children. This section covers key indicators on access to safe drinking water and availability of sanitation facilities at the state level. It also includes the expenditure on toilet construction under the Total Sanitation Campaign.



60.1%

Households with access to improved sources of drinking water^{E, 24}

45.1%

Households using improved sanitation facility^{F, 24}



30.6%

Households practicing open defecation²⁴

5.01 M

Expenditure on toilets under Total Sanitation Campaign (TSC)^{G, 25}



1,065 M

National Average²⁵

C. AGRICULTURE AND FOOD SECURITY

Agriculture productivity and food security can affect household access to foods necessary for a healthy diet. Thus, this section presents indicators related to agricultural growth and food consumption patterns in the state, indicating the level of food security in the state relative to the national situation.



4.7%

Growth rate of agriculture from 2007-2012²⁶



0.09%

Share in India's total foodgrain production²⁷



Mean Calorie intake per person per day (in Kcal)²⁸

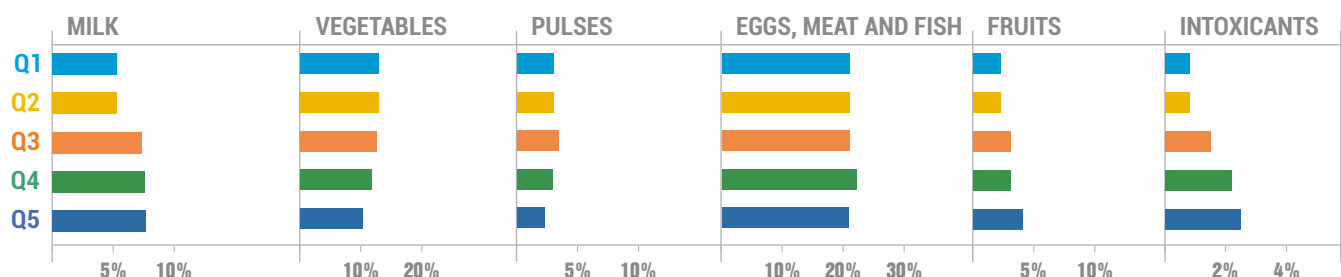
RURAL

NA 2233
MEGHALAYA INDIA AVG

URBAN

NA 2206
MEGHALAYA INDIA AVG

Expenditure on food items by income quintiles²⁸



^E Improved sources of drinking water include: piped water into dwelling, piped water to yard/plot, public tap or standpipe, tubewell or borehole, protected dug well, protected spring, and rainwater (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>).

^F Improved sanitation means households using improved toilets that include: flush toilet, piped sewer system, septic tank, flush/pour flush to pit latrine, ventilated improved pit latrine, pit latrine with slab, composting toilet, special case (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>); excludes those households who are using improved toilets but sharing toilet facilities with other households.

^G Besides toilet construction subsidies, this expenditure also includes funding other activities such as solid and liquid waste management, IEC activities for sustainable demand generation for sanitation facilities, assistance to production centers of sanitary materials and rural sanitary marts, provision of construction of community sanitary complexes, provision of sanitation facilities in govt. schools and Anganwadis in govt. buildings etc.

²⁴ Source : RSoC, 2014

²⁵ Source : Indiastat, Rajya Sabha Unstarred Question No. 2950, dated on 30.08.2011, 2011-12

²⁶ Source : Indiastat, compiled by datanet from Rajyasabha & Lok Sabha unstarred questions no. 3039, 4535. 2007-12

²⁷ Source : Indiastat, Ministry of Agriculture, Government of India 2011-2012

²⁸ Source : NSSO, 68th round-Nutritional Intake in India, 2011-12

V. STATUS OF NUTRITION-RELEVANT INTERVENTIONS

A. NUTRITION-SPECIFIC INTERVENTIONS

The financial resources allocated to, and spent on direct nutrition-specific interventions can determine the scale, coverage and quality of interventions to reach vulnerable target populations. These services, in India, are delivered both by the Integrated Child Development Scheme (ICDS) and the National Health Mission (NHM). This section includes data on the coverage of interventions delivered by these two key centrally-sponsored schemes that directly impact maternal and child nutrition and health. We also include here information on the human resources and service availability of these schemes and expenditures.

A.1. COVERAGE OF ICDS AND NHM:

The Integrated Child Development Services (ICDS) aims to improve the nutrition and health status of children under-six through a package of services (supplementary nutrition, immunization, health check-up, referral services, etc.) delivered through frontline workers at the Anganwadi Centres (AWCs). This section provides information on expenditure on ICDS and coverage of its supplementary nutrition programme (SNP). This section also covers critical services provided by the health system, including provision of care for pregnant women and child immunization. Immunization plays a crucial role in complementing actions to improve nutrition. The link between undernutrition and infectious diseases is cyclical, poor nutrition increases vulnerability to infections, which in turn worsen nutrition status. Data on immunization among children are presented by residence. Here, full immunization refers to children covered with BCG, measles and 3 doses each of DPT and polio.

Beneficiaries who availed supplementary food under ICDS²⁹

Children 6-35 months	90.7%
Children 36-71 months	93.1%
Pregnant women	84.6%
Lactating mothers	92.9%

Beneficiaries who received supplementary food for at least 21 days in the month prior to the survey

Children aged 6-35 months	77%
Children aged 36-71 months	NA
Pregnant women	98%
Lactating women	99%

²⁹ Source : RSoC, 2014

SERVICES PROVIDED TO WOMEN WHO HAD A LIVE BIRTH IN LAST 35 MONTHS³⁰



70.6%

Received 3 or more antenatal checkups prior to delivery



73.7%

Received 2 or more TT injections prior to delivery



25.2%

Consumed 100 or more IFA tablets/syrup during pregnancy



66.5%

Had Institutional delivery



68.6%

Women who had live birth in 35 months where delivery was assisted by skilled health provider³⁰



43.9%

Rural

47.5%

Urban

Children aged 12-23 months who are fully immunised³⁰



17.5%

Children aged 12-23 months who have not received any immunisation³⁰

WOMEN GIVEN ADVICE ON³¹:



42.3%

Breastfeeding



25.3%

Nutrition of mother and child



23.8%

Institutional delivery

A.2. PERSONNEL CAPACITY OF ICDS AND NRHM:

This section features data on availability of healthcare personnel and services available to women of reproductive age (antenatal care, tetanus toxoid coverage, iron-folic acid supplementation coverage, institutional delivery and counseling). Household and individual access to health services can directly impact children's nutrition and welfare during the crucial first 1,000 days of life.

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Pending or vacant Anganwadi workers to sanctioned number of workers*	23.9%
AWWs living in the AWC village/ward	93.3%
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Median age of AWWs	33 years
AWCs serving to population more than the stipulated norm	19.9%

Growth Monitoring ³⁰	Value
AWCs having functional baby weighing scale	38.3%
AWCs having functional adult weighing scale	26.4%
Available WHO growth chart at AWCs	29.7%

^H Number of AWC surveyed for Meghalaya as per RSoC 2014 is 90.

³⁰ Source : RSoC, 2014

³¹ Source : DLHS-4, 2012-13

* Source : MoWCD, 2012

Training and Comprehensive Knowledge ³²	Value
AWWs having correct knowledge of intake of food by pregnant women	30.9%
AWWs having correct knowledge of normal birth weight of children	64.4%
AWWs having correct knowledge of initiation of breastfeeding within one hour	84.9%
AWWs having correct knowledge of exclusive breastfeeding for the first six months	73.8%
AWWs having correct knowledge of appropriate age of child for complementary feeding	55.8%

Health Service Delivery Personnel	Value
ASHAs selected ³³	100%
Current density of ASHA as per Census 2011 rural population ³³	1 per 379 persons
Pending or vacant ANM positions sub centres & PHCs ³⁴	0%

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* All children studying in primary & upper primary classes in schools supported under Sarva Shiksha Abhiyan and NCLP (National Child Labour Project) run by Ministry of Labour.

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³² Source : RSoC, 2014

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³⁴ Source : MoHFW, 2013

³⁵ Source : Lok Sabha Unstarred Question # 846 dated 27.02.2015, 2012-13

³⁶ Source : Lok Sabha Annexured Unstarred Question # 409 dated 6.12.2013, 2012-13

³⁷ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/lsq15/15/as216.htm 2011-12

³⁸ Source : Report No. 558, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

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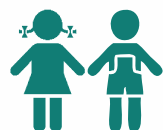
⁴⁰ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014, 2012-13

⁴¹ Source : Food Corporation of India 2013, 2012-13

⁴² Source : Lok Sabha Annexured Unstarred Question # 3835 dated 19.03.2015, 2012-13

FAST FACTS ON NUTRITION AND ITS DETERMINANTS IN MIZORAM

World Health Assembly Nutrition Targets



CHILDREN UNDER 5 YEARS

26.9%
Stunted¹

14.3%
Wasted¹

World Health Assembly Nutrition Targets



44.5%

Infants 0-5 months old who are exclusively breastfed¹



2.2%

Children under 3 years who have low birth weight (<2.5 kgs)¹



64.1%

Women 15-49 years old with anemia²

Immediate Determinants



60.9%

Infants 6-8 months old who receive solid, semi-solid or soft foods¹

10.5%

Infants & young children 6-23 months old who achieve minimal diet diversity in complementary feeding¹



70.7%

Children 6-59 months old with anemia²



4.6%

Children 6-59 months old who had diarrhea in 15 days prior to survey¹

Immediate Determinants



0%

Children 6-35 months old who received supplementary food under ICDS for 21 days in the month prior to survey¹



68.6%

Children 12-23 months old who are fully immunized¹



75.2%

Mothers of children under 36 months old who received three or more antenatal checkups¹

Underlying Determinants



31.5%

Currently married women with 10 or more years of schooling²



9.1%

Women aged 20-24 years who were married before the age of 18¹



24.8%

Adolescent girls 15-18 years old with low BMI (<18.5)¹



3.8%

Households practicing open defecation¹



20.4%

Population below state-specific poverty line³

Does state have a high-level nutrition mission?

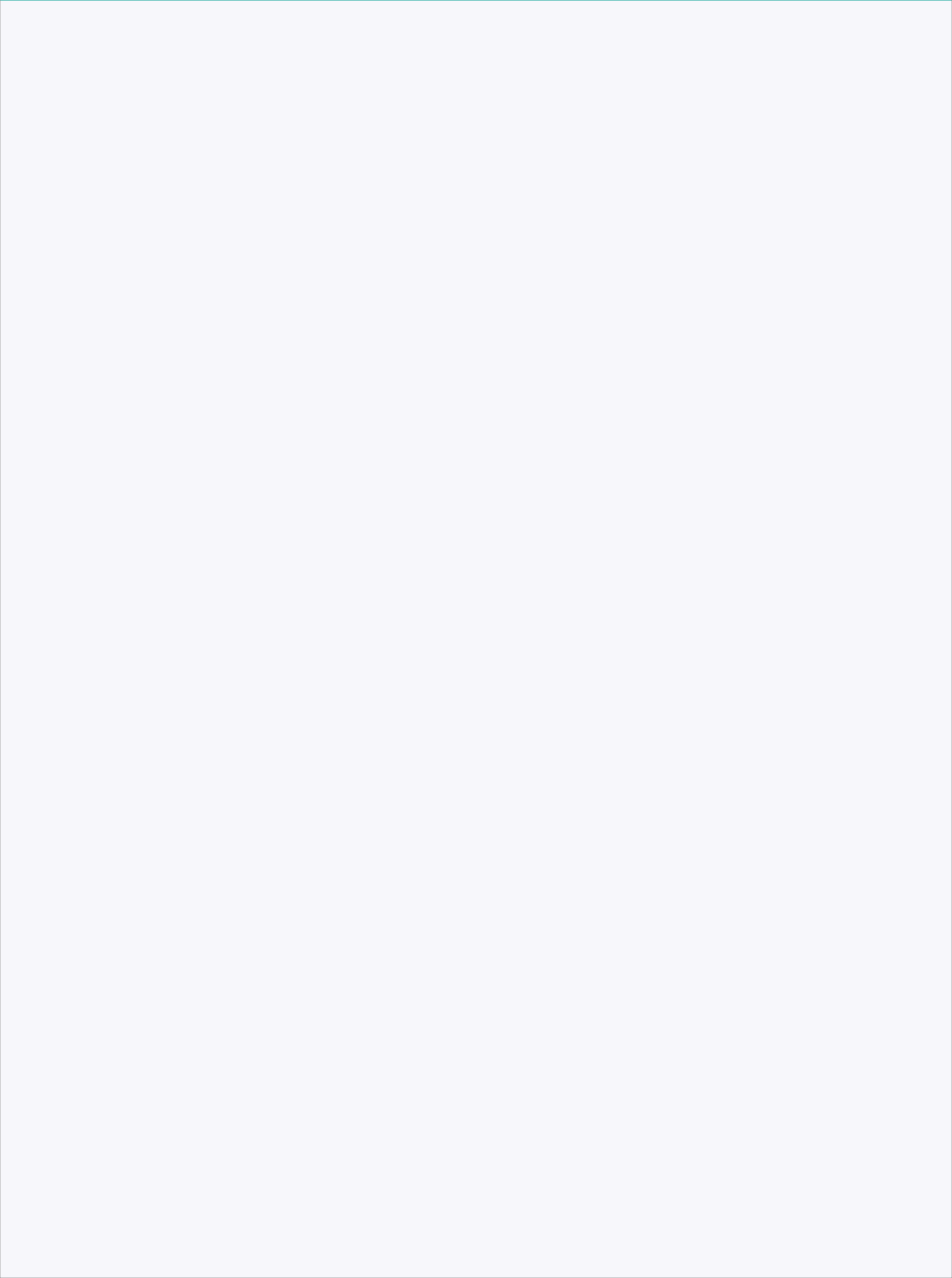
NO

Underlying Determinants

¹ Source : RSoC, 2014

² Source : DLHS4, 2012-13

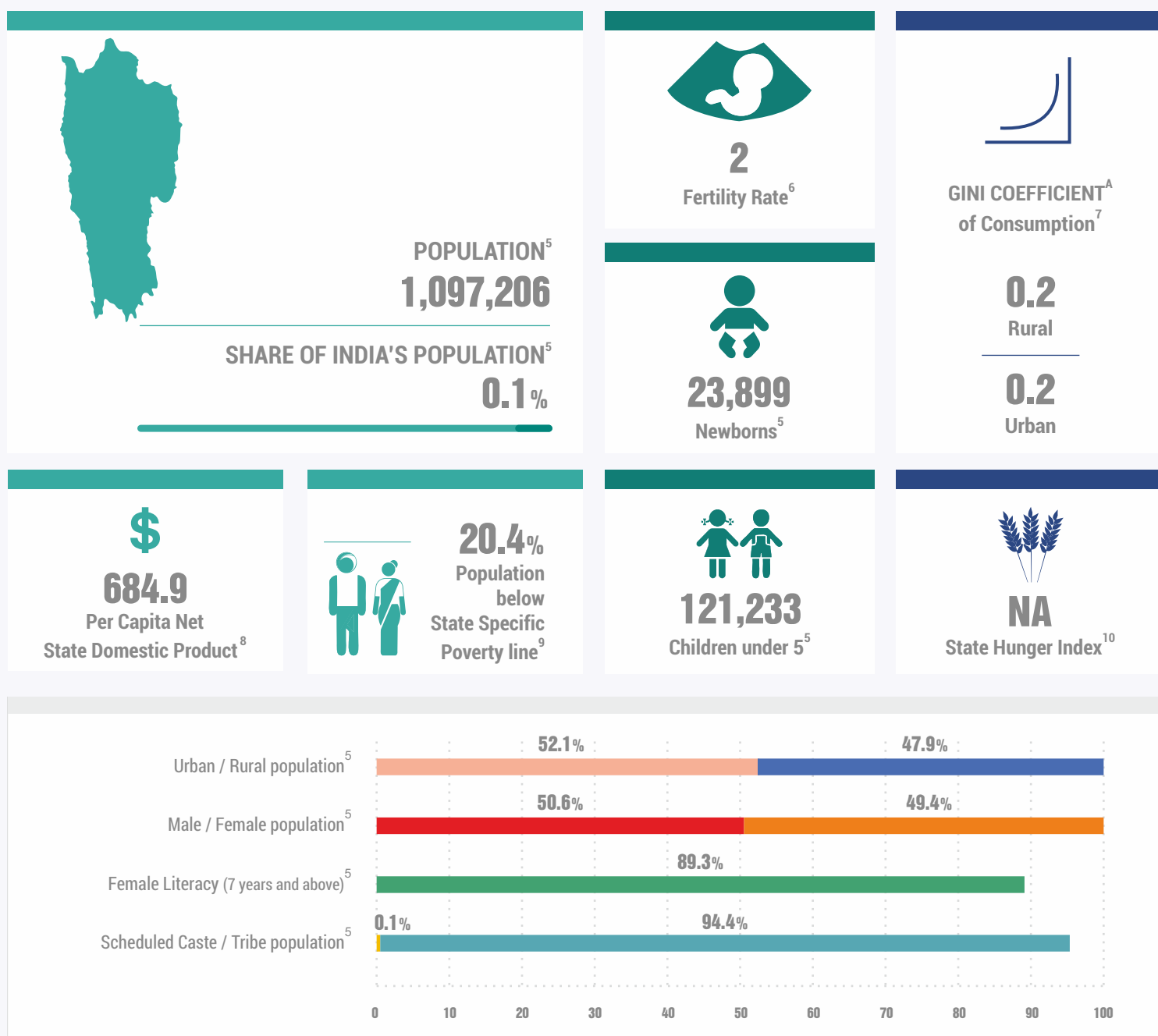
³ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Govt. of India



I. CONTEXT

A. DEMOGRAPHIC CONTEXT

This section highlights the demographic composition of the state in terms of male-female, rural-urban, and SC-ST ratios, literacy and fertility rates. In addition, it also includes the size of the population of newborns and children less than five years of age (as of the Census of India, 2011) to illustrate the size of the target population for nutrition-related interventions that need to reach this vulnerable population.



A : Gini coefficient is a measure of inequality of distribution. A Gini coefficient of 0 represents perfect equality, while a value of 100 implies perfect inequality. (See Appendix A for more information)

⁵ Source : Primary Census Abstract, Census, 2011

⁶ Source : SRS, 2009

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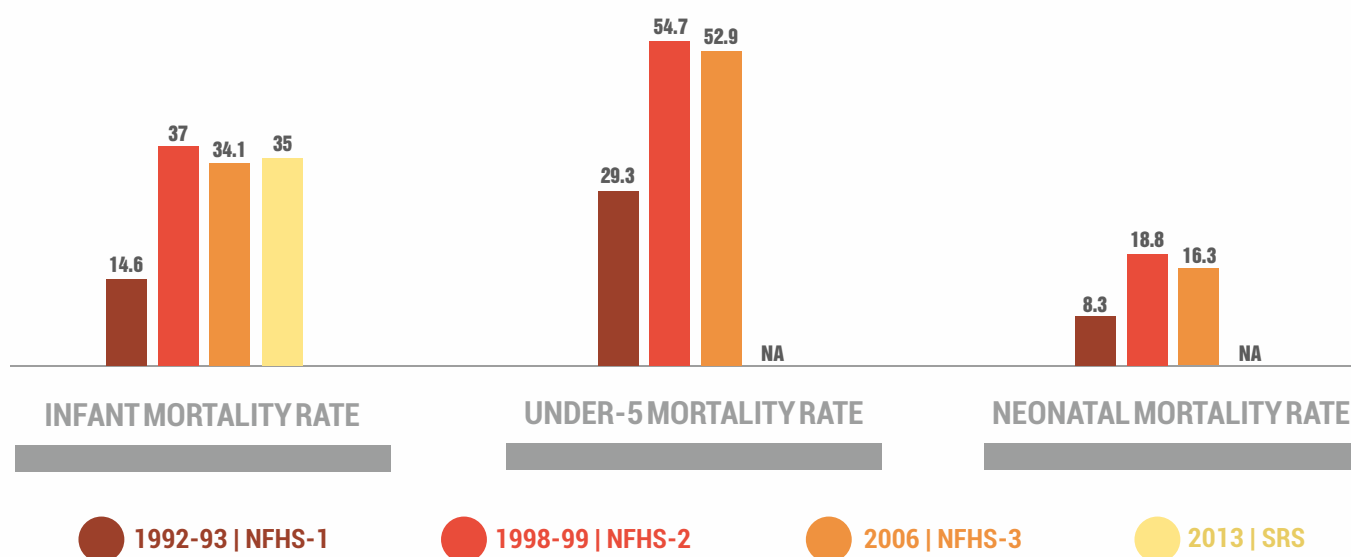
⁸ Source : Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14 : http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82

⁹ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Government of India, 2011-12 : http://planningcommission.nic.in/news/pre_pov2307.pdf

¹⁰ Source : IFPRI, India State Hunger Index, 2009

B. CHILD MORTALITY PER THOUSAND LIVE BIRTHS

This section illustrates trends in mortality in neonates, infants and children under 5 years, since 1992. The purpose of this is to highlight the success achieved by individual states in averting deaths of children since the economic growth of the 1990s.



II. NUTRITIONAL STATUS AMONG CHILDREN

This section presents data on nutrition outcome indicators (stunting, wasting, and underweight) and anemia prevalence. Anthropometric measures for children under 5 (stunting, wasting, and underweight) are presented over time periods, by age groups and by background characteristics. This data aims to convey the prevalence and severity of undernutrition in the state.

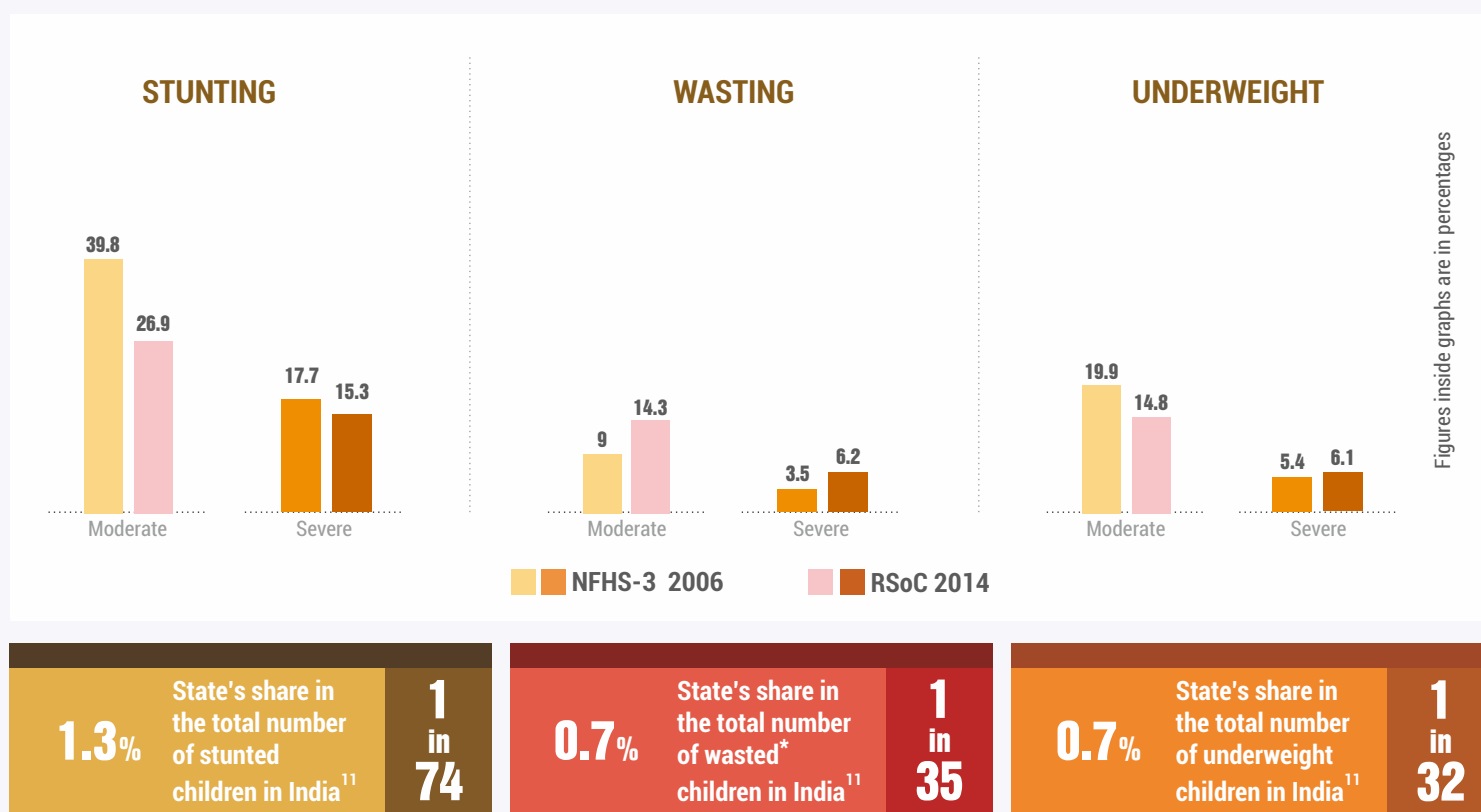
A. CHILD UNDERNUTRITION, BY TIME PERIOD

ANTHROPOMETRIC MEASURES

Stunting is inadequate height for age, which is indicative of chronic or cumulative nutritional deprivation in early childhood. A stunted child's height-for-age is below -2 standard deviations from the median height-for-age (termed HAZ) of the WHO Child Growth Standards, while a severely stunted child is below -3 standard deviations.

Wasting is inadequate weight for height, which points to acute or short-term undernutrition. A wasted child's weight-for-height (WHZ) is below -2 standard deviations from the WHO Child Growth Standards; a severely wasted child is below -3 standard deviations. (Another way to determine severe wasting or severe acute malnutrition is through a measurement of a child's mid-upper arm circumference (MUAC).

Underweight is inadequate weight for age, a composite indicator that encompasses stunting and wasting. An underweight child's weight-for-age (WAZ) is below -2 standard deviations from the WHO Child Growth Standards; again, a severely underweight child is below -3 standard deviations.

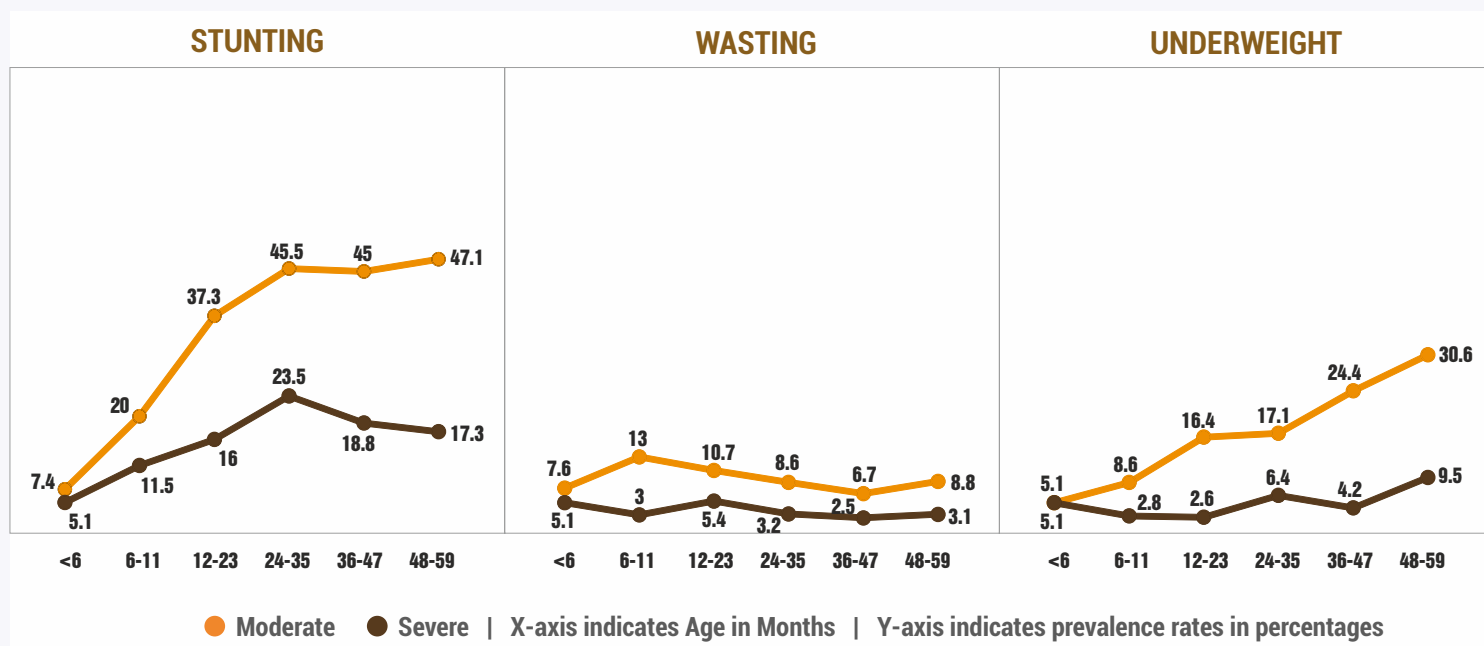


*Wasting is subject to seasonal variations either in food supply or disease prevalence and hence may not be comparable across groups of children measured at different times of the year within a survey round as well as between different survey rounds.

¹¹ Source : NFHS-3, 2006

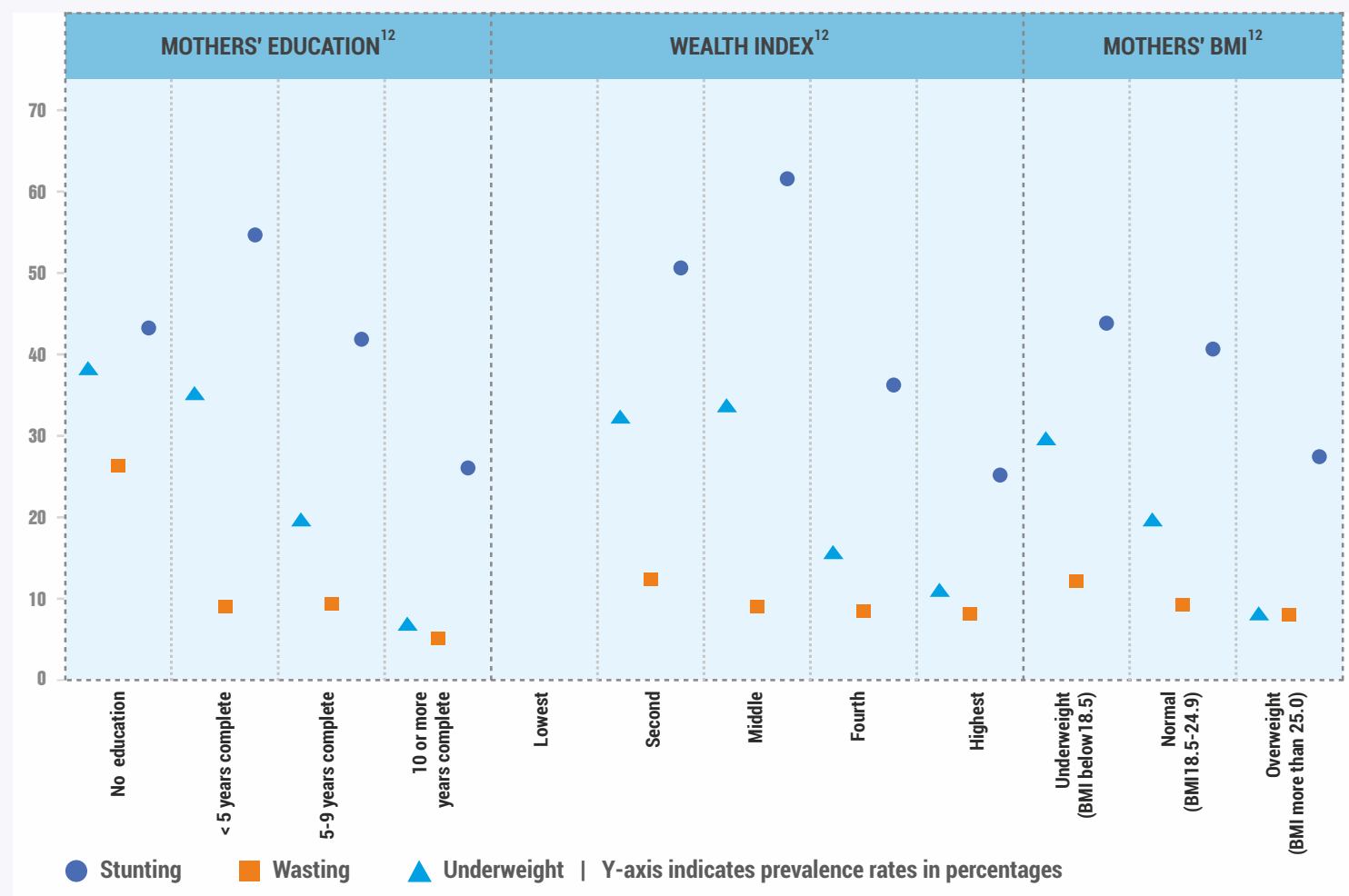
B. CHILD UNDERNUTRITION, BY AGE GROUPS¹²

Percentage of moderate (below -2 SD from the WHO growth standards) and severe (below -3 SD) stunting, wasting and underweight are available for 6 age groups among children under 5.

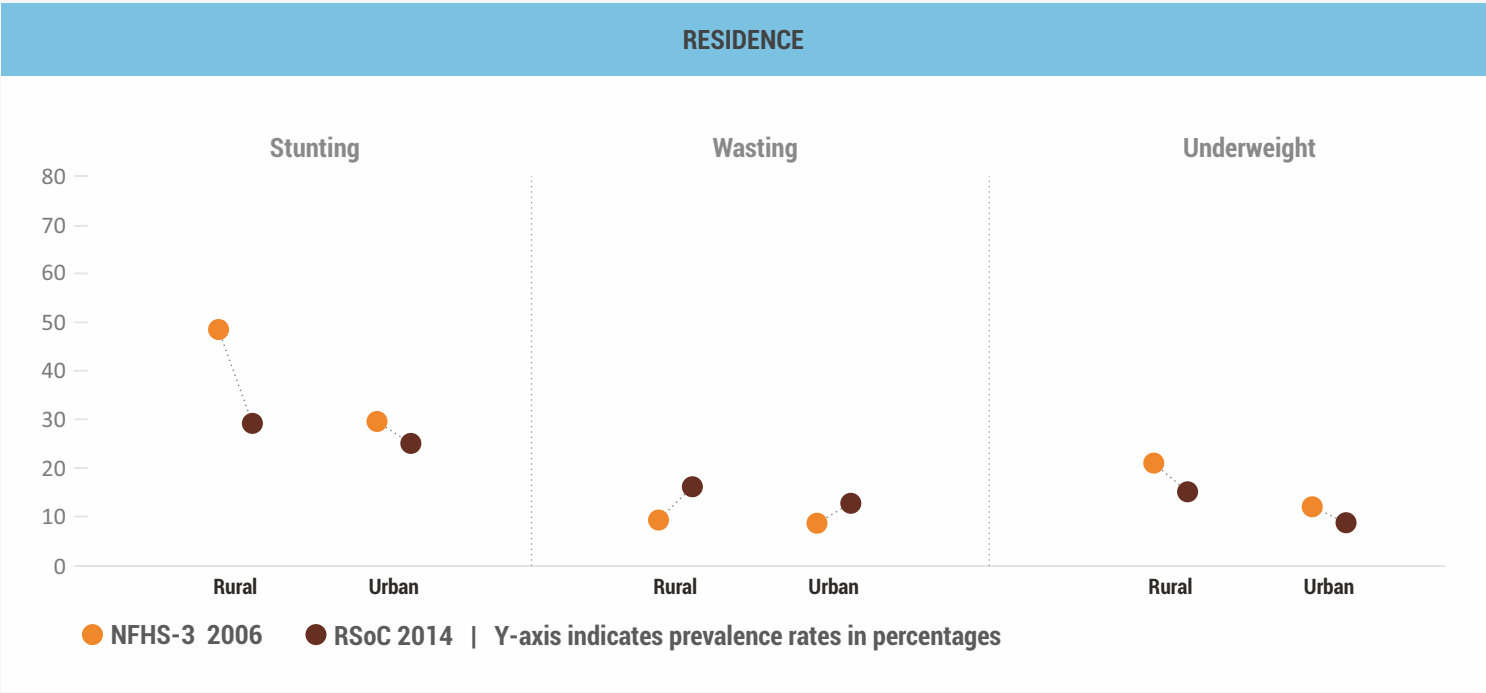
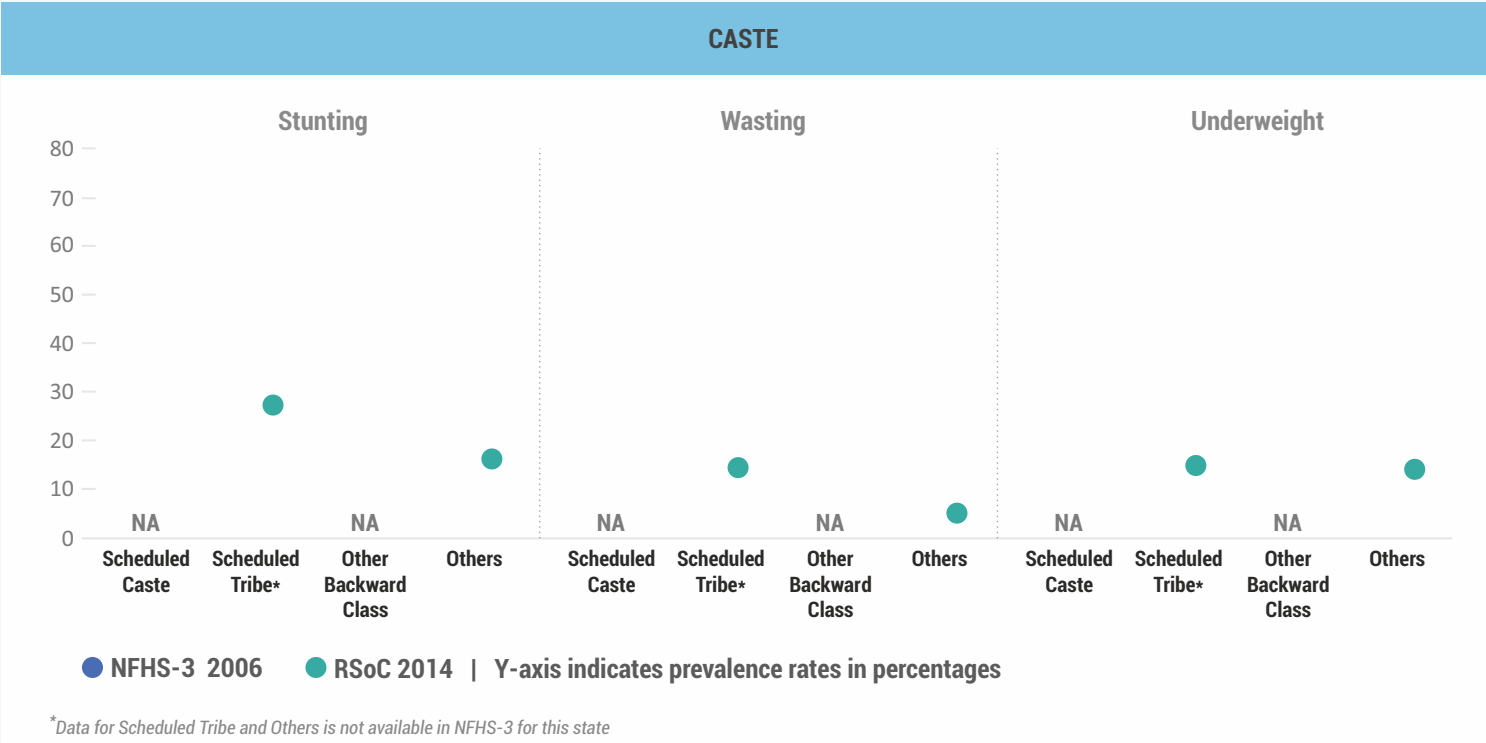


C. PREVALENCE OF CHILD UNDERNUTRITION, BY BACKGROUND CHARACTERISTICS

In this section, child undernutrition outcomes are presented, along with key socioeconomic drivers that are known to be associated with child nutrition, such as caste, residence, mother's health and education, and household income.

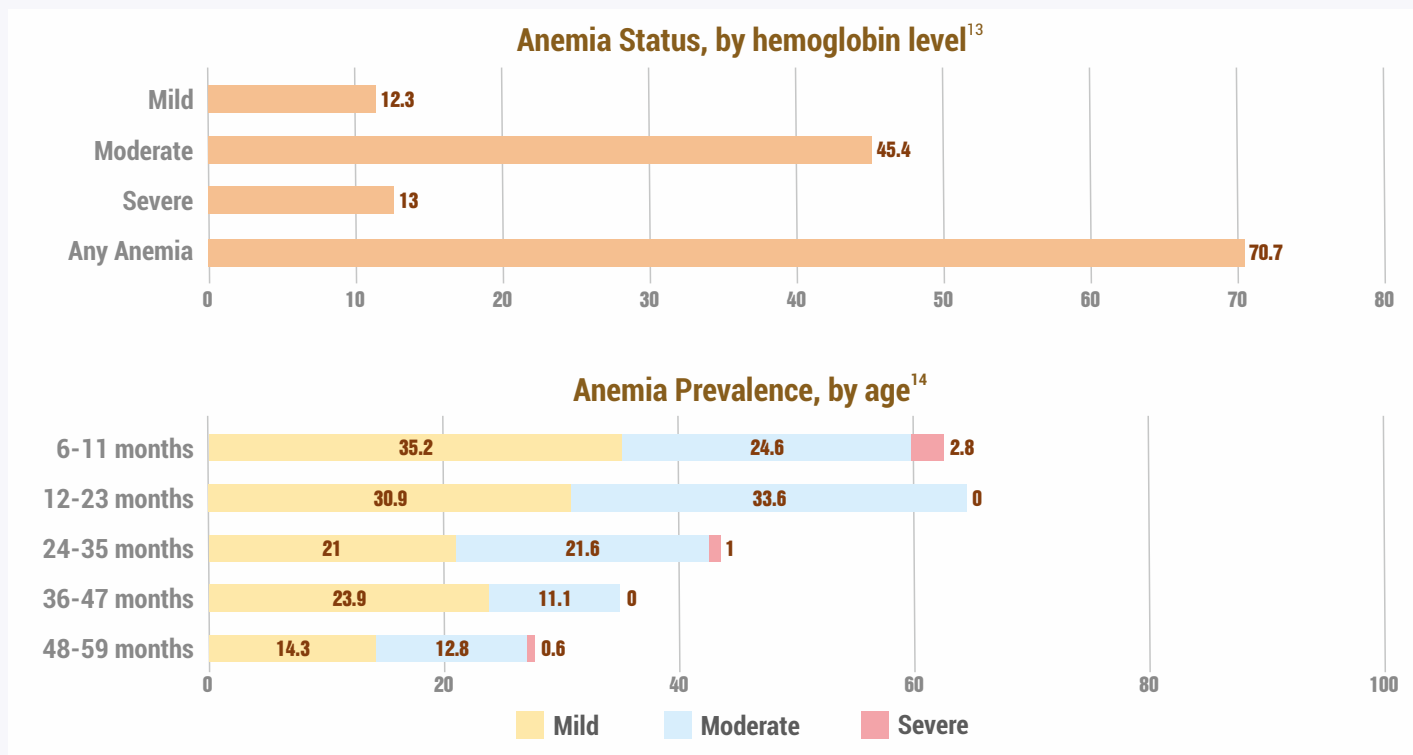


¹² Source : NFHS-3, 2006



D. ANEMIA PREVALENCE

Anemia can impair physical and cognitive development among children and create long term impacts on productivity and wellbeing. This section features data on anemia prevalence by severity and age groups for children under 5.



¹³ Source : DLHS-4, 2012-13

¹⁴ Source : NFHS-3, 2006

III. IMMEDIATE DETERMINANTS

A. INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES¹⁵

This section presents indicators for assessing IYCF practices as recommended by the WHO and revised in 2008. Following optimal IYCF practices during the first 1,000 days is crucial for early child survival and growth as well as long-term health and wellbeing.

Children aged 0-23 months breastfed immediately/within an hour of birth		84.8%
	Children aged 0-5 months who were exclusively breastfed	44.5%
	Children aged 6-8 months who were fed complementary foods	60.9%
	For breastfed children (6-23 months)- A. Fed minimum number of times. Note : At least twice a day for breastfed infants 6-8 months old and at least three times a day for breastfed children 9-23 months old B. Had minimum dietary diversity Note : Minimum dietary diversity refers to four or more food groups^B fed to children aged 6-23 months	20% 10.5%

B. CHILD HEALTH¹⁵

Prevalence of childhood illnesses (in children aged 0-59 months)	
Had diarrhea in 15 days prior to survey	4.6%
Had fever in 15 days prior to survey	6.3%
Had symptoms of Acute Respiratory Infection (ARI) in 15 days prior to survey	2%

^B The 7 food groups include the following: i. grains, roots and tubers ii. legumes and nuts iii. dairy products (milk, yoghurt, cheese) iv. Flesh foods (meat, fish, poultry, and liver/organ meats) v. eggs vi. Vitamin-A rich fruits and vegetables vii. other fruits and vegetables.

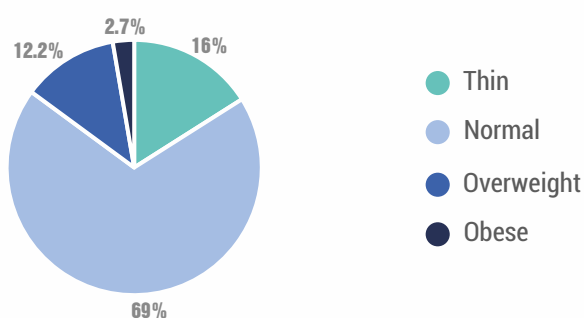
¹⁵ Source : RSoC, 2014

C. NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

Maternal health and nutrition, as well as adolescent nutrition, have important consequences for intergenerational transmission of undernutrition. Data on Body Mass Index (BMI), anemia prevalence and height among women of reproductive age are presented in this section, as are data on adolescent BMI and anemia.

C.1. WOMEN 15-49 YEARS OLD¹⁶

BMI^c levels of women aged 15-49 years



^cBody Mass Index (BMI) is defined as the weight in kilograms by the square of the height in metres (kg/m²). It is a simple index of weight-for-height which is commonly used to classify underweight, overweight and obesity in adults. Range: BMI < 18.5 = total thin, BMI 18.5-24.9 = normal, BMI 25.0-29.9 = Overweight, BMI > 30.0 = Obese [per WHO Standards]



64.1%

Women aged 15-49 years are anemic

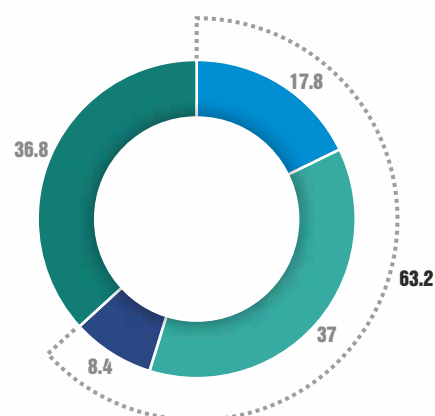
8.4%

Women aged 15-49 years are severely anemic

C.2. PREGNANT WOMEN¹⁶

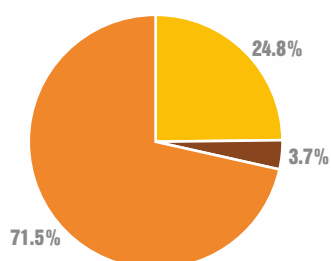
Anemia prevalence in pregnant women aged 15-49 years

● Mild ● Moderate ● Severe ● None ---- Any



C.3. ADOLESCENT GIRLS

BMI levels of adolescent girls aged 15-18 years¹⁷



● Normal ● Thin ● Overweight and Obese



39.4%

Adolescent girls aged 15-19 years are anemic¹⁶

1.3%

Adolescent girls aged 15-19 years are severely anemic¹⁶

¹⁶ Source : DLHS-4, 2012-13

¹⁷ Source : RSoC, 2014

^{17a} Source : NFHS-3, 2006

IV. UNDERLYING DETERMINANTS

A. SOCIAL STATUS OF WOMEN

Women's status is recognized to contribute in significant ways to improving nutrition. This section presents indicators that are representative of women's social status, including measures of education, age at marriage and first birth, employment, decision making and domestic violence. It also includes the Gender Empowerment Measure that captures gender inequality along three dimensions: political participation and decision-making power, economic participation and decision-making power, and power over economic resources.



Currently married women who have 10 or more years of schooling¹⁸ **31.5%**



9.1% Women aged 20-24 years who were married before the age of 18¹⁹

24.6 Average age at marriage¹⁹

Gender Empowerment Measure^{D,20}

0.4

0.5

National Average²⁰



Female workforce participation rate²² **36.2%**

Currently married women who make decisions about²³:



33.7% Own healthcare



14.6% Major household purchase



55.6% Purchases for daily household needs



16.7% Visits to her family/friends/relatives



25.1% Women who have experienced any form of physical/sexual/emotional violence²³

82.4% Ever married women who justify hitting/wife-beating (for either of the reasons mentioned)²³

^D The Gender Empowerment Measure is a weighted average index based on indicators that are classified into three dimensions: a. political participation and decision-making power b. economic participation and decision-making power and c. power over economic resources. The index ranges from a minimum of 0 to a maximum of 1, with a higher score indicating greater empowerment of women. (More information available at <http://wcd.nic.in/publication/GDIGEReport/Part3.pdf>.)

¹⁸ Source : DLHS-4, 2012-13

¹⁹ Source : RSoC, 2014

²⁰ Source : MoWCD, 2006

²² Source : Women and Men in India, 16th Issue MoSPI, 2014

²³ Source : NFHS-3, 2006

B. WATER AND SANITATION

Poor hygiene and sanitation, by directly increasing exposure and susceptibility to infections, are associated with undernutrition among children. This section covers key indicators on access to safe drinking water and availability of sanitation facilities at the state level. It also includes the expenditure on toilet construction under the Total Sanitation Campaign.



72%

Households with access to improved sources of drinking water^{E, 24}

92.9%

Households using improved sanitation facility^{F, 24}



3.8%

Households practicing open defecation²⁴

1.92 M

Expenditure on toilets under Total Sanitation Campaign (TSC)^{G, 25}



1,065 M

National Average²⁵

C. AGRICULTURE AND FOOD SECURITY

Agriculture productivity and food security can affect household access to foods necessary for a healthy diet. Thus, this section presents indicators related to agricultural growth and food consumption patterns in the state, indicating the level of food security in the state relative to the national situation.



1.6%

Growth rate of agriculture from 2007-2012²⁶



0.03%

Share in India's total foodgrain production²⁷



Mean Calorie intake per person per day (in Kcal)²⁸

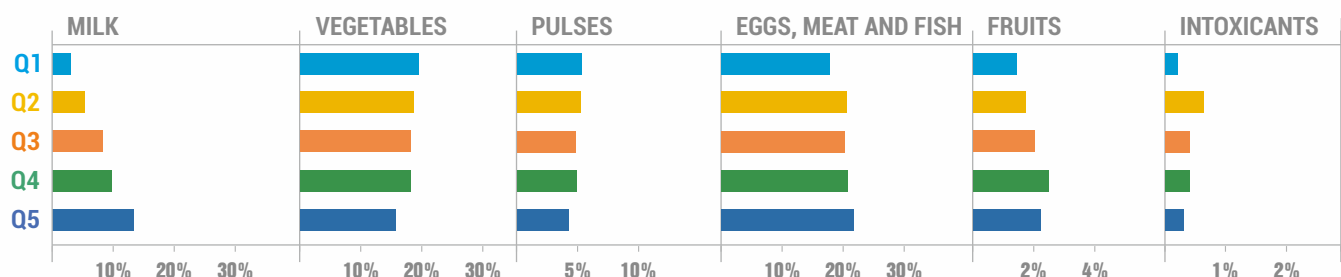
RURAL

NA 2233
MIZORAM INDIA AVG

URBAN

NA 2206
MIZORAM INDIA AVG

Expenditure on food items by income quintiles²⁸



^E Improved sources of drinking water include: piped water into dwelling, piped water to yard/plot, public tap or standpipe, tubewell or borehole, protected dug well, protected spring, and rainwater (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>).

^F Improved sanitation means households using improved toilets that include: flush toilet, piped sewer system, septic tank, flush/pour flush to pit latrine, ventilated improved pit latrine, pit latrine with slab, composting toilet, special case (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>); excludes those households who are using improved toilets but sharing toilet facilities with other households.

^G Besides toilet construction subsidies, this expenditure also includes funding other activities such as solid and liquid waste management, IEC activities for sustainable demand generation for sanitation facilities, assistance to production centers of sanitary materials and rural sanitary marts, provision of construction of community sanitary complexes, provision of sanitation facilities in govt. schools and Anganwadis in govt. buildings etc.

²⁴ Source : RSoC, 2014

²⁵ Source : Indiastat, Rajya Sabha Unstarred Question No. 2950, dated on 30.08.2011, 2011-12

²⁶ Source : Indiastat, compiled by datanet from Rajyasabha & Lok Sabha unstarred questions no. 3039, 4535. 2007-12

²⁷ Source : Indiastat, Ministry of Agriculture, Government of India 2011-2012

²⁸ Source : NSSO, 68th round-Nutritional Intake in India, 2011-12

V. STATUS OF NUTRITION-RELEVANT INTERVENTIONS

A. NUTRITION-SPECIFIC INTERVENTIONS

The financial resources allocated to, and spent on direct nutrition-specific interventions can determine the scale, coverage and quality of interventions to reach vulnerable target populations. These services, in India, are delivered both by the Integrated Child Development Scheme (ICDS) and the National Health Mission (NHM). This section includes data on the coverage of interventions delivered by these two key centrally-sponsored schemes that directly impact maternal and child nutrition and health. We also include here information on the human resources and service availability of these schemes and expenditures.

A.1. COVERAGE OF ICDS AND NHM:

The Integrated Child Development Services (ICDS) aims to improve the nutrition and health status of children under-six through a package of services (supplementary nutrition, immunization, health check-up, referral services, etc.) delivered through frontline workers at the Anganwadi Centres (AWCs). This section provides information on expenditure on ICDS and coverage of its supplementary nutrition programme (SNP). This section also covers critical services provided by the health system, including provision of care for pregnant women and child immunization. Immunization plays a crucial role in complementing actions to improve nutrition. The link between undernutrition and infectious diseases is cyclical, poor nutrition increases vulnerability to infections, which in turn worsen nutrition status. Data on immunization among children are presented by residence. Here, full immunization refers to children covered with BCG, measles and 3 doses each of DPT and polio.

Beneficiaries who availed supplementary food under ICDS²⁹

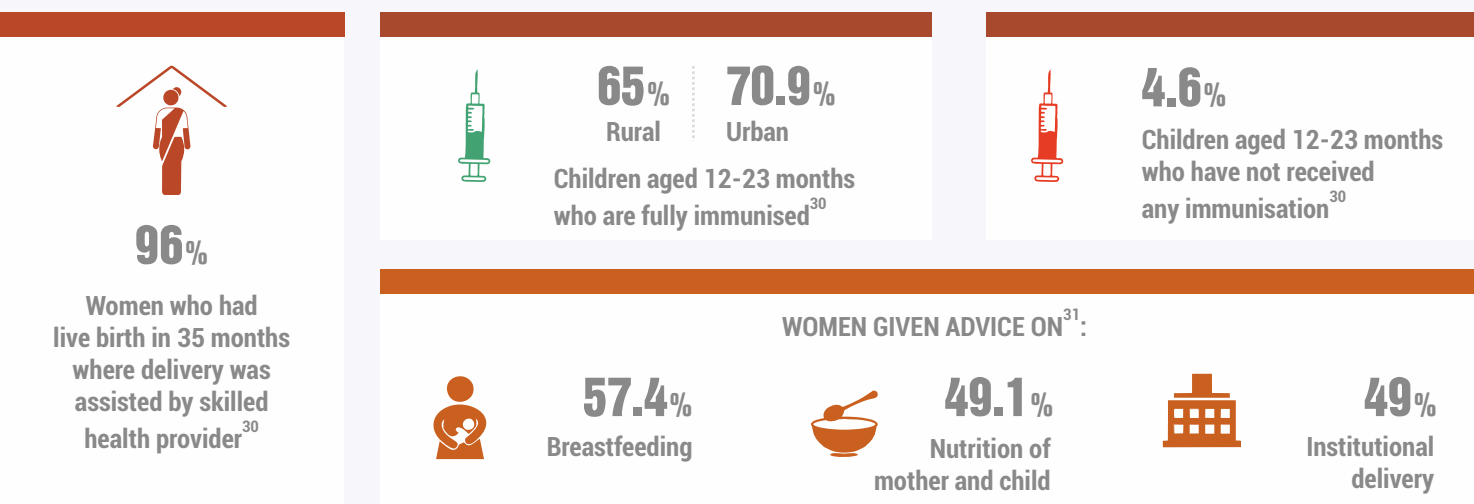
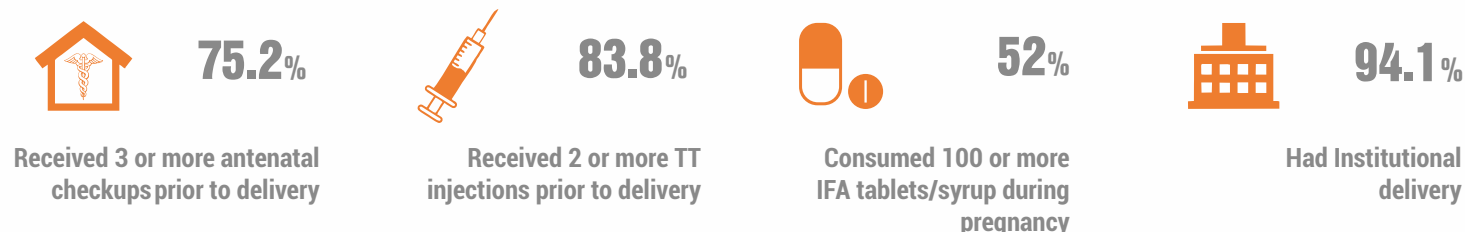
Children 6-35 months	63.4%
Children 36-71 months	68.9%
Pregnant women	44.1%
Lactating mothers	46.4%

Beneficiaries who received supplementary food for at least 21 days in the month prior to the survey

Children aged 6-35 months	0%
Children aged 36-71 months	16.3%
Pregnant women	NA
Lactating women	0%

²⁹ Source : RSoC, 2014

SERVICES PROVIDED TO WOMEN WHO HAD A LIVE BIRTH IN LAST 35 MONTHS³⁰



A.2. PERSONNEL CAPACITY OF ICDS AND NRHM:

This section features data on availability of healthcare personnel and services available to women of reproductive age (antenatal care, tetanus toxoid coverage, iron-folic acid supplementation coverage, institutional delivery and counseling). Household and individual access to health services can directly impact children's nutrition and welfare during the crucial first 1,000 days of life.

Availability of Anganwadi Centres and Workers (AWCs and AWWs) ^{H, 30}	Value
Pending or vacant Anganwadi workers to sanctioned number of workers*	0%
AWWs living in the AWC village/ward	95.8%
AWWs having 10 or more years of schooling	52.1%
Median age of AWWs	39 years
AWCs serving to population more than the stipulated norm	6.5%

Growth Monitoring ³⁰	Value
AWCs having functional baby weighing scale	80.2%
AWCs having functional adult weighing scale	64.8%
Available WHO growth chart at AWCs	78.2%

^H Number of AWCs surveyed for Mizoram as per RSoC 2014 is 91.

³⁰ Source : RSoC, 2014

³¹ Source : DLHS-4, 2012-13

* Source : MoWCD, 2012

Training and Comprehensive Knowledge ³²	Value
AWWs having correct knowledge of intake of food by pregnant women	87.3%
AWWs having correct knowledge of normal birth weight of children	78.6%
AWWs having correct knowledge of initiation of breastfeeding within one hour	100%
AWWs having correct knowledge of exclusive breastfeeding for the first six months	89.7%
AWWs having correct knowledge of appropriate age of child for complementary feeding	82.9%

Health Service Delivery Personnel	Value
ASHAs selected ³³	100%
Current density of ASHA as per Census 2011 rural population ³³	1 per 536 persons
Pending or vacant ANM positions sub centres & PHCs ³⁴	0%

A.3. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SPECIFIC INTERVENTIONS

Expenditure on Schemes (in million dollars)	In million USD	National Average
ICDS (ICDS general + SNP + training) (women and children) ³⁵	9	75
NRHM expenditure (Central Government) ³⁶	11	68.8
NRHM expenditure (State Government) ³⁶	2.4	9.3

B. NUTRITION-SENSITIVE INTERVENTIONS

This section includes information on expenditure and coverage of key centrally-sponsored schemes that indirectly impact maternal and child nutrition. These are: the Mid Day Meal Scheme (MDMS), Public Distribution System (PDS), and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

B.1. COVERAGE OF SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS

Coverage of Schemes	Value
MDMS (base: eligible children*) ³⁷	52.8%
PDS (base: rural and urban households reporting consumption) ³⁸	92.4%
MGNREGA (base: rural persons 18 years and above registered in MGNREG job card and demanded work during last 365 days) ³⁹	98.8%

* All children studying in primary & upper primary classes in schools supported under Sarva Shiksha Abhiyan and NCLP (National Child Labour Project) run by Ministry of Labour.

B.2. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS:

Expenditure on Schemes (in million dollars)	In million USD	National Average
MDMS ⁴⁰	6	47
PDS ⁴¹	26.3	475.3
MGNREGA ⁴²	48	214

³² Source : RSoC, 2014

³³ Source : NRHM, 2013

³⁴ Source : MoHFW, 2013

³⁵ Source : Lok Sabha Unstarred Question # 846 dated 27.02.2015, 2012-13

³⁶ Source : Lok Sabha Annexured Unstarred Question # 409 dated 6.12.2013, 2012-13

³⁷ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/lsq15/15/as216.htm 2011-12

³⁸ Source : Report No. 558, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

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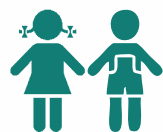
⁴⁰ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014, 2012-13

⁴¹ Source : Food Corporation of India 2013, 2012-13

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Stunted¹
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Wasted¹

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58.1%

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18.9%

 Children under 3 years who have low birth weight (<2.5 kgs)¹

50.2%

 Women 15-49 years old with anemia²

18.7%

 Infants 6-8 months old who receive solid, semi-solid or soft foods¹
2.6%

 Infants & young children 6-23 months old who achieve minimal diet diversity in complementary feeding¹

Immediate Determinants


61.3%

 Children 6-59 months old with anemia²

0.4%

 Children 6-59 months old who had diarrhea in 15 days prior to survey¹

Immediate Determinants


0%

 Children 6-35 months old who received supplementary food under ICDS for 21 days in the month prior to survey¹

33.2%

 Children 12-23 months old who are fully immunized¹

14.5%

 Mothers of children under 36 months old who received three or more antenatal checkups¹

24.9%

 Currently married women with 10 or more years of schooling²

10.4%

 Women aged 20-24 years who were married before the age of 18¹

50.9%

 Adolescent girls 15-18 years old with low BMI (<18.5)¹

Underlying Determinants


14%

 Households practicing open defecation¹

18.9%

 Population below state-specific poverty line³

Does state have a high-level nutrition mission?

NO

Underlying Determinants

¹ Source : RSoC, 2014

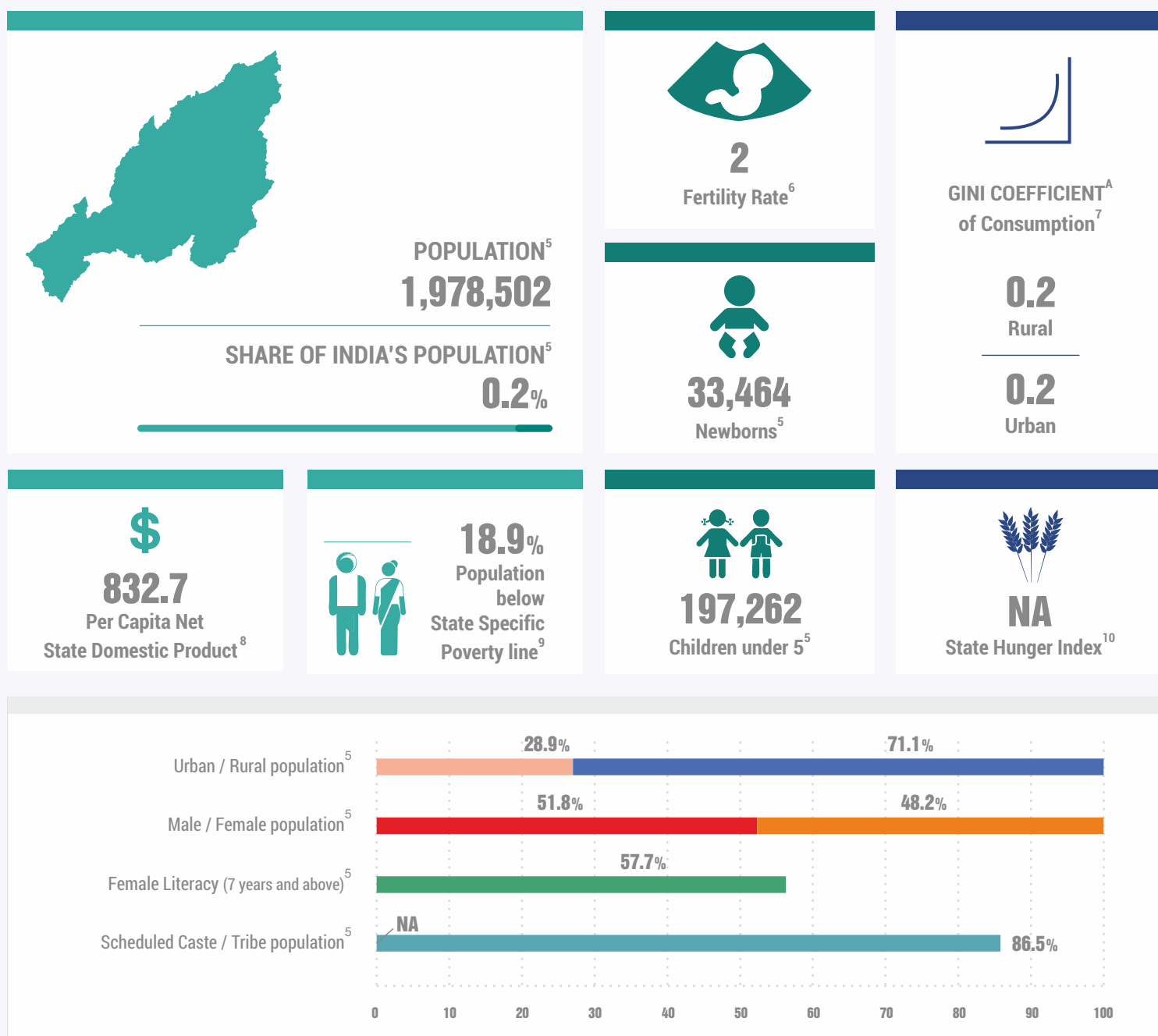
² Source : DLHS4, 2012-13

³ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Govt. of India

I. CONTEXT

A. DEMOGRAPHIC CONTEXT

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⁵ Source : Primary Census Abstract, Census, 2011

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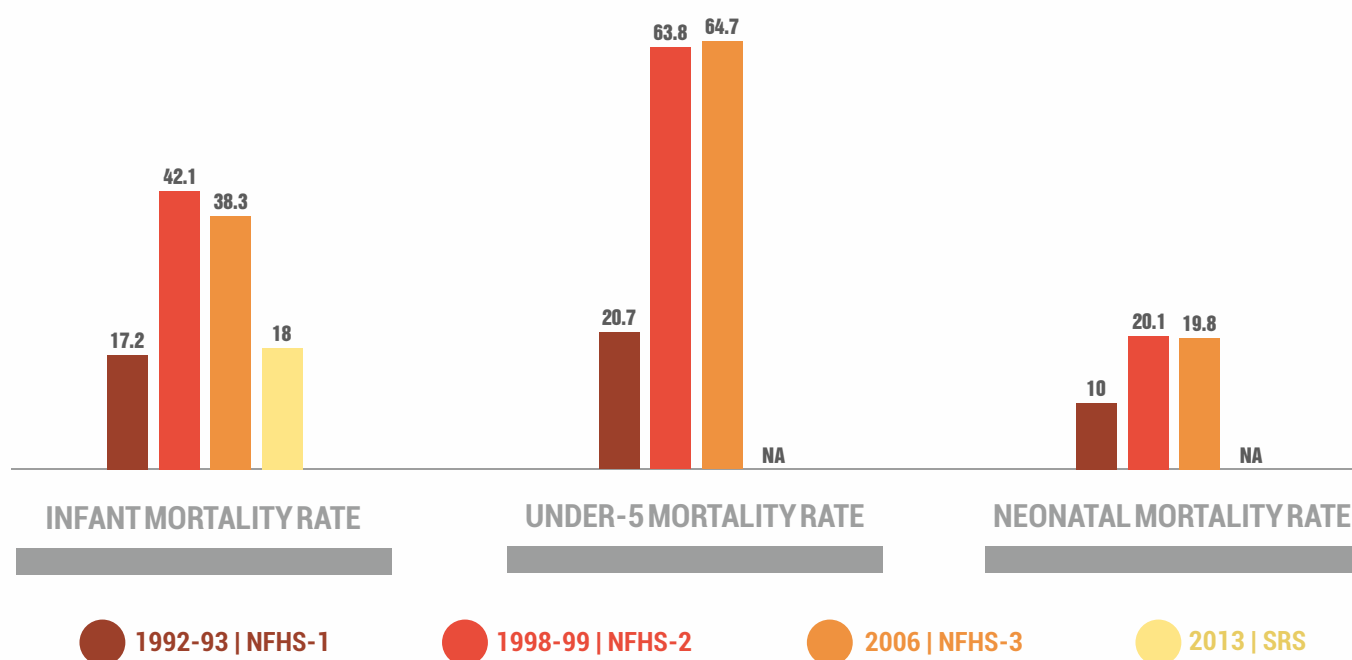
⁸ Source : Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14 : http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82

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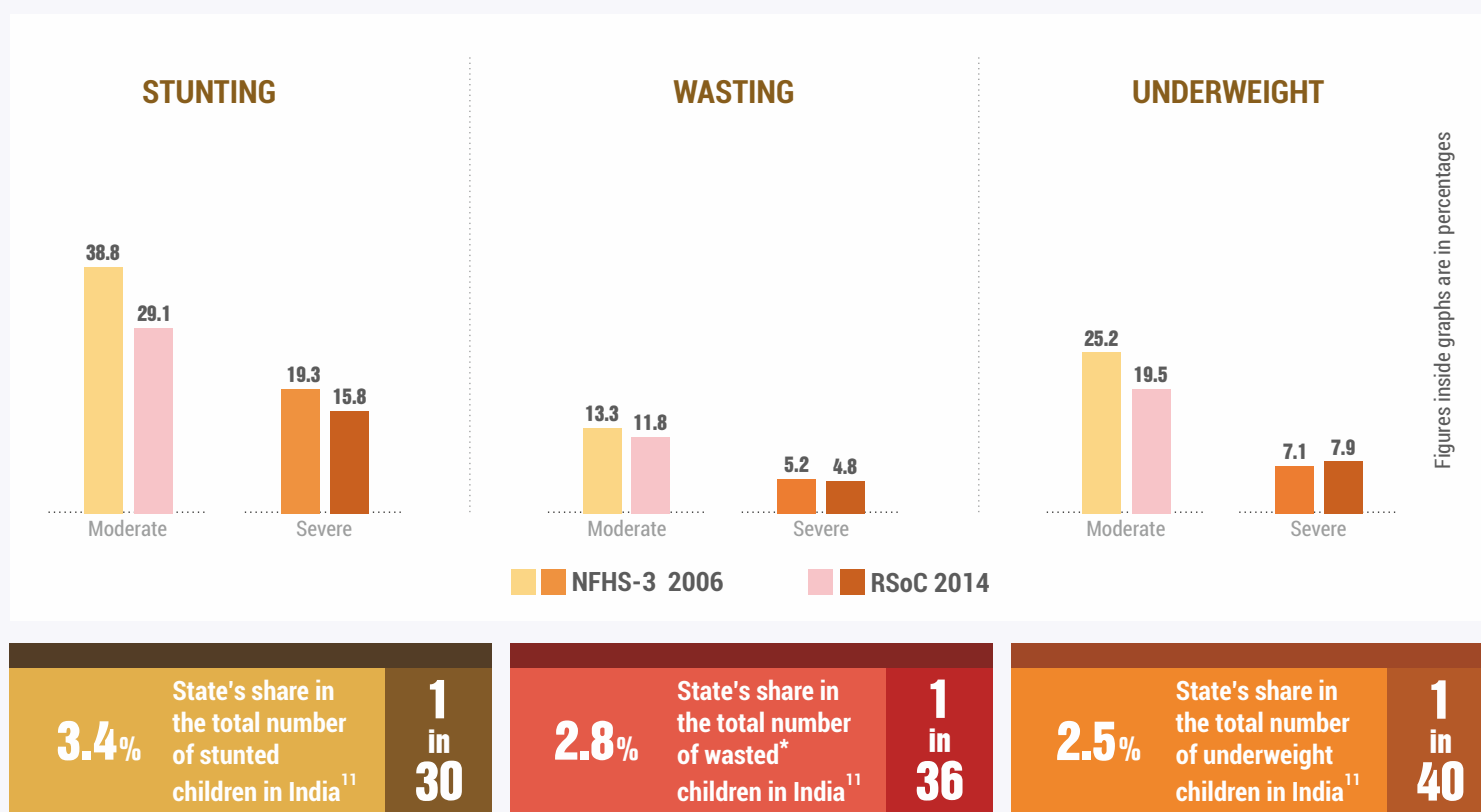
A. CHILD UNDERNUTRITION, BY TIME PERIOD

ANTHROPOMETRIC MEASURES

Stunting is inadequate height for age, which is indicative of chronic or cumulative nutritional deprivation in early childhood. A stunted child's height-for-age is below -2 standard deviations from the median height-for-age (termed HAZ) of the WHO Child Growth Standards, while a severely stunted child is below -3 standard deviations.

Wasting is inadequate weight for height, which points to acute or short-term undernutrition. A wasted child's weight-for-height (WHZ) is below -2 standard deviations from the WHO Child Growth Standards; a severely wasted child is below -3 standard deviations. (Another way to determine severe wasting or severe acute malnutrition is through a measurement of a child's mid-upper arm circumference (MUAC).

Underweight is inadequate weight for age, a composite indicator that encompasses stunting and wasting. An underweight child's weight-for-age (WAZ) is below -2 standard deviations from the WHO Child Growth Standards; again, a severely underweight child is below -3 standard deviations.

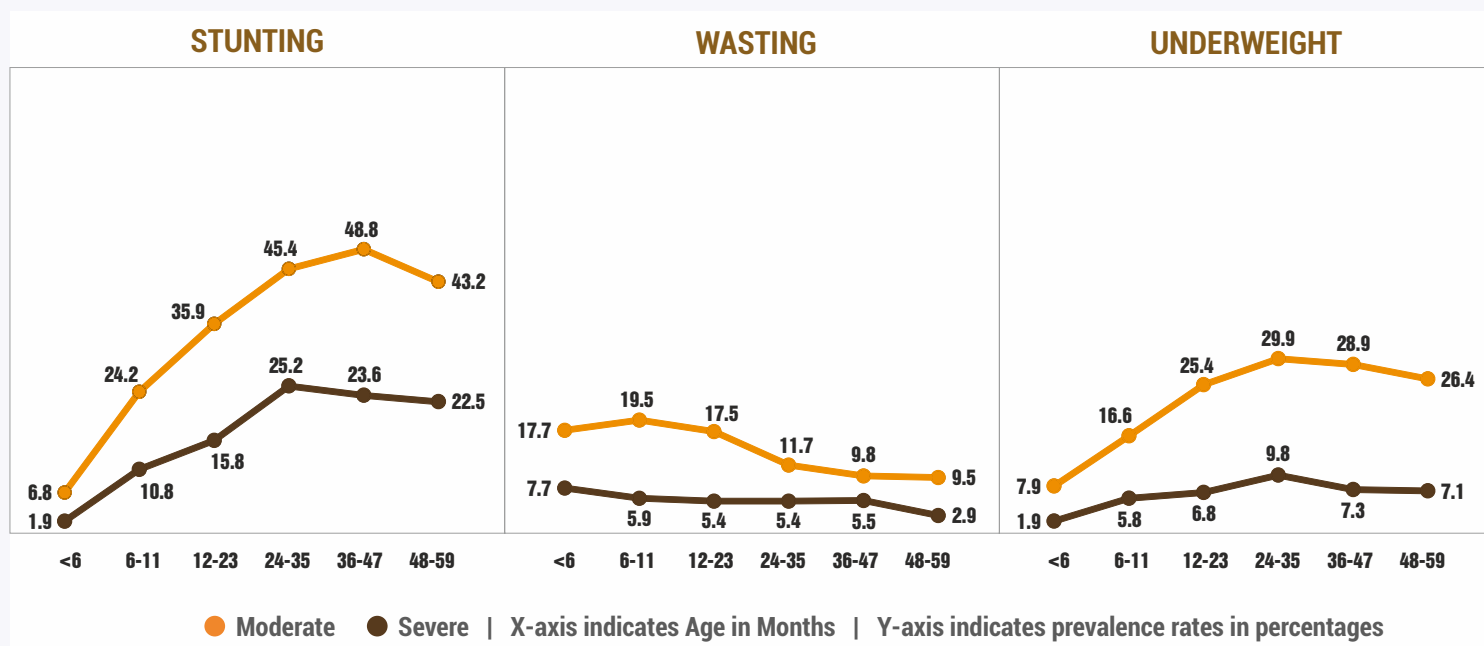


*Wasting is subject to seasonal variations either in food supply or disease prevalence and hence may not be comparable across groups of children measured at different times of the year within a survey round as well as between different survey rounds.

¹¹ Source : NFHS-3, 2006

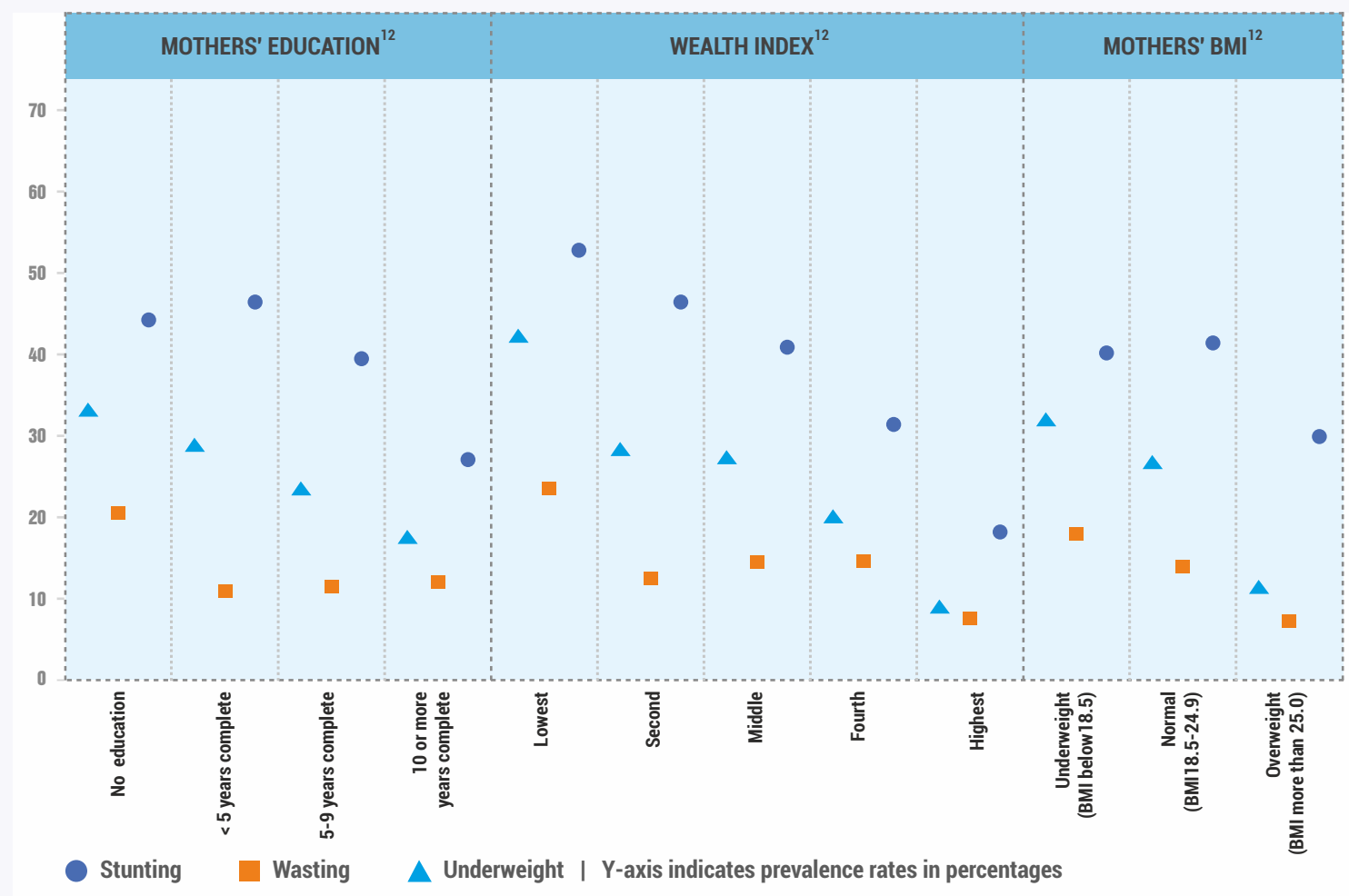
B. CHILD UNDERNUTRITION, BY AGE GROUPS¹²

Percentage of moderate (below -2 SD from the WHO growth standards) and severe (below -3 SD) stunting, wasting and underweight are available for 6 age groups among children under 5.



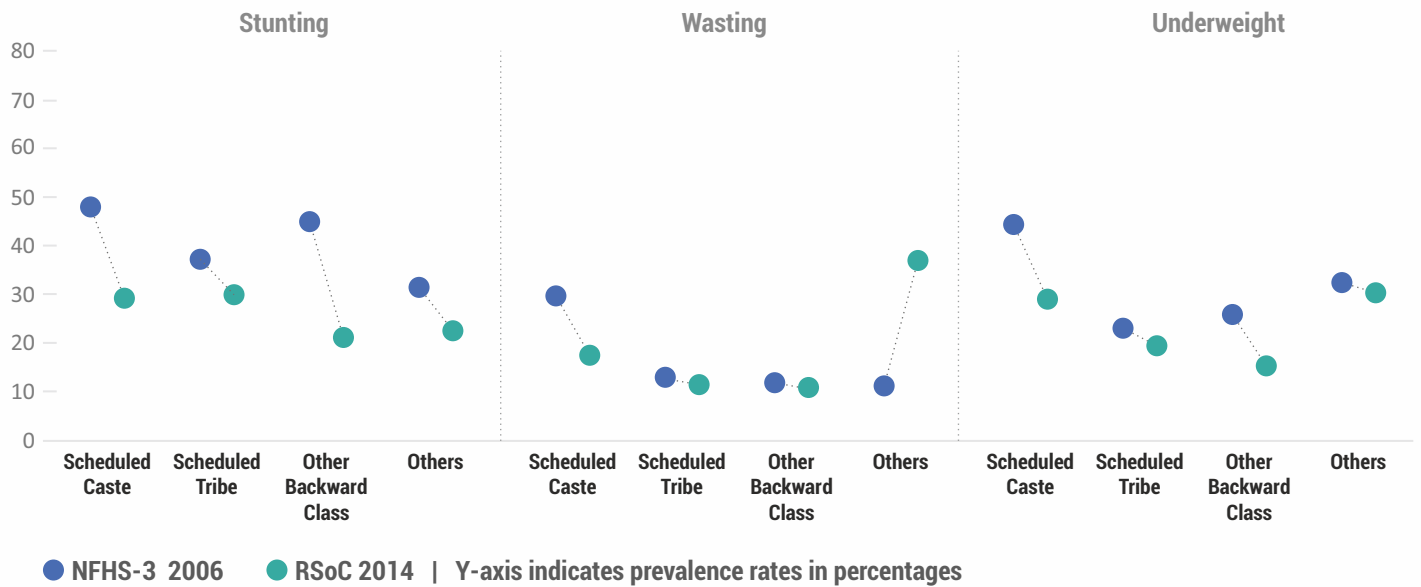
C. PREVALENCE OF CHILD UNDERNUTRITION, BY BACKGROUND CHARACTERISTICS

In this section, child undernutrition outcomes are presented, along with key socioeconomic drivers that are known to be associated with child nutrition, such as caste, residence, mother's health and education, and household income.

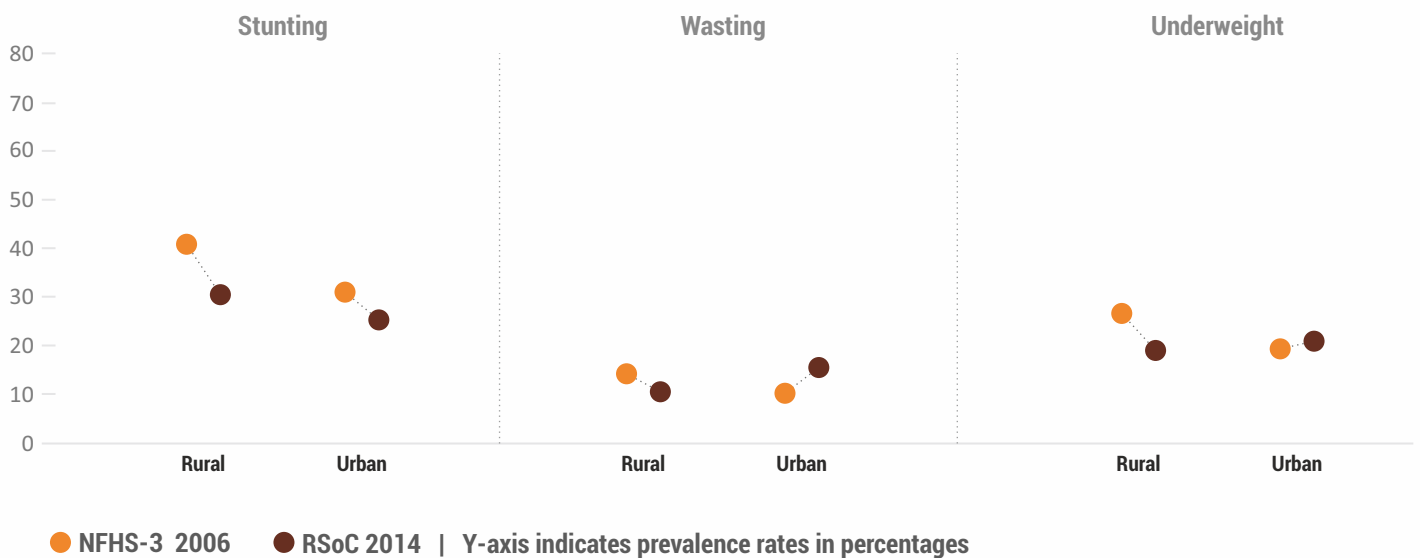


¹² Source : NFHS-3, 2006

CASTE

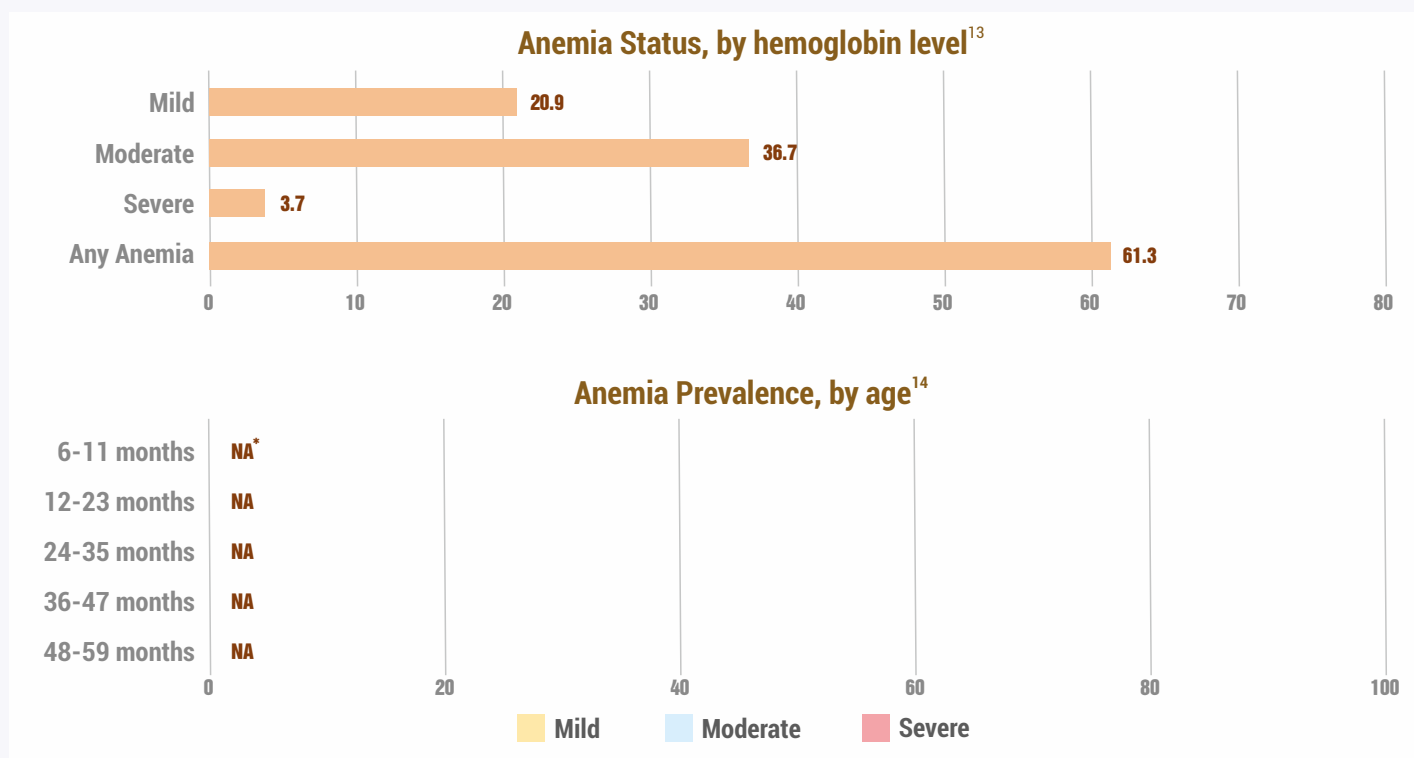


RESIDENCE



D. ANEMIA PREVALENCE

Anemia can impair physical and cognitive development among children and create long term impacts on productivity and wellbeing. This section features data on anemia prevalence by severity and age groups for children under 5.



*NA- In Nagaland, local opposition prevented the NFHS-3 teams from collecting blood for any purpose. Hence, neither haemoglobin measurement nor HIV testing could be done in this one state.

¹³ Source : DLHS-4, 2012-13

¹⁴ Source : NFHS-3, 2006

III. IMMEDIATE DETERMINANTS

A. INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES¹⁵

This section presents indicators for assessing IYCF practices as recommended by the WHO and revised in 2008. Following optimal IYCF practices during the first 1,000 days is crucial for early child survival and growth as well as long-term health and wellbeing.

Children aged 0-23 months breastfed immediately/within an hour of birth		68.5%
	Children aged 0-5 months who were exclusively breastfed	58.1%
	Children aged 6-8 months who were fed complementary foods	18.7%
	For breastfed children (6-23 months)- A. Fed minimum number of times. Note : At least twice a day for breastfed infants 6-8 months old and at least three times a day for breastfed children 9-23 months old B. Had minimum dietary diversity Note : Minimum dietary diversity refers to four or more food groups^B fed to children aged 6-23 months	12.6% 2.6%

B. CHILD HEALTH¹⁵

Prevalence of childhood illnesses (in children aged 0-59 months)

Had diarrhea in 15 days prior to survey	0.4%
Had fever in 15 days prior to survey	0.5%
Had symptoms of Acute Respiratory Infection (ARI) in 15 days prior to survey	0.3%

^B The 7 food groups include the following: i. grains, roots and tubers ii. legumes and nuts iii. dairy products (milk, yoghurt, cheese) iv. Flesh foods (meat, fish, poultry, and liver/organ meats) v. eggs vi. Vitamin-A rich fruits and vegetables vii. other fruits and vegetables.

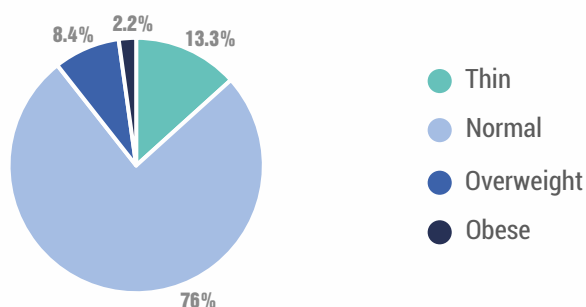
¹⁵ Source : RSoC, 2014

C. NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

Maternal health and nutrition, as well as adolescent nutrition, have important consequences for intergenerational transmission of undernutrition. Data on Body Mass Index (BMI), anemia prevalence and height among women of reproductive age are presented in this section, as are data on adolescent BMI and anemia.

C.1. WOMEN 15-49 YEARS OLD¹⁶

BMI^c levels of women aged 15-49 years



^cBody Mass Index (BMI) is defined as the weight in kilograms by the square of the height in metres (kg/m²). It is a simple index of weight-for-height which is commonly used to classify underweight, overweight and obesity in adults. Range: BMI < 18.5 = total thin, BMI 18.5-24.9 = normal, BMI 25.0-29.9 = Overweight, BMI > 30.0 = Obese [per WHO Standards]



50.2%

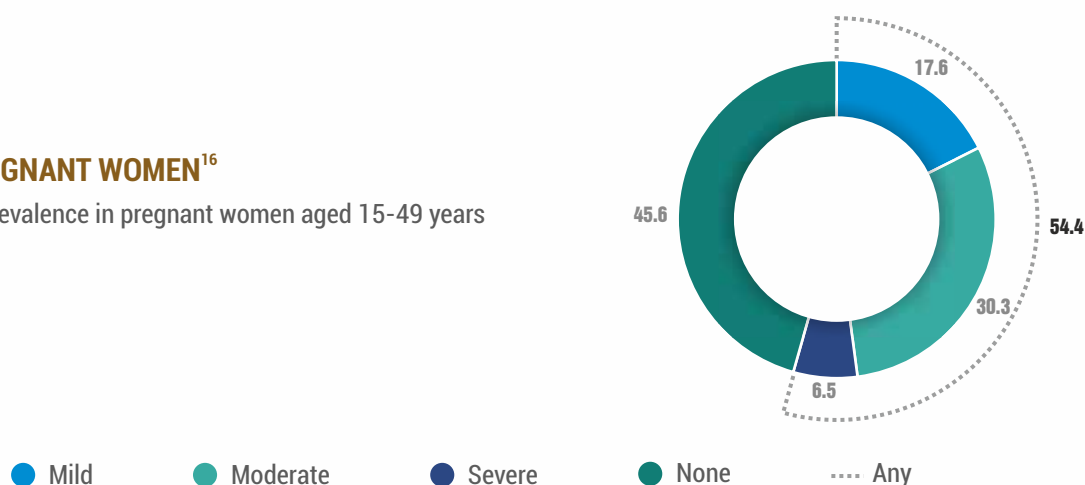
Women aged 15-49 years are anemic

5.2%

Women aged 15-49 years are severely anemic

C.2. PREGNANT WOMEN¹⁶

Anemia prevalence in pregnant women aged 15-49 years



● Mild

● Moderate

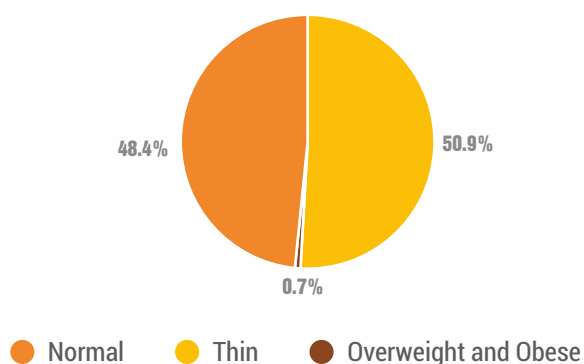
● Severe

● None

--- Any

C.3. ADOLESCENT GIRLS

BMI levels of adolescent girls aged 15-18 years¹⁷



NA*

Adolescent girls aged 15-19 years are anemic¹⁶

NA

Adolescent girls aged 15-19 years are severely anemic¹⁶

NA-Nagaland, local opposition prevented the NFHS-3 teams from collecting blood for any purpose. Hence, neither haemoglobin measurement nor HIV testing could be done in this one state.

¹⁶ Source : DLHS-4, 2012-13

¹⁷ Source : RSoC, 2014

^{17a} Source : NFHS-3, 2006

IV. UNDERLYING DETERMINANTS

A. SOCIAL STATUS OF WOMEN

Women's status is recognized to contribute in significant ways to improving nutrition. This section presents indicators that are representative of women's social status, including measures of education, age at marriage and first birth, employment, decision making and domestic violence. It also includes the Gender Empowerment Measure that captures gender inequality along three dimensions: political participation and decision-making power, economic participation and decision-making power, and power over economic resources.



Currently married women who have 10 or more years of schooling¹⁸ **24.9%**



10.4% Women aged 20-24 years who were married before the age of 18¹⁹ | **20.8** Average age at marriage¹⁹

Gender Empowerment Measure^{D,20}

0.3

0.5

National Average²⁰



Female workforce participation rate²² **44.7%**

Currently married women who make decisions about²³:



20.1% Own healthcare



9.8% Major household purchase



56.7% Purchases for daily household needs



8.4% Visits to her family/friends/relatives



21.3% Women who have experienced any form of physical/sexual/emotional violence²³

79% Ever married women who justify hitting/wife-beating (for either of the reasons mentioned)²³

^D The Gender Empowerment Measure is a weighted average index based on indicators that are classified into three dimensions: a. political participation and decision-making power b. economic participation and decision-making power and c. power over economic resources. The index ranges from a minimum of 0 to a maximum of 1, with a higher score indicating greater empowerment of women. (More information available at <http://wcd.nic.in/publication/GDIGEReport/Part3.pdf>.)

¹⁸ Source : DLHS-4, 2012-13

¹⁹ Source : RSoC, 2014

²⁰ Source : MoWCD, 2006

²² Source : Women and Men in India, 16th Issue MoSPI, 2014

²³ Source : NFHS-3, 2006

B. WATER AND SANITATION

Poor hygiene and sanitation, by directly increasing exposure and susceptibility to infections, are associated with undernutrition among children. This section covers key indicators on access to safe drinking water and availability of sanitation facilities at the state level. It also includes the expenditure on toilet construction under the Total Sanitation Campaign.



62%

Households with access to improved sources of drinking water^{E, 24}

77.7%

Households using improved sanitation facility^{F, 24}



14%

Households practicing open defecation²⁴

3.7 M

Expenditure on toilets under Total Sanitation Campaign (TSC)^{G, 25}



1,065 M

National Average²⁵

C. AGRICULTURE AND FOOD SECURITY

Agriculture productivity and food security can affect household access to foods necessary for a healthy diet. Thus, this section presents indicators related to agricultural growth and food consumption patterns in the state, indicating the level of food security in the state relative to the national situation.



8.4%

Growth rate of agriculture from 2007-2012²⁶



0.2%

Share in India's total foodgrain production²⁷



Mean Calorie intake per person per day (in Kcal)²⁸

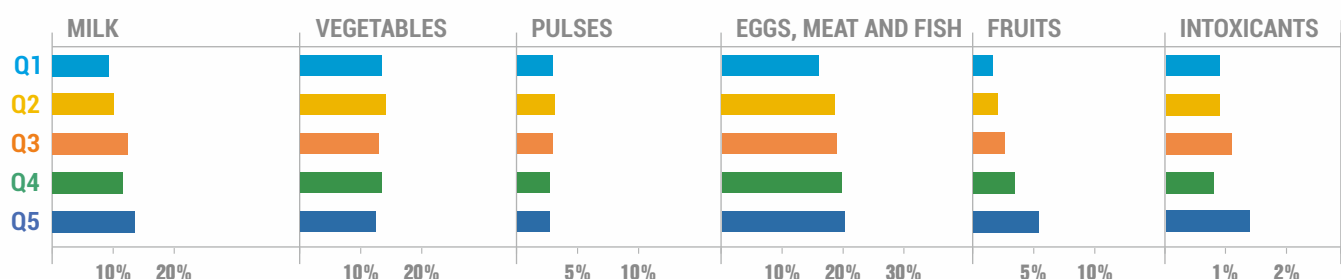
RURAL

NA 2233
NAGALAND INDIA AVG

URBAN

NA 2206
NAGALAND INDIA AVG

Expenditure on food items by income quintiles²⁸



^E Improved sources of drinking water include: piped water into dwelling, piped water to yard/plot, public tap or standpipe, tubewell or borehole, protected dug well, protected spring, and rainwater (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>).

^F Improved sanitation means households using improved toilets that include: flush toilet, piped sewer system, septic tank, flush/pour flush to pit latrine, ventilated improved pit latrine, pit latrine with slab, composting toilet, special case (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>); excludes those households who are using improved toilets but sharing toilet facilities with other households.

^G Besides toilet construction subsidies, this expenditure also includes funding other activities such as solid and liquid waste management, IEC activities for sustainable demand generation for sanitation facilities, assistance to production centers of sanitary materials and rural sanitary marts, provision of construction of community sanitary complexes, provision of sanitation facilities in govt. schools and Anganwadis in govt. buildings etc.

²⁴ Source : RSoC, 2014

²⁵ Source : Indiastat, Rajya Sabha Unstarred Question No. 2950, dated on 30.08.2011, 2011-12

²⁶ Source : Indiastat, compiled by datanet from Rajyasabha & Lok Sabha unstarred questions no. 3039, 4535. 2007-12

²⁷ Source : Indiastat, Ministry of Agriculture, Government of India 2011-2012

²⁸ Source : NSSO, 68th round-Nutritional Intake in India, 2011-12

V. STATUS OF NUTRITION-RELEVANT INTERVENTIONS

A. NUTRITION-SPECIFIC INTERVENTIONS

The financial resources allocated to, and spent on direct nutrition-specific interventions can determine the scale, coverage and quality of interventions to reach vulnerable target populations. These services, in India, are delivered both by the Integrated Child Development Scheme (ICDS) and the National Health Mission (NHM). This section includes data on the coverage of interventions delivered by these two key centrally-sponsored schemes that directly impact maternal and child nutrition and health. We also include here information on the human resources and service availability of these schemes and expenditures.

A.1. COVERAGE OF ICDS AND NHM:

The Integrated Child Development Services (ICDS) aims to improve the nutrition and health status of children under-six through a package of services (supplementary nutrition, immunization, health check-up, referral services, etc.) delivered through frontline workers at the Anganwadi Centres (AWCs). This section provides information on expenditure on ICDS and coverage of its supplementary nutrition programme (SNP). This section also covers critical services provided by the health system, including provision of care for pregnant women and child immunization. Immunization plays a crucial role in complementing actions to improve nutrition. The link between undernutrition and infectious diseases is cyclical, poor nutrition increases vulnerability to infections, which in turn worsen nutrition status. Data on immunization among children are presented by residence. Here, full immunization refers to children covered with BCG, measles and 3 doses each of DPT and polio.

Beneficiaries who availed supplementary food under ICDS²⁹

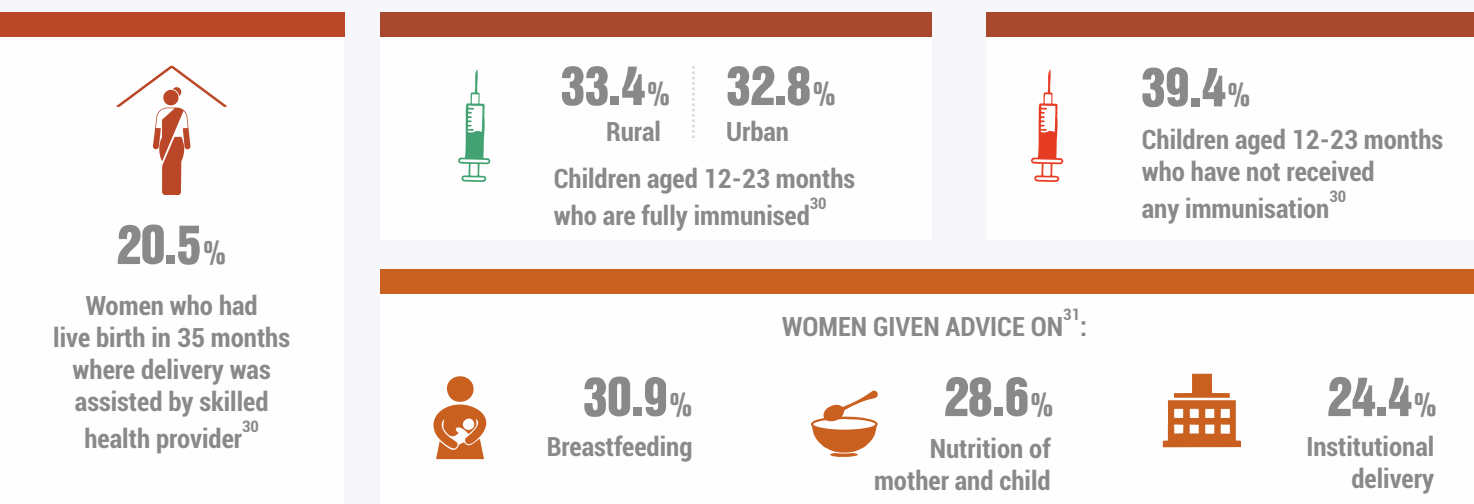
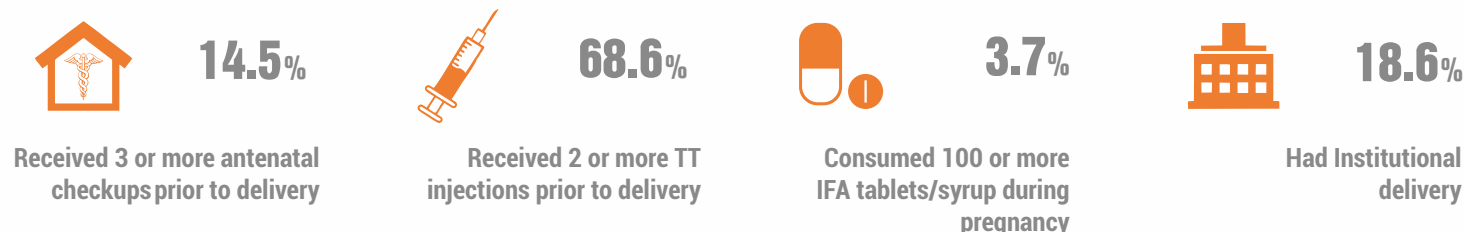
Children 6-35 months	9%
Children 36-71 months	13.8%
Pregnant women	0%
Lactating mothers	3%

Beneficiaries who received supplementary food for at least 21 days in the month prior to the survey

Children aged 6-35 months	0%
Children aged 36-71 months	0%
Pregnant women	NA
Lactating women	NA

²⁹ Source : RSoC, 2014

SERVICES PROVIDED TO WOMEN WHO HAD A LIVE BIRTH IN LAST 35 MONTHS³⁰



WOMEN GIVEN ADVICE ON³¹:



A.2. PERSONNEL CAPACITY OF ICDS AND NRHM:

This section features data on availability of healthcare personnel and services available to women of reproductive age (antenatal care, tetanus toxoid coverage, iron-folic acid supplementation coverage, institutional delivery and counseling). Household and individual access to health services can directly impact children's nutrition and welfare during the crucial first 1,000 days of life.

Availability of Anganwadi Centres and Workers (AWCs and AWWs) ^{H, 30}	Value
Pending or vacant Anganwadi workers to sanctioned number of workers*	1.7%
AWWs living in the AWC village/ward	97%
AWWs having 10 or more years of schooling	34.8%
Median age of AWWs	37 years
AWCs serving to population more than the stipulated norm	20.2%

Growth Monitoring ³⁰	Value
AWCs having functional baby weighing scale	45.8%
AWCs having functional adult weighing scale	42.3%
Available WHO growth chart at AWCs	46.4%

^H Number of AWCs surveyed for Nagaland as per RSoC 2014 is 118.

³⁰ Source : RSoC, 2014

³¹ Source : DLHS-4, 2012-13

* Source : MoWCD, 2012

Training and Comprehensive Knowledge ³²	Value
AWWs having correct knowledge of intake of food by pregnant women	82.2%
AWWs having correct knowledge of normal birth weight of children	52.9%
AWWs having correct knowledge of initiation of breastfeeding within one hour	90.7%
AWWs having correct knowledge of exclusive breastfeeding for the first six months	76.3%
AWWs having correct knowledge of appropriate age of child for complementary feeding	48.7%

Health Service Delivery Personnel	Value
ASHAs selected ³³	98%
Current density of ASHA as per Census 2011 rural population ³³	1 per 758 persons
Pending or vacant ANM positions sub centres & PHCs ³⁴	0%

A.3. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SPECIFIC INTERVENTIONS

Expenditure on Schemes (in million dollars)	In million USD	National Average
ICDS (ICDS general + SNP + training) (women and children) ³⁵	14	75
NRHM expenditure (Central Government) ³⁶	15.3	68.8
NRHM expenditure (State Government) ³⁶	1.1	9.3

B. NUTRITION-SENSITIVE INTERVENTIONS

This section includes information on expenditure and coverage of key centrally-sponsored schemes that indirectly impact maternal and child nutrition. These are: the Mid Day Meal Scheme (MDMS), Public Distribution System (PDS), and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

B.1. COVERAGE OF SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS

Coverage of Schemes	Value
MDMS (base: eligible children*) ³⁷	1.8%
PDS (base: rural and urban households reporting consumption) ³⁸	14.8%
MGNREGA (base: rural persons 18 years and above registered in MGNREG job card and demanded work during last 365 days) ³⁹	97.4%

* All children studying in primary & upper primary classes in schools supported under Sarva Shiksha Abhiyan and NCLP (National Child Labour Project) run by Ministry of Labour.

B.2. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS:

Expenditure on Schemes (in million dollars)	In million USD	National Average
MDMS ⁴⁰	5	47
PDS ⁴¹	48.6	475.3
MGNREGA ⁴²	71	214

³² Source : RSoC, 2014

³³ Source : NRHM, 2013

³⁴ Source : MoHFW, 2013

³⁵ Source : Lok Sabha Unstarred Question # 846 dated 27.02.2015, 2012-13

³⁶ Source : Lok Sabha Annexured Unstarred Question # 409 dated 6.12.2013, 2012-13

³⁷ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/lsq15/15/as216.htm 2011-12

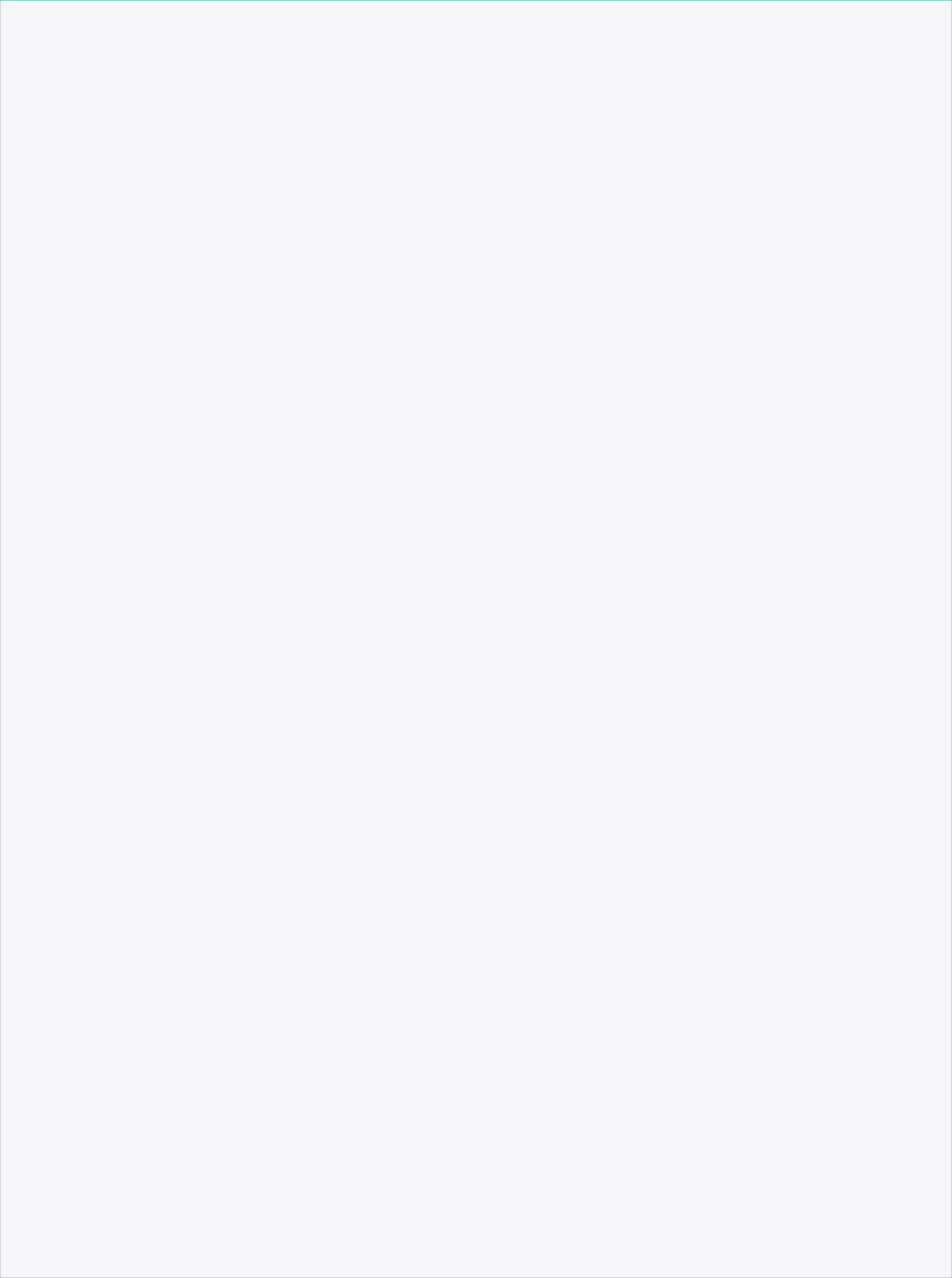
³⁸ Source : Report No. 558, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

³⁹ Source : Report No. 554, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

⁴⁰ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014, 2012-13

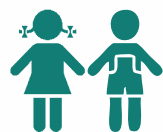
⁴¹ Source : Food Corporation of India 2013, 2012-13

⁴² Source : Lok Sabha Annexured Unstarred Question # 3835 dated 19.03.2015, 2012-13



FAST FACTS ON NUTRITION AND ITS DETERMINANTS IN ODISHA

World Health Assembly Nutrition Targets



CHILDREN UNDER 5 YEARS

38.2%
Stunted¹
18.3%
Wasted¹

World Health Assembly Nutrition Targets


68.5%

 Infants 0-5
months old who are
exclusively breastfed¹

18.9%

 Children under
3 years who have low
birth weight (<2.5 kgs)²

61.2%

 Women
15-49 years old
with anemia¹

Immediate Determinants


55.5%

 Infants 6-8 months old who receive solid, semi-solid or soft foods²
25.8%

 Infants & young children 6-23 months old who achieve minimal diet diversity in
complementary feeding²

65%

 Children 6-59 months
old with anemia¹

9.2%

 Children 6-59 months old who
had diarrhea in 15 days prior
to survey²

Immediate Determinants


0%

 Children 6-35 months old
who received supplementary
food under ICDS for 21 days
in the month prior to survey²

62%

 Children 12-23
months old who are
fully immunized²

75.3%

 Mothers of
children under 36 months
old who received three
or more antenatal checkups²

Underlying Determinants


13%

 Currently
married women with 10
or more years of schooling¹

33.3%

 Women aged 20-24
years who were
married before the age of 18²

51.8%

 Adolescent girls
15-18 years old
with low BMI (<18.5)²

Underlying Determinants


77.7%

 Households
practicing
open defecation²

32.6%

 Population
below
state-specific poverty line³

 Does state have a
high-level nutrition mission?

NO
¹ Source : RSoC, 2014

² Source : NFHS-3, 2006

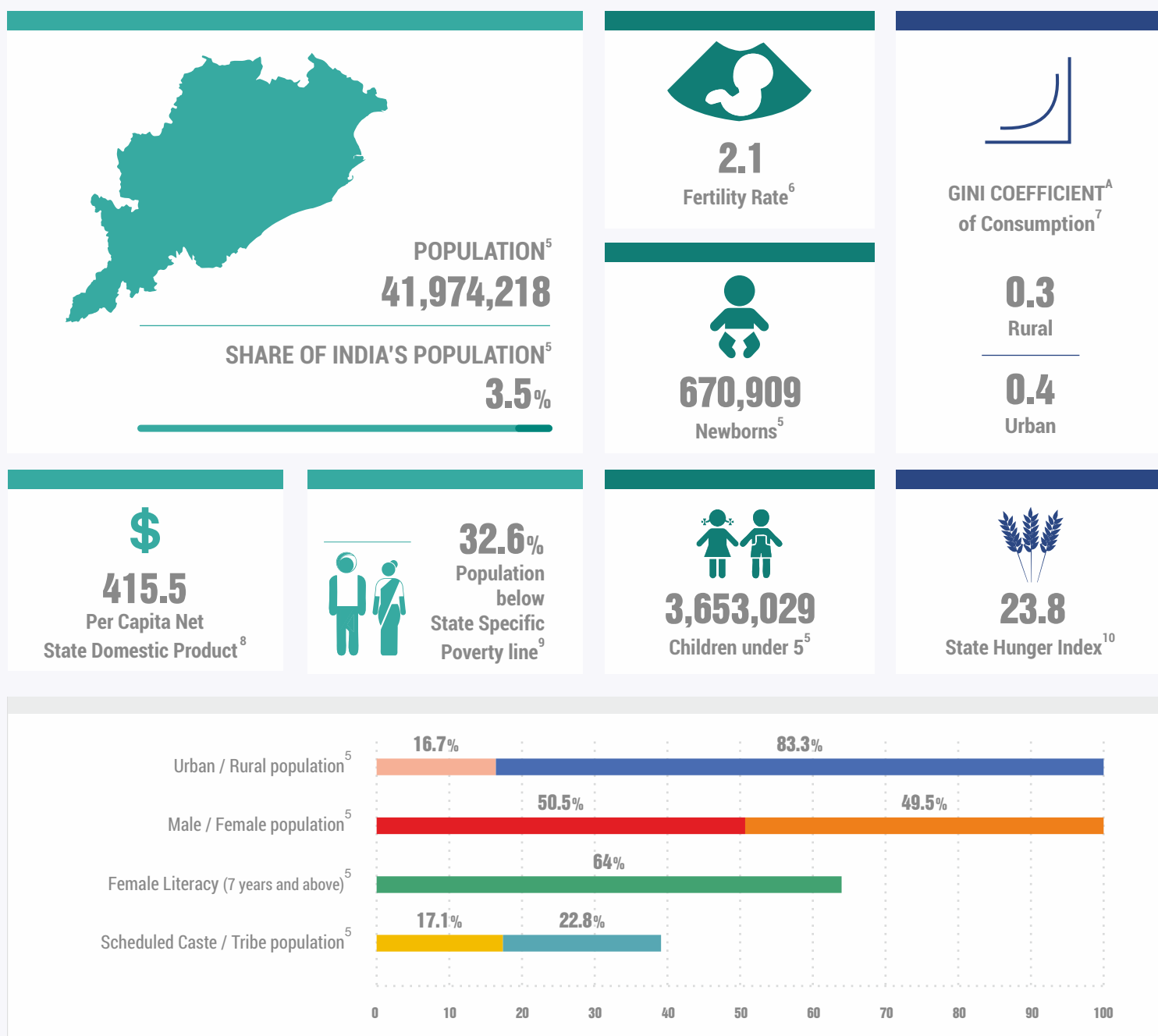
³ Source : DLHS-3, 2007-08

⁴ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Govt. of India

I. CONTEXT

A. DEMOGRAPHIC CONTEXT

This section highlights the demographic composition of the state in terms of male-female, rural-urban, and SC-ST ratios, literacy and fertility rates. In addition, it also includes the size of the population of newborns and children less than five years of age (as of the Census of India, 2011) to illustrate the size of the target population for nutrition-related interventions that need to reach this vulnerable population.



A : Gini coefficient is a measure of inequality of distribution. A Gini coefficient of 0 represents perfect equality, while a value of 100 implies perfect inequality. (See Appendix A for more information)

⁵ Source : Primary Census Abstract, Census, 2011

⁶ Source : SRS, 2013

⁷ Source : Planning Commission Estimates: NSSO 66th round-Employment and Unemployment Survey, 2009-10

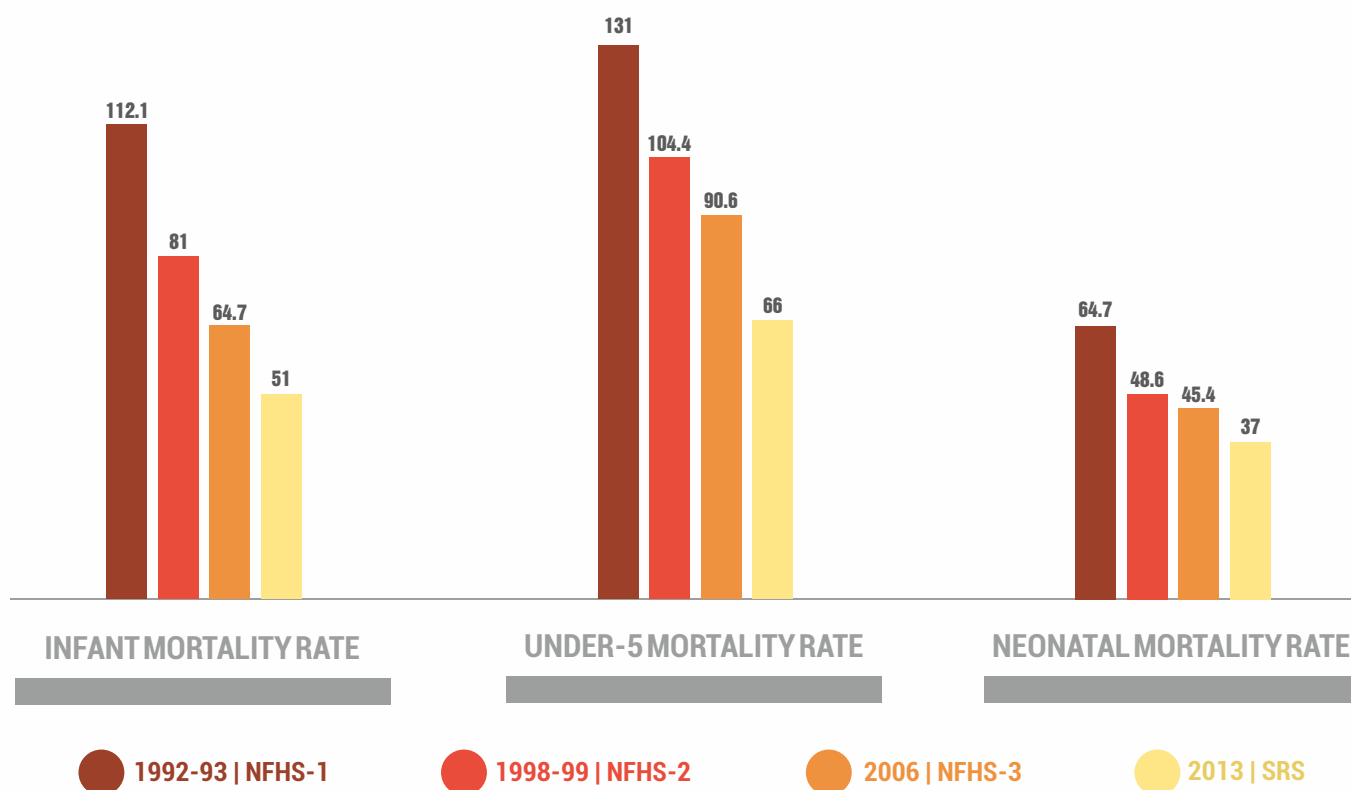
⁸ Source : Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14 : http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82

⁹ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Government of India, 2011-12 : http://planningcommission.nic.in/news/pre_pov2307.pdf

¹⁰ Source : IFPRI, India State Hunger Index, 2009

B. CHILD MORTALITY PER THOUSAND LIVE BIRTHS

This section illustrates trends in mortality in neonates, infants and children under 5 years, since 1992. The purpose of this is to highlight the success achieved by individual states in averting deaths of children since the economic growth of the 1990s.



II. NUTRITIONAL STATUS AMONG CHILDREN

This section presents data on nutrition outcome indicators (stunting, wasting, and underweight) and anemia prevalence. Anthropometric measures for children under 5 (stunting, wasting, and underweight) are presented over time periods, by age groups and by background characteristics. This data aims to convey the prevalence and severity of undernutrition in the state.

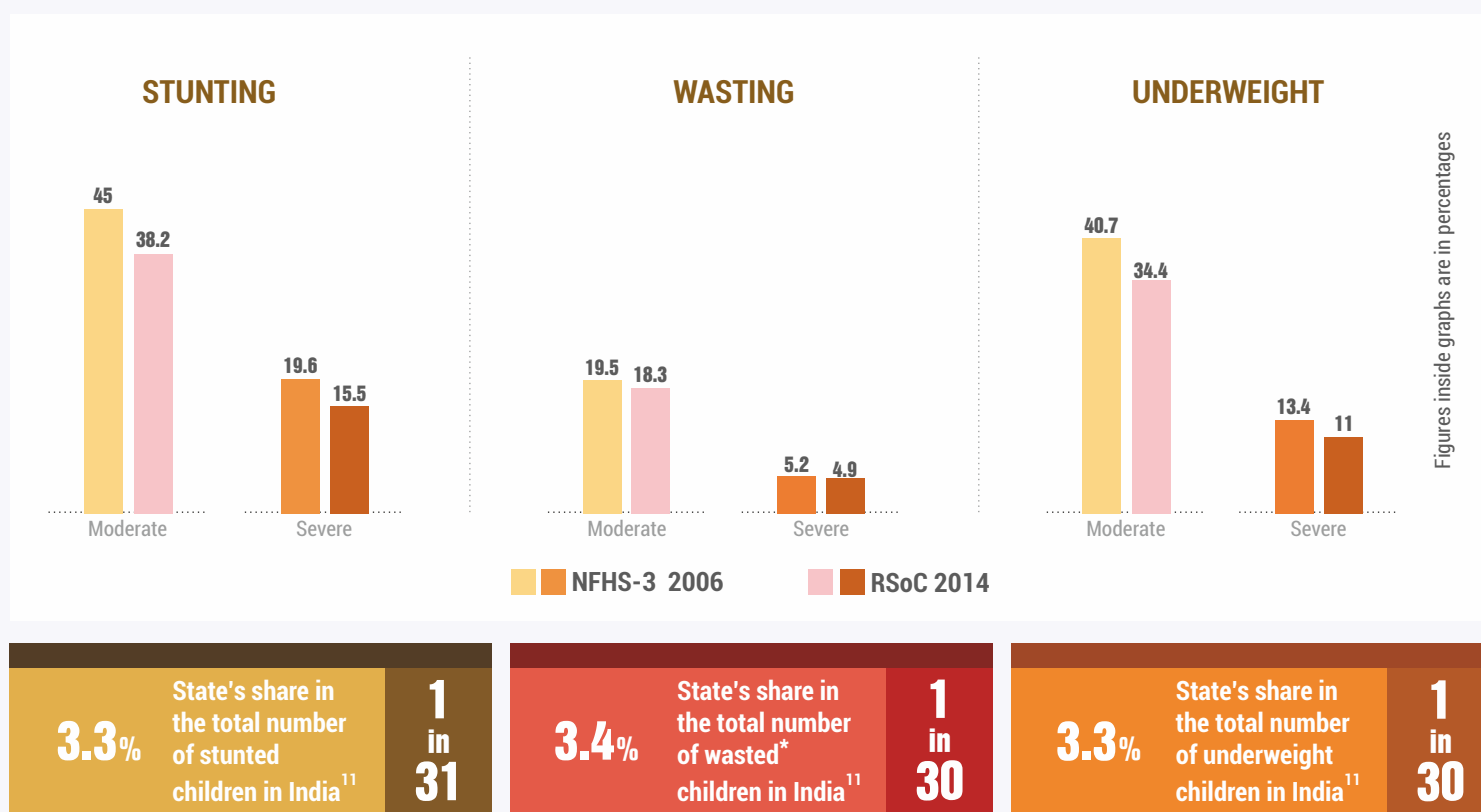
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Stunting is inadequate height for age, which is indicative of chronic or cumulative nutritional deprivation in early childhood. A stunted child's height-for-age is below -2 standard deviations from the median height-for-age (termed HAZ) of the WHO Child Growth Standards, while a severely stunted child is below -3 standard deviations.

Wasting is inadequate weight for height, which points to acute or short-term undernutrition. A wasted child's weight-for-height (WHZ) is below -2 standard deviations from the WHO Child Growth Standards; a severely wasted child is below -3 standard deviations. (Another way to determine severe wasting or severe acute malnutrition is through a measurement of a child's mid-upper arm circumference (MUAC).

Underweight is inadequate weight for age, a composite indicator that encompasses stunting and wasting. An underweight child's weight-for-age (WAZ) is below -2 standard deviations from the WHO Child Growth Standards; again, a severely underweight child is below -3 standard deviations.

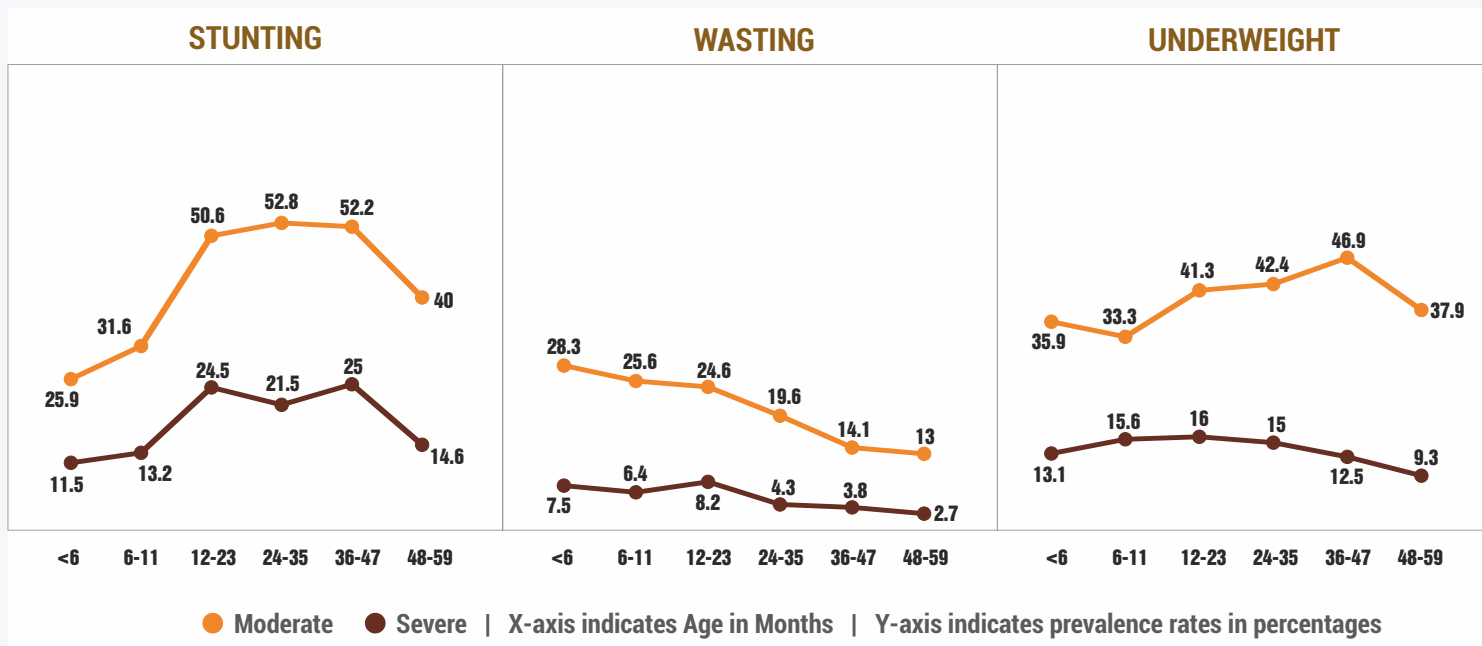


*Wasting is subject to seasonal variations either in food supply or disease prevalence and hence may not be comparable across groups of children measured at different times of the year within a survey round as well as between different survey rounds.

¹¹ Source : NFHS-3, 2006

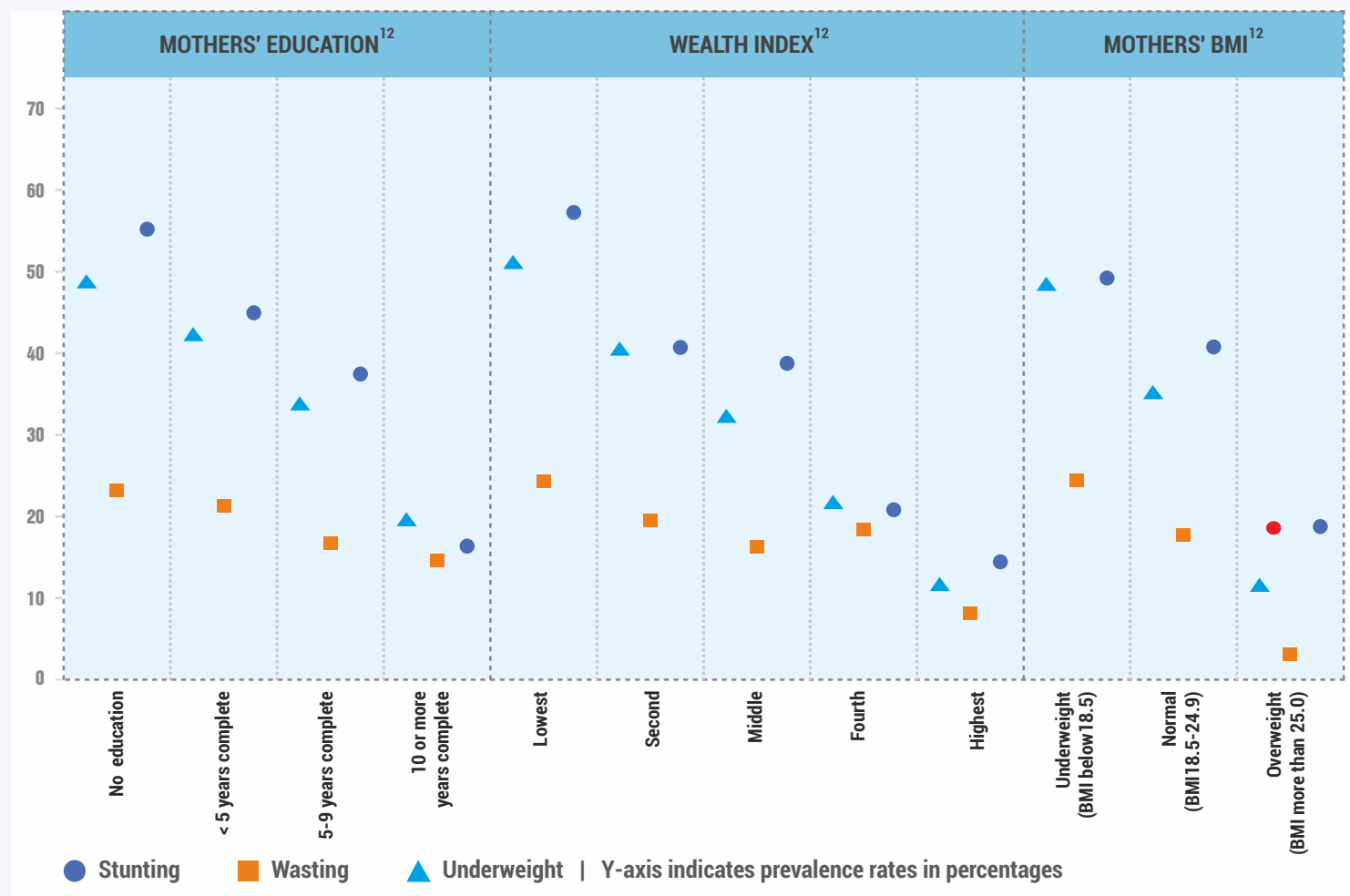
B. CHILD UNDERNUTRITION, BY AGE GROUPS¹²

Percentage of moderate (below -2 SD from the WHO growth standards) and severe (below -3 SD) stunting, wasting and underweight are available for 6 age groups among children under 5.



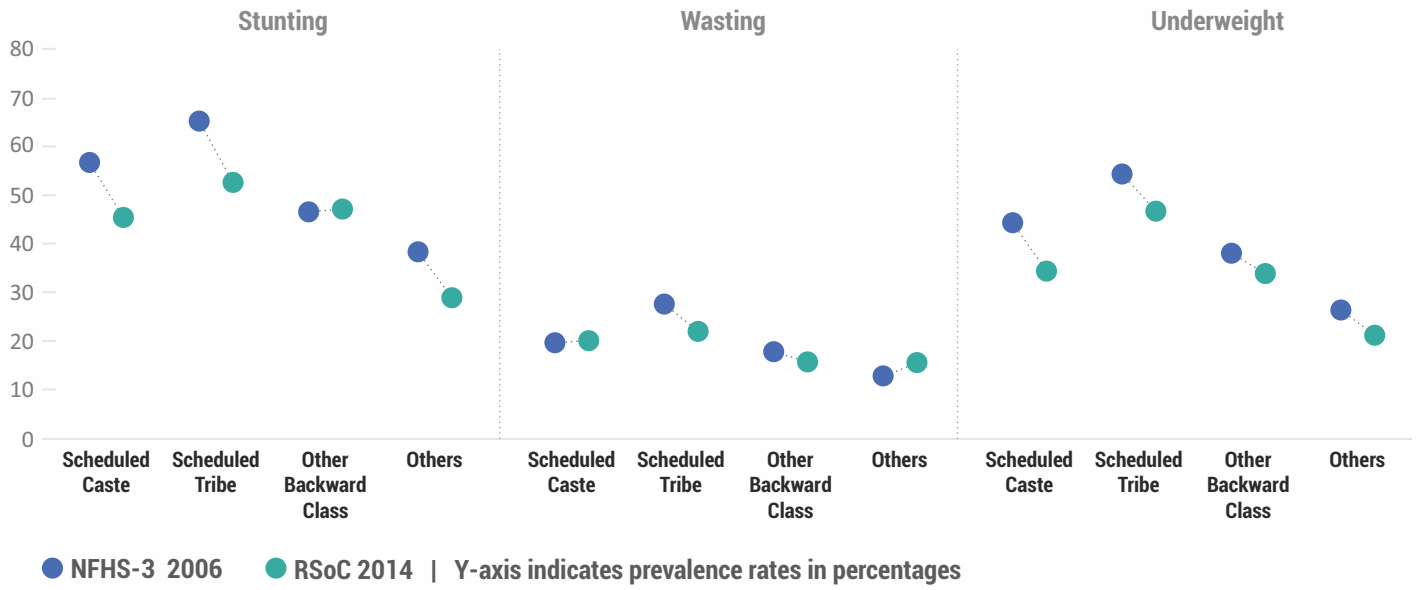
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In this section, child undernutrition outcomes are presented, along with key socioeconomic drivers that are known to be associated with child nutrition, such as caste, residence, mother's health and education, and household income.

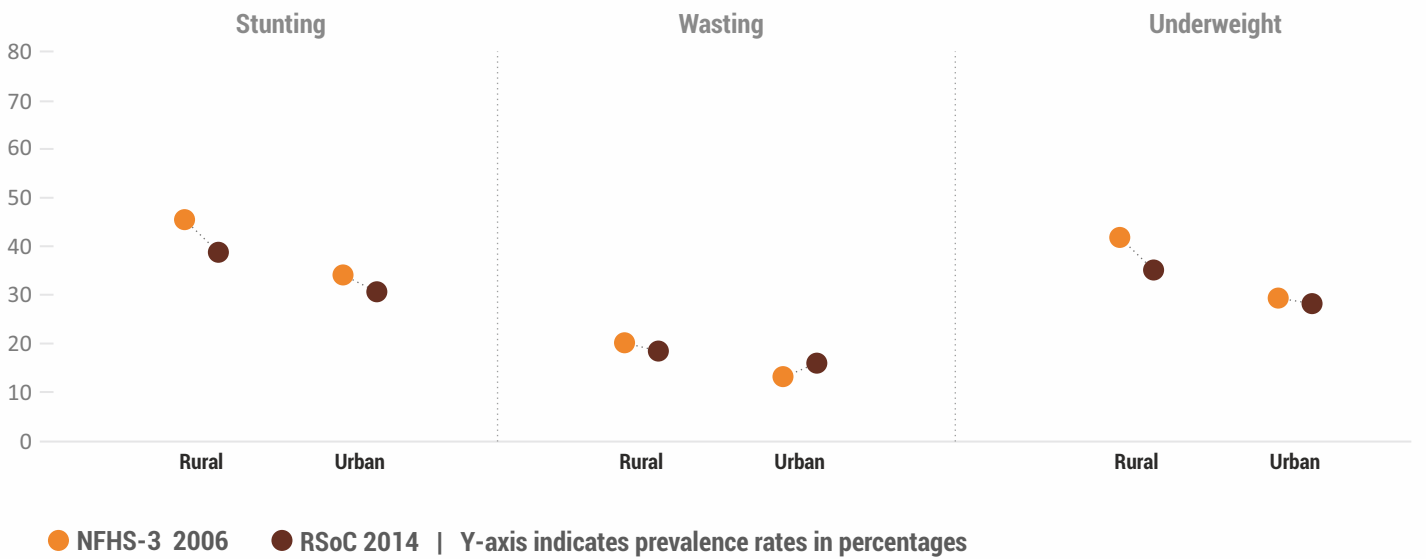


¹² Source : NFHS-3, 2006

CASTE



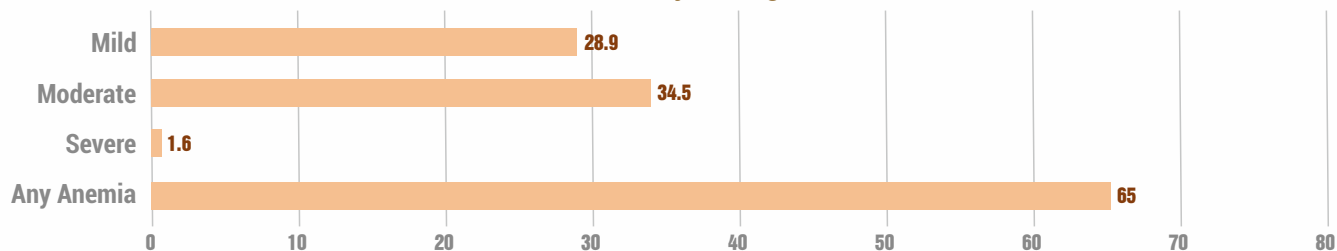
RESIDENCE



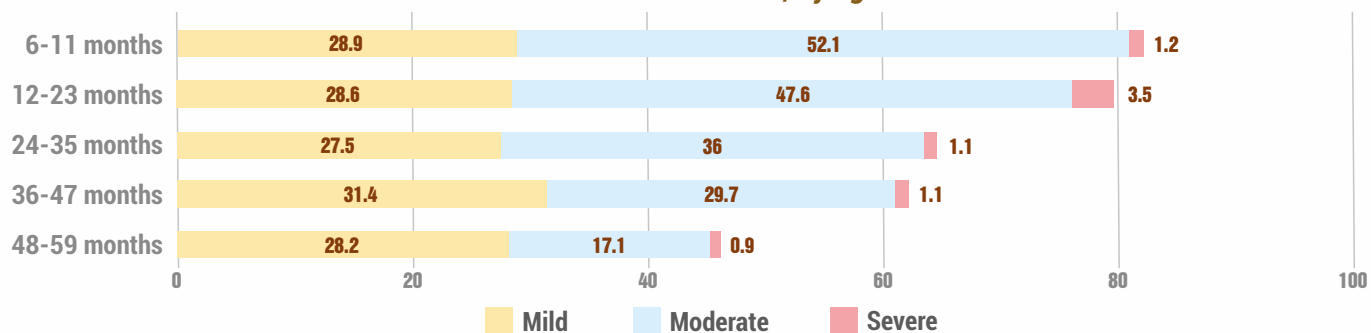
D. ANEMIA PREVALENCE

Anemia can impair physical and cognitive development among children and create long term impacts on productivity and wellbeing. This section features data on anemia prevalence by severity and age groups for children under 5.

Anemia Status, by hemoglobin level¹³



Anemia Prevalence, by age¹⁴



¹³ Source : NFHS-3, 2006

III. IMMEDIATE DETERMINANTS

A. INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES¹⁵

This section presents indicators for assessing IYCF practices as recommended by the WHO and revised in 2008. Following optimal IYCF practices during the first 1,000 days is crucial for early child survival and growth as well as long-term health and wellbeing.

Children aged 0-23 months breastfed immediately/within an hour of birth		73.3%
	Children aged 0-5 months who were exclusively breastfed	68.5%
	Children aged 6-8 months who were fed complementary foods	55.5%
	For breastfed children (6-23 months)- A. Fed minimum number of times. Note : At least twice a day for breastfed infants 6-8 months old and at least three times a day for breastfed children 9-23 months old B. Had minimum dietary diversity Note : Minimum dietary diversity refers to four or more food groups^B fed to children aged 6-23 months	41.9% 25.8%

B. CHILD HEALTH¹⁵

Prevalence of childhood illnesses (in children aged 0-59 months)

Had diarrhea in 15 days prior to survey	9.2%
Had fever in 15 days prior to survey	13.7%
Had symptoms of Acute Respiratory Infection (ARI) in 15 days prior to survey	9%

^B The 7 food groups include the following: i. grains, roots and tubers ii. legumes and nuts iii. dairy products (milk, yoghurt, cheese) iv. Flesh foods (meat, fish, poultry, and liver/organ meats) v. eggs vi. Vitamin-A rich fruits and vegetables vii. other fruits and vegetables.

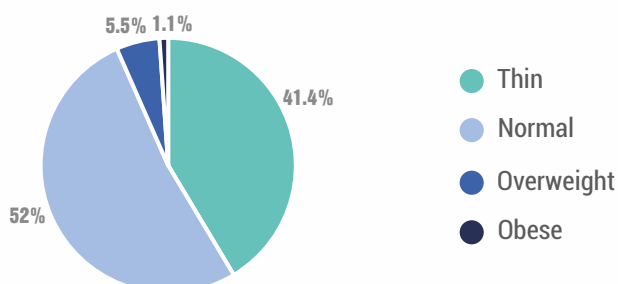
¹⁵ Source : RSoC, 2014

C. NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

Maternal health and nutrition, as well as adolescent nutrition, have important consequences for intergenerational transmission of undernutrition. Data on Body Mass Index (BMI), anemia prevalence and height among women of reproductive age are presented in this section, as are data on adolescent BMI and anemia.

C.1. WOMEN 15-49 YEARS OLD¹⁶

BMI^c levels of women aged 15-49 years



^cBody Mass Index (BMI) is defined as the weight in kilograms by the square of the height in metres (kg/m²). It is a simple index of weight-for-height which is commonly used to classify underweight, overweight and obesity in adults. Range: BMI < 18.5 = total thin, BMI 18.5-24.9 = normal, BMI 25.0-29.9 = Overweight, BMI > 30.0 = Obese [per WHO Standards]



61.2%

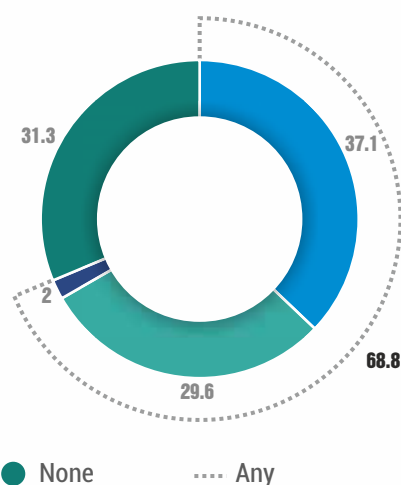
Women aged 15-49 years are anemic

1.5%

Women aged 15-49 years are severely anemic

C.2. PREGNANT WOMEN¹⁶

Anemia prevalence in pregnant women aged 15-49 years



● Mild

● Moderate

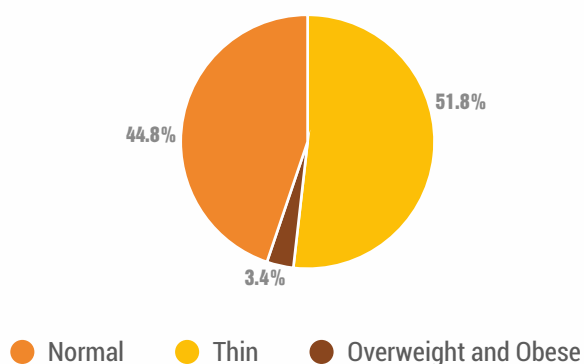
● Severe

● None

--- Any

C.3. ADOLESCENT GIRLS

BMI levels of adolescent girls aged 15-18 years¹⁷



61.4%

Adolescent girls aged 15-19 years are anemic¹⁶

1.7%

Adolescent girls aged 15-19 years are severely anemic¹⁶

¹⁶ Source : NFHS-3, 2006

¹⁷ Source : RSoC, 2014

IV. UNDERLYING DETERMINANTS

A. SOCIAL STATUS OF WOMEN

Women's status is recognized to contribute in significant ways to improving nutrition. This section presents indicators that are representative of women's social status, including measures of education, age at marriage and first birth, employment, decision making and domestic violence. It also includes the Gender Empowerment Measure that captures gender inequality along three dimensions: political participation and decision-making power, economic participation and decision-making power, and power over economic resources.



Currently married women who have 10 or more years of schooling¹⁸ **13%**



33.3% Women aged 20-24 years who were married before the age of 18¹⁹

20.9 Average age at marriage¹⁹

Gender Empowerment Measure^{D,20}

0.4

0.5

National Average²⁰



Female workforce participation rate²² **27.2%**

Currently married women who make decisions about²³:



38.1% Own healthcare



6.7% Major household purchase



24.3% Purchases for daily household needs



5% Visits to her family/friends/relatives



41.2% Women who have experienced any form of physical/sexual/emotional violence²³

62.2% Ever married women who justify hitting/wife-beating (for either of the reasons mentioned)²³

^D The Gender Empowerment Measure is a weighted average index based on indicators that are classified into three dimensions: a. political participation and decision-making power b. economic participation and decision-making power and c. power over economic resources. The index ranges from a minimum of 0 to a maximum of 1, with a higher score indicating greater empowerment of women. (More information available at <http://wcd.nic.in/publication/GDIGEReport/Part3.pdf>.)

¹⁸ Source : DLHS-3, 2007-08

¹⁹ Source : RSoC, 2014

²⁰ Source : MoWCD, 2006

²² Source : Women and Men in India, 16th Issue MoSPI, 2014

²³ Source : NFHS-3, 2006

B. WATER AND SANITATION

Poor hygiene and sanitation, by directly increasing exposure and susceptibility to infections, are associated with undernutrition among children. This section covers key indicators on access to safe drinking water and availability of sanitation facilities at the state level. It also includes the expenditure on toilet construction under the Total Sanitation Campaign.



87.1%

Households with access to improved sources of drinking water^{E, 24}

17%

Households using improved sanitation facility^{F, 24}



77.7%

Households practicing open defecation²⁴

46.9 M

Expenditure on toilets under Total Sanitation Campaign (TSC)^{G, 25}



1,050 M

National Average²⁵

C. AGRICULTURE AND FOOD SECURITY

Agriculture productivity and food security can affect household access to foods necessary for a healthy diet. Thus, this section presents indicators related to agricultural growth and food consumption patterns in the state, indicating the level of food security in the state relative to the national situation.



3%

Growth rate of agriculture from 2007-2012²⁶



2.5%

Share in India's total foodgrain production²⁷



Mean Calorie intake per person per day (in Kcal)²⁸

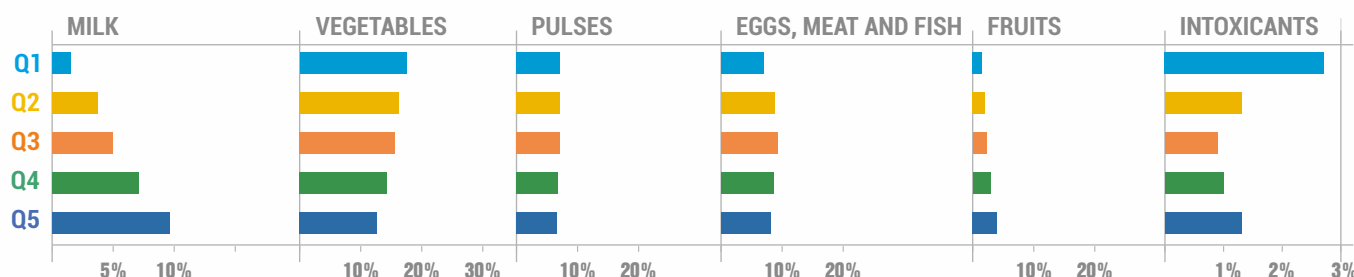
RURAL

2215 **2233**
ODISHA INDIA AVG

URBAN

2191 **2206**
ODISHA INDIA AVG

Expenditure on food items by income quintiles²⁸



^E Improved sanitation means households using improved toilets that include: flush toilet, piped sewer system, septic tank, flush/pour flush to pit latrine, ventilated improved pit latrine, pit latrine with slab, composting toilet, special case (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>); excludes those households who are using improved toilets but sharing toilet facilities with other households.

^F Besides toilet construction subsidies, this expenditure also includes funding other activities such as solid and liquid waste management, IEC activities for sustainable demand generation for sanitation facilities, assistance to production centers of sanitary materials and rural sanitary marts, provision of construction of community sanitary complexes, provision of sanitation facilities in govt. schools and Anganwadis in govt. buildings etc.

²⁴ Source : RSoC, 2014

²⁵ Source : Indiastat, Rajya Sabha Unstarred Question No. 2950, dated on 30.08.2011, 2011-12

²⁶ Source : Indiastat, compiled by datanet from Rajyasabha & Lok Sabha unstarred questions no. 3039, 4535. 2007-12

²⁷ Source : Indiastat, Ministry of Agriculture, Government of India 2011-2012

²⁸ Source : NSSO, 68th round-Nutritional Intake in India, 2011-12

V. STATUS OF NUTRITION-RELEVANT INTERVENTIONS

A. NUTRITION-SPECIFIC INTERVENTIONS

The financial resources allocated to, and spent on direct nutrition-specific interventions can determine the scale, coverage and quality of interventions to reach vulnerable target populations. These services, in India, are delivered both by the Integrated Child Development Scheme (ICDS) and the National Health Mission (NHM). This section includes data on the coverage of interventions delivered by these two key centrally-sponsored schemes that directly impact maternal and child nutrition and health. We also include here information on the human resources and service availability of these schemes and expenditures.

A.1. COVERAGE OF ICDS AND NHM:

The Integrated Child Development Services (ICDS) aims to improve the nutrition and health status of children under-six through a package of services (supplementary nutrition, immunization, health check-up, referral services, etc.) delivered through frontline workers at the Anganwadi Centres (AWCs). This section provides information on expenditure on ICDS and coverage of its supplementary nutrition programme (SNP). This section also covers critical services provided by the health system, including provision of care for pregnant women and child immunization. Immunization plays a crucial role in complementing actions to improve nutrition. The link between undernutrition and infectious diseases is cyclical, poor nutrition increases vulnerability to infections, which in turn worsen nutrition status. Data on immunization among children are presented by residence. Here, full immunization refers to children covered with BCG, measles and 3 doses each of DPT and polio.

Beneficiaries who availed supplementary food under ICDS²⁹

Children 6-35 months	89.2%
Children 36-71 months	67.3%
Pregnant women	60.6%
Lactating mothers	76.5%

Beneficiaries who received supplementary food for at least 21 days in the month prior to the survey

Children aged 6-35 months	0%
Children aged 36-71 months	35.6%
Pregnant women	24.8%
Lactating women	0%

²⁹ Source : RSoC, 2014

SERVICES PROVIDED TO WOMEN WHO HAD A LIVE BIRTH IN LAST 35 MONTHS³⁰



75.3%

Received 3 or more antenatal checkups prior to delivery



95.8%

Received 2 or more TT injections prior to delivery



28.9%

Consumed 100 or more IFA tablets/syrup during pregnancy



81.3%

Had Institutional delivery



83.7%

Women who had live birth in 35 months where delivery was assisted by skilled health provider³⁰



62.1%

Rural

61.6%

Urban

Children aged 12-23 months who are fully immunised³⁰



8%

Children aged 12-23 months who have not received any immunisation³⁰

WOMEN GIVEN ADVICE ON³¹:



48.5%

Breastfeeding



45.2%

Nutrition



48.2%

Institutional delivery

A.2. PERSONNEL CAPACITY OF ICDS AND NRHM:

This section features data on availability of healthcare personnel and services available to women of reproductive age (antenatal care, tetanus toxoid coverage, iron-folic acid supplementation coverage, institutional delivery and counseling). Household and individual access to health services can directly impact children's nutrition and welfare during the crucial first 1,000 days of life.

Availability of Anganwadi Centres and Workers (AWCs and AWWs) ^{H, 30}	Value
Pending or vacant Anganwadi workers to sanctioned number of workers ^{30a}	9.1%
AWWs living in the AWC village/ward	84.9%
AWWs having 10 or more years of schooling	74.9%
Median age of AWWs	35 years
AWCs serving to population more than the stipulated norm	31%

Growth Monitoring ³⁰	Value
AWCs having functional baby weighing scale	89.4%
AWCs having functional adult weighing scale	36%
Available WHO growth chart at AWCs	97.3%

^H Number of AWCs surveyed for Odisha as per RSoC 2014 is 200.

³⁰ Source : RSoC, 2014

^{30a} Source : MoWCD, 2012

³¹ Source : DLHS-4, 2012-13

Training and Comprehensive Knowledge ³²	Value
AWWs having correct knowledge of intake of food by pregnant women	97.3%
AWWs having correct knowledge of normal birth weight of children	93%
AWWs having correct knowledge of initiation of breastfeeding within one hour	96.7%
AWWs having correct knowledge of exclusive breastfeeding for the first six months	75.7%
AWWs having correct knowledge of appropriate age of child for complementary feeding	55.6%

Health Service Delivery Personnel	Value
ASHAs selected ³³	99.6%
Current density of ASHA as per Census 2011 rural population ³³	1 per 805 persons
Pending or vacant ANM positions sub centres & PHCs ³⁴	0.3%

A.3. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SPECIFIC INTERVENTIONS

Expenditure on Schemes (in million dollars)	In million USD	National Average
ICDS (ICDS general + SNP + training) (women and children) ³⁵	111	75
NRHM expenditure (Central Government) ³⁶	86.2	68.8
NRHM expenditure (State Government) ³⁶	29.2	9.3

B. NUTRITION-SENSITIVE INTERVENTIONS

This section includes information on expenditure and coverage of key centrally-sponsored schemes that indirectly impact maternal and child nutrition. These are: the Mid Day Meal Scheme (MDMS), Public Distribution System (PDS), and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

B.1. COVERAGE OF SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS

Coverage of Schemes	Value
MDMS (base: eligible children*) ³⁷	56.1%
PDS (base: rural and urban households reporting consumption) ³⁸	59.1%
MGNREGA (base: rural persons 18 years and above registered in MGNREG job card and demanded work during last 365 days) ³⁹	70%

* All children studying in primary & upper primary classes in schools supported under Sarva Shiksha Abhiyan and NCLP (National Child Labour Project) run by Ministry of Labour.

B.2. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS:

Expenditure on Schemes (in million dollars)	In million USD	National Average
MDMS ⁴⁰	83	47
PDS ⁴¹	862.7	475.3
MGNREGA ⁴²	196	214

³² Source : RSoC, 2014

³³ Source : NRHM, 2013

³⁴ Source : MoHFW, 2013

³⁵ Source : Lok Sabha Unstarred Question # 846 dated 27.02.2015, 2012-13

³⁶ Source : Lok Sabha Annexured Unstarred Question # 409 dated 6.12.2013, 2012-13

³⁷ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/lsq15/15/as216.htm 2011-12

³⁸ Source : Report No. 558, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

³⁹ Source : Report No. 554, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

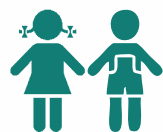
⁴⁰ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014, 2012-13

⁴¹ Source : Food Corporation of India 2013, 2012-13

⁴² Source : Lok Sabha Annexured Unstarred Question # 3835 dated 19.03.2015, 2012-13

FAST FACTS ON NUTRITION AND ITS DETERMINANTS IN PUNJAB

World Health Assembly Nutrition Targets



CHILDREN UNDER 5 YEARS

30.5%
Stunted¹
8.7%
Wasted¹

World Health Assembly Nutrition Targets


60.2%

 Infants 0-5 months old who are exclusively breastfed¹

20.7%

 Children under 3 years who have low birth weight (<2.5 kgs)¹

52.7%

 Women 15-49 years old with anemia²

Immediate Determinants


53.8%

 Infants 6-8 months old who receive solid, semi-solid or soft foods¹
19.1%

 Infants & young children 6-23 months old who achieve minimal diet diversity in complementary feeding¹

65.8%

 Children 6-59 months old with anemia²

2.6%

 Children 6-59 months old who had diarrhea in 15 days prior to survey¹

Immediate Determinants


23.8%

 Children 6-35 months old who received supplementary food under ICDS for 21 days in the month prior to survey¹

78.6%

 Children 12-23 months old who are fully immunized¹

59.8%

 Mothers of children under 36 months old who received three or more antenatal checkups¹

Underlying Determinants


42.3%

 Currently married women with 10 or more years of schooling²

12.5%

 Women aged 20-24 years who were married before the age of 18¹

38.8%

 Adolescent girls 15-18 years old with low BMI (<18.5)¹

Underlying Determinants


9.7%

 Households practicing open defecation¹

8.3%

 Population below state-specific poverty line³

Does state have a high-level nutrition mission?

NO
¹ Source : RSoC, 2014

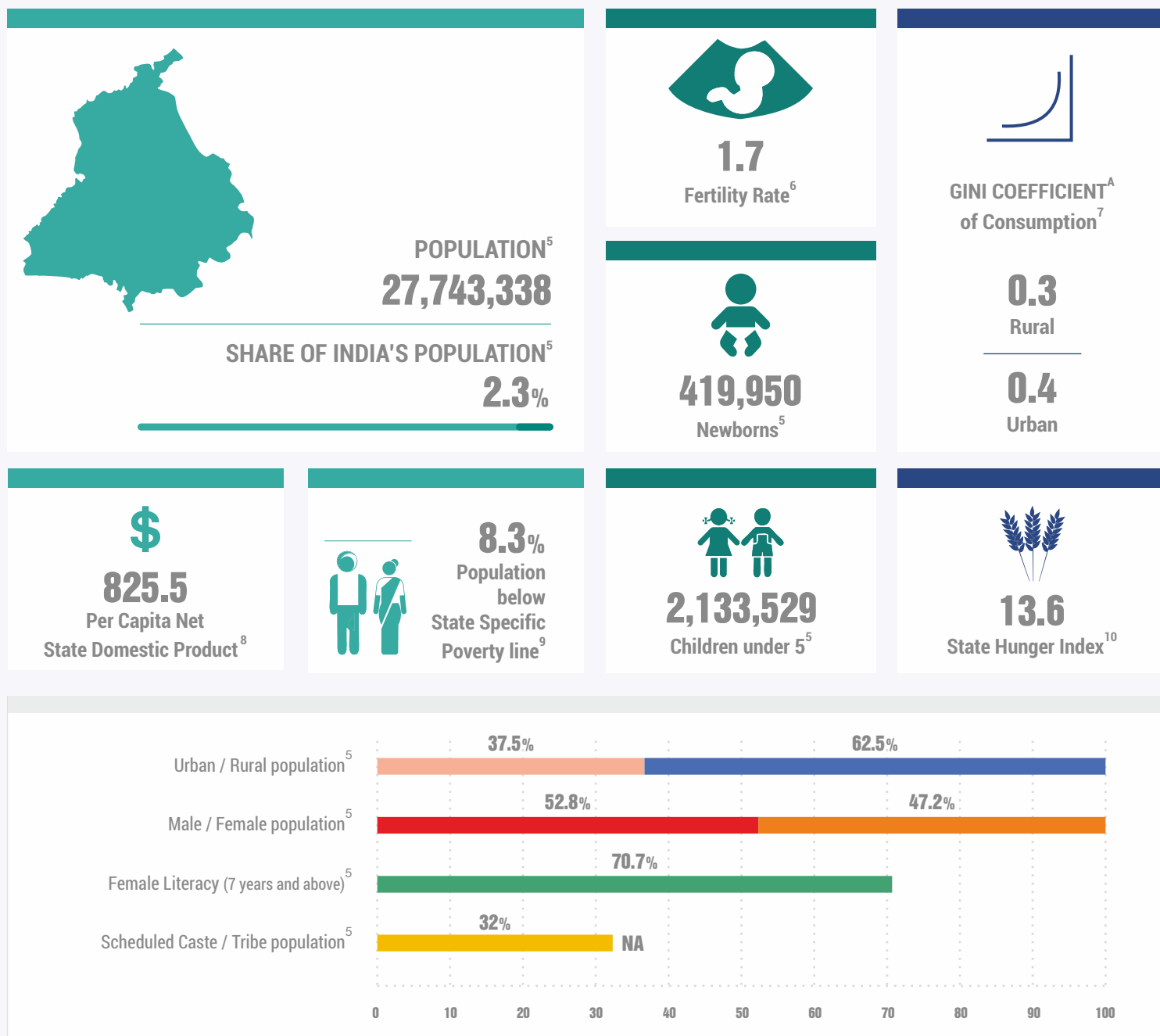
² Source : DLHS4, 2012-13

³ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Govt. of India

I. CONTEXT

A. DEMOGRAPHIC CONTEXT

This section highlights the demographic composition of the state in terms of male-female, rural-urban, and SC-ST ratios, literacy and fertility rates. In addition, it also includes the size of the population of newborns and children less than five years of age (as of the Census of India, 2011) to illustrate the size of the target population for nutrition-related interventions that need to reach this vulnerable population.



A : Gini coefficient is a measure of inequality of distribution. A Gini coefficient of 0 represents perfect equality, while a value of 100 implies perfect inequality. (See Appendix A for more information)

⁵ Source : Primary Census Abstract, Census, 2011

⁶ Source : SRS, 2013

⁷ Source : Planning Commission Estimates: NSSO 66th round-Employment and Unemployment Survey, 2009-10

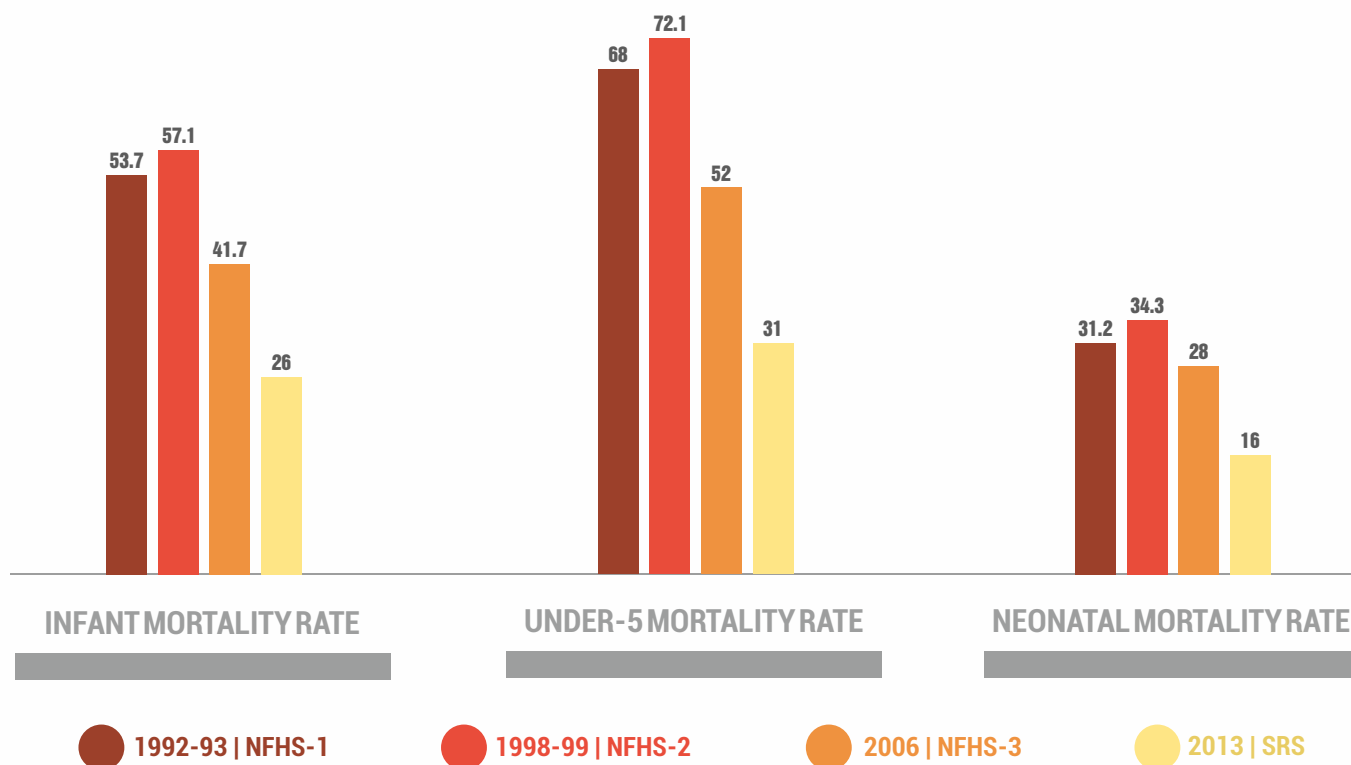
⁸ Source : Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14 : http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82

⁹ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Government of India, 2011-12 : http://planningcommission.nic.in/news/pre_pov2307.pdf

¹⁰ Source : IFPRI, India State Hunger Index, 2009

B. CHILD MORTALITY PER THOUSAND LIVE BIRTHS

This section illustrates trends in mortality in neonates, infants and children under 5 years, since 1992. The purpose of this is to highlight the success achieved by individual states in averting deaths of children since the economic growth of the 1990s.



II. NUTRITIONAL STATUS AMONG CHILDREN

This section presents data on nutrition outcome indicators (stunting, wasting, and underweight) and anemia prevalence. Anthropometric measures for children under 5 (stunting, wasting, and underweight) are presented over time periods, by age groups and by background characteristics. This data aims to convey the prevalence and severity of undernutrition in the state.

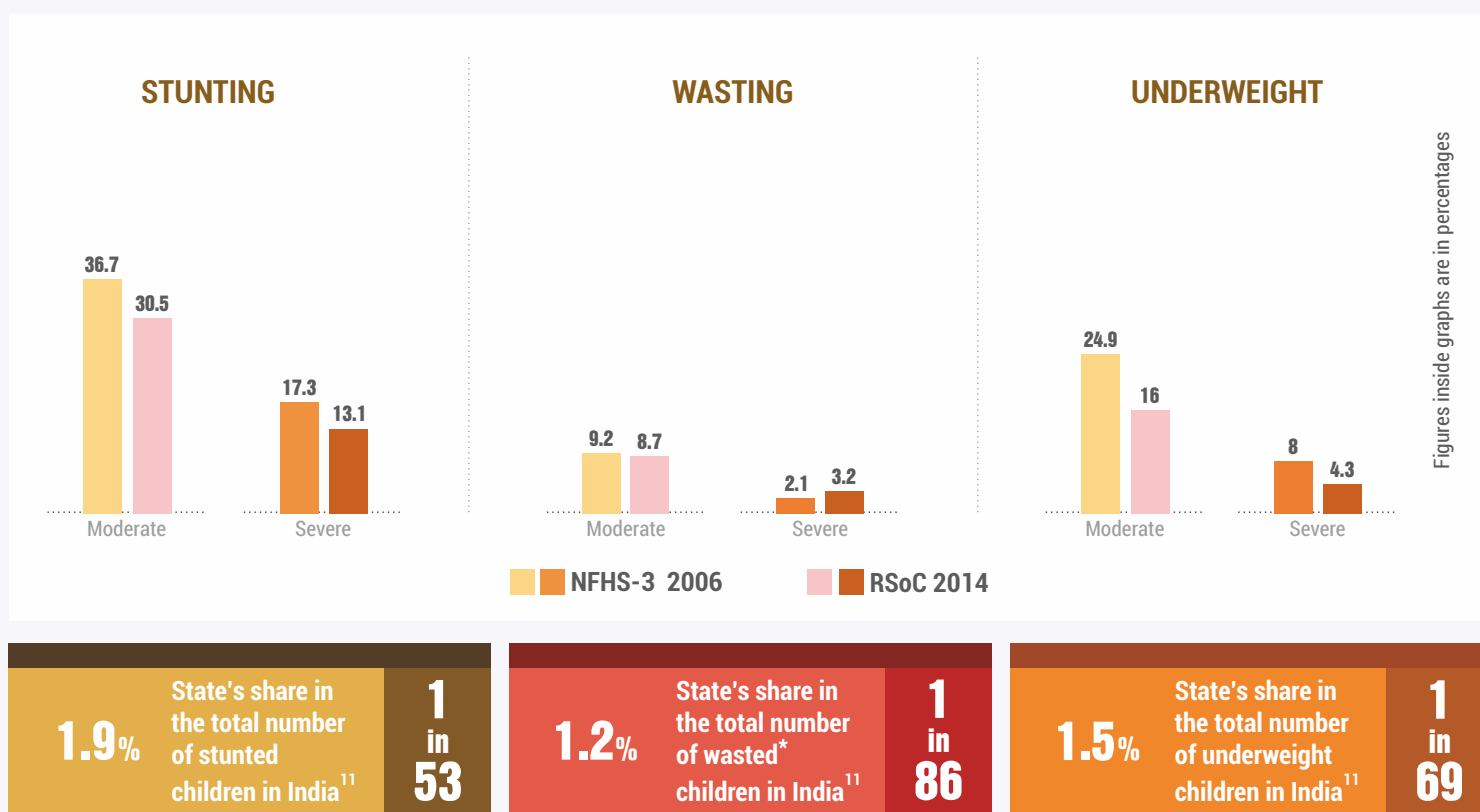
A. CHILD UNDERNUTRITION, BY TIME PERIOD

ANTHROPOMETRIC MEASURES

Stunting is inadequate height for age, which is indicative of chronic or cumulative nutritional deprivation in early childhood. A stunted child's height-for-age is below -2 standard deviations from the median height-for-age (termed HAZ) of the WHO Child Growth Standards, while a severely stunted child is below -3 standard deviations.

Wasting is inadequate weight for height, which points to acute or short-term undernutrition. A wasted child's weight-for-height (WHZ) is below -2 standard deviations from the WHO Child Growth Standards; a severely wasted child is below -3 standard deviations. (Another way to determine severe wasting or severe acute malnutrition is through a measurement of a child's mid-upper arm circumference (MUAC).

Underweight is inadequate weight for age, a composite indicator that encompasses stunting and wasting. An underweight child's weight-for-age (WAZ) is below -2 standard deviations from the WHO Child Growth Standards; again, a severely underweight child is below -3 standard deviations.

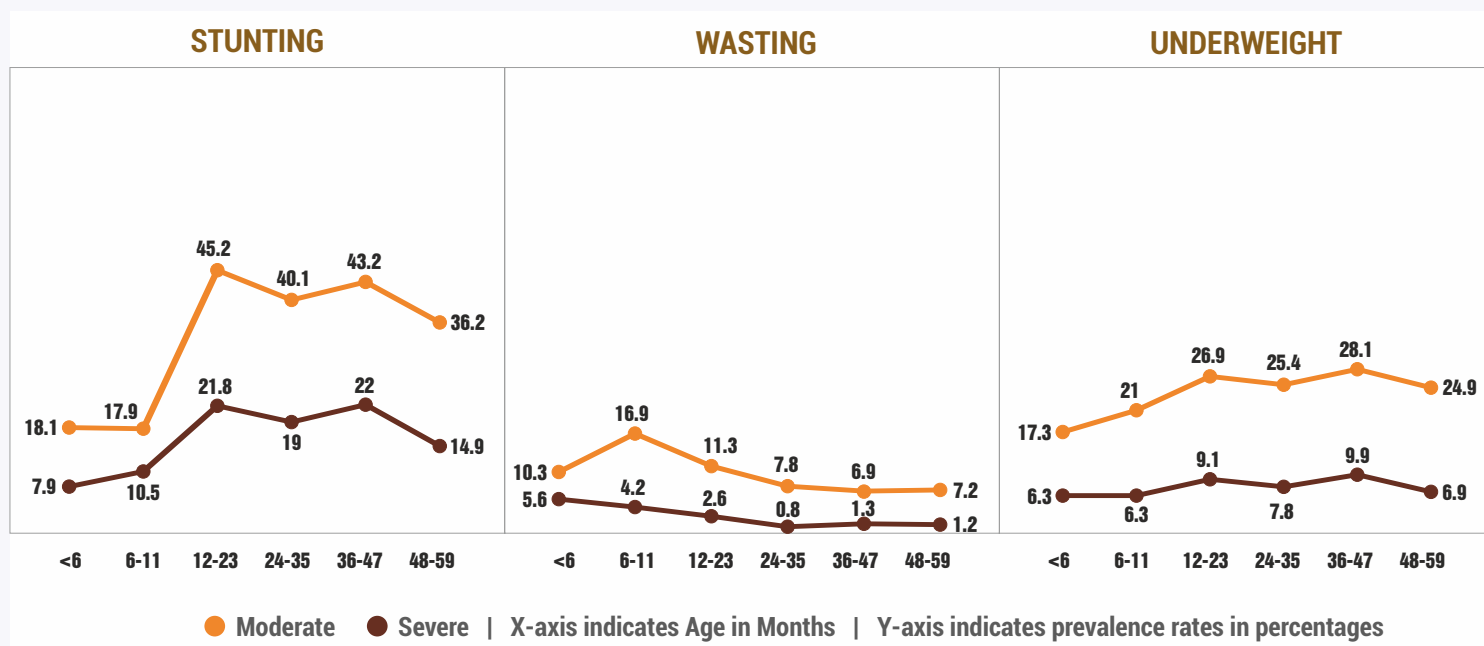


*Wasting is subject to seasonal variations either in food supply or disease prevalence and hence may not be comparable across groups of children measured at different times of the year within a survey round as well as between different survey rounds.

¹¹ Source : NFHS-3, 2006

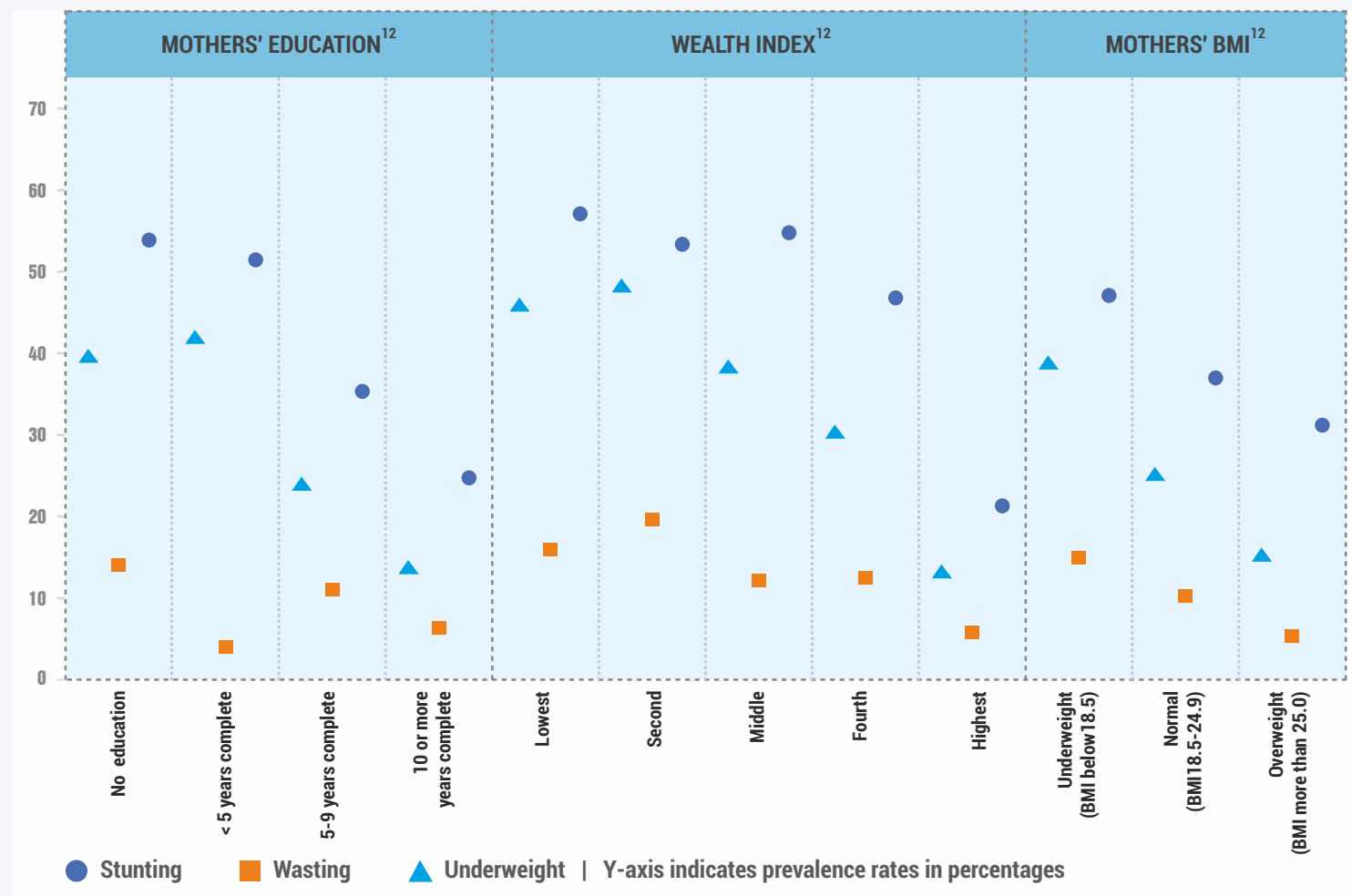
B. CHILD UNDERNUTRITION, BY AGE GROUPS¹²

Percentage of moderate (below -2 SD from the WHO growth standards) and severe (below -3 SD) stunting, wasting and underweight are available for 6 age groups among children under 5.



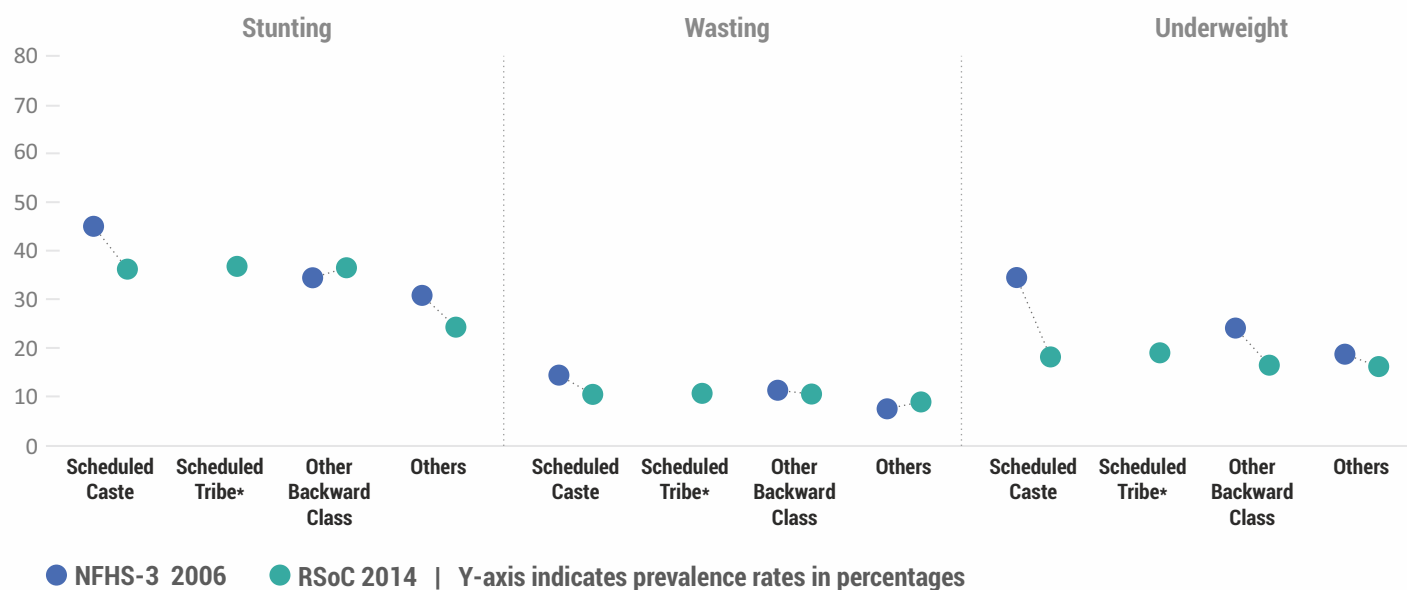
C. PREVALENCE OF CHILD UNDERNUTRITION, BY BACKGROUND CHARACTERISTICS

In this section, child undernutrition outcomes are presented, along with key socioeconomic drivers that are known to be associated with child nutrition, such as caste, residence, mother's health and education, and household income.



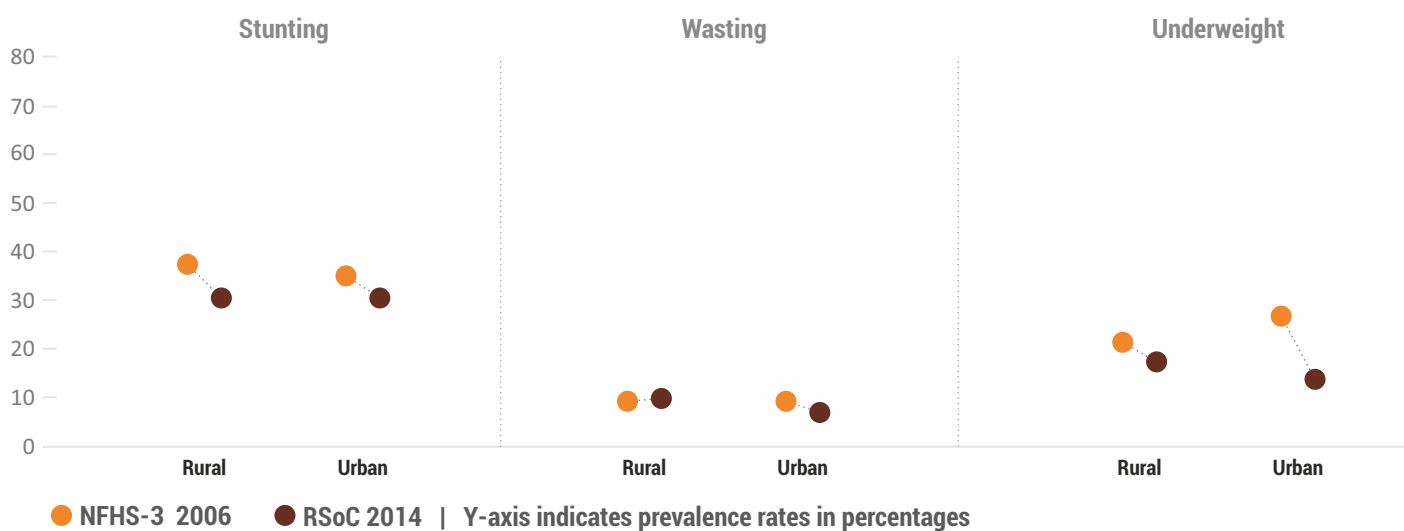
¹² Source : NFHS-3, 2006

CASTE



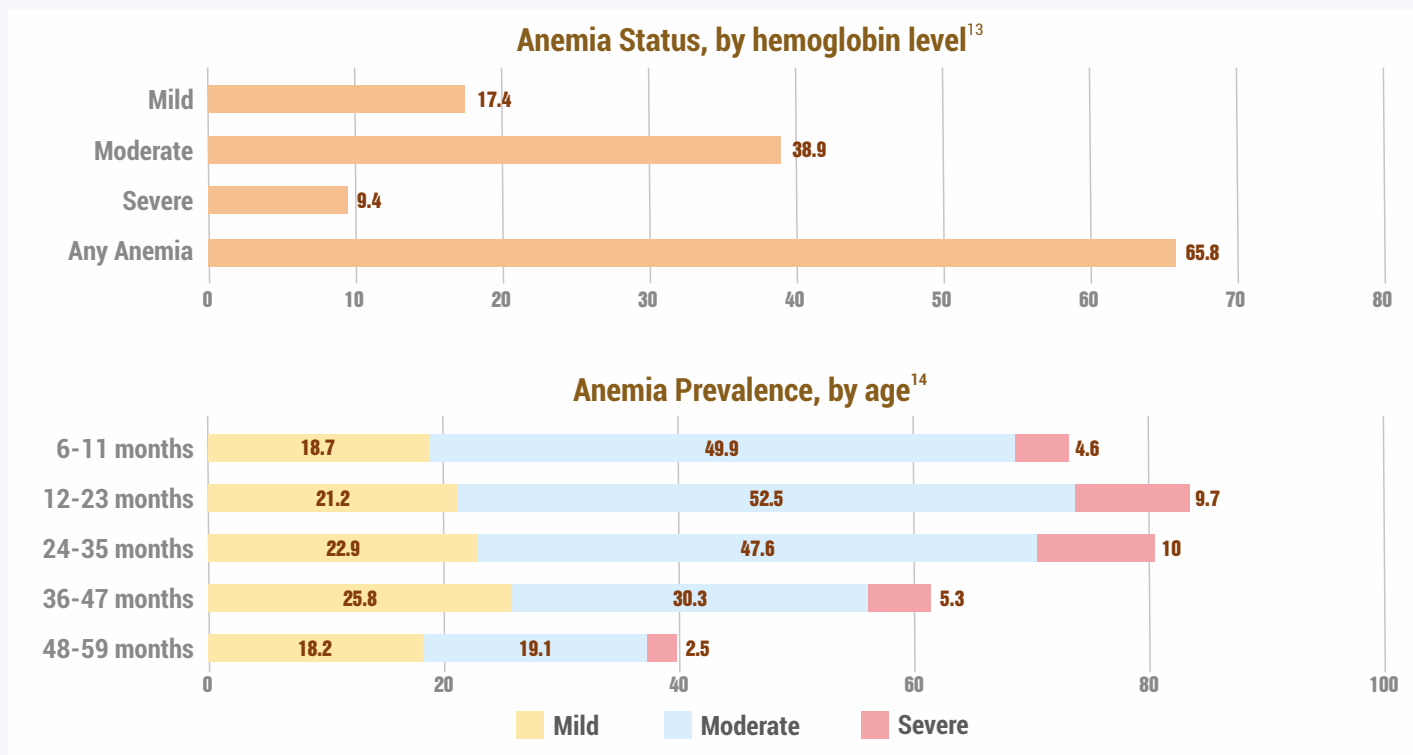
*Data for Scheduled Tribes is not available in NFHS-3 for this state

RESIDENCE



D. ANEMIA PREVALENCE

Anemia can impair physical and cognitive development among children and create long term impacts on productivity and wellbeing. This section features data on anemia prevalence by severity and age groups for children under 5.



¹³ Source : DLHS-4, 2012-13

¹⁴ Source : NFHS-3, 2006

III. IMMEDIATE DETERMINANTS

A. INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES¹⁵

This section presents indicators for assessing IYCF practices as recommended by the WHO and revised in 2008. Following optimal IYCF practices during the first 1,000 days is crucial for early child survival and growth as well as long-term health and wellbeing.

Children aged 0-23 months breastfed immediately/within an hour of birth		32.9%
	Children aged 0-5 months who were exclusively breastfed	60.2%
	Children aged 6-8 months who were fed complementary foods	53.8%
	For breastfed children (6-23 months)- A. Fed minimum number of times. Note : At least twice a day for breastfed infants 6-8 months old and at least three times a day for breastfed children 9-23 months old B. Had minimum dietary diversity Note : Minimum dietary diversity refers to four or more food groups^B fed to children aged 6-23 months	35.2% 19.1%

B. CHILD HEALTH¹⁵

Prevalence of childhood illnesses (in children aged 0-59 months)

Had diarrhea in 15 days prior to survey	2.6%
Had fever in 15 days prior to survey	11.5%
Had symptoms of Acute Respiratory Infection (ARI) in 15 days prior to survey	6.7%

^B The 7 food groups include the following: i. grains, roots and tubers ii. legumes and nuts iii. dairy products (milk, yoghurt, cheese) iv. Flesh foods (meat, fish, poultry, and liver/organ meats) v. eggs vi. Vitamin-A rich fruits and vegetables vii. other fruits and vegetables.

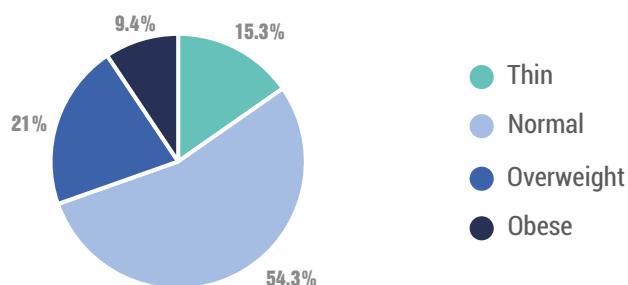
¹⁵ Source : RSoC, 2014

C. NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

Maternal health and nutrition, as well as adolescent nutrition, have important consequences for intergenerational transmission of undernutrition. Data on Body Mass Index (BMI), anemia prevalence and height among women of reproductive age are presented in this section, as are data on adolescent BMI and anemia.

C.1. WOMEN 15-49 YEARS OLD¹⁶

BMI^c levels of women aged 15-49 years



^cBody Mass Index (BMI) is defined as the weight in kilograms by the square of the height in metres (kg/m²). It is a simple index of weight-for-height which is commonly used to classify underweight, overweight and obesity in adults. Range: BMI < 18.5 = total thin, BMI 18.5-24.9 = normal, BMI 25.0-29.9 = Overweight, BMI > 30.0 = Obese [per WHO Standards]



52.7%

Women aged 15-49 years are anemic

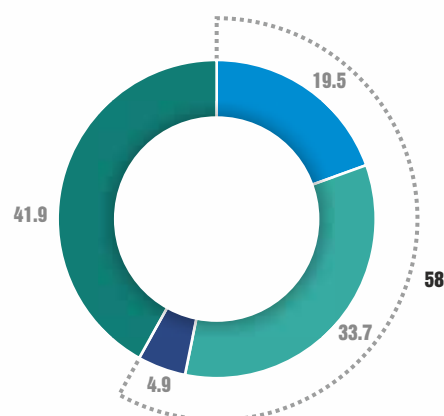
3.8%

Women aged 15-49 years are severely anemic

C.2. PREGNANT WOMEN¹⁶

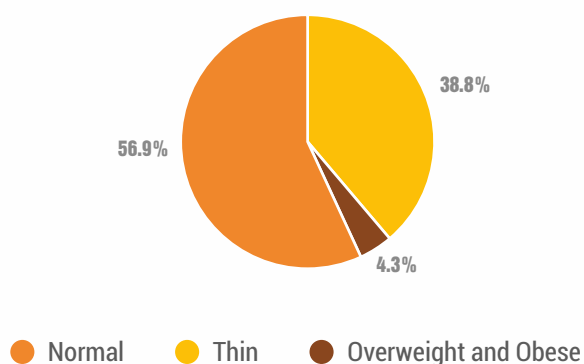
Anemia prevalence in pregnant women aged 15-49 years

● Mild ● Moderate ● Severe ● None ---- Any



C.3. ADOLESCENT GIRLS

BMI levels of adolescent girls aged 15-18 years¹⁷



41.4%

Adolescent girls aged 15-19 years are anemic¹⁶

1.6%

Adolescent girls aged 15-19 years are severely anemic¹⁶

¹⁶ Source : DLHS-4, 2012-13

¹⁷ Source : RSoC, 2014

^{17a} Source : NFHS-3, 2006

IV. UNDERLYING DETERMINANTS

A. SOCIAL STATUS OF WOMEN

Women's status is recognized to contribute in significant ways to improving nutrition. This section presents indicators that are representative of women's social status, including measures of education, age at marriage and first birth, employment, decision making and domestic violence. It also includes the Gender Empowerment Measure that captures gender inequality along three dimensions: political participation and decision-making power, economic participation and decision-making power, and power over economic resources.



Currently married women who have 10 or more years of schooling¹⁸ **42.3%**



12.5% Women aged 20-24 years who were married before the age of 18¹⁹

22.3 Average age at marriage¹⁹

Gender Empowerment Measure^{D,20}

0.5

0.5

National Average²⁰



Female workforce participation rate²² **13.9%**

Currently married women who make decisions about²³:



46.7% Own healthcare



6.3% Major household purchase



30.7% Purchases for daily household needs



14.5% Visits to her family/friends/relatives



26.7% Women who have experienced any form of physical/sexual/emotional violence²³

55% Ever married women who justify hitting/wife-beating (for either of the reasons mentioned)²³

^D The Gender Empowerment Measure is a weighted average index based on indicators that are classified into three dimensions: a. political participation and decision-making power b. economic participation and decision-making power and c. power over economic resources. The index ranges from a minimum of 0 to a maximum of 1, with a higher score indicating greater empowerment of women. (More information available at <http://wcd.nic.in/publication/GDIGEReport/Part3.pdf>.)

¹⁸ Source : DLHS-4, 2012-13

¹⁹ Source : RSoC, 2014

²⁰ Source : MoWCD, 2006

²² Source : Women and Men in India, 16th Issue MoSPI, 2014

²³ Source : NFHS-3, 2006

B. WATER AND SANITATION

Poor hygiene and sanitation, by directly increasing exposure and susceptibility to infections, are associated with undernutrition among children. This section covers key indicators on access to safe drinking water and availability of sanitation facilities at the state level. It also includes the expenditure on toilet construction under the Total Sanitation Campaign.



99.1%

Households with access to improved sources of drinking water^{E, 24}

72.3%

Households using improved sanitation facility^{F, 24}



9.7%

Households practicing open defecation²⁴

0.55 M

Expenditure on toilets under Total Sanitation Campaign (TSC)^{G, 25}



1,065 M

National Average²⁵

C. AGRICULTURE AND FOOD SECURITY

Agriculture productivity and food security can affect household access to foods necessary for a healthy diet. Thus, this section presents indicators related to agricultural growth and food consumption patterns in the state, indicating the level of food security in the state relative to the national situation.



2.4%

Growth rate of agriculture from 2007-2012²⁶



10.9%

Share in India's total foodgrain production²⁷



Mean Calorie intake per person per day (in Kcal)²⁸

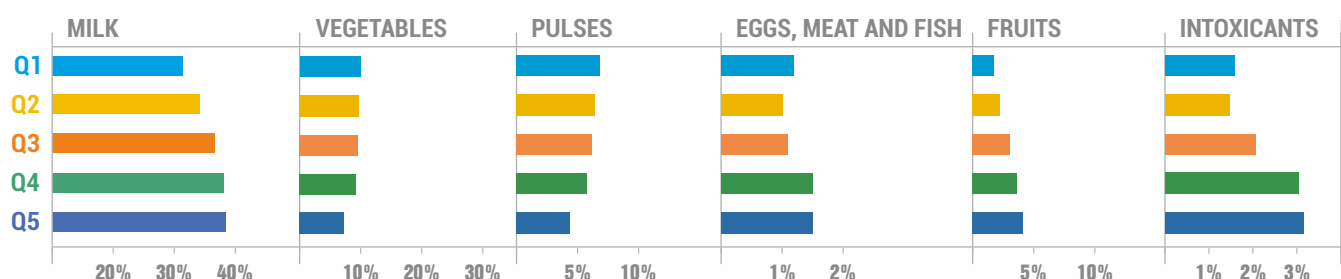
RURAL

2483 **2233**
PUNJAB INDIA AVG

URBAN

2299 **2206**
PUNJAB INDIA AVG

Expenditure on food items by income quintiles²⁸



^E Improved sources of drinking water include: piped water into dwelling, piped water to yard/plot, public tap or standpipe, tubewell or borehole, protected dug well, protected spring, and rainwater (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>).

^F Improved sanitation means households using improved toilets that include: flush toilet, piped sewer system, septic tank, flush/pour flush to pit latrine, ventilated improved pit latrine, pit latrine with slab, composting toilet, special case (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>); excludes those households who are using improved toilets but sharing toilet facilities with other households.

^G Besides toilet construction subsidies, this expenditure also includes funding other activities such as solid and liquid waste management, IEC activities for sustainable demand generation for sanitation facilities, assistance to production centers of sanitary materials and rural sanitary marts, provision of construction of community sanitary complexes, provision of sanitation facilities in govt. schools and Anganwadis in govt. buildings etc.

²⁴ Source : RSoC, 2014

²⁵ Source : Indiastat, Rajya Sabha Unstarred Question No. 2950, dated on 30.08.2011, 2011-12

²⁶ Source : Indiastat, compiled by datanet from Rajyasabha & Lok Sabha unstarred questions no. 3039, 4535. 2007-12

²⁷ Source : Indiastat, Ministry of Agriculture, Government of India 2011-2012

²⁸ Source : NSSO, 68th round-Nutritional Intake in India, 2011-12

V. STATUS OF NUTRITION-RELEVANT INTERVENTIONS

A. NUTRITION-SPECIFIC INTERVENTIONS

The financial resources allocated to, and spent on direct nutrition-specific interventions can determine the scale, coverage and quality of interventions to reach vulnerable target populations. These services, in India, are delivered both by the Integrated Child Development Scheme (ICDS) and the National Health Mission (NHM). This section includes data on the coverage of interventions delivered by these two key centrally-sponsored schemes that directly impact maternal and child nutrition and health. We also include here information on the human resources and service availability of these schemes and expenditures.

A.1. COVERAGE OF ICDS AND NHM:

The Integrated Child Development Services (ICDS) aims to improve the nutrition and health status of children under-six through a package of services (supplementary nutrition, immunization, health check-up, referral services, etc.) delivered through frontline workers at the Anganwadi Centres (AWCs). This section provides information on expenditure on ICDS and coverage of its supplementary nutrition programme (SNP). This section also covers critical services provided by the health system, including provision of care for pregnant women and child immunization. Immunization plays a crucial role in complementing actions to improve nutrition. The link between undernutrition and infectious diseases is cyclical, poor nutrition increases vulnerability to infections, which in turn worsen nutrition status. Data on immunization among children are presented by residence. Here, full immunization refers to children covered with BCG, measles and 3 doses each of DPT and polio.

Beneficiaries who availed supplementary food under ICDS²⁹

Children 6-35 months	23.1%
Children 36-71 months	20.9%
Pregnant women	14.9%
Lactating mothers	15.5%

Beneficiaries who received supplementary food for at least 21 days in the month prior to the survey

Children aged 6-35 months	23.8%
Children aged 36-71 months	33.2%
Pregnant women	NA
Lactating women	17.6%

²⁹ Source : RSoC, 2014

SERVICES PROVIDED TO WOMEN WHO HAD A LIVE BIRTH IN LAST 35 MONTHS³⁰



59.8%

Received 3 or more antenatal checkups prior to delivery



95.3%

Received 2 or more TT injections prior to delivery



19.7%

Consumed 100 or more IFA tablets/syrup during pregnancy



80.4%

Had Institutional delivery



85.4%

Women who had live birth in 35 months where delivery was assisted by skilled health provider³⁰



78.4%

Rural

78.9%

Urban

Children aged 12-23 months who are fully immunised³⁰



2.3%

Children aged 12-23 months who have not received any immunisation³⁰

WOMEN GIVEN ADVICE ON³¹:



50%

Breastfeeding



39.4%

Nutrition of mother and child



29.4%

Institutional delivery

A.2. PERSONNEL CAPACITY OF ICDS AND NRHM:

This section features data on availability of healthcare personnel and services available to women of reproductive age (antenatal care, tetanus toxoid coverage, iron-folic acid supplementation coverage, institutional delivery and counseling). Household and individual access to health services can directly impact children's nutrition and welfare during the crucial first 1,000 days of life.

Availability of Anganwadi Centres and Workers (AWCs and AWWs) ^{H, 30}	Value
Pending or vacant Anganwadi workers to sanctioned number of workers*	1.2%
AWWs living in the AWC village/ward	86.4%
AWWs having 10 or more years of schooling	95.3%
Median age of AWWs	43 years
AWCs serving to population more than the stipulated norm	54.4%

Growth Monitoring ³⁰	Value
AWCs having functional baby weighing scale	49.4%
AWCs having functional adult weighing scale	37.5%
Available WHO growth chart at AWCs	89.1%

^H Number of AWCs surveyed for Punjab as per RSoC 2014 is 134.

³⁰ Source : RSoC, 2014

³¹ Source : DLHS-4, 2012-13

* Source : MoWCD, 2012

Training and Comprehensive Knowledge ³²	Value
AWWs having correct knowledge of intake of food by pregnant women	87.7%
AWWs having correct knowledge of normal birth weight of children	86.4%
AWWs having correct knowledge of initiation of breastfeeding within one hour	97.2%
AWWs having correct knowledge of exclusive breastfeeding for the first six months	97.6%
AWWs having correct knowledge of appropriate age of child for complementary feeding	69.9%

Health Service Delivery Personnel	Value
ASHAs selected ³³	94%
Current density of ASHA as per Census 2011 rural population ³³	1 per 1057 persons
Pending or vacant ANM positions sub centres & PHCs ³⁴	0%

A.3. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SPECIFIC INTERVENTIONS

Expenditure on Schemes (in million dollars)	In million USD	National Average
ICDS (ICDS general + SNP + training) (women and children) ³⁵	49	75
NRHM expenditure (Central Government) ³⁶	51.9	68.8
NRHM expenditure (State Government) ³⁶	5.8	9.3

B. NUTRITION-SENSITIVE INTERVENTIONS

This section includes information on expenditure and coverage of key centrally-sponsored schemes that indirectly impact maternal and child nutrition. These are: the Mid Day Meal Scheme (MDMS), Public Distribution System (PDS), and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

B.1. COVERAGE OF SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS

Coverage of Schemes	Value
MDMS (base: eligible children*) ³⁷	29.8%
PDS (base: rural and urban households reporting consumption) ³⁸	18.2%
MGNREGA (base: rural persons 18 years and above registered in MGNREG job card and demanded work during last 365 days) ³⁹	68.8%

* All children studying in primary & upper primary classes in schools supported under Sarva Shiksha Abhiyan and NCLP (National Child Labour Project) run by Ministry of Labour.

B.2. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS:

Expenditure on Schemes (in million dollars)	In million USD	National Average
MDMS ⁴⁰	28	47
PDS ⁴¹	175.2	475.3
MGNREGA ⁴²	26	214

³² Source : RSoC, 2014

³³ Source : NRHM, 2013

³⁴ Source : MoHFW, 2013

³⁵ Source : Lok Sabha Unstarred Question # 846 dated 27.02.2015, 2012-13

³⁶ Source : Lok Sabha Annexured Unstarred Question # 409 dated 6.12.2013, 2012-13

³⁷ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/lsq15/15/as216.htm 2011-12

³⁸ Source : Report No. 558, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

³⁹ Source : Report No. 554, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

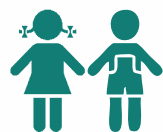
⁴⁰ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014, 2012-13

⁴¹ Source : Food Corporation of India 2013, 2012-13

⁴² Source : Lok Sabha Annexured Unstarred Question # 3835 dated 19.03.2015, 2012-13

FAST FACTS ON NUTRITION AND ITS DETERMINANTS IN RAJASTHAN

World Health Assembly Nutrition Targets



CHILDREN UNDER 5 YEARS

36.4%
Stunted¹
14.1%
Wasted¹

World Health Assembly Nutrition Targets


49.9%

 Infants 0-5 months old who are exclusively breastfed¹

23.2%

 Children under 3 years who have low birth weight (<2.5 kgs)²

53.1%

 Women 15-49 years old with anemia¹

Immediate Determinants


45.9%

 Infants 6-8 months old who receive solid, semi-solid or soft foods²
14.5%

 Infants & young children 6-23 months old who achieve minimal diet diversity in complementary feeding²

69.7%

 Children 6-59 months old with anemia¹

5.6%

 Children 6-59 months old who had diarrhea in 15 days prior to survey²

Immediate Determinants


26.8%

 Children 6-35 months old who received supplementary food under ICDS for 21 days in the month prior to survey²

60.7%

 Children 12-23 months old who are fully immunized²

51.2%

 Mothers of children under 36 months old who received three or more antenatal checkups²

Underlying Determinants


9.2%

 Currently married women with 10 or more years of schooling¹

47.4%

 Women aged 20-24 years who were married before the age of 18²

60.2%

 Adolescent girls 15-18 years old with low BMI (<18.5)²

Underlying Determinants


59.1%

 Households practicing open defecation²

14.7%

 Population below state-specific poverty line³

Does state have a high-level nutrition mission?

NO
¹ Source : RSoC, 2014

² Source : NFHS-3, 2006

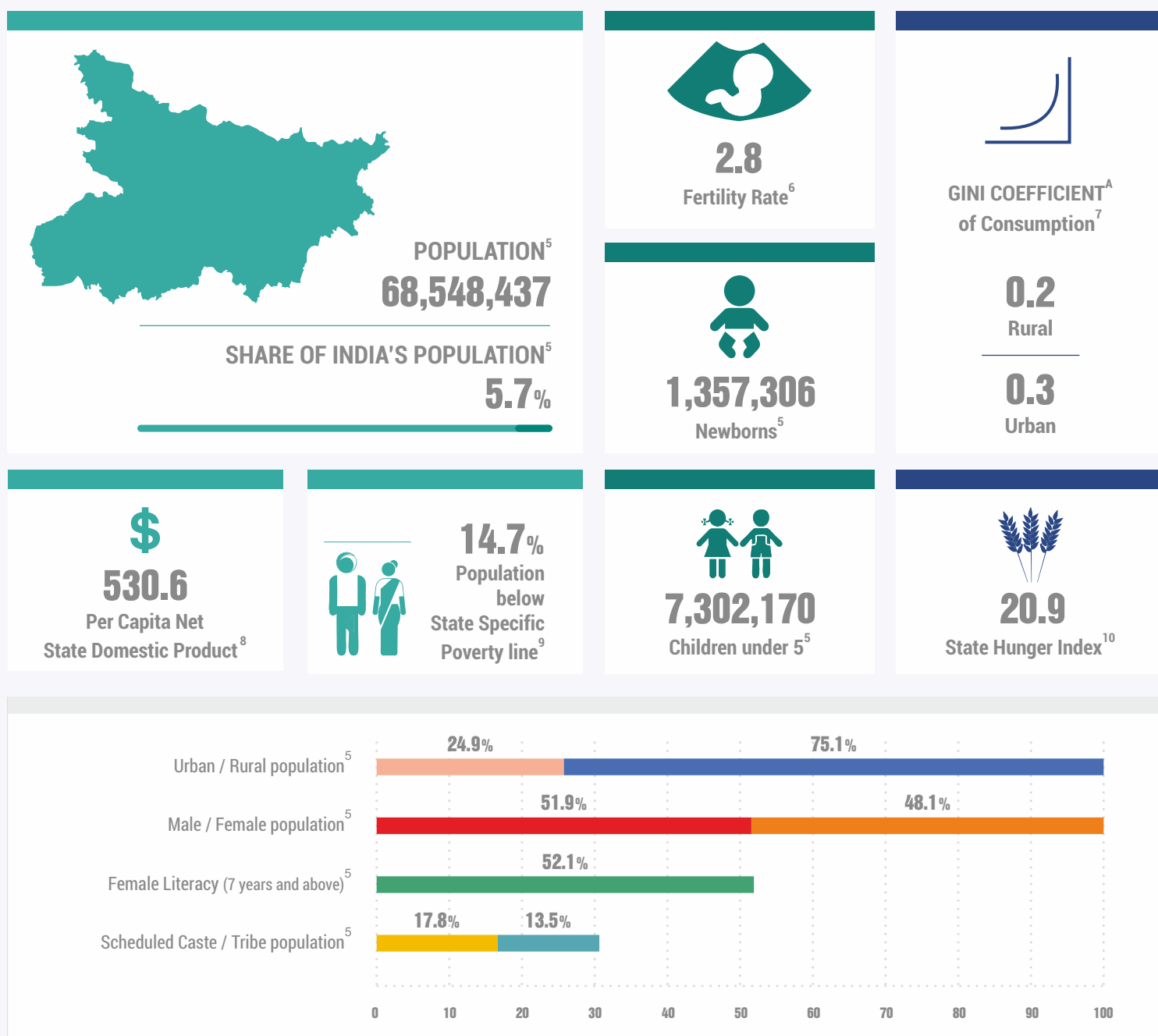
³ Source : DLHS-3, 2007-08

⁴ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Govt. of India

I. CONTEXT

A. DEMOGRAPHIC CONTEXT

This section highlights the demographic composition of the state in terms of male-female, rural-urban, and SC-ST ratios, literacy and fertility rates. In addition, it also includes the size of the population of newborns and children less than five years of age (as of the Census of India, 2011) to illustrate the size of the target population for nutrition-related interventions that need to reach this vulnerable population.



A : Gini coefficient is a measure of inequality of distribution. A Gini coefficient of 0 represents perfect equality, while a value of 100 implies perfect inequality. (See Appendix A for more information)

⁵ Source : Primary Census Abstract, Census, 2011

⁶ Source : SRS, 2013

⁷ Source : Planning Commission Estimates: NSSO 66th round-Employment and Unemployment Survey, 2009-10

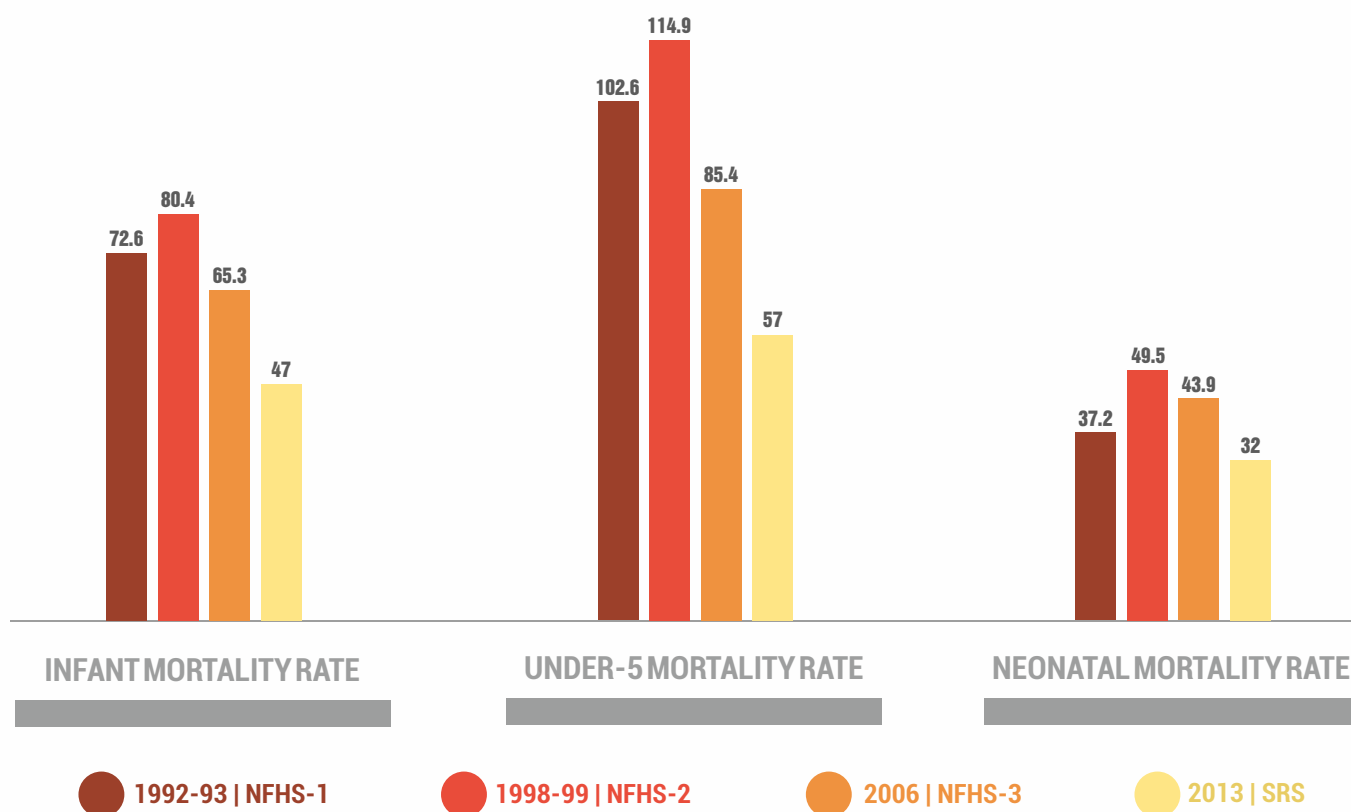
⁸ Source : Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14; http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82

⁹ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Government of India, 2011-12 : http://planningcommission.nic.in/news/pre_pov2307.pdf

¹⁰ Source : IFPRI, India State Hunger Index, 2009

B. CHILD MORTALITY PER THOUSAND LIVE BIRTHS

This section illustrates trends in mortality in neonates, infants and children under 5 years, since 1992. The purpose of this is to highlight the success achieved by individual states in averting deaths of children since the economic growth of the 1990s.



II. NUTRITIONAL STATUS AMONG CHILDREN

This section presents data on nutrition outcome indicators (stunting, wasting, and underweight) and anemia prevalence. Anthropometric measures for children under 5 (stunting, wasting, and underweight) are presented over time periods, by age groups and by background characteristics. This data aims to convey the prevalence and severity of undernutrition in the state.

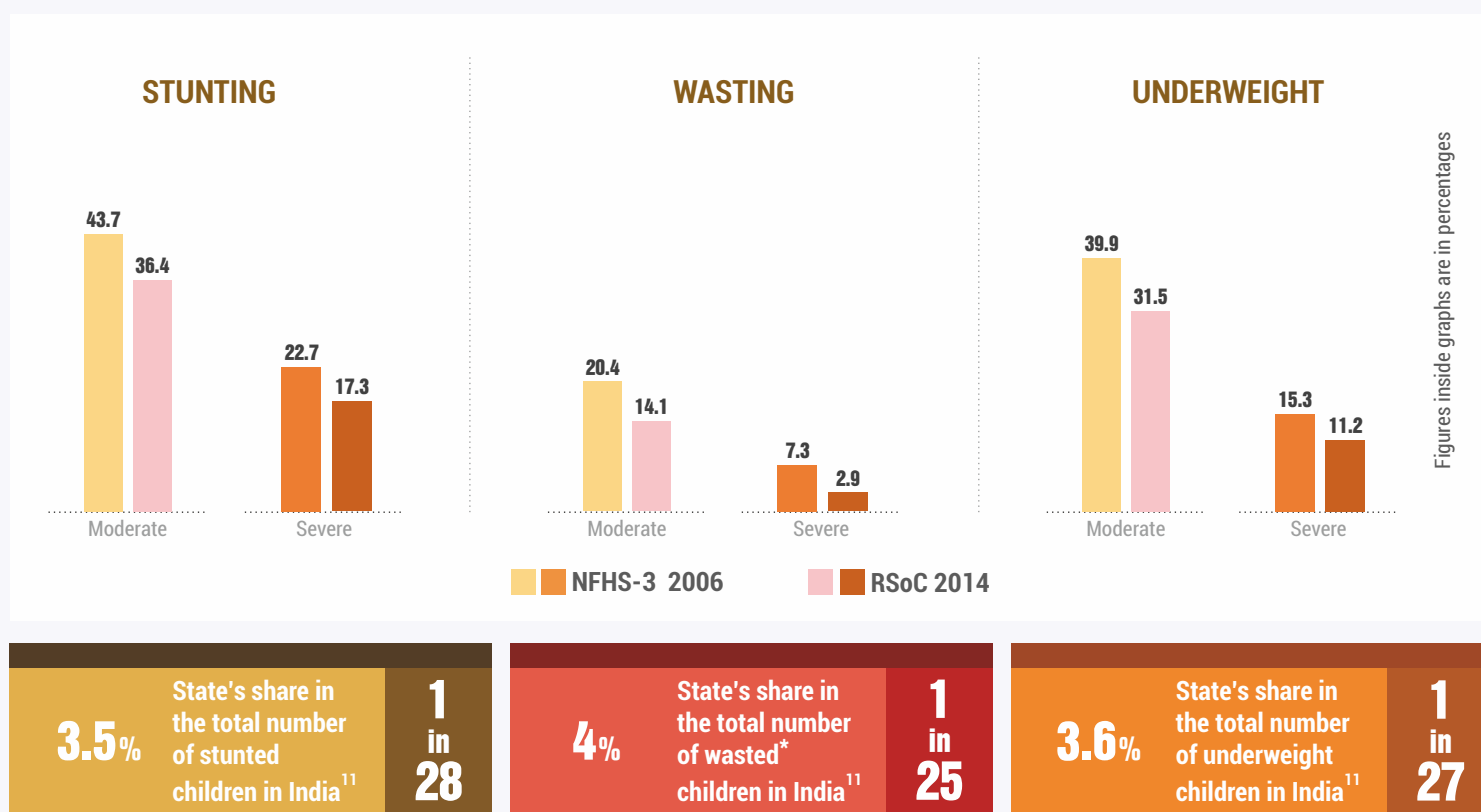
A. CHILD UNDERNUTRITION, BY TIME PERIOD

ANTHROPOMETRIC MEASURES

Stunting is inadequate height for age, which is indicative of chronic or cumulative nutritional deprivation in early childhood. A stunted child's height-for-age is below -2 standard deviations from the median height-for-age (termed HAZ) of the WHO Child Growth Standards, while a severely stunted child is below -3 standard deviations.

Wasting is inadequate weight for height, which points to acute or short-term undernutrition. A wasted child's weight-for-height (WHZ) is below -2 standard deviations from the WHO Child Growth Standards; a severely wasted child is below -3 standard deviations. (Another way to determine severe wasting or severe acute malnutrition is through a measurement of a child's mid-upper arm circumference (MUAC).

Underweight is inadequate weight for age, a composite indicator that encompasses stunting and wasting. An underweight child's weight-for-age (WAZ) is below -2 standard deviations from the WHO Child Growth Standards; again, a severely underweight child is below -3 standard deviations.

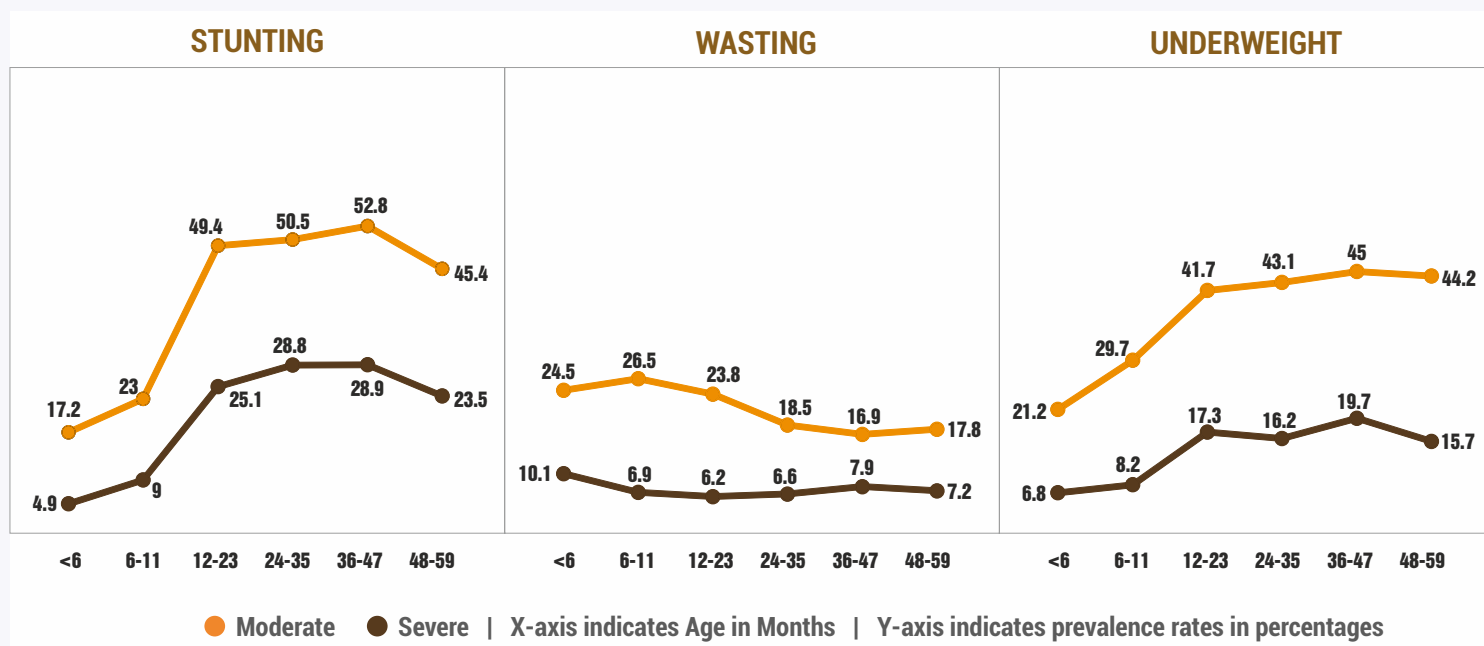


*Wasting is subject to seasonal variations either in food supply or disease prevalence and hence may not be comparable across groups of children measured at different times of the year within a survey round as well as between different survey rounds.

¹¹ Source : NFHS-3, 2006

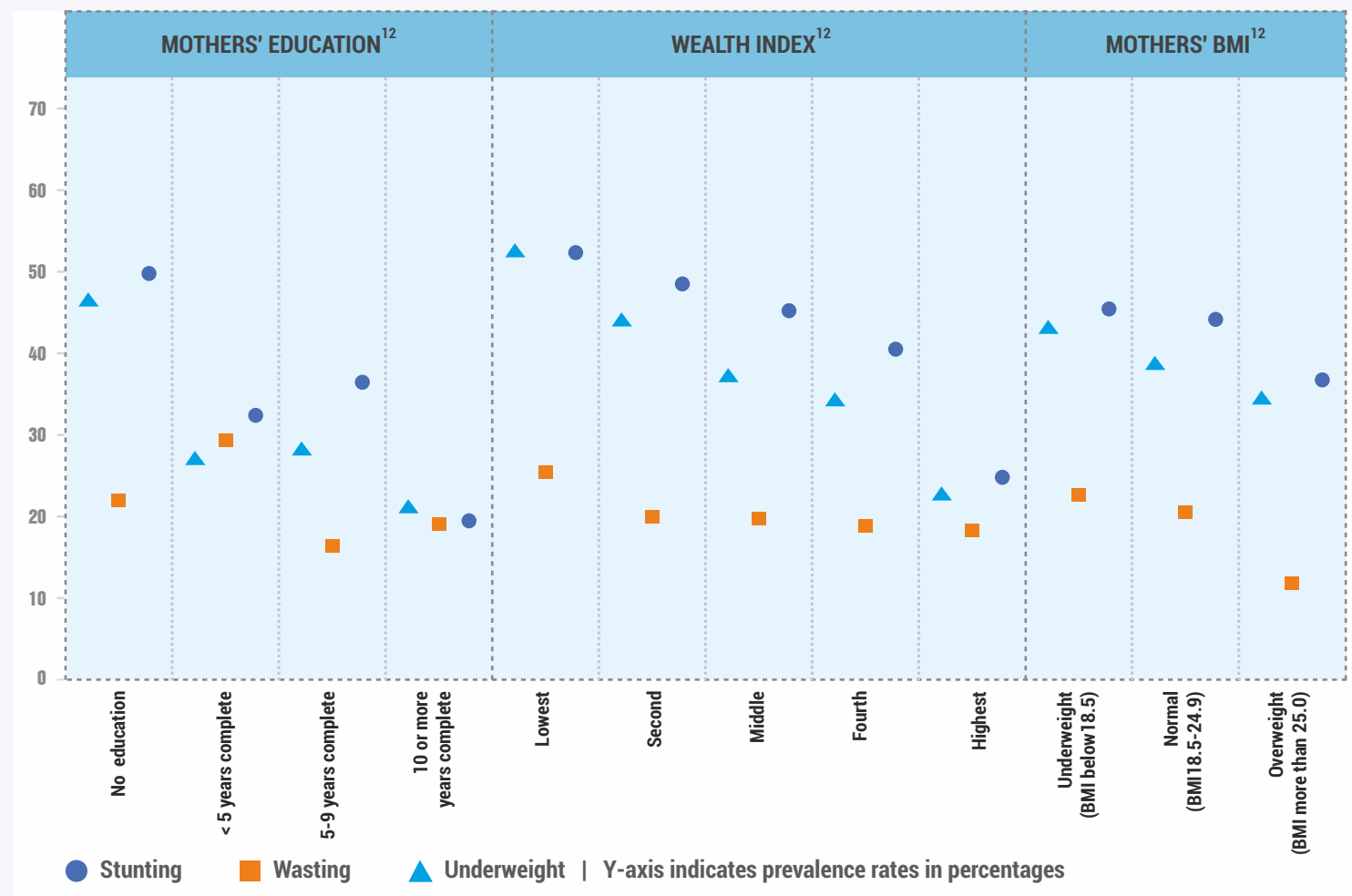
B. CHILD UNDERNUTRITION, BY AGE GROUPS¹²

Percentage of moderate (below -2 SD from the WHO growth standards) and severe (below -3 SD) stunting, wasting and underweight are available for 6 age groups among children under 5.



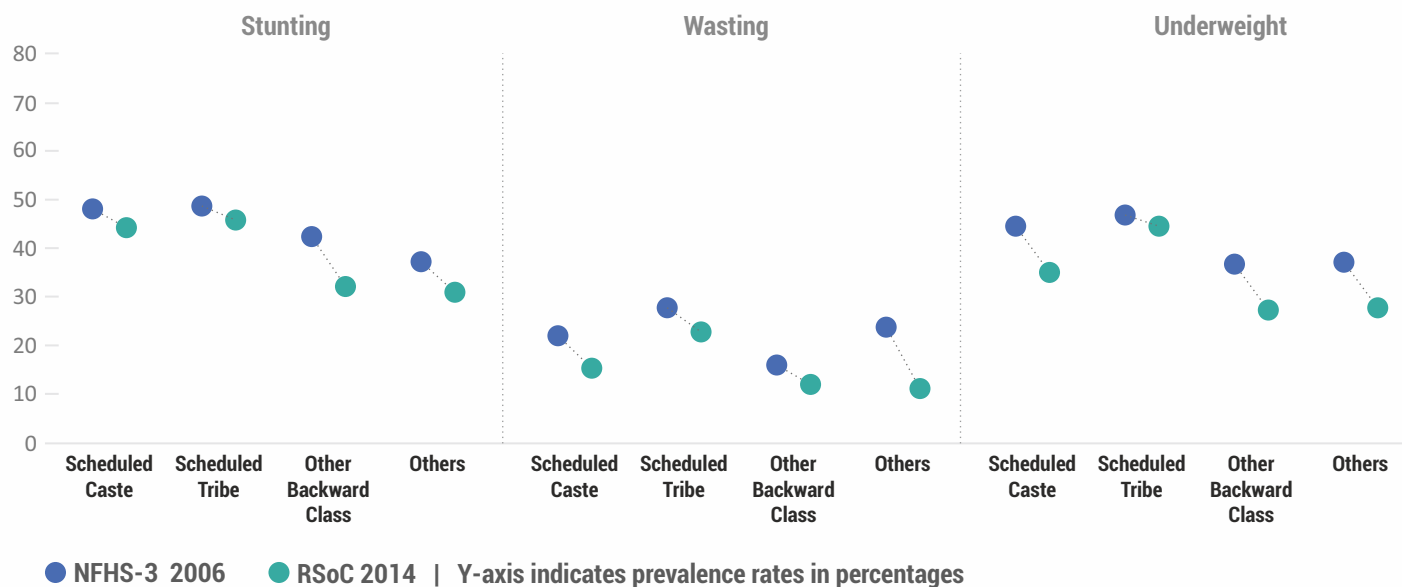
C. PREVALENCE OF CHILD UNDERNUTRITION, BY BACKGROUND CHARACTERISTICS

In this section, child undernutrition outcomes are presented, along with key socioeconomic drivers that are known to be associated with child nutrition, such as caste, residence, mother's health and education, and household income.

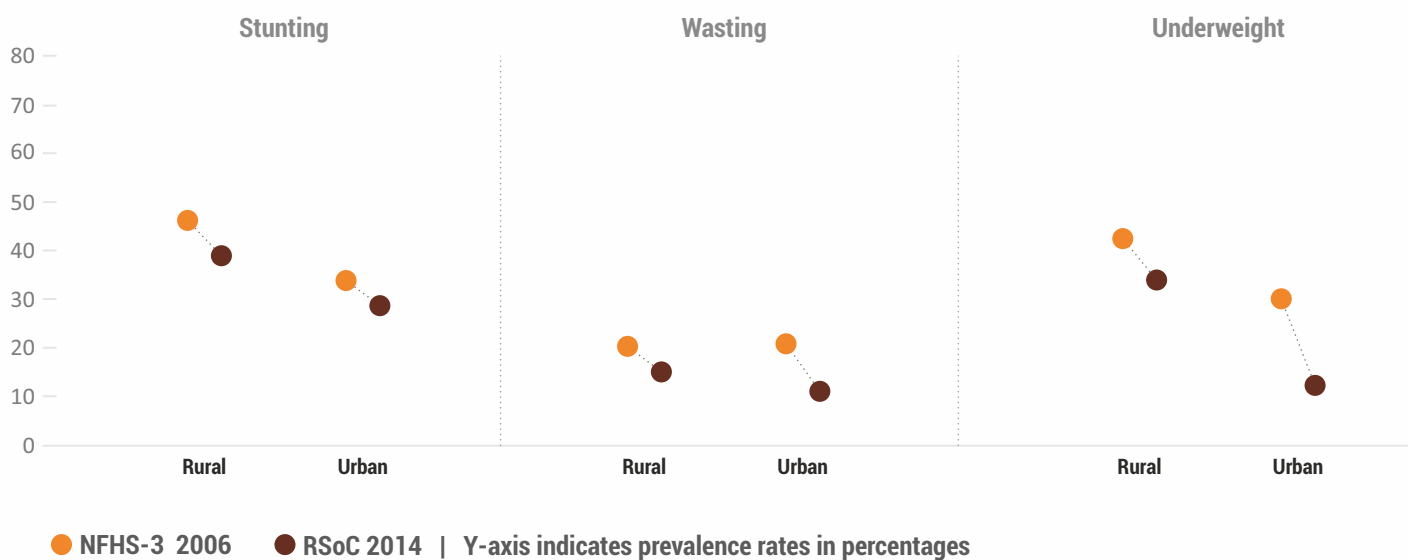


¹² Source : NFHS-3, 2006

CASTE

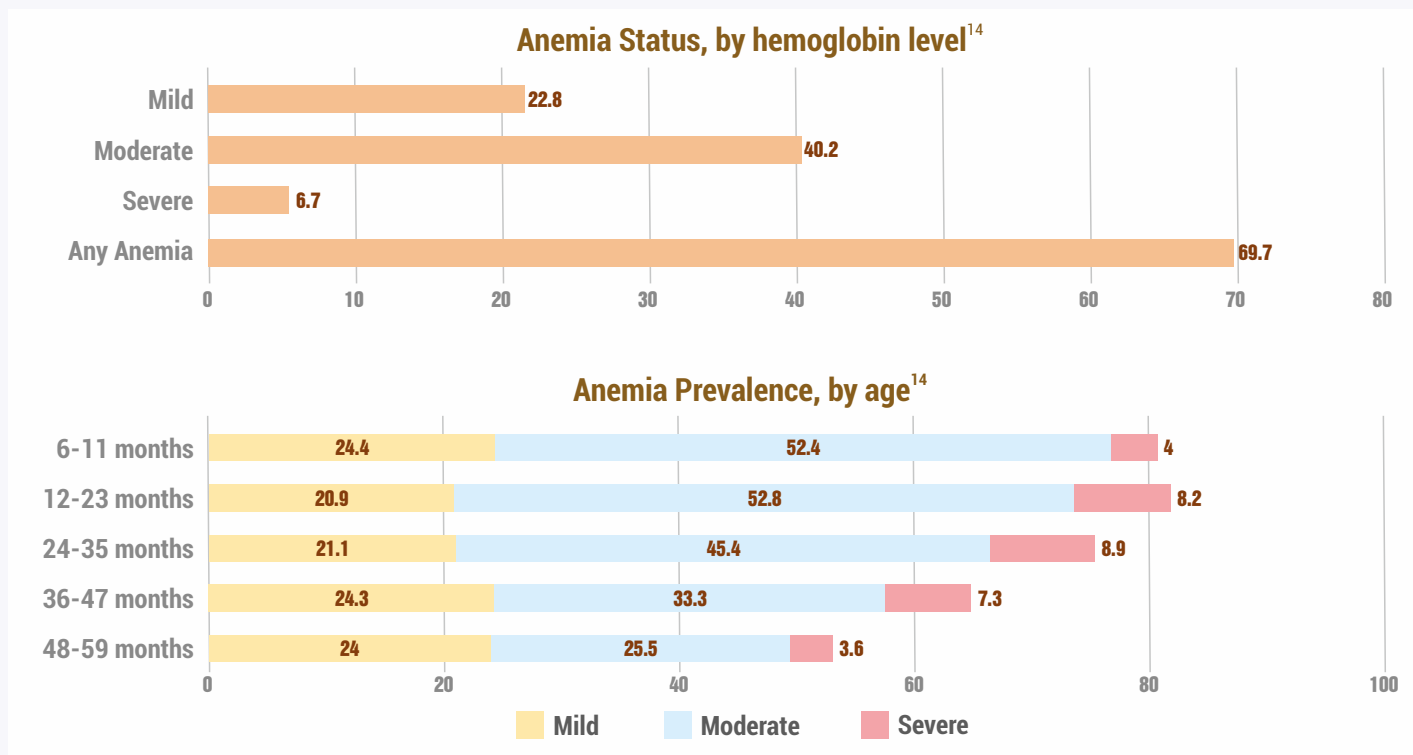


RESIDENCE



D. ANEMIA PREVALENCE

Anemia can impair physical and cognitive development among children and create long term impacts on productivity and wellbeing. This section features data on anemia prevalence by severity and age groups for children under 5.



¹⁴ Source : NFHS-3, 2006

III. IMMEDIATE DETERMINANTS

A. INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES¹⁵

This section presents indicators for assessing IYCF practices as recommended by the WHO and revised in 2008. Following optimal IYCF practices during the first 1,000 days is crucial for early child survival and growth as well as long-term health and wellbeing.

Children aged 0-23 months breastfed immediately/within an hour of birth		38.6%
	Children aged 0-5 months who were exclusively breastfed	49.9%
	Children aged 6-8 months who were fed complementary foods	45.9%
	For breastfed children (6-23 months)- A. Fed minimum number of times. Note : At least twice a day for breastfed infants 6-8 months old and at least three times a day for breastfed children 9-23 months old B. Had minimum dietary diversity Note : Minimum dietary diversity refers to four or more food groups^B fed to children aged 6-23 months	45.8% 14.5%

B. CHILD HEALTH¹⁵

Prevalence of childhood illnesses (in children aged 0-59 months)

Had diarrhea in 15 days prior to survey	5.6%
Had fever in 15 days prior to survey	16%
Had symptoms of Acute Respiratory Infection (ARI) in 15 days prior to survey	9.3%

^B The 7 food groups include the following: i. grains, roots and tubers ii. legumes and nuts iii. dairy products (milk, yoghurt, cheese) iv. Flesh foods (meat, fish, poultry, and liver/organ meats) v. eggs vi. Vitamin-A rich fruits and vegetables vii. other fruits and vegetables.

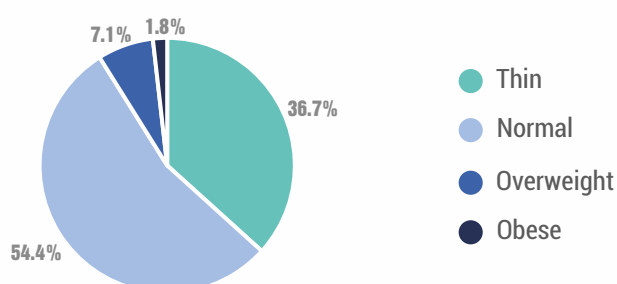
¹⁵ Source : RSoC, 2014

C. NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

Maternal health and nutrition, as well as adolescent nutrition, have important consequences for intergenerational transmission of undernutrition. Data on Body Mass Index (BMI), anemia prevalence and height among women of reproductive age are presented in this section, as are data on adolescent BMI and anemia.

C.1. WOMEN 15-49 YEARS OLD¹⁶

BMI^c levels of women aged 15-49 years



^cBody Mass Index (BMI) is defined as the weight in kilograms by the square of the height in metres (kg/m²). It is a simple index of weight-for-height which is commonly used to classify underweight, overweight and obesity in adults. Range: BMI < 18.5 = total thin, BMI 18.5-24.9 = normal, BMI 25.0-29.9 = Overweight, BMI > 30.0 = Obese [per WHO Standards]



53.1%

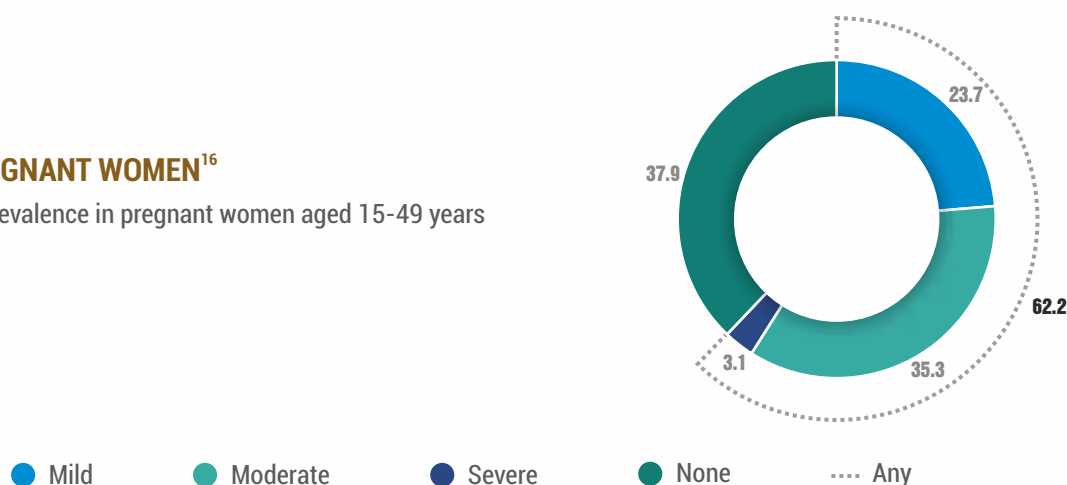
Women aged 15-49 years are anemic

2.5%

Women aged 15-49 years are severely anemic

C.2. PREGNANT WOMEN¹⁶

Anemia prevalence in pregnant women aged 15-49 years



● Mild

● Moderate

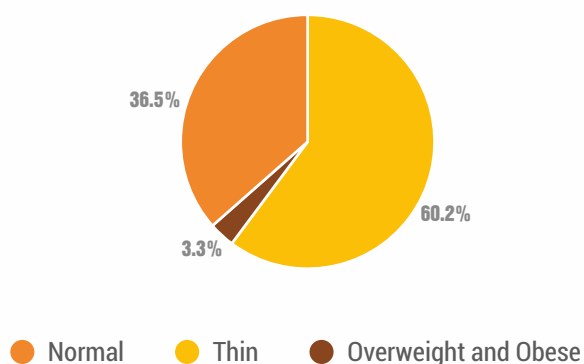
● Severe

● None

--- Any

C.3. ADOLESCENT GIRLS

BMI levels of adolescent girls aged 15-18 years¹⁷



53.9%

Adolescent girls aged 15-19 years are anemic¹⁶

3.1%

Adolescent girls aged 15-19 years are severely anemic¹⁶

¹⁶ Source : NFHS-3, 2006

¹⁷ Source : RSoC, 2014

IV. UNDERLYING DETERMINANTS

A. SOCIAL STATUS OF WOMEN

Women's status is recognized to contribute in significant ways to improving nutrition. This section presents indicators that are representative of women's social status, including measures of education, age at marriage and first birth, employment, decision making and domestic violence. It also includes the Gender Empowerment Measure that captures gender inequality along three dimensions: political participation and decision-making power, economic participation and decision-making power, and power over economic resources.



Currently married women who have 10 or more years of schooling¹⁸ **9.2%**



47.4% Women aged 20-24 years who were married before the age of 18¹⁹ **19.3** Average age at marriage¹⁹

Gender Empowerment Measure^{D,20}

0.4

0.5

National Average²⁰



Female workforce participation rate²² **35.1%**

Currently married women who make decisions about²³:



24.9% Own healthcare



5.4% Major household purchase



29.3% Purchases for daily household needs



8.3% Visits to her family/friends/relatives



50.2% Women who have experienced any form of physical/sexual/emotional violence²³

59.6% Ever married women who justify hitting/wife-beating (for either of the reasons mentioned)²³

^D The Gender Empowerment Measure is a weighted average index based on indicators that are classified into three dimensions: a. political participation and decision-making power b. economic participation and decision-making power and c. power over economic resources. The index ranges from a minimum of 0 to a maximum of 1, with a higher score indicating greater empowerment of women. (More information available at <http://wcd.nic.in/publication/GDIGEReport/Part3.pdf>.)

¹⁸ Source : DLHS-3, 2007-08

¹⁹ Source : RSoC, 2014

²⁰ Source : MoWCD, 2006

²² Source : Women and Men in India, 16th Issue MoSPI, 2014

²³ Source : NFHS-3, 2006

B. WATER AND SANITATION

Poor hygiene and sanitation, by directly increasing exposure and susceptibility to infections, are associated with undernutrition among children. This section covers key indicators on access to safe drinking water and availability of sanitation facilities at the state level. It also includes the expenditure on toilet construction under the Total Sanitation Campaign.



88%

Households with access to improved sources of drinking water^{E, 24}

31.1%

Households using improved sanitation facility^{F, 24}



59.1%

Households practicing open defecation²⁴

15.8 M

Expenditure on toilets under Total Sanitation Campaign (TSC)^{G, 25}



1,065 M

National Average²⁵

C. AGRICULTURE AND FOOD SECURITY

Agriculture productivity and food security can affect household access to foods necessary for a healthy diet. Thus, this section presents indicators related to agricultural growth and food consumption patterns in the state, indicating the level of food security in the state relative to the national situation.



3.5%

Growth rate of agriculture from 2007-2012²⁶



7.5%

Share in India's total foodgrain production²⁷



Mean Calorie intake per person per day (in Kcal)²⁸

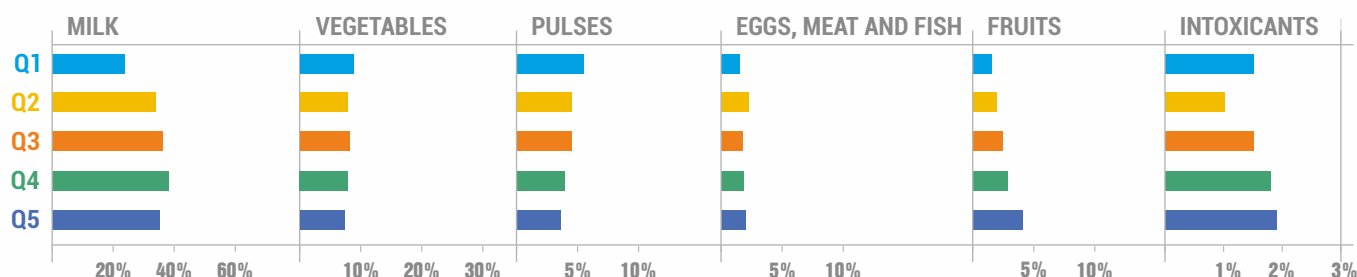
RURAL

2408 **2233**
RAJASTHAN INDIA AVG

URBAN

2320 **2206**
RAJASTHAN INDIA AVG

Expenditure on food items by income quintiles²⁸



^E Improved sources of drinking water include: piped water into dwelling, piped water to yard/plot, public tap or standpipe, tubewell or borehole, protected dug well, protected spring, and rainwater (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>).

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²⁴ Source : RSoC, 2014

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²⁷ Source : Indiastat, Ministry of Agriculture, Government of India 2011-2012

²⁸ Source : NSSO, 68th round-Nutritional Intake in India, 2011-12

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Beneficiaries who availed supplementary food under ICDS²⁹

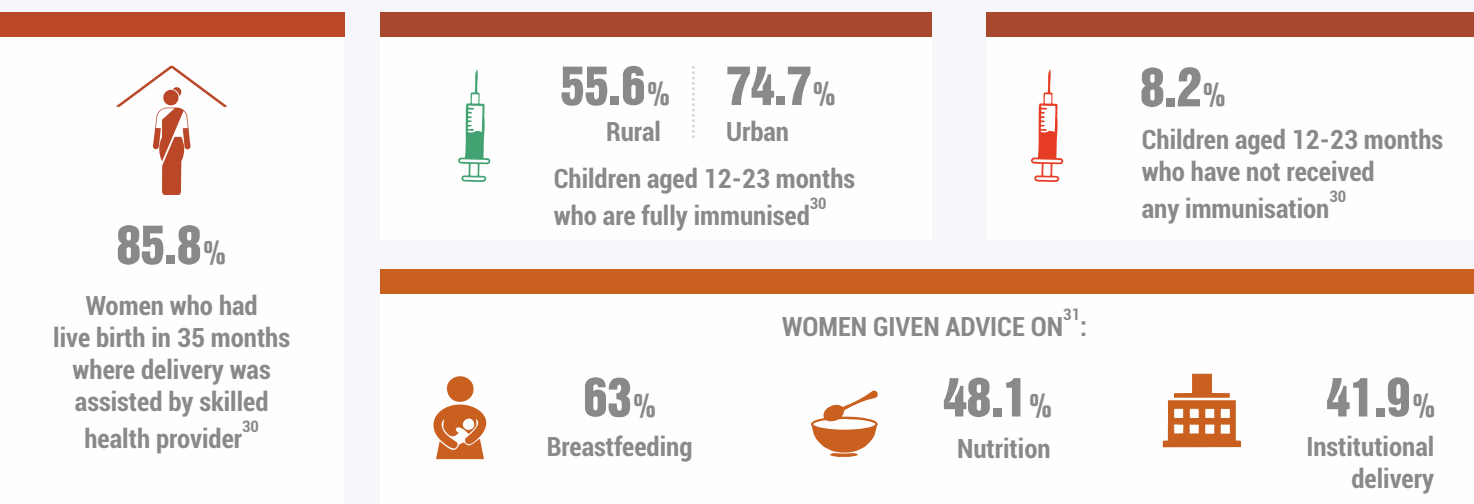
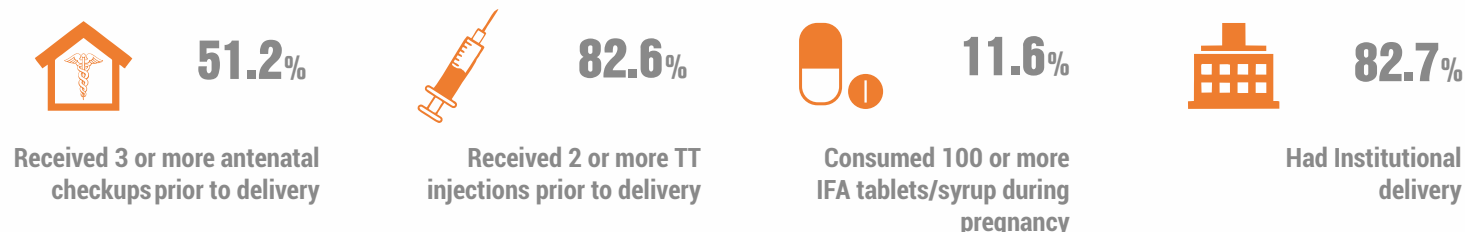
Children 6-35 months	33.7%
Children 36-71 months	22%
Pregnant women	33.5%
Lactating mothers	35.5%

Beneficiaries who received supplementary food for at least 21 days in the month prior to the survey

Children aged 6-35 months	26.8%
Children aged 36-71 months	26.8%
Pregnant women	28.9%
Lactating women	23.9%

²⁹ Source : RSoC, 2014

SERVICES PROVIDED TO WOMEN WHO HAD A LIVE BIRTH IN LAST 35 MONTHS³⁰



A.2. PERSONNEL CAPACITY OF ICDS AND NRHM:

This section features data on availability of healthcare personnel and services available to women of reproductive age (antenatal care, tetanus toxoid coverage, iron-folic acid supplementation coverage, institutional delivery and counseling). Household and individual access to health services can directly impact children's nutrition and welfare during the crucial first 1,000 days of life.

Availability of Anganwadi Centres and Workers (AWCs and AWWs) ^{H, 30}	Value
Pending or vacant Anganwadi workers to sanctioned number of workers ^{30a}	5.7%
AWWs living in the AWC village/ward	75.8%
AWWs having 10 or more years of schooling	56.4%
Median age of AWWs	36 years
AWCs serving to population more than the stipulated norm	67.5%

Growth Monitoring ³⁰	Value
AWCs having functional baby weighing scale	57.7%
AWCs having functional adult weighing scale	51.1%
Available WHO growth chart at AWCs	90.8%

^H Number of AWCs surveyed for Rajasthan as per RSoC 2014 is 206.

³⁰ Source : RSoC, 2014

^{30a} Source : MoWCD, 2012

³¹ Source : DLHS-3, 2007-08

Training and Comprehensive Knowledge ³²	Value
AWWs having correct knowledge of intake of food by pregnant women	91%
AWWs having correct knowledge of normal birth weight of children	64%
AWWs having correct knowledge of initiation of breastfeeding within one hour	95.2%
AWWs having correct knowledge of exclusive breastfeeding for the first six months	97.1%
AWWs having correct knowledge of appropriate age of child for complementary feeding	55.2%

Health Service Delivery Personnel	Value
ASHAs selected ³³	94%
Current density of ASHA as per Census 2011 rural population ³³	1 per 998 persons
Pending or vacant ANM positions sub centres & PHCs ³⁴	9.4%

A.3. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SPECIFIC INTERVENTIONS

Expenditure on Schemes (in million dollars)	In million USD	National Average
ICDS (ICDS general + SNP + training) (women and children) ³⁵	115	75
NRHM expenditure (Central Government) ³⁶	136.6	68.8
NRHM expenditure (State Government) ³⁶	40.1	9.3

B. NUTRITION-SENSITIVE INTERVENTIONS

This section includes information on expenditure and coverage of key centrally-sponsored schemes that indirectly impact maternal and child nutrition. These are: the Mid Day Meal Scheme (MDMS), Public Distribution System (PDS), and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

B.1. COVERAGE OF SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS

Coverage of Schemes	Value
MDMS (base: eligible children*) ³⁷	35.6%
PDS (base: rural and urban households reporting consumption) ³⁸	25.4%
MGNREGA (base: rural persons 18 years and above registered in MGNREG job card and demanded work during last 365 days) ³⁹	79%

* All children studying in primary & upper primary classes in schools supported under Sarva Shiksha Abhiyan and NCLP (National Child Labour Project) run by Ministry of Labour.

B.2. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS:

Expenditure on Schemes (in million dollars)	In million USD	National Average
MDMS ⁴⁰	75	47
PDS ⁴¹	716.9	475.3
MGNREGA ⁴²	545	214

³² Source : RSoC, 2014

³³ Source : NRHM, 2013

³⁴ Source : MoHFW, 2013

³⁵ Source : Lok Sabha Unstarred Question # 846 dated 27.02.2015, 2012-13

³⁶ Source : Lok Sabha Annexured Unstarred Question # 409 dated 6.12.2013, 2012-13

³⁷ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/lsq15/15/as216.htm 2011-12

³⁸ Source : Report No. 558, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

³⁹ Source : Report No. 554, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

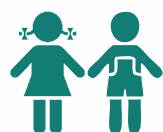
⁴⁰ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014, 2012-13

⁴¹ Source : Food Corporation of India 2013, 2012-13

⁴² Source : Lok Sabha Annexured Unstarred Question # 3835 dated 19.03.2015, 2012-13

FAST FACTS ON NUTRITION AND ITS DETERMINANTS IN SIKKIM

World Health Assembly Nutrition Targets



CHILDREN UNDER 5 YEARS

28%
Stunted¹
5.1%
Wasted¹

World Health Assembly Nutrition Targets


63%

 Infants 0-5 months old who are exclusively breastfed¹

10%

 Children under 3 years who have low birth weight (<2.5 kgs)¹

70.6%

 Women 15-49 years old with anemia²

Immediate Determinants


68.8%

 Infants 6-8 months old who receive solid, semi-solid or soft foods¹
46.5%

 Infants & young children 6-23 months old who achieve minimal diet diversity in complementary feeding¹

82.9%

 Children 6-59 months old with anemia²

7.1%

 Children 6-59 months old who had diarrhea in 15 days prior to survey¹

Immediate Determinants


0%

 Children 6-35 months old who received supplementary food under ICDS for 21 days in the month prior to survey¹

77.8%

 Children 12-23 months old who are fully immunized¹

92.2%

 Mothers of children under 36 months old who received three or more antenatal checkups¹

Underlying Determinants


26.8%

 Currently married women with 10 or more years of schooling²

30.4%

 Women aged 20-24 years who were married before the age of 18¹

10.5%

 Adolescent girls 15-18 years old with low BMI (<18.5)¹

Underlying Determinants


4.4%

 Households practicing open defecation¹

8.2%

 Population below state-specific poverty line³

Does state have a high-level nutrition mission?

NO
¹ Source : RSoC, 2014

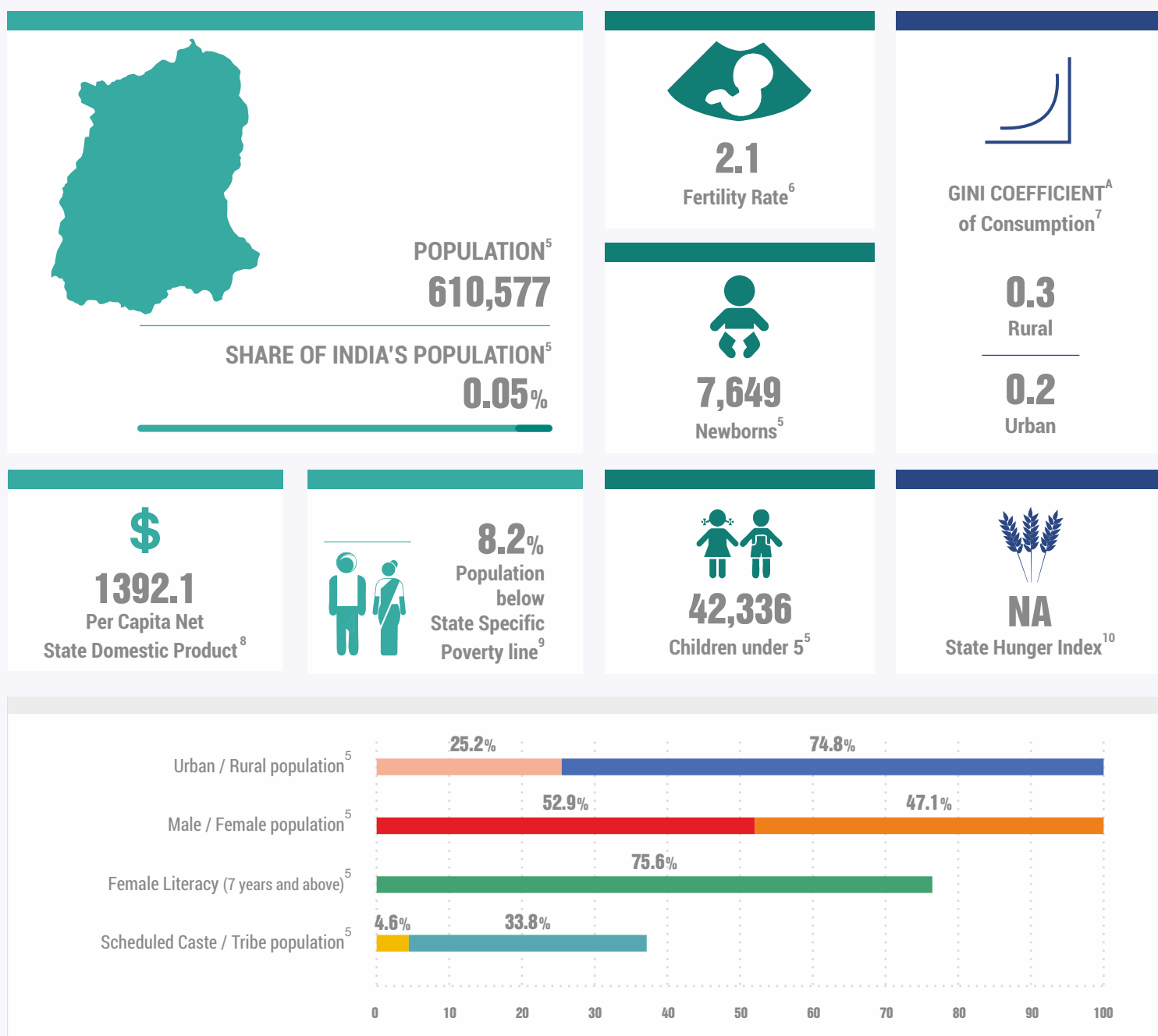
² Source : DLHS4, 2012-13

³ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Govt. of India

I. CONTEXT

A. DEMOGRAPHIC CONTEXT

This section highlights the demographic composition of the state in terms of male-female, rural-urban, and SC-ST ratios, literacy and fertility rates. In addition, it also includes the size of the population of newborns and children less than five years of age (as of the Census of India, 2011) to illustrate the size of the target population for nutrition-related interventions that need to reach this vulnerable population.



A : Gini coefficient is a measure of inequality of distribution. A Gini coefficient of 0 represents perfect equality, while a value of 100 implies perfect inequality. (See Appendix A for more information)

⁵ Source : Primary Census Abstract, Census, 2011

⁶ Source : SRS, 2009

⁷ Source : Planning Commission Estimates: NSSO 66th round-Employment and Unemployment Survey, 2009-10

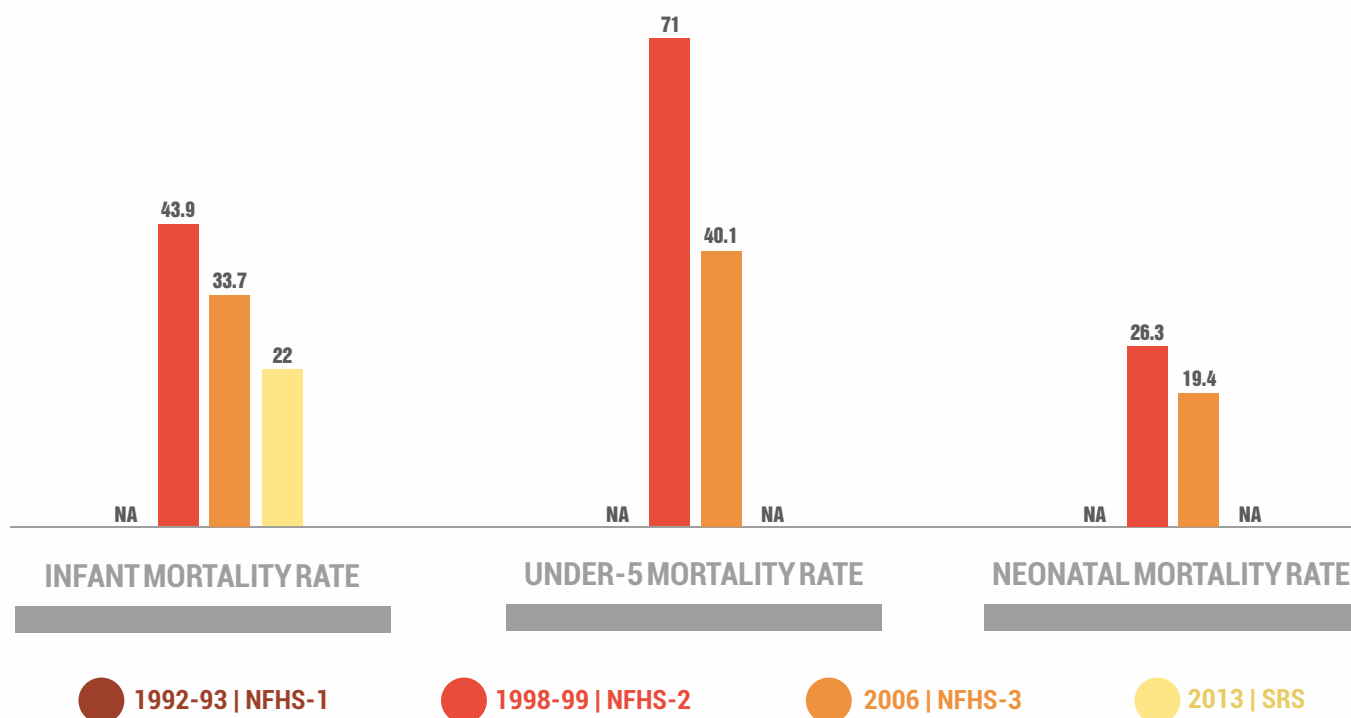
⁸ Source : Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14 : http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82

⁹ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Government of India, 2011-12 : http://planningcommission.nic.in/news/pre_pov2307.pdf

¹⁰ Source : IFPRI, India State Hunger Index, 2009

B. CHILD MORTALITY PER THOUSAND LIVE BIRTHS

This section illustrates trends in mortality in neonates, infants and children under 5 years, since 1992. The purpose of this is to highlight the success achieved by individual states in averting deaths of children since the economic growth of the 1990s.



II. NUTRITIONAL STATUS AMONG CHILDREN

This section presents data on nutrition outcome indicators (stunting, wasting, and underweight) and anemia prevalence. Anthropometric measures for children under 5 (stunting, wasting, and underweight) are presented over time periods, by age groups and by background characteristics. This data aims to convey the prevalence and severity of undernutrition in the state.

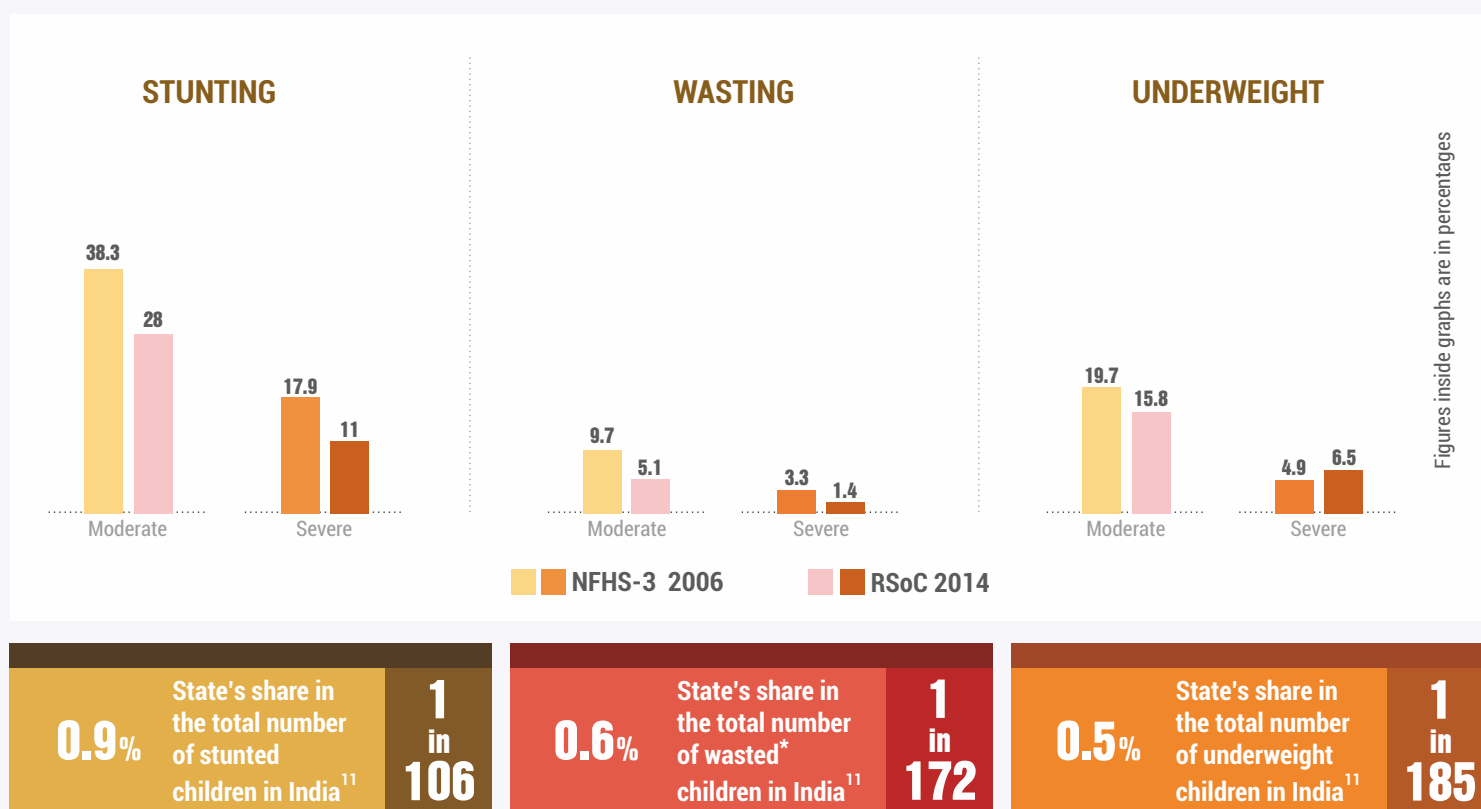
A. CHILD UNDERNUTRITION, BY TIME PERIOD

ANTHROPOMETRIC MEASURES

Stunting is inadequate height for age, which is indicative of chronic or cumulative nutritional deprivation in early childhood. A stunted child's height-for-age is below -2 standard deviations from the median height-for-age (termed HAZ) of the WHO Child Growth Standards, while a severely stunted child is below -3 standard deviations.

Wasting is inadequate weight for height, which points to acute or short-term undernutrition. A wasted child's weight-for-height (WHZ) is below -2 standard deviations from the WHO Child Growth Standards; a severely wasted child is below -3 standard deviations. (Another way to determine severe wasting or severe acute malnutrition is through a measurement of a child's mid-upper arm circumference (MUAC).

Underweight is inadequate weight for age, a composite indicator that encompasses stunting and wasting. An underweight child's weight-for-age (WAZ) is below -2 standard deviations from the WHO Child Growth Standards; again, a severely underweight child is below -3 standard deviations.

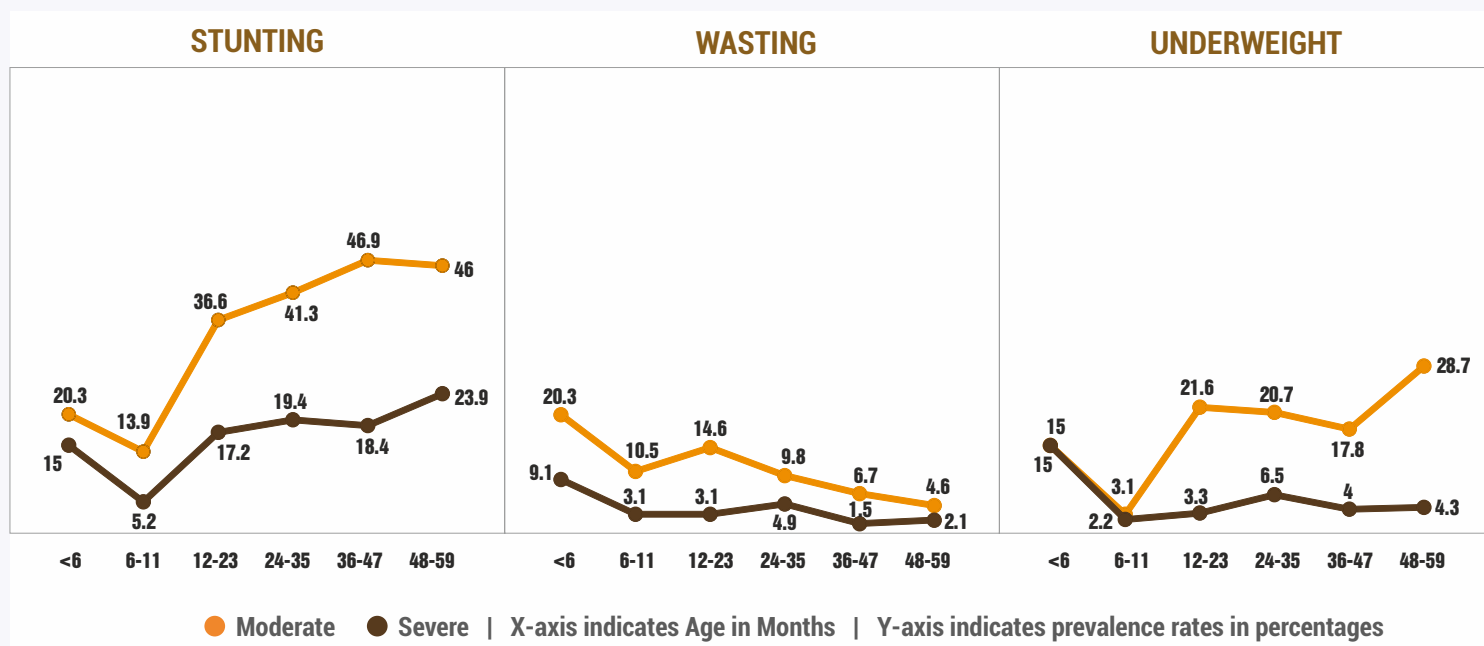


*Wasting is subject to seasonal variations either in food supply or disease prevalence and hence may not be comparable across groups of children measured at different times of the year within a survey round as well as between different survey rounds.

¹¹ Source : NFHS-3, 2006

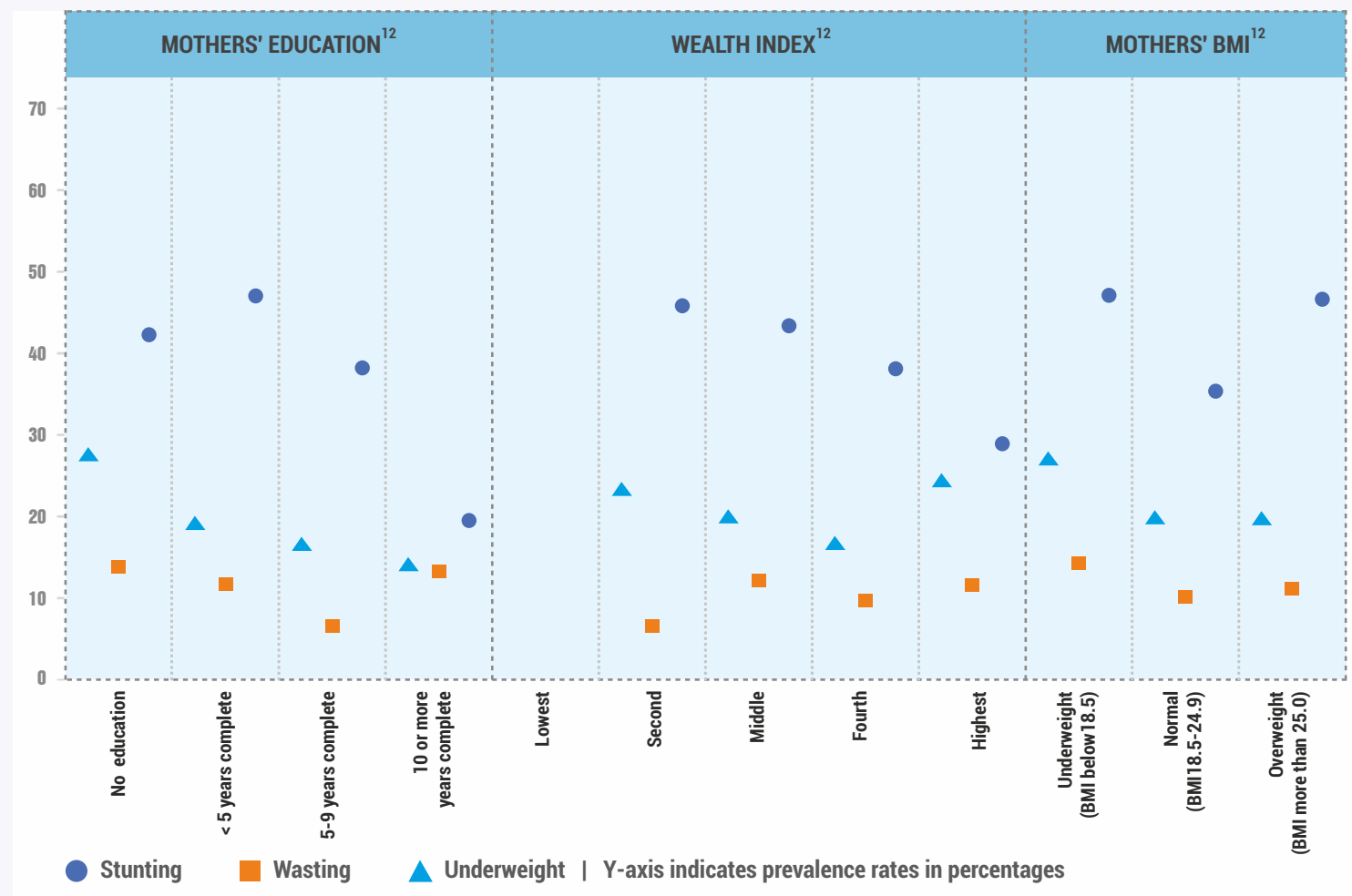
B. CHILD UNDERNUTRITION, BY AGE GROUPS¹²

Percentage of moderate (below -2 SD from the WHO growth standards) and severe (below -3 SD) stunting, wasting and underweight are available for 6 age groups among children under 5.



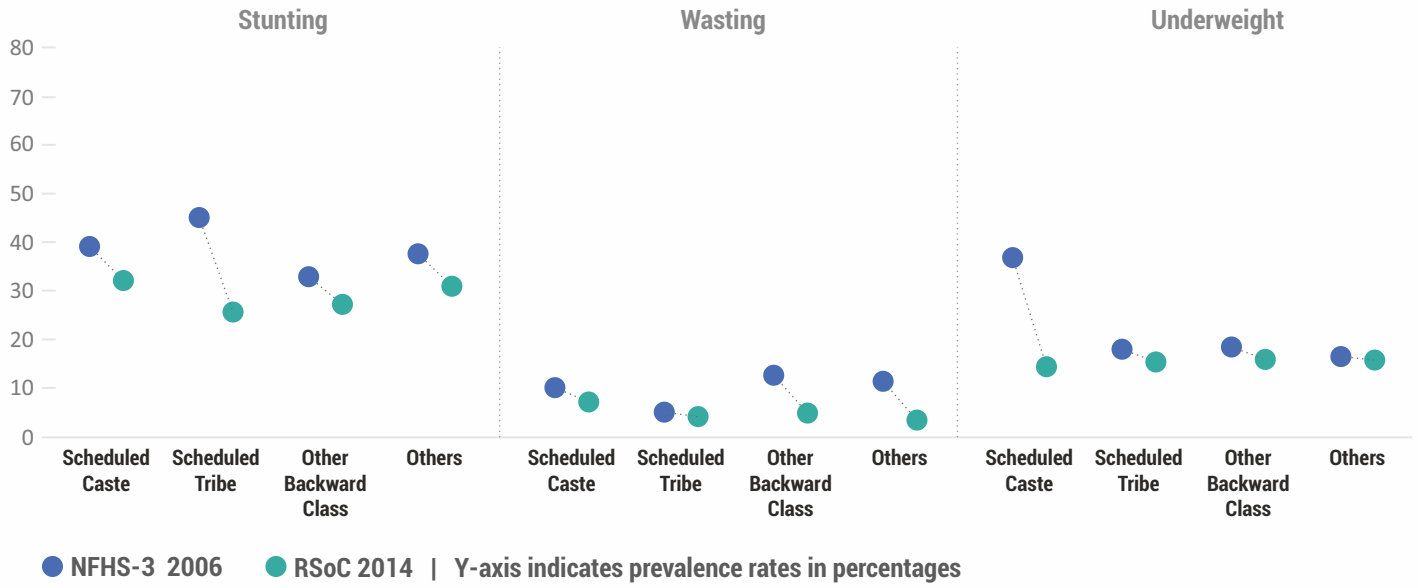
C. PREVALENCE OF CHILD UNDERNUTRITION, BY BACKGROUND CHARACTERISTICS

In this section, child undernutrition outcomes are presented, along with key socioeconomic drivers that are known to be associated with child nutrition, such as caste, residence, mother's health and education, and household income.

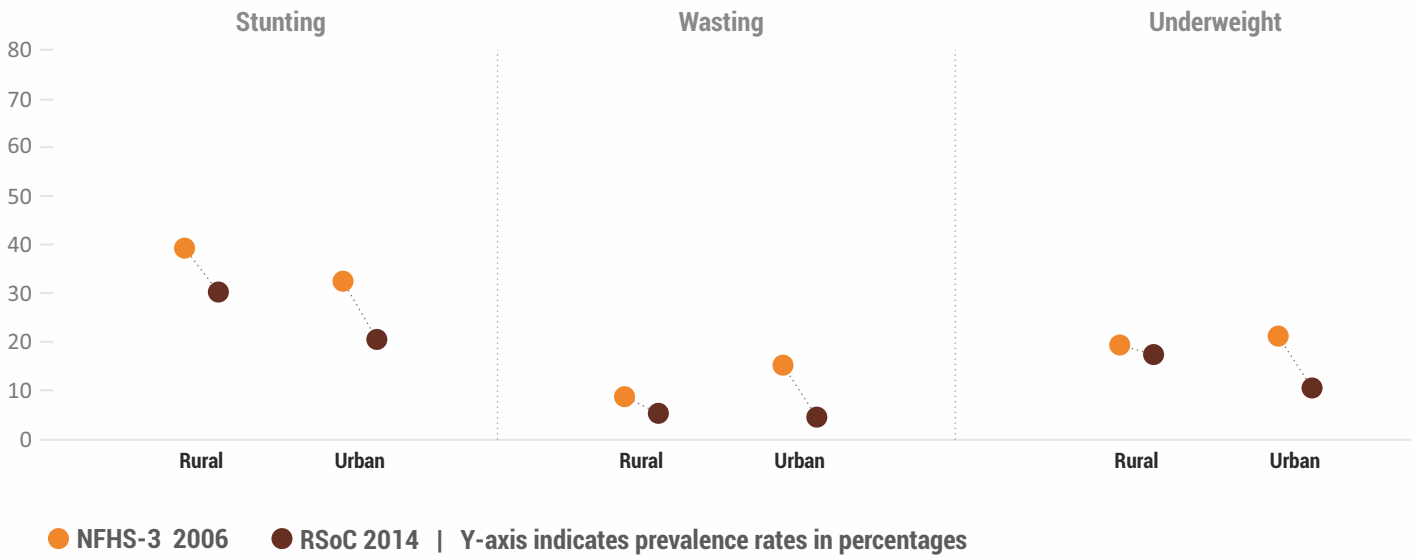


¹² Source : NFHS-3, 2006

CASTE

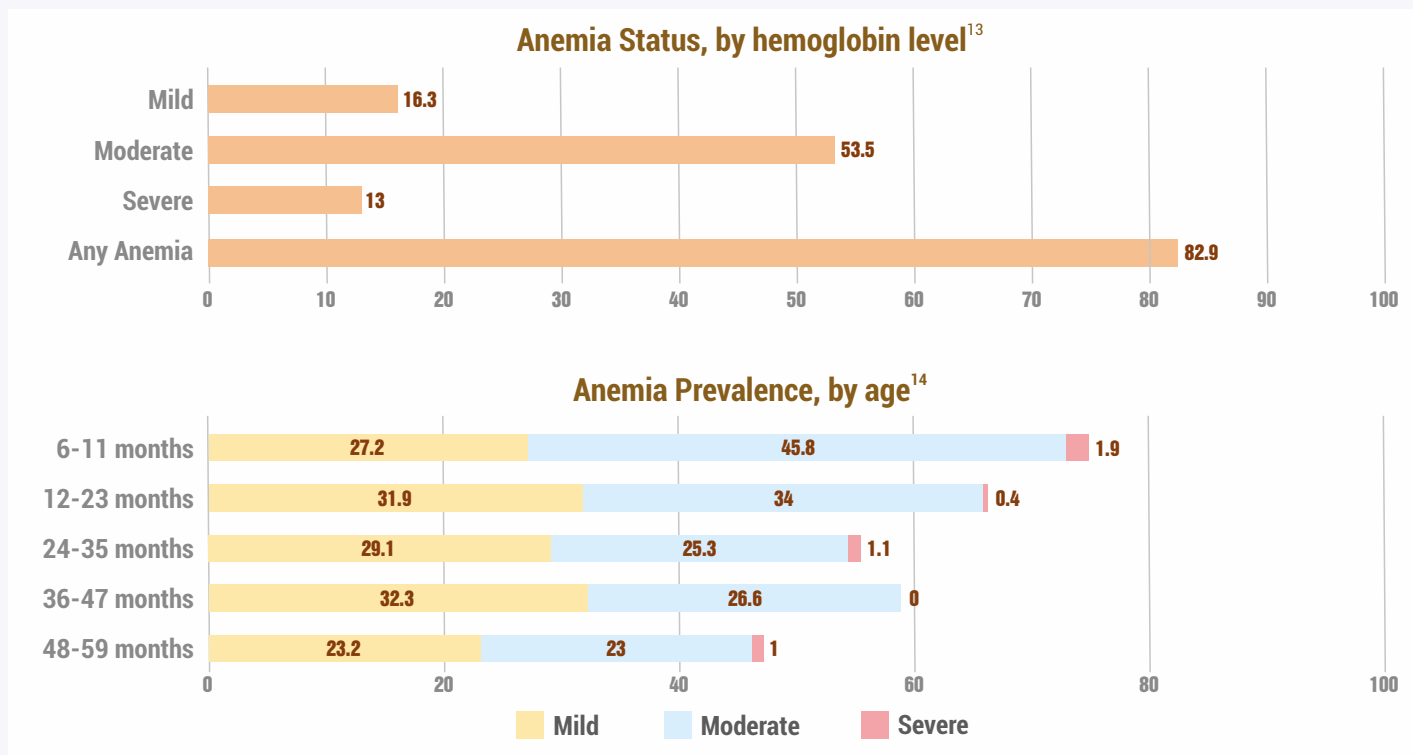


RESIDENCE



D. ANEMIA PREVALENCE

Anemia can impair physical and cognitive development among children and create long term impacts on productivity and wellbeing. This section features data on anemia prevalence by severity and age groups for children under 5.



¹³ Source : DLHS-4, 2012-13

¹⁴ Source : NFHS-3, 2006

III. IMMEDIATE DETERMINANTS

A. INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES¹⁵

This section presents indicators for assessing IYCF practices as recommended by the WHO and revised in 2008. Following optimal IYCF practices during the first 1,000 days is crucial for early child survival and growth as well as long-term health and wellbeing.

Children aged 0-23 months breastfed immediately/within an hour of birth		56.4%
	Children aged 0-5 months who were exclusively breastfed	63%
	Children aged 6-8 months who were fed complementary foods	68.8%
	For breastfed children (6-23 months)- A. Fed minimum number of times. Note : At least twice a day for breastfed infants 6-8 months old and at least three times a day for breastfed children 9-23 months old B. Had minimum dietary diversity Note : Minimum dietary diversity refers to four or more food groups^B fed to children aged 6-23 months	55.3% 46.5%

B. CHILD HEALTH¹⁵

Prevalence of childhood illnesses (in children aged 0-59 months)

Had diarrhea in 15 days prior to survey	7.1%
Had fever in 15 days prior to survey	8.8%
Had symptoms of Acute Respiratory Infection (ARI) in 15 days prior to survey	4.8%

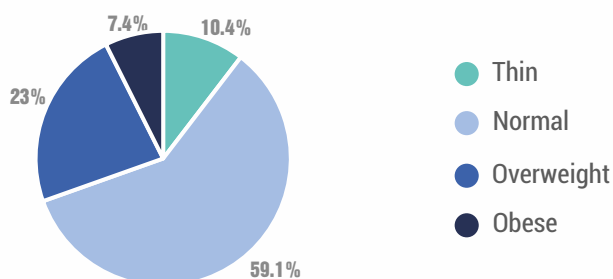
^B The 7 food groups include the following: i. grains, roots and tubers ii. legumes and nuts iii. dairy products (milk, yoghurt, cheese) iv. Flesh foods (meat, fish, poultry, and liver/organ meats) v. eggs vi. Vitamin-A rich fruits and vegetables vii. other fruits and vegetables.

C. NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

Maternal health and nutrition, as well as adolescent nutrition, have important consequences for intergenerational transmission of undernutrition. Data on Body Mass Index (BMI), anemia prevalence and height among women of reproductive age are presented in this section, as are data on adolescent BMI and anemia.

C.1. WOMEN 15-49 YEARS OLD¹⁶

BMI^c levels of women aged 15-49 years



^cBody Mass Index (BMI) is defined as the weight in kilograms by the square of the height in metres (kg/m²). It is a simple index of weight-for-height which is commonly used to classify underweight, overweight and obesity in adults. Range: BMI < 18.5 = total thin, BMI 18.5-24.9 = normal, BMI 25.0-29.9 = Overweight, BMI > 30.0 = Obese [per WHO Standards]



70.6%

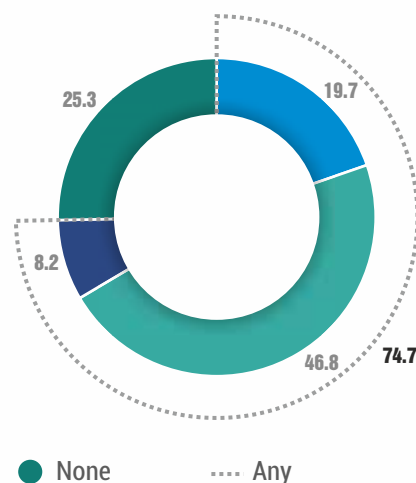
Women aged 15-49 years are anemic

8.3%

Women aged 15-49 years are severely anemic

C.2. PREGNANT WOMEN¹⁶

Anemia prevalence in pregnant women aged 15-49 years



● Mild

● Moderate

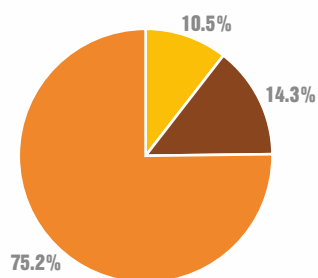
● Severe

● None

--- Any

C.3. ADOLESCENT GIRLS

BMI levels of adolescent girls aged 15-18 years¹⁷



● Normal

● Thin

● Overweight and Obese



64.1%

Adolescent girls aged 15-19 years are anemic¹⁶

1%

Adolescent girls aged 15-19 years are severely anemic¹⁶

¹⁶ Source : DLHS-4, 2012-13

¹⁷ Source : RSoC, 2014

^{17a} Source : NFHS-3, 2006

IV. UNDERLYING DETERMINANTS

A. SOCIAL STATUS OF WOMEN

Women's status is recognized to contribute in significant ways to improving nutrition. This section presents indicators that are representative of women's social status, including measures of education, age at marriage and first birth, employment, decision making and domestic violence. It also includes the Gender Empowerment Measure that captures gender inequality along three dimensions: political participation and decision-making power, economic participation and decision-making power, and power over economic resources.



Currently married women who have 10 or more years of schooling¹⁸ **26.8%**



30.4% Women aged 20-24 years who were married before the age of 18¹⁹

21.9 Average age at marriage¹⁹

Gender Empowerment Measure^{D,20}

0.4

0.5

National Average²⁰



Female workforce participation rate²² **39.6%**

Currently married women who make decisions about²³:



43.9% Own healthcare



6% Major household purchase



42% Purchases for daily household needs



20.2% Visits to her family/friends/relatives



18.8% Women who have experienced any form of physical/sexual/emotional violence²³

77.2% Ever married women who justify hitting/wife-beating (for either of the reasons mentioned)²³

^D The Gender Empowerment Measure is a weighted average index based on indicators that are classified into three dimensions: a. political participation and decision-making power b. economic participation and decision-making power and c. power over economic resources. The index ranges from a minimum of 0 to a maximum of 1, with a higher score indicating greater empowerment of women. (More information available at <http://wcd.nic.in/publication/GDIGEReport/Part3.pdf>.)

¹⁸ Source : DLHS-4, 2012-13

¹⁹ Source : RSoC, 2014

²⁰ Source : MoWCD, 2006

²² Source : Women and Men in India, 16th Issue MoSPI, 2014

²³ Source : NFHS-3, 2006

B. WATER AND SANITATION

Poor hygiene and sanitation, by directly increasing exposure and susceptibility to infections, are associated with undernutrition among children. This section covers key indicators on access to safe drinking water and availability of sanitation facilities at the state level. It also includes the expenditure on toilet construction under the Total Sanitation Campaign.



71.3%

Households with access to improved sources of drinking water^{E, 24}

73.2%

Households using improved sanitation facility^{F, 24}



4.4%

Households practicing open defecation²⁴

3.23 M

Expenditure on toilets under Total Sanitation Campaign (TSC)^{G, 25}



1,065 M

National Average²⁵

C. AGRICULTURE AND FOOD SECURITY

Agriculture productivity and food security can affect household access to foods necessary for a healthy diet. Thus, this section presents indicators related to agricultural growth and food consumption patterns in the state, indicating the level of food security in the state relative to the national situation.



3.3%

Growth rate of agriculture from 2007-2012²⁶



0.04%

Share in India's total foodgrain production²⁷



Mean Calorie intake per person per day (in Kcal)²⁸

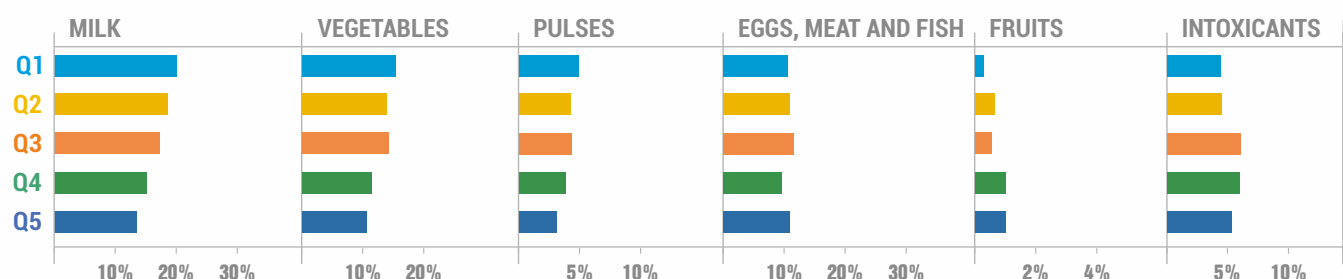
RURAL

NA 2233
SIKKIM INDIA AVG

URBAN

NA 2206
SIKKIM INDIA AVG

Expenditure on food items by income quintiles²⁸



^E Improved sources of drinking water include: piped water into dwelling, piped water to yard/plot, public tap or standpipe, tubewell or borehole, protected dug well, protected spring, and rainwater (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>).

^F Improved sanitation means households using improved toilets that include: flush toilet, piped sewer system, septic tank, flush/pour flush to pit latrine, ventilated improved pit latrine, pit latrine with slab, composting toilet, special case (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>); excludes those households who are using improved toilets but sharing toilet facilities with other households.

^G Besides toilet construction subsidies, this expenditure also includes funding other activities such as solid and liquid waste management, IEC activities for sustainable demand generation for sanitation facilities, assistance to production centers of sanitary materials and rural sanitary marts, provision of construction of community sanitary complexes, provision of sanitation facilities in govt. schools and Anganwadis in govt. buildings etc.

²⁴ Source : RSoC, 2014

²⁵ Source : Indiastat, Rajya Sabha Unstarred Question No. 2950, dated on 30.08.2011, 2011-12

²⁶ Source : Indiastat, compiled by datanet from Rajyasabha & Lok Sabha unstarred questions no. 3039, 4535. 2007-12

²⁷ Source : Indiastat, Ministry of Agriculture, Government of India 2011-2012

²⁸ Source : NSSO, 68th round-Nutritional Intake in India, 2011-12

V. STATUS OF NUTRITION-RELEVANT INTERVENTIONS

A. NUTRITION-SPECIFIC INTERVENTIONS

The financial resources allocated to, and spent on direct nutrition-specific interventions can determine the scale, coverage and quality of interventions to reach vulnerable target populations. These services, in India, are delivered both by the Integrated Child Development Scheme (ICDS) and the National Health Mission (NHM). This section includes data on the coverage of interventions delivered by these two key centrally-sponsored schemes that directly impact maternal and child nutrition and health. We also include here information on the human resources and service availability of these schemes and expenditures.

A.1. COVERAGE OF ICDS AND NHM:

The Integrated Child Development Services (ICDS) aims to improve the nutrition and health status of children under-six through a package of services (supplementary nutrition, immunization, health check-up, referral services, etc.) delivered through frontline workers at the Anganwadi Centres (AWCs). This section provides information on expenditure on ICDS and coverage of its supplementary nutrition programme (SNP). This section also covers critical services provided by the health system, including provision of care for pregnant women and child immunization. Immunization plays a crucial role in complementing actions to improve nutrition. The link between undernutrition and infectious diseases is cyclical, poor nutrition increases vulnerability to infections, which in turn worsen nutrition status. Data on immunization among children are presented by residence. Here, full immunization refers to children covered with BCG, measles and 3 doses each of DPT and polio.

Beneficiaries who availed supplementary food under ICDS²⁹

Children 6-35 months	65.7%
Children 36-71 months	51.8%
Pregnant women	55.1%
Lactating mothers	43.9%

Beneficiaries who received supplementary food for at least 21 days in the month prior to the survey

Children aged 6-35 months	0%
Children aged 36-71 months	38%
Pregnant women	NA
Lactating women	0%

²⁹ Source : RSoC, 2014

SERVICES PROVIDED TO WOMEN WHO HAD A LIVE BIRTH IN LAST 35 MONTHS³⁰



92.2%

Received 3 or more antenatal checkups prior to delivery



94.6%

Received 2 or more TT injections prior to delivery



58.8%

Consumed 100 or more IFA tablets/syrup during pregnancy



86.6%

Had Institutional delivery



87.8%

Women who had live birth in 35 months where delivery was assisted by skilled health provider³⁰



79.7%

Rural

71.6%

Urban

Children aged 12-23 months who are fully immunised³⁰



0.6%

Children aged 12-23 months who have not received any immunisation³⁰

WOMEN GIVEN ADVICE ON³¹:



70%

Breastfeeding



65.9%

Nutrition of mother and child



59.6%

Institutional delivery

A.2. PERSONNEL CAPACITY OF ICDS AND NRHM:

This section features data on availability of healthcare personnel and services available to women of reproductive age (antenatal care, tetanus toxoid coverage, iron-folic acid supplementation coverage, institutional delivery and counseling). Household and individual access to health services can directly impact children's nutrition and welfare during the crucial first 1,000 days of life.

Availability of Anganwadi Centres and Workers (AWCs and AWWs) ^{H, 30}	Value
Pending or vacant Anganwadi workers to sanctioned number of workers*	1.1%
AWWs living in the AWC village/ward	85.9%
AWWs having 10 or more years of schooling	62.3%
Median age of AWWs	34 years
AWCs serving to population more than the stipulated norm	8.8%

Growth Monitoring ³⁰	Value
AWCs having functional baby weighing scale	70.4%
AWCs having functional adult weighing scale	24.8%
Available WHO growth chart at AWCs	67%

^H Number of AWCs surveyed for Sikkim as per RSoC 2014 is 145.

³⁰ Source : RSoC, 2014

³¹ Source : DLHS-4, 2012-13

* Source : MoWCD, 2012

Training and Comprehensive Knowledge ³²	Value
AWWs having correct knowledge of intake of food by pregnant women	92.4%
AWWs having correct knowledge of normal birth weight of children	75.2%
AWWs having correct knowledge of initiation of breastfeeding within one hour	96.9%
AWWs having correct knowledge of exclusive breastfeeding for the first six months	99.2%
AWWs having correct knowledge of appropriate age of child for complementary feeding	93.1%

Health Service Delivery Personnel	Value
ASHAs selected ³³	100%
Current density of ASHA as per Census 2011 rural population ³³	1 per 685 persons
Pending or vacant ANM positions sub centres & PHCs ³⁴	0%

A.3. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SPECIFIC INTERVENTIONS

Expenditure on Schemes (in million dollars)	In million USD	National Average
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This section includes information on expenditure and coverage of key centrally-sponsored schemes that indirectly impact maternal and child nutrition. These are: the Mid Day Meal Scheme (MDMS), Public Distribution System (PDS), and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

B.1. COVERAGE OF SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS

Coverage of Schemes	Value
MDMS (base: eligible children*) ³⁷	50.3%
PDS (base: rural and urban households reporting consumption) ³⁸	46.9%
MGNREGA (base: rural persons 18 years and above registered in MGNREG job card and demanded work during last 365 days) ³⁹	97.4%

* All children studying in primary & upper primary classes in schools supported under Sarva Shiksha Abhiyan and NCLP (National Child Labour Project) run by Ministry of Labour.

B.2. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS:

Expenditure on Schemes (in million dollars)	In million USD	National Average
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PDS ⁴¹	18.3	475.3
MGNREGA ⁴²	14	214

³² Source : RSoC, 2014

³³ Source : NRHM, 2013

³⁴ Source : MoHFW, 2013

³⁵ Source : Lok Sabha Unstarred Question # 846 dated 27.02.2015, 2012-13

³⁶ Source : Lok Sabha Annexured Unstarred Question # 409 dated 6.12.2013, 2012-13

³⁷ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/lsq15/15/as216.htm 2011-12

³⁸ Source : Report No. 558, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

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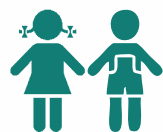
⁴⁰ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014, 2012-13

⁴¹ Source : Food Corporation of India 2013, 2012-13

⁴² Source : Lok Sabha Annexured Unstarred Question # 3835 dated 19.03.2015, 2012-13

FAST FACTS ON NUTRITION AND ITS DETERMINANTS IN TAMIL NADU

World Health Assembly Nutrition Targets



CHILDREN UNDER 5 YEARS

23.3%
Stunted¹
19%
Wasted¹

World Health Assembly Nutrition Targets


57%

 Infants 0-5
months old who are
exclusively breastfed¹

16.7%

 Children under
3 years who have low
birth weight (<2.5 kgs)¹

49.2%

 Women
15-49 years old
with anemia²

Immediate Determinants


64%

 Infants 6-8 months old who receive solid, semi-solid or soft foods¹
21.4%

 Infants & young children 6-23 months old who achieve minimal diet diversity in
complementary feeding¹

60.2%

 Children 6-59 months
old with anemia²

5.1%

 Children 6-59 months old who
had diarrhea in 15 days prior
to survey¹

Immediate Determinants


33.8%

 Children 6-35 months old
who received supplementary
food under ICDS for 21 days
in the month prior to survey¹

76.3%

 Children 12-23
months old who are
fully immunized¹

91.8%

 Mothers of
children under 36 months
old who received three
or more antenatal checkups¹

Underlying Determinants


36.1%

 Currently
married women with 10
or more years of schooling²

20.7%

 Women aged 20-24
years who were
married before the age of 18¹

35.2%

 Adolescent girls
15-18 years old
with low BMI (<18.5)¹

Underlying Determinants


43.4%

 Households
practicing
open defecation¹

16.6%

 Population
below
state-specific poverty line³

 Does state have a
high-level nutrition mission?

NO
¹ Source : RSoC, 2014

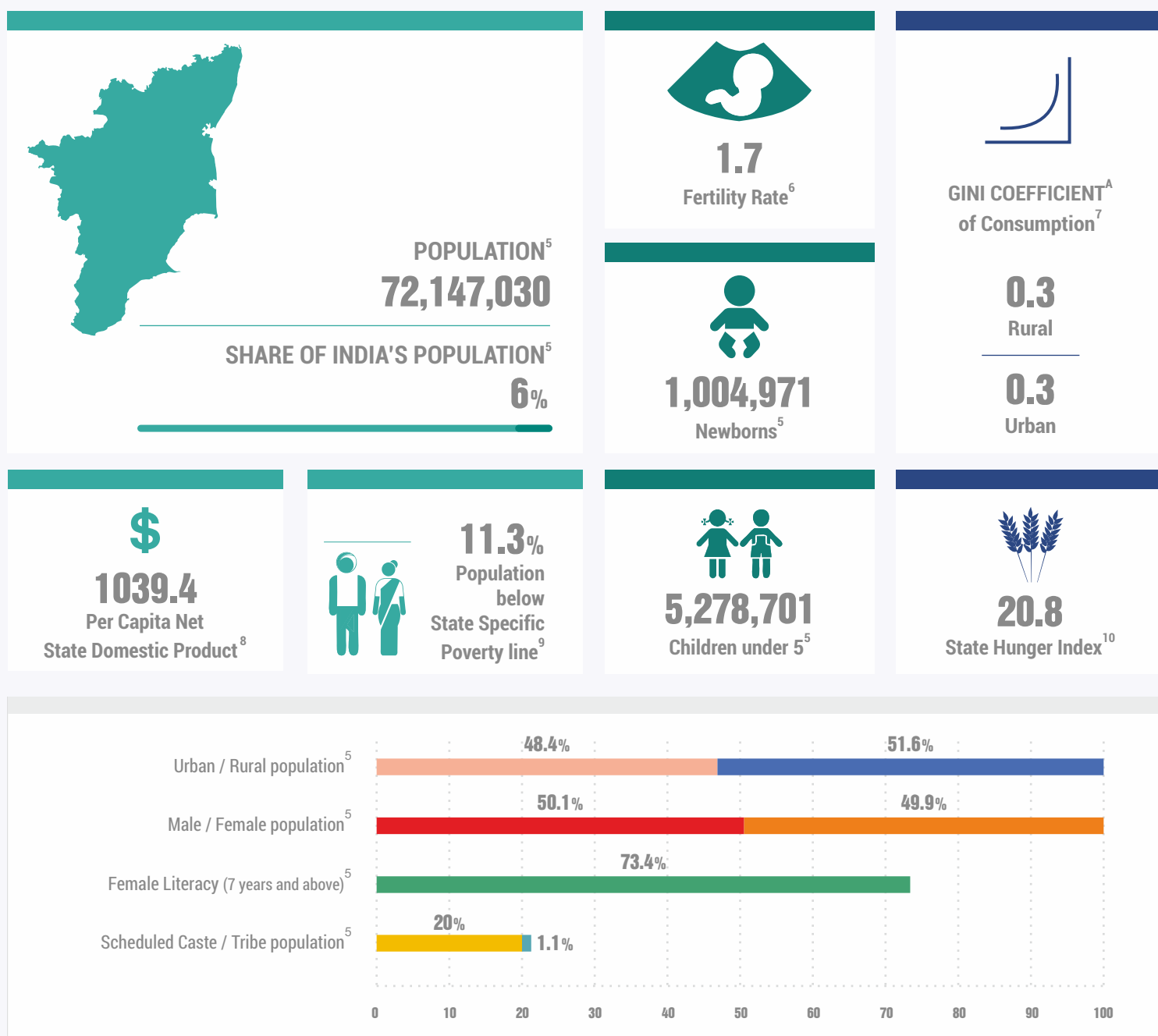
² Source : DLHS4, 2012-13

³ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Govt. of India

I. CONTEXT

A. DEMOGRAPHIC CONTEXT

This section highlights the demographic composition of the state in terms of male-female, rural-urban, and SC-ST ratios, literacy and fertility rates. In addition, it also includes the size of the population of newborns and children less than five years of age (as of the Census of India, 2011) to illustrate the size of the target population for nutrition-related interventions that need to reach this vulnerable population.



A : Gini coefficient is a measure of inequality of distribution. A Gini coefficient of 0 represents perfect equality, while a value of 100 implies perfect inequality. (See Appendix A for more information)

⁵ Source : Primary Census Abstract, Census, 2011

⁶ Source : SRS, 2013

⁷ Source : Planning Commission Estimates: NSSO 66th round-Employment and Unemployment Survey, 2009-10

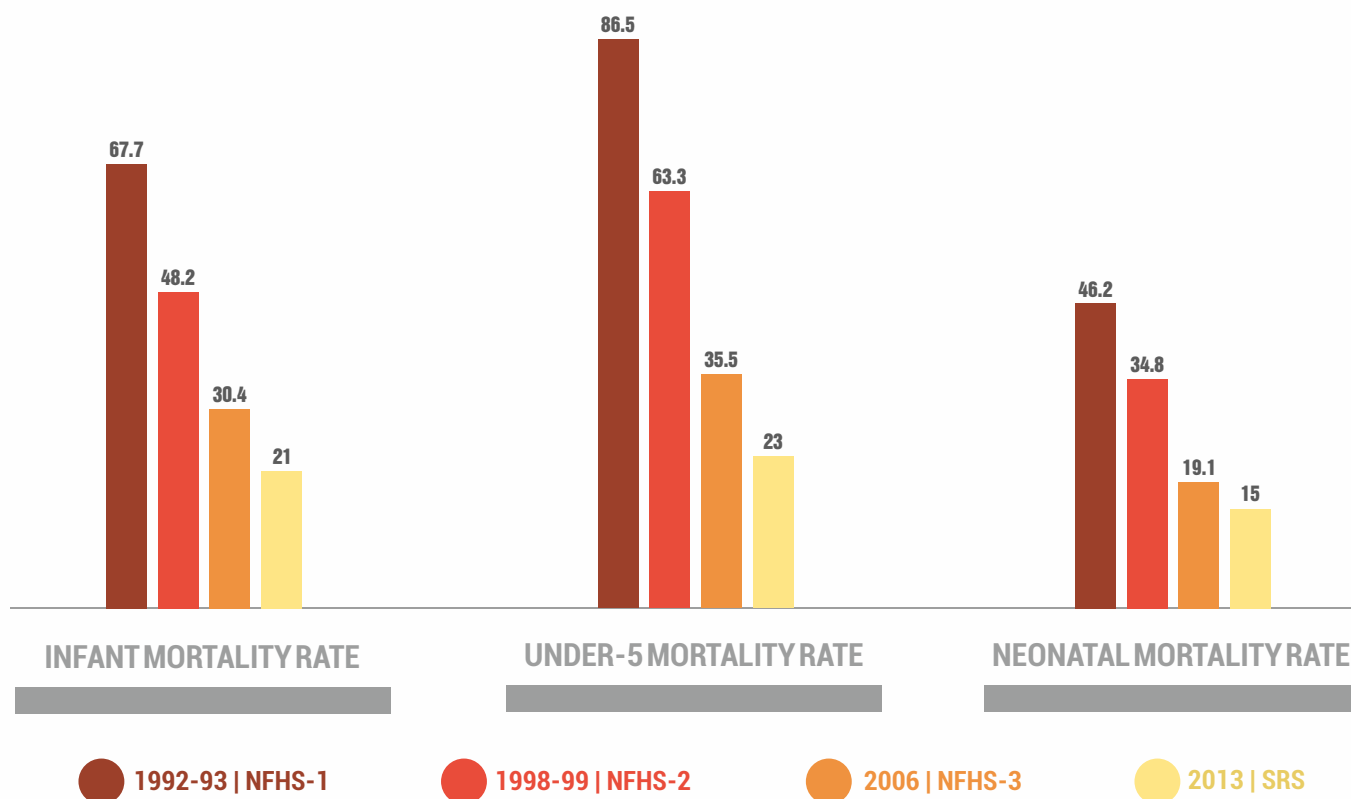
⁸ Source : Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14 : http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82

⁹ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Government of India, 2011-12 : http://planningcommission.nic.in/news/pre_pov2307.pdf

¹⁰ Source : IFPRI, India State Hunger Index, 2009

B. CHILD MORTALITY PER THOUSAND LIVE BIRTHS

This section illustrates trends in mortality in neonates, infants and children under 5 years, since 1992. The purpose of this is to highlight the success achieved by individual states in averting deaths of children since the economic growth of the 1990s.



II. NUTRITIONAL STATUS AMONG CHILDREN

This section presents data on nutrition outcome indicators (stunting, wasting, and underweight) and anemia prevalence. Anthropometric measures for children under 5 (stunting, wasting, and underweight) are presented over time periods, by age groups and by background characteristics. This data aims to convey the prevalence and severity of undernutrition in the state.

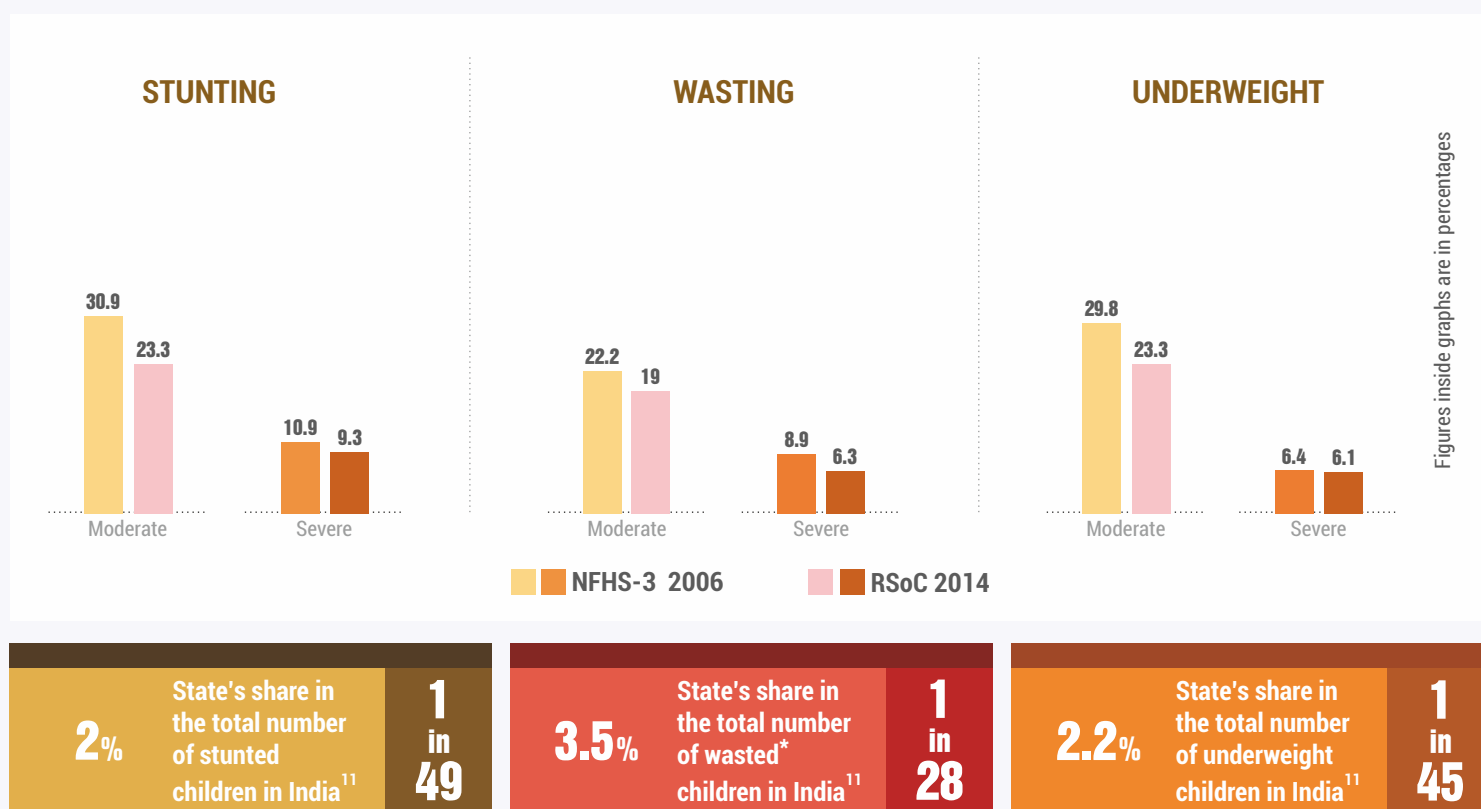
A. CHILD UNDERNUTRITION, BY TIME PERIOD

ANTHROPOMETRIC MEASURES

Stunting is inadequate height for age, which is indicative of chronic or cumulative nutritional deprivation in early childhood. A stunted child's height-for-age is below -2 standard deviations from the median height-for-age (termed HAZ) of the WHO Child Growth Standards, while a severely stunted child is below -3 standard deviations.

Wasting is inadequate weight for height, which points to acute or short-term undernutrition. A wasted child's weight-for-height (WHZ) is below -2 standard deviations from the WHO Child Growth Standards; a severely wasted child is below -3 standard deviations. (Another way to determine severe wasting or severe acute malnutrition is through a measurement of a child's mid-upper arm circumference (MUAC).

Underweight is inadequate weight for age, a composite indicator that encompasses stunting and wasting. An underweight child's weight-for-age (WAZ) is below -2 standard deviations from the WHO Child Growth Standards; again, a severely underweight child is below -3 standard deviations.

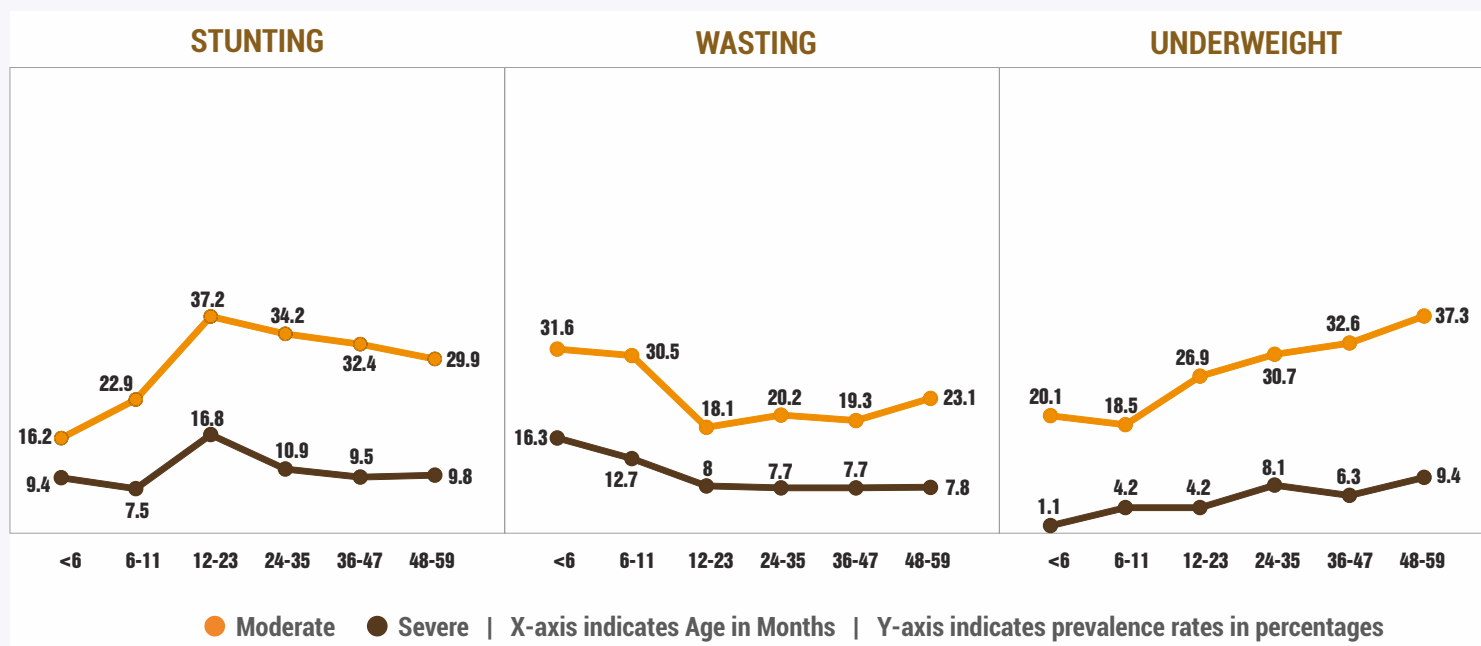


*Wasting is subject to seasonal variations either in food supply or disease prevalence and hence may not be comparable across groups of children measured at different times of the year within a survey round as well as between different survey rounds.

¹¹ Source : NFHS-3, 2006

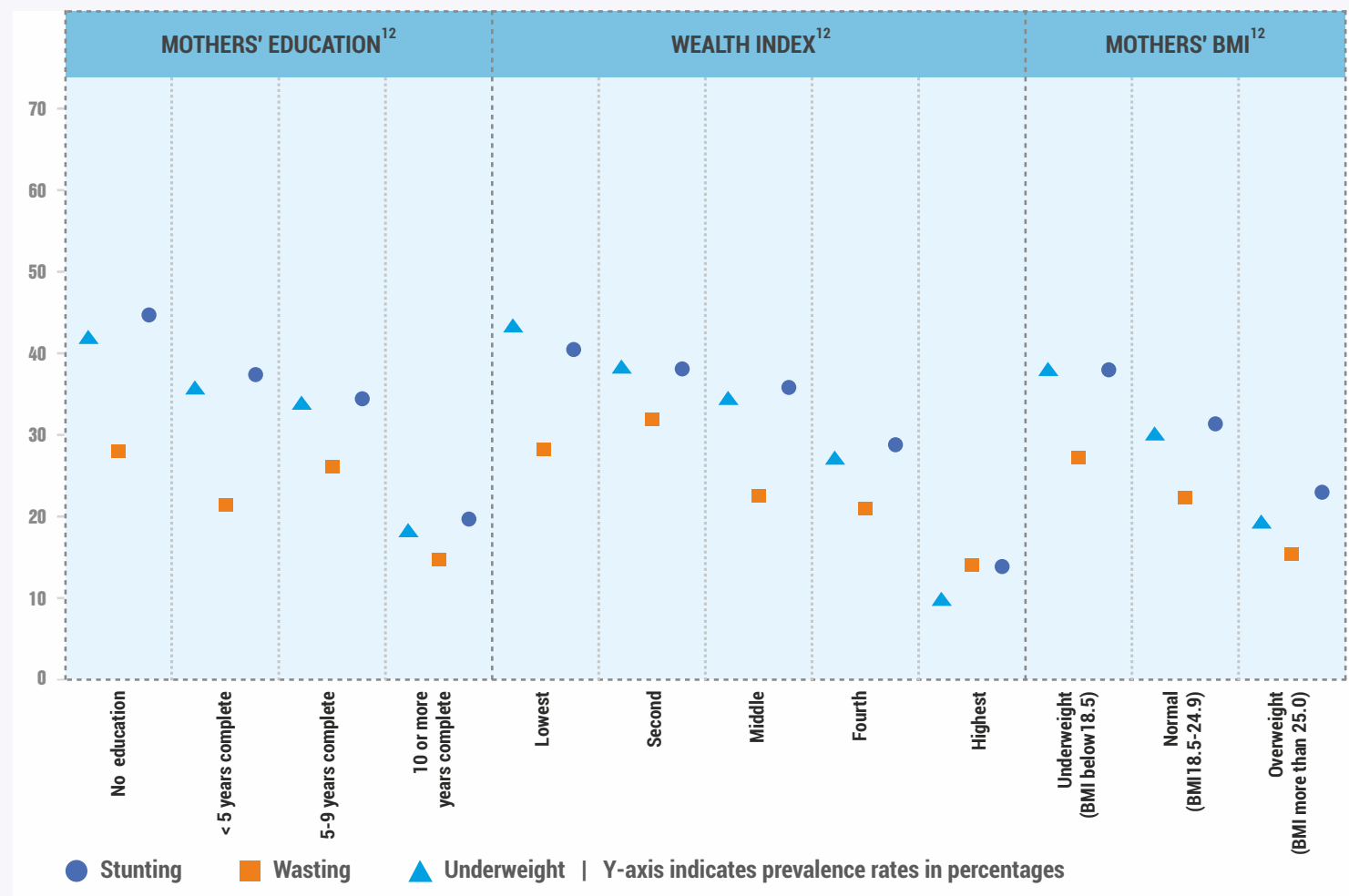
B. CHILD UNDERNUTRITION, BY AGE GROUPS¹²

Percentage of moderate (below -2 SD from the WHO growth standards) and severe (below -3 SD) stunting, wasting and underweight are available for 6 age groups among children under 5.



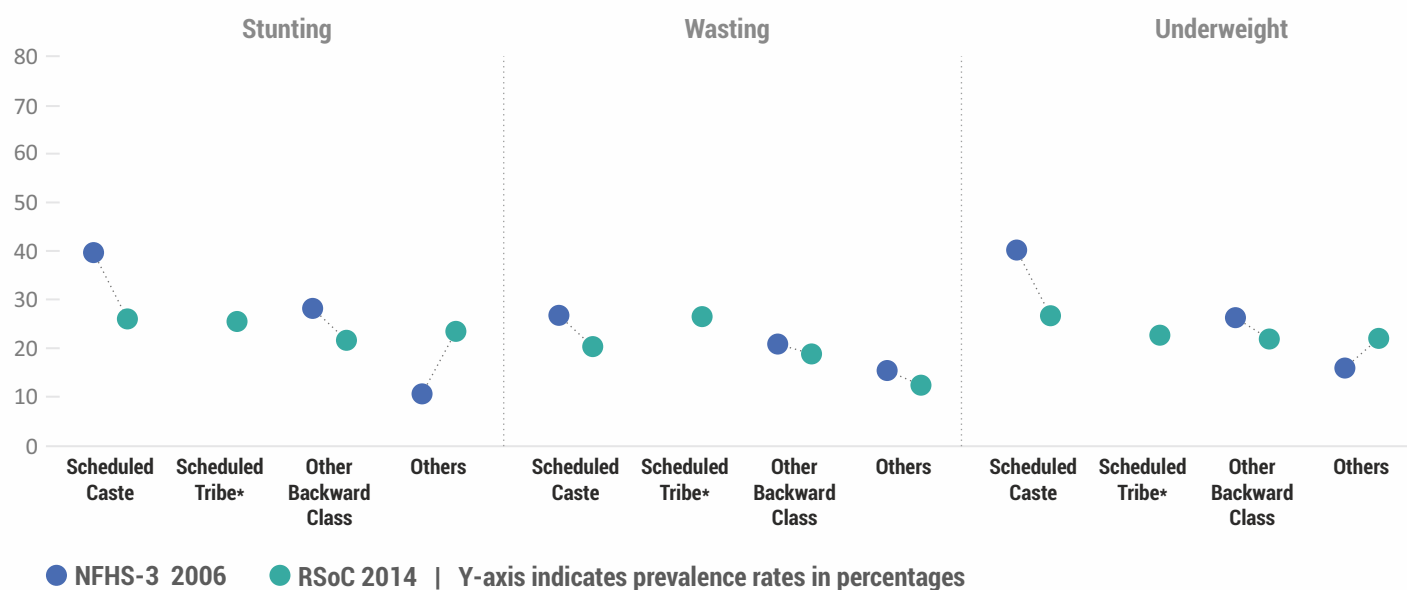
C. PREVALENCE OF CHILD UNDERNUTRITION, BY BACKGROUND CHARACTERISTICS

In this section, child undernutrition outcomes are presented, along with key socioeconomic drivers that are known to be associated with child nutrition, such as caste, residence, mother's health and education, and household income.



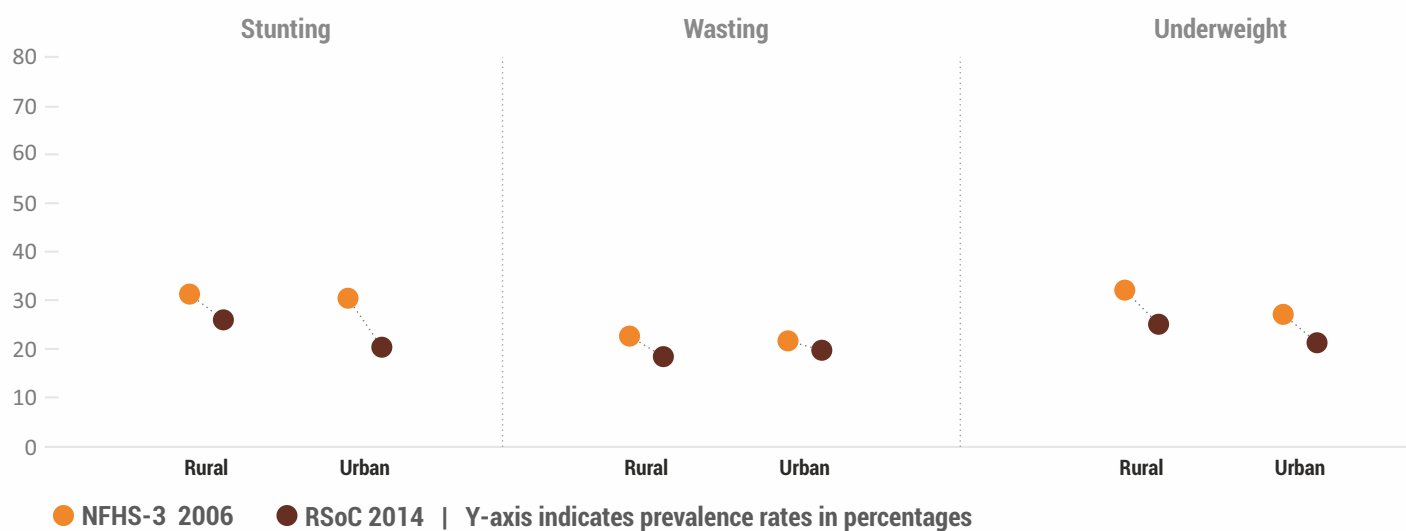
¹² Source : NFHS-3, 2006

CASTE



*Data for Scheduled Tribes is not available in NFHS-3 for this state

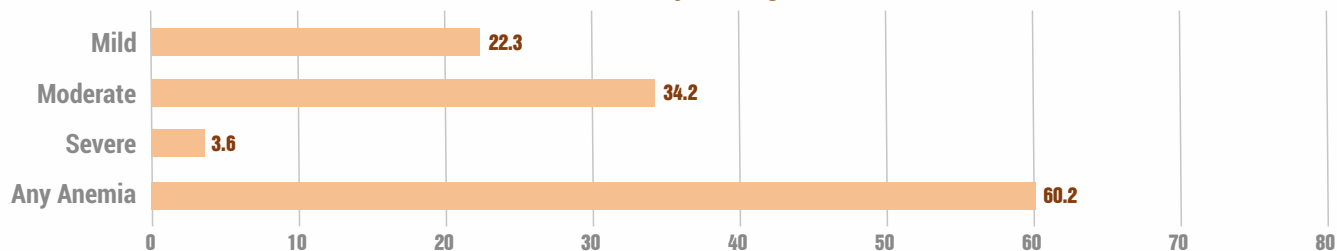
RESIDENCE



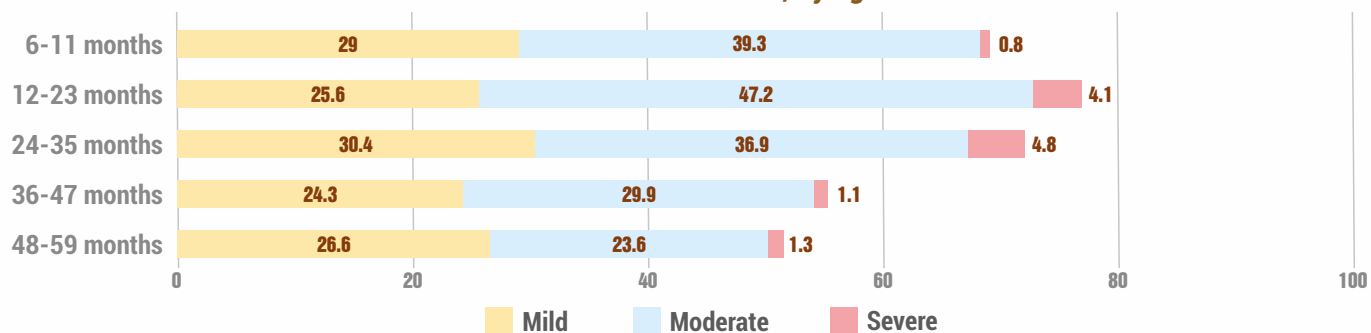
D. ANEMIA PREVALENCE

Anemia can impair physical and cognitive development among children and create long term impacts on productivity and wellbeing. This section features data on anemia prevalence by severity and age groups for children under 5.

Anemia Status, by hemoglobin level¹³



Anemia Prevalence, by age¹⁴



¹³ Source : DLHS-4, 2012-13

¹⁴ Source : NFHS-3, 2006

III. IMMEDIATE DETERMINANTS

A. INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES¹⁵

This section presents indicators for assessing IYCF practices as recommended by the WHO and revised in 2008. Following optimal IYCF practices during the first 1,000 days is crucial for early child survival and growth as well as long-term health and wellbeing.

Children aged 0-23 months breastfed immediately/within an hour of birth		74.7%
	Children aged 0-5 months who were exclusively breastfed	57%
	Children aged 6-8 months who were fed complementary foods	64%
	For breastfed children (6-23 months)- A. Fed minimum number of times. Note : At least twice a day for breastfed infants 6-8 months old and at least three times a day for breastfed children 9-23 months old B. Had minimum dietary diversity Note : Minimum dietary diversity refers to four or more food groups^B fed to children aged 6-23 months	30% 21.4%

B. CHILD HEALTH¹⁵

Prevalence of childhood illnesses (in children aged 0-59 months)

Had diarrhea in 15 days prior to survey	5.1%
Had fever in 15 days prior to survey	12.7%
Had symptoms of Acute Respiratory Infection (ARI) in 15 days prior to survey	4.8%

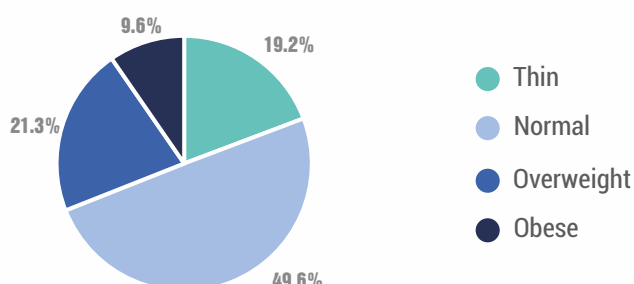
^B The 7 food groups include the following: i. grains, roots and tubers ii. legumes and nuts iii. dairy products (milk, yoghurt, cheese) iv. Flesh foods (meat, fish, poultry, and liver/organ meats) v. eggs vi. Vitamin-A rich fruits and vegetables vii. other fruits and vegetables.

C. NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

Maternal health and nutrition, as well as adolescent nutrition, have important consequences for intergenerational transmission of undernutrition. Data on Body Mass Index (BMI), anemia prevalence and height among women of reproductive age are presented in this section, as are data on adolescent BMI and anemia.

C.1. WOMEN 15-49 YEARS OLD¹⁶

BMI^c levels of women aged 15-49 years



^cBody Mass Index (BMI) is defined as the weight in kilograms by the square of the height in metres (kg/m²). It is a simple index of weight-for-height which is commonly used to classify underweight, overweight and obesity in adults. Range: BMI < 18.5 = total thin, BMI 18.5-24.9 = normal, BMI 25.0-29.9 = Overweight, BMI > 30.0 = Obese [per WHO Standards]



49.2%

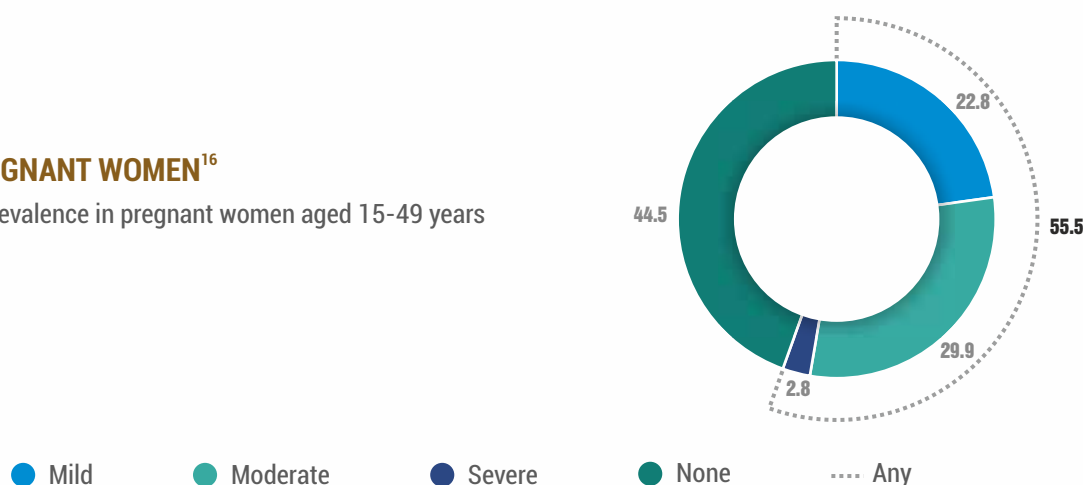
Women aged 15-49 years are anemic

2.6%

Women aged 15-49 years are severely anemic

C.2. PREGNANT WOMEN¹⁶

Anemia prevalence in pregnant women aged 15-49 years



● Mild

● Moderate

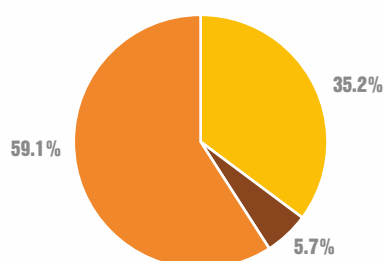
● Severe

● None

--- Any

C.3. ADOLESCENT GIRLS

BMI levels of adolescent girls aged 15-18 years¹⁷



● Normal

● Thin

● Overweight and Obese



49.7%

Adolescent girls aged 15-19 years are anemic¹⁶

1%

Adolescent girls aged 15-19 years are severely anemic¹⁶

¹⁶ Source : DLHS-4, 2012-13

¹⁷ Source : RSoC, 2014

^{17a} Source : NFHS-3, 2006

IV. UNDERLYING DETERMINANTS

A. SOCIAL STATUS OF WOMEN

Women's status is recognized to contribute in significant ways to improving nutrition. This section presents indicators that are representative of women's social status, including measures of education, age at marriage and first birth, employment, decision making and domestic violence. It also includes the Gender Empowerment Measure that captures gender inequality along three dimensions: political participation and decision-making power, economic participation and decision-making power, and power over economic resources.



Currently married women who have 10 or more years of schooling¹⁸ **36.1%**



20.7% Women aged 20-24 years who were married before the age of 18¹⁹

22.4 Average age at marriage¹⁹

Gender Empowerment Measure^{D,20}

0.5

0.5

National Average²⁰



Female workforce participation rate²² **31.8%**

Currently married women who make decisions about²³:



29.1% Own healthcare



21.3% Major household purchase



57% Purchases for daily household needs



20.7% Visits to her family/friends/relatives



44.1% Women who have experienced any form of physical/sexual/emotional violence²³

69.4% Ever married women who justify hitting/wife-beating (for either of the reasons mentioned)²³

^D The Gender Empowerment Measure is a weighted average index based on indicators that are classified into three dimensions: a. political participation and decision-making power b. economic participation and decision-making power and c. power over economic resources. The index ranges from a minimum of 0 to a maximum of 1, with a higher score indicating greater empowerment of women. (More information available at <http://wcd.nic.in/publication/GDIGEReport/Part3.pdf>.)

¹⁸ Source : DLHS-4, 2012-13

¹⁹ Source : RSoC, 2014

²⁰ Source : MoWCD, 2006

²² Source : Women and Men in India, 16th Issue MoSPI, 2014

²³ Source : NFHS-3, 2006

B. WATER AND SANITATION

Poor hygiene and sanitation, by directly increasing exposure and susceptibility to infections, are associated with undernutrition among children. This section covers key indicators on access to safe drinking water and availability of sanitation facilities at the state level. It also includes the expenditure on toilet construction under the Total Sanitation Campaign.



95.1%

Households with access to improved sources of drinking water^{E, 24}

46.4%

Households using improved sanitation facility^{F, 24}



43.4%

Households practicing open defecation²⁴

75.6 M

Expenditure on toilets under Total Sanitation Campaign (TSC)^{G, 25}



1,065 M

National Average²⁵

C. AGRICULTURE AND FOOD SECURITY

Agriculture productivity and food security can affect household access to foods necessary for a healthy diet. Thus, this section presents indicators related to agricultural growth and food consumption patterns in the state, indicating the level of food security in the state relative to the national situation.



4.7%

Growth rate of agriculture from 2007-2012²⁶



3.9%

Share in India's total foodgrain production²⁷



Mean Calorie intake per person per day (in Kcal)²⁸

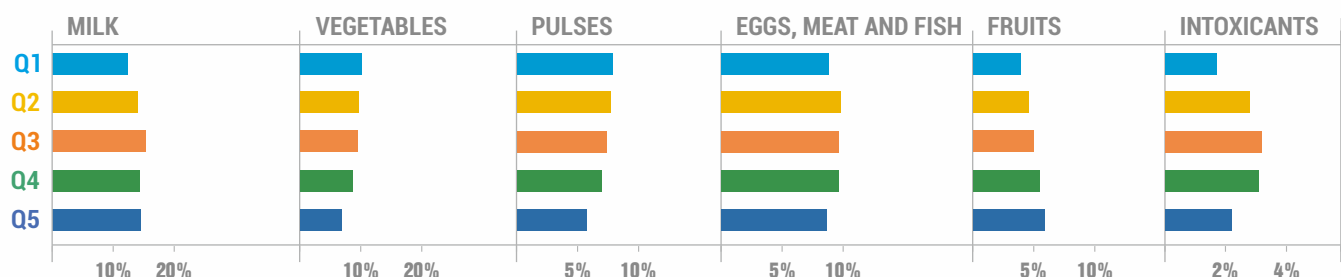
RURAL

2052 TAMIL NADU
2233 INDIA AVG

URBAN

2112 TAMIL NADU
2206 INDIA AVG

Expenditure on food items by income quintiles²⁸



^E Improved sources of drinking water include: piped water into dwelling, piped water to yard/plot, public tap or standpipe, tubewell or borehole, protected dug well, protected spring, and rainwater (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>).

^F Improved sanitation means households using improved toilets that include: flush toilet, piped sewer system, septic tank, flush/pour flush to pit latrine, ventilated improved pit latrine, pit latrine with slab, composting toilet, special case (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>); excludes those households who are using improved toilets but sharing toilet facilities with other households.

^G Besides toilet construction subsidies, this expenditure also includes funding other activities such as solid and liquid waste management, IEC activities for sustainable demand generation for sanitation facilities, assistance to production centers of sanitary materials and rural sanitary marts, provision of construction of community sanitary complexes, provision of sanitation facilities in govt. schools and Anganwadis in govt. buildings etc.

²⁴ Source : RSoC, 2014

²⁵ Source : Indiastat, Rajya Sabha Unstarred Question No. 2950, dated on 30.08.2011, 2011-12

²⁶ Source : Indiastat, compiled by datanet from Rajyasabha & Lok Sabha unstarred questions no. 3039, 4535. 2007-12

²⁷ Source : Indiastat, Ministry of Agriculture, Government of India 2011-2012

²⁸ Source : NSSO, 68th round-Nutritional Intake in India, 2011-12

V. STATUS OF NUTRITION-RELEVANT INTERVENTIONS

A. NUTRITION-SPECIFIC INTERVENTIONS

The financial resources allocated to, and spent on direct nutrition-specific interventions can determine the scale, coverage and quality of interventions to reach vulnerable target populations. These services, in India, are delivered both by the Integrated Child Development Scheme (ICDS) and the National Health Mission (NHM). This section includes data on the coverage of interventions delivered by these two key centrally-sponsored schemes that directly impact maternal and child nutrition and health. We also include here information on the human resources and service availability of these schemes and expenditures.

A.1. COVERAGE OF ICDS AND NHM:

The Integrated Child Development Services (ICDS) aims to improve the nutrition and health status of children under-six through a package of services (supplementary nutrition, immunization, health check-up, referral services, etc.) delivered through frontline workers at the Anganwadi Centres (AWCs). This section provides information on expenditure on ICDS and coverage of its supplementary nutrition programme (SNP). This section also covers critical services provided by the health system, including provision of care for pregnant women and child immunization. Immunization plays a crucial role in complementing actions to improve nutrition. The link between undernutrition and infectious diseases is cyclical, poor nutrition increases vulnerability to infections, which in turn worsen nutrition status. Data on immunization among children are presented by residence. Here, full immunization refers to children covered with BCG, measles and 3 doses each of DPT and polio.

Beneficiaries who availed supplementary food under ICDS²⁹

Children 6-35 months	42.3%
Children 36-71 months	26.5%
Pregnant women	45.7%
Lactating mothers	30.5%

Beneficiaries who received supplementary food for at least 21 days in the month prior to the survey

Children aged 6-35 months	33.8%
Children aged 36-71 months	36.4%
Pregnant women	24.5%
Lactating women	31.3%

²⁹ Source : RSoC, 2014

SERVICES PROVIDED TO WOMEN WHO HAD A LIVE BIRTH IN LAST 35 MONTHS³⁰



91.8%

Received 3 or more antenatal checkups prior to delivery



96.4%

Received 2 or more TT injections prior to delivery



37.7%

Consumed 100 or more IFA tablets/syrup during pregnancy



99.3%

Had Institutional delivery



99.5%

Women who had live birth in 35 months where delivery was assisted by skilled health provider³⁰



72.8%

Rural

80%

Urban

Children aged 12-23 months who are fully immunised³⁰



1.4%

Children aged 12-23 months who have not received any immunisation³⁰

WOMEN GIVEN ADVICE ON³¹:



71.8%

Breastfeeding



54.7%

Nutrition of mother and child



40.2%

Institutional delivery

A.2. PERSONNEL CAPACITY OF ICDS AND NRHM:

This section features data on availability of healthcare personnel and services available to women of reproductive age (antenatal care, tetanus toxoid coverage, iron-folic acid supplementation coverage, institutional delivery and counseling). Household and individual access to health services can directly impact children's nutrition and welfare during the crucial first 1,000 days of life.

Availability of Anganwadi Centres and Workers (AWCs and AWWs) ^{H, 30}	Value
Pending or vacant Anganwadi workers to sanctioned number of workers*	16.5%
AWWs living in the AWC village/ward	31.5%
AWWs having 10 or more years of schooling	92.9%
Median age of AWWs	49 years
AWCs serving to population more than the stipulated norm	87.2%

Growth Monitoring ³⁰	Value
AWCs having functional baby weighing scale	85.8%
AWCs having functional adult weighing scale	70.2%
Available WHO growth chart at AWCs	97%

^H Number of AWCs surveyed for Tamil Nadu as per RSoC 2014 is 183.

³⁰ Source : RSoC, 2014

³¹ Source : DLHS-4, 2012-13

* Source : MoWCD, 2012

Training and Comprehensive Knowledge ³²	Value
AWWs having correct knowledge of intake of food by pregnant women	88.2%
AWWs having correct knowledge of normal birth weight of children	72.9%
AWWs having correct knowledge of initiation of breastfeeding within one hour	96.6%
AWWs having correct knowledge of exclusive breastfeeding for the first six months	76%
AWWs having correct knowledge of appropriate age of child for complementary feeding	41 %
Health Service Delivery Personnel	Value
ASHAs selected ³³	79%
Current density of ASHA as per Census 2011 rural population ³³	**
Pending or vacant ANM positions sub centres & PHCs ³⁴	4.3%

** ASHAs have been selected only in the tribal areas.

A.3. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SPECIFIC INTERVENTIONS

Expenditure on Schemes (in million dollars)	In million USD	National Average
ICDS (ICDS general + SNP + training) (women and children) ³⁵	71	75
NRHM expenditure (Central Government) ³⁶	152.9	68.8
NRHM expenditure (State Government) ³⁶	-27.3	9.3

B. NUTRITION-SENSITIVE INTERVENTIONS

This section includes information on expenditure and coverage of key centrally-sponsored schemes that indirectly impact maternal and child nutrition. These are: the Mid Day Meal Scheme (MDMS), Public Distribution System (PDS), and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

B.1. COVERAGE OF SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS

Coverage of Schemes	Value
MDMS (base: eligible children*) ³⁷	32%
PDS (base: rural and urban households reporting consumption) ³⁸	82%
MGNREGA (base: rural persons 18 years and above registered in MGNREG job card and demanded work during last 365 days) ³⁹	93.6%

* All children studying in primary & upper primary classes in schools supported under Sarva Shiksha Abhiyan and NCLP (National Child Labour Project) run by Ministry of Labour.

B.2. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS:

Expenditure on Schemes (in million dollars)	In million USD	National Average
MDMS ⁴⁰	8	47
PDS ⁴¹	1315.5	475.3
MGNREGA ⁴²	687	214

³² Source : RSoC, 2014

³³ Source : NRHM, 2013

³⁴ Source : MoHFW, 2013

³⁵ Source : Lok Sabha Unstarred Question # 846 dated 27.02.2015, 2012-13

³⁶ Source : Lok Sabha Annexured Unstarred Question # 409 dated 6.12.2013, 2012-13

³⁷ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/lsq15/15/as216.htm 2011-12

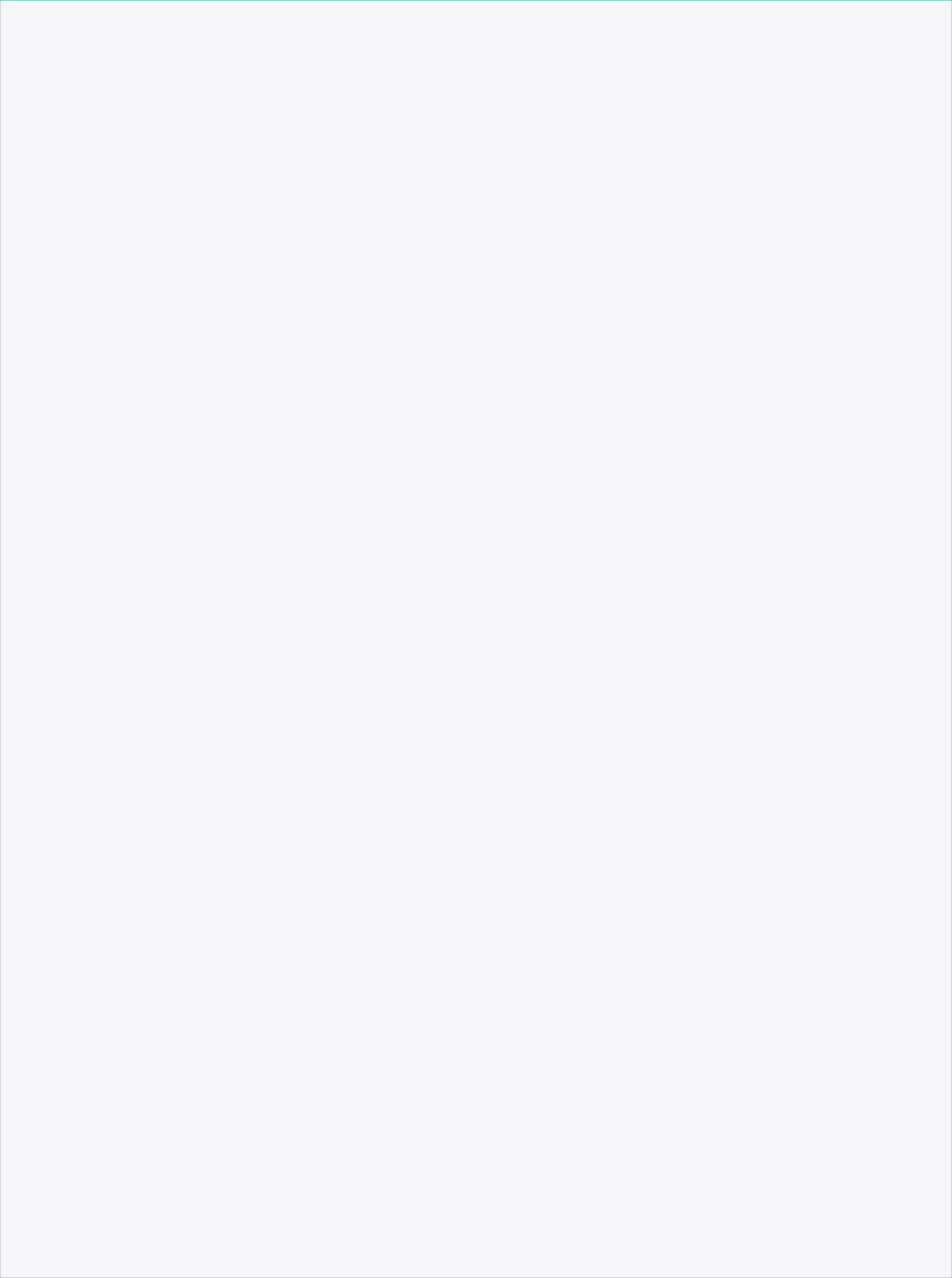
³⁸ Source : Report No. 558, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

³⁹ Source : Report No. 554, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

⁴⁰ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014, 2012-13

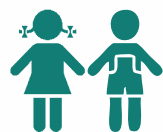
⁴¹ Source : Food Corporation of India 2013, 2012-13

⁴² Source : Lok Sabha Annexured Unstarred Question # 3835 dated 19.03.2015, 2012-13



FAST FACTS ON NUTRITION AND ITS DETERMINANTS IN TRIPURA

World Health Assembly Nutrition Targets



CHILDREN UNDER 5 YEARS

31%
Stunted¹
17.1%
Wasted¹

World Health Assembly Nutrition Targets


57.7%

 Infants 0-5
months old who are
exclusively breastfed¹

18.5%

 Children under
3 years who have low
birth weight (<2.5 kgs)¹

45.6%

 Women
15-49 years old
with anemia²

Immediate Determinants


60.8% Infants 6-8 months old who receive solid, semi-solid or soft foods¹
21% Infants & young children 6-23 months old who achieve minimal diet diversity in complementary feeding¹

51.1% Children 6-59 months
old with anemia²

3% Children 6-59 months old who
had diarrhea in 15 days prior
to survey¹

Immediate Determinants


0%

 Children 6-35 months old
who received supplementary
food under ICDS for 21 days
in the month prior to survey¹

59.2%

 Children 12-23
months old who are
fully immunized¹

67%

 Mothers of
children under 36 months
old who received three
or more antenatal checkups¹

Underlying Determinants


25.1%

 Currently
married women with 10
or more years of schooling²

40.8%

 Women aged 20-24
years who were
married before the age of 18¹

31.8%

 Adolescent girls
15-18 years old
with low BMI (<18.5)¹

Underlying Determinants


3.5%

 Households
practicing
open defecation¹

11.3%

 Population
below
state-specific poverty line³

 Does state have a
high-level nutrition mission?

NO
¹ Source : RSoC, 2014

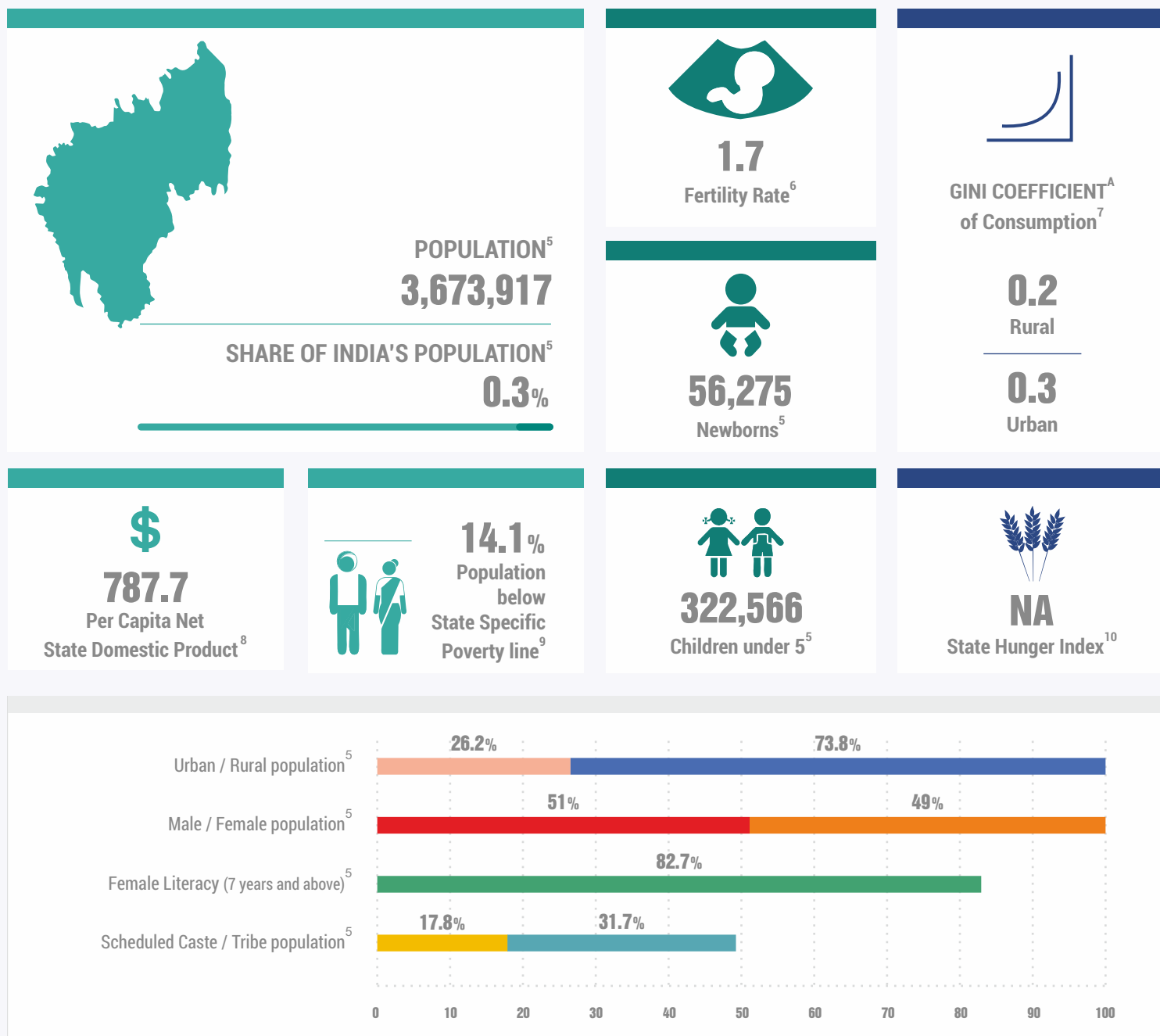
² Source : DLHS4, 2012-13

³ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Govt. of India

I. CONTEXT

A. DEMOGRAPHIC CONTEXT

This section highlights the demographic composition of the state in terms of male-female, rural-urban, and SC-ST ratios, literacy and fertility rates. In addition, it also includes the size of the population of newborns and children less than five years of age (as of the Census of India, 2011) to illustrate the size of the target population for nutrition-related interventions that need to reach this vulnerable population.



A : Gini coefficient is a measure of inequality of distribution. A Gini coefficient of 0 represents perfect equality, while a value of 100 implies perfect inequality. (See Appendix A for more information)

⁵ Source : Primary Census Abstract, Census, 2011

⁶ Source : SRS, 2009

⁷ Source : Planning Commission Estimates: NSSO 66th round-Employment and Unemployment Survey, 2009-10

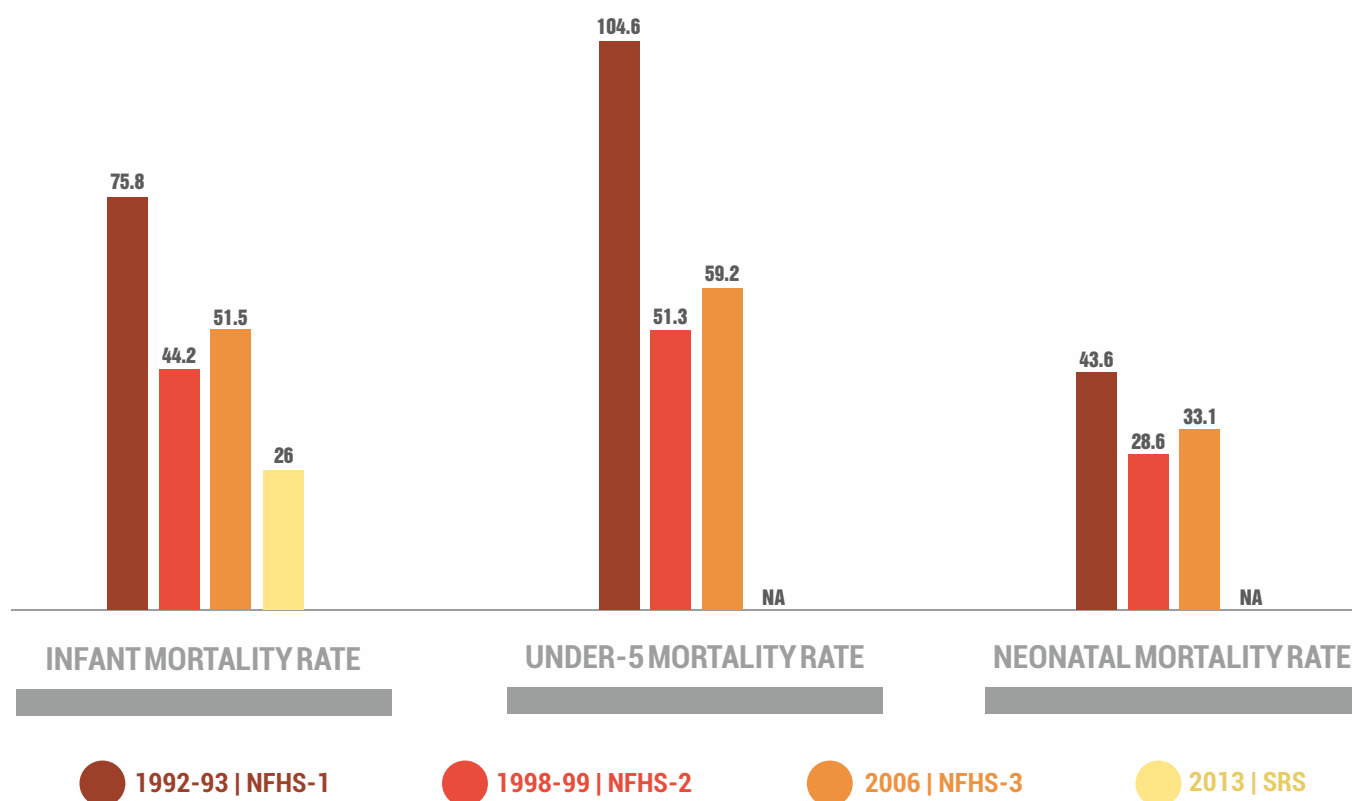
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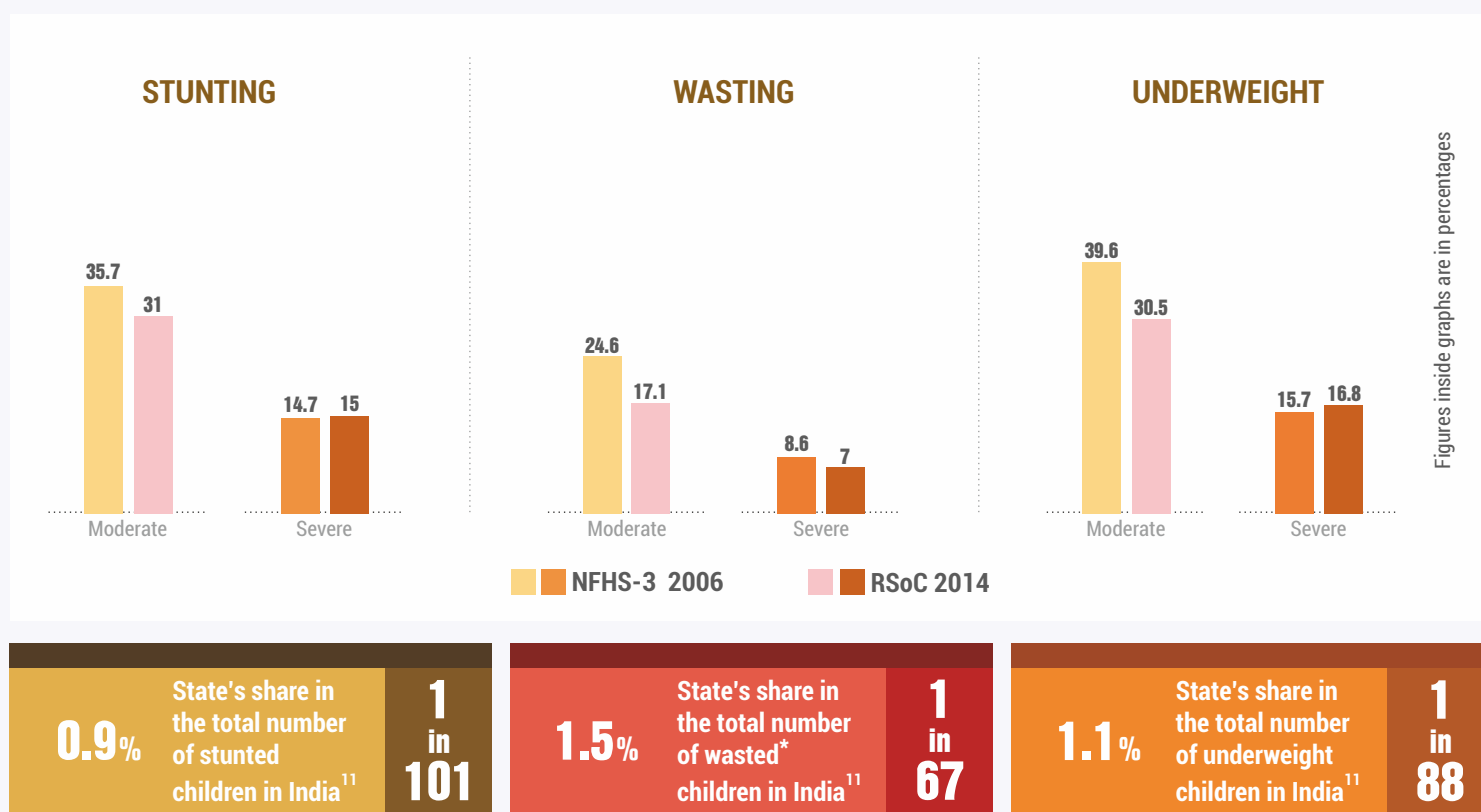
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Underweight is inadequate weight for age, a composite indicator that encompasses stunting and wasting. An underweight child's weight-for-age (WAZ) is below -2 standard deviations from the WHO Child Growth Standards; again, a severely underweight child is below -3 standard deviations.

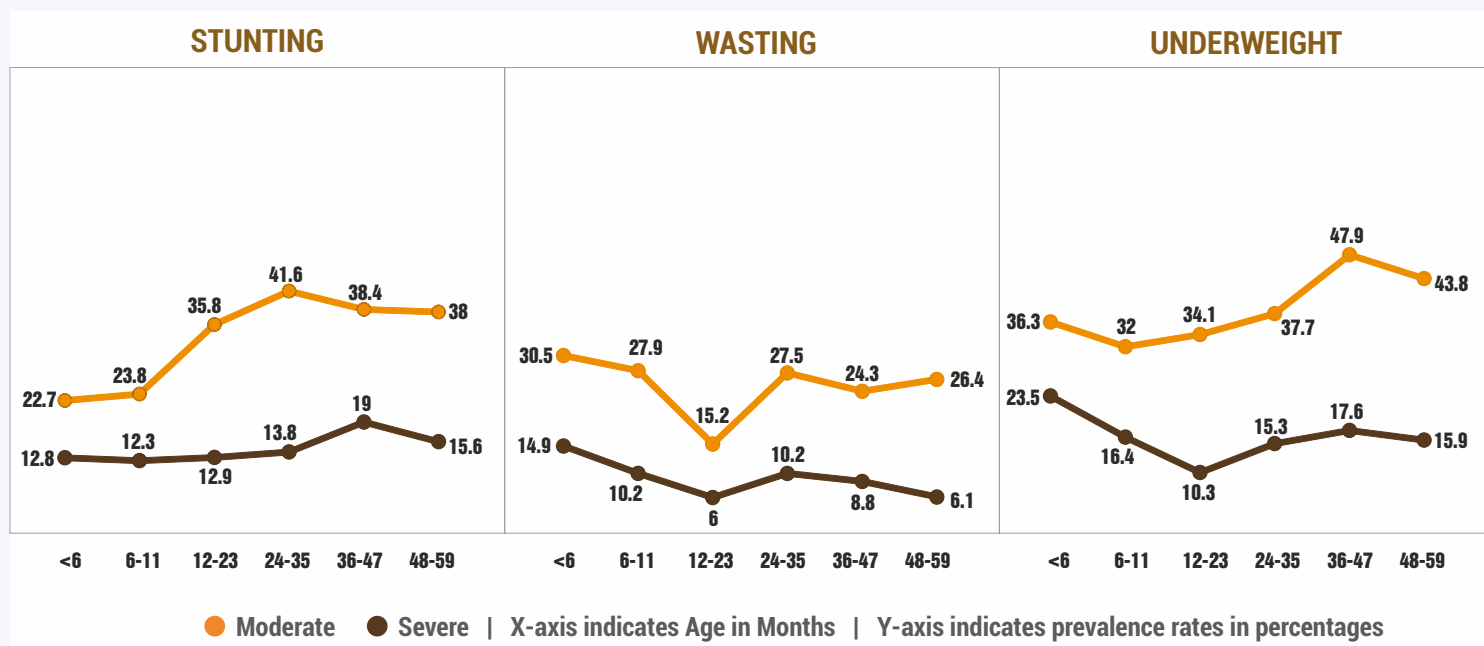


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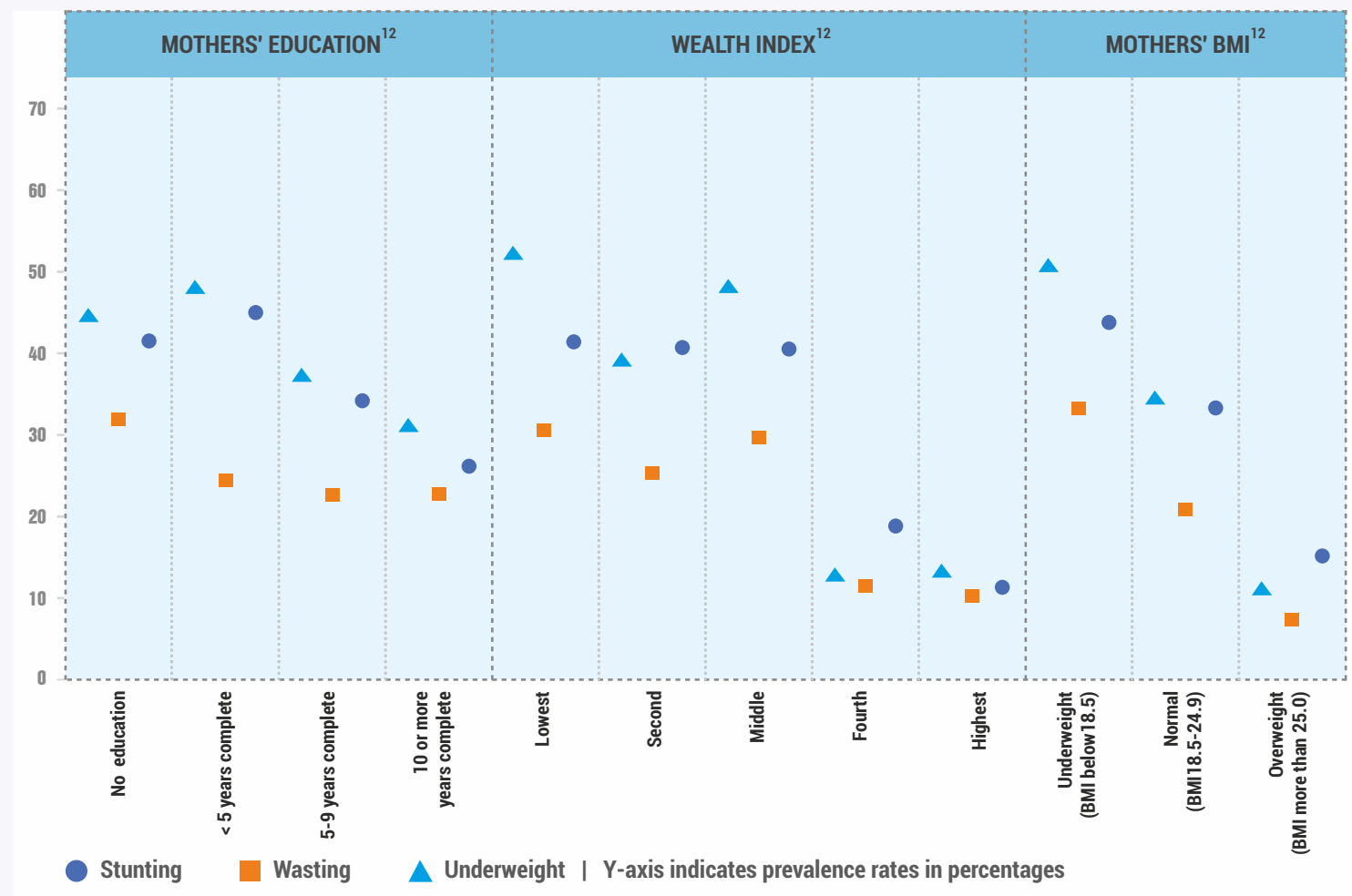
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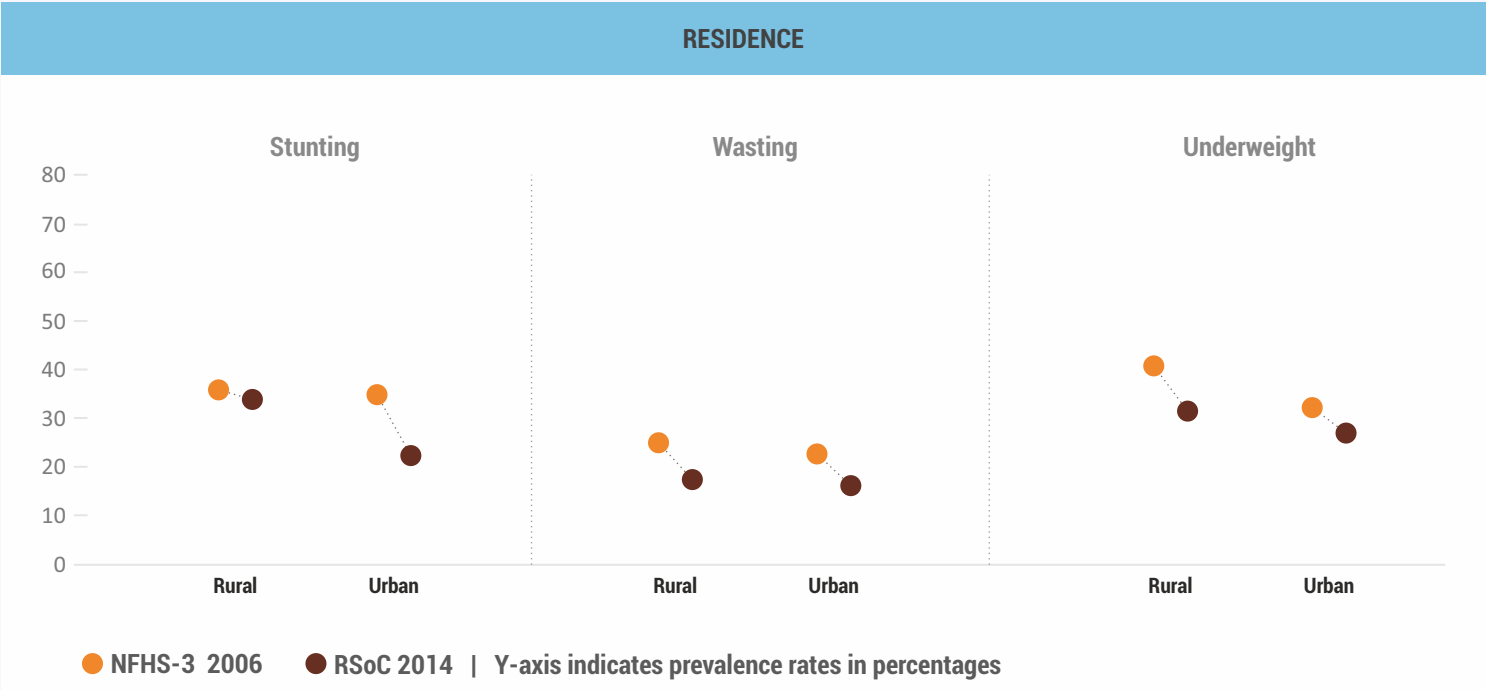
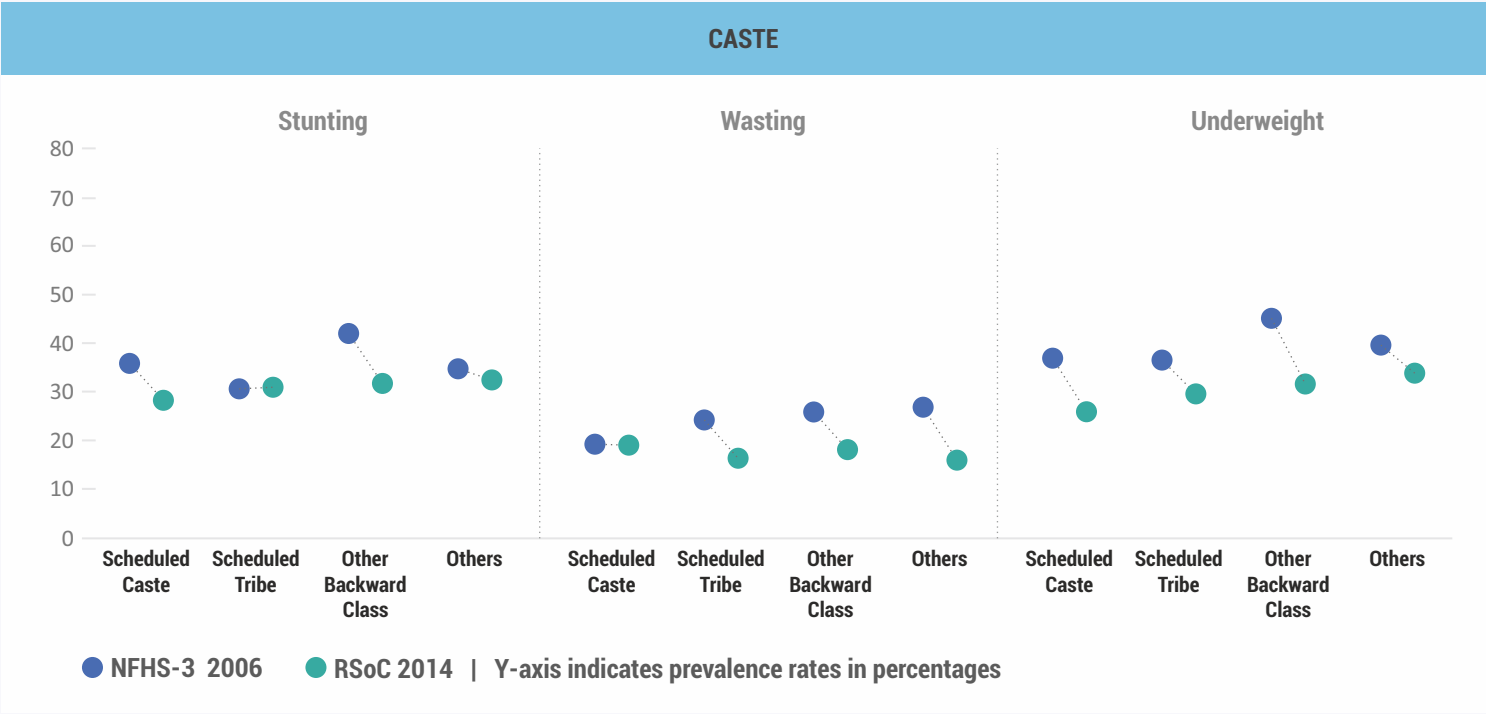


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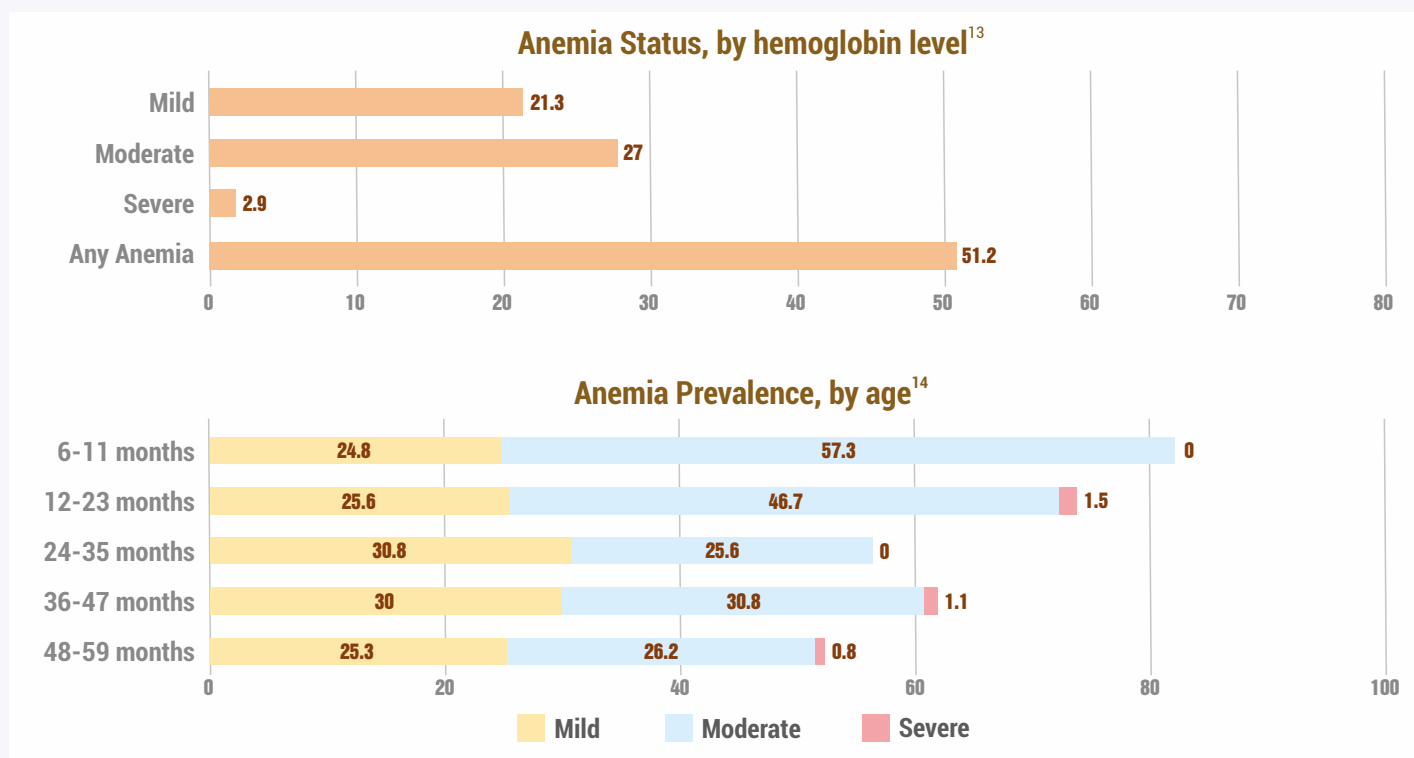


¹² Source : NFHS-3, 2006



D. ANEMIA PREVALENCE

Anemia can impair physical and cognitive development among children and create long term impacts on productivity and wellbeing. This section features data on anemia prevalence by severity and age groups for children under 5.



¹³ Source : DLHS-4, 2012-13

¹⁴ Source : NFHS-3, 2006

III. IMMEDIATE DETERMINANTS

A. INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES¹⁵

This section presents indicators for assessing IYCF practices as recommended by the WHO and revised in 2008. Following optimal IYCF practices during the first 1,000 days is crucial for early child survival and growth as well as long-term health and wellbeing.

Children aged 0-23 months breastfed immediately/within an hour of birth		39.9%
	Children aged 0-5 months who were exclusively breastfed	57.7%
	Children aged 6-8 months who were fed complementary foods	60.8%
	For breastfed children (6-23 months)- A. Fed minimum number of times. Note : At least twice a day for breastfed infants 6-8 months old and at least three times a day for breastfed children 9-23 months old B. Had minimum dietary diversity Note : Minimum dietary diversity refers to four or more food groups^B fed to children aged 6-23 months	51.9% 21%

B. CHILD HEALTH¹⁵

Prevalence of childhood illnesses (in children aged 0-59 months)

Had diarrhea in 15 days prior to survey	3%
Had fever in 15 days prior to survey	9.8%
Had symptoms of Acute Respiratory Infection (ARI) in 15 days prior to survey	7%

^B The 7 food groups include the following: i. grains, roots and tubers ii. legumes and nuts iii. dairy products (milk, yoghurt, cheese) iv. Flesh foods (meat, fish, poultry, and liver/organ meats) v. eggs vi. Vitamin-A rich fruits and vegetables vii. other fruits and vegetables.

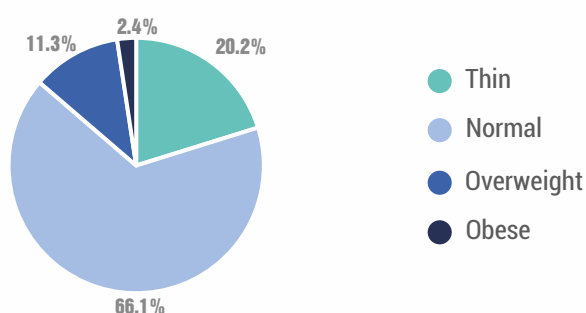
¹⁵ Source : RSoC, 2014

C. NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

Maternal health and nutrition, as well as adolescent nutrition, have important consequences for intergenerational transmission of undernutrition. Data on Body Mass Index (BMI), anemia prevalence and height among women of reproductive age are presented in this section, as are data on adolescent BMI and anemia.

C.1. WOMEN 15-49 YEARS OLD¹⁶

BMI^c levels of women aged 15-49 years



^cBody Mass Index (BMI) is defined as the weight in kilograms by the square of the height in metres (kg/m²). It is a simple index of weight-for-height which is commonly used to classify underweight, overweight and obesity in adults. Range: BMI < 18.5 = total thin, BMI 18.5-24.9 = normal, BMI 25.0-29.9 = Overweight, BMI > 30.0 = Obese [per WHO Standards]



45.6%

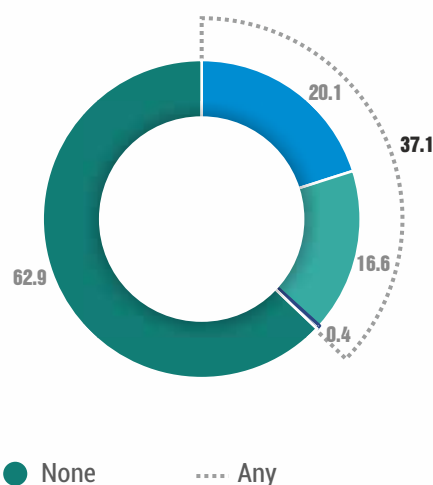
Women aged 15-49 years are anemic

1.6%

Women aged 15-49 years are severely anemic

C.2. PREGNANT WOMEN¹⁶

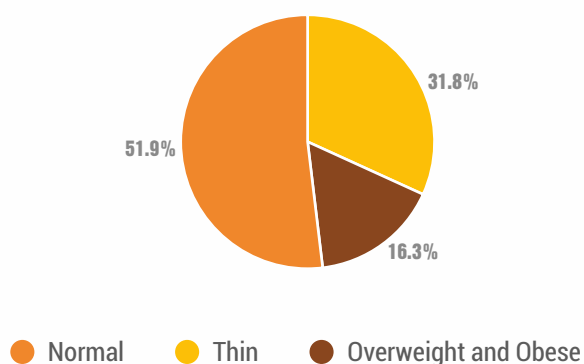
Anemia prevalence in pregnant women aged 15-49 years



● Mild ● Moderate ● Severe ● None ---- Any

C.3. ADOLESCENT GIRLS

BMI levels of adolescent girls aged 15-18 years¹⁷



59.8%

Adolescent girls aged 15-19 years are anemic¹⁶

1.3%

Adolescent girls aged 15-19 years are severely anemic¹⁶

¹⁶ Source : DLHS-4, 2012-13

¹⁷ Source : RSoC, 2014

^{17a} Source : NFHS-3, 2006

IV. UNDERLYING DETERMINANTS

A. SOCIAL STATUS OF WOMEN

Women's status is recognized to contribute in significant ways to improving nutrition. This section presents indicators that are representative of women's social status, including measures of education, age at marriage and first birth, employment, decision making and domestic violence. It also includes the Gender Empowerment Measure that captures gender inequality along three dimensions: political participation and decision-making power, economic participation and decision-making power, and power over economic resources.



Currently married women who have 10 or more years of schooling¹⁸ **25.1%**



40.8% Women aged 20-24 years who were married before the age of 18¹⁹

21 Average age at marriage¹⁹

Gender Empowerment Measure^{D,20}

0.4

0.5

National Average²⁰



Female workforce participation rate²² **23.6%**

Currently married women who make decisions about²³:



26.2% Own healthcare



8.9% Major household purchase



32.9% Purchases for daily household needs



25.6% Visits to her family/friends/relatives



46.6% Women who have experienced any form of physical/sexual/emotional violence²³

52.3% Ever married women who justify hitting/wife-beating (for either of the reasons mentioned)²³

^D The Gender Empowerment Measure is a weighted average index based on indicators that are classified into three dimensions: a. political participation and decision-making power b. economic participation and decision-making power and c. power over economic resources. The index ranges from a minimum of 0 to a maximum of 1, with a higher score indicating greater empowerment of women. (More information available at <http://wcd.nic.in/publication/GDIGEReport/Part3.pdf>.)

¹⁸ Source : DLHS-4, 2012-13

¹⁹ Source : RSoC, 2014

²⁰ Source : MoWCD, 2006

²² Source : Women and Men in India, 16th Issue MoSPI, 2014

²³ Source : NFHS-3, 2006

B. WATER AND SANITATION

Poor hygiene and sanitation, by directly increasing exposure and susceptibility to infections, are associated with undernutrition among children. This section covers key indicators on access to safe drinking water and availability of sanitation facilities at the state level. It also includes the expenditure on toilet construction under the Total Sanitation Campaign.



87.2%

Households with access to improved sources of drinking water^{E, 24}

58%

Households using improved sanitation facility^{F, 24}



3.5%

Households practicing open defecation²⁴

7.4 M

Expenditure on toilets under Total Sanitation Campaign (TSC)^{G, 25}



1,065 M

National Average²⁵

C. AGRICULTURE AND FOOD SECURITY

Agriculture productivity and food security can affect household access to foods necessary for a healthy diet. Thus, this section presents indicators related to agricultural growth and food consumption patterns in the state, indicating the level of food security in the state relative to the national situation.



1.4%

Growth rate of agriculture from 2007-2012²⁶



0.3%

Share in India's total foodgrain production²⁷



Mean Calorie intake per person per day (in Kcal)²⁸

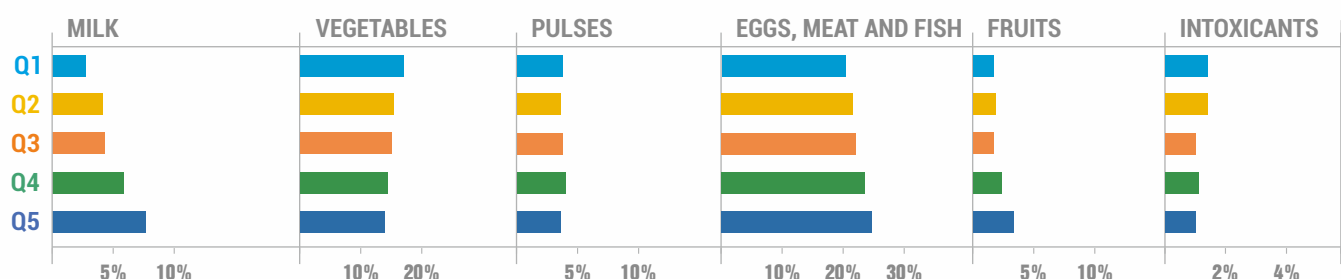
RURAL

NA 2233
TRIPURA INDIA AVG

URBAN

NA 2206
TRIPURA INDIA AVG

Expenditure on food items by income quintiles²⁸



^E Improved sources of drinking water include: piped water into dwelling, piped water to yard/plot, public tap or standpipe, tubewell or borehole, protected dug well, protected spring, and rainwater (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>).

^F Improved sanitation means households using improved toilets that include: flush toilet, piped sewer system, septic tank, flush/pour flush to pit latrine, ventilated improved pit latrine, pit latrine with slab, composting toilet, special case (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>); excludes those households who are using improved toilets but sharing toilet facilities with other households.

^G Besides toilet construction subsidies, this expenditure also includes funding other activities such as solid and liquid waste management, IEC activities for sustainable demand generation for sanitation facilities, assistance to production centers of sanitary materials and rural sanitary marts, provision of construction of community sanitary complexes, provision of sanitation facilities in govt. schools and Anganwadis in govt. buildings etc.

²⁴ Source : RSoC, 2014

²⁵ Source : Indiastat, Rajya Sabha Unstarred Question No. 2950, dated on 30.08.2011, 2011-12

²⁶ Source : Indiastat, compiled by datanet from Rajyasabha & Lok Sabha unstarred questions no. 3039, 4535. 2007-12

²⁷ Source : Indiastat, Ministry of Agriculture, Government of India 2011-2012

²⁸ Source : NSSO, 68th round-Nutritional Intake in India, 2011-12

V. STATUS OF NUTRITION-RELEVANT INTERVENTIONS

A. NUTRITION-SPECIFIC INTERVENTIONS

The financial resources allocated to, and spent on direct nutrition-specific interventions can determine the scale, coverage and quality of interventions to reach vulnerable target populations. These services, in India, are delivered both by the Integrated Child Development Scheme (ICDS) and the National Health Mission (NHM). This section includes data on the coverage of interventions delivered by these two key centrally-sponsored schemes that directly impact maternal and child nutrition and health. We also include here information on the human resources and service availability of these schemes and expenditures.

A.1. COVERAGE OF ICDS AND NHM:

The Integrated Child Development Services (ICDS) aims to improve the nutrition and health status of children under-six through a package of services (supplementary nutrition, immunization, health check-up, referral services, etc.) delivered through frontline workers at the Anganwadi Centres (AWCs). This section provides information on expenditure on ICDS and coverage of its supplementary nutrition programme (SNP). This section also covers critical services provided by the health system, including provision of care for pregnant women and child immunization. Immunization plays a crucial role in complementing actions to improve nutrition. The link between undernutrition and infectious diseases is cyclical, poor nutrition increases vulnerability to infections, which in turn worsen nutrition status. Data on immunization among children are presented by residence. Here, full immunization refers to children covered with BCG, measles and 3 doses each of DPT and polio.

Beneficiaries who availed supplementary food under ICDS²⁹

Children 6-35 months	70%
Children 36-71 months	78.4%
Pregnant women	60%
Lactating mothers	27.2%

Beneficiaries who received supplementary food for at least 21 days in the month prior to the survey

Children aged 6-35 months	0%
Children aged 36-71 months	39.3%
Pregnant women	49.5%
Lactating women	0%

²⁹ Source : RSoC, 2014

SERVICES PROVIDED TO WOMEN WHO HAD A LIVE BIRTH IN LAST 35 MONTHS³⁰



67%

Received 3 or more antenatal checkups prior to delivery



89.8%

Received 2 or more TT injections prior to delivery



24.6%

Consumed 100 or more IFA tablets/syrup during pregnancy



79.5%

Had Institutional delivery



80.4%

Women who had live birth in 35 months where delivery was assisted by skilled health provider³⁰



56.2%

Rural

68.5%

Urban

Children aged 12-23 months who are fully immunised³⁰



11.9%

Children aged 12-23 months who have not received any immunisation³⁰

WOMEN GIVEN ADVICE ON³¹:



73.1%

Breastfeeding



70.4%

Nutrition of mother and child



43.9%

Institutional delivery

A.2. PERSONNEL CAPACITY OF ICDS AND NRHM:

This section features data on availability of healthcare personnel and services available to women of reproductive age (antenatal care, tetanus toxoid coverage, iron-folic acid supplementation coverage, institutional delivery and counseling). Household and individual access to health services can directly impact children's nutrition and welfare during the crucial first 1,000 days of life.

Availability of Anganwadi Centres and Workers (AWCs and AWWs) ^{H, 30}	Value
Pending or vacant Anganwadi workers to sanctioned number of workers*	0.1%
AWWs living in the AWC village/ward	66.8%
AWWs having 10 or more years of schooling	61.4%
Median age of AWWs	36 years
AWCs serving to population more than the stipulated norm	2.9%

Growth Monitoring ³⁰	Value
AWCs having functional baby weighing scale	20.9%
AWCs having functional adult weighing scale	94.8%
Available WHO growth chart at AWCs	93.6%

^H Number of AWCs surveyed for Tripura as per RSoC 2014 is 263.

³⁰ Source : RSoC, 2014

³¹ Source : DLHS-4, 2012-13

* Source : MoWCD, 2012

Training and Comprehensive Knowledge ³²	Value
AWWs having correct knowledge of intake of food by pregnant women	91.9%
AWWs having correct knowledge of normal birth weight of children	75.2%
AWWs having correct knowledge of initiation of breastfeeding within one hour	87.9%
AWWs having correct knowledge of exclusive breastfeeding for the first six months	92%
AWWs having correct knowledge of appropriate age of child for complementary feeding	78.1%

Health Service Delivery Personnel	Value
ASHAs selected ³³	100%
Current density of ASHA as per Census 2011 rural population ³³	1 per 368 persons
Pending or vacant ANM positions sub centres & PHCs ³⁴	NA

A.3. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SPECIFIC INTERVENTIONS

Expenditure on Schemes (in million dollars)	In million USD	National Average
ICDS (ICDS general + SNP + training) (women and children) ³⁵	16	75
NRHM expenditure (Central Government) ³⁶	11.2	68.8
NRHM expenditure (State Government) ³⁶	7.6	9.3

B. NUTRITION-SENSITIVE INTERVENTIONS

This section includes information on expenditure and coverage of key centrally-sponsored schemes that indirectly impact maternal and child nutrition. These are: the Mid Day Meal Scheme (MDMS), Public Distribution System (PDS), and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

B.1. COVERAGE OF SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS

Coverage of Schemes	Value
MDMS (base: eligible children*) ³⁷	82.5%
PDS (base: rural and urban households reporting consumption) ³⁸	80.6%
MGNREGA (base: rural persons 18 years and above registered in MGNREG job card and demanded work during last 365 days) ³⁹	98.2%

* All children studying in primary & upper primary classes in schools supported under Sarva Shiksha Abhiyan and NCLP (National Child Labour Project) run by Ministry of Labour.

B.2. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS:

Expenditure on Schemes (in million dollars)	In million USD	National Average
MDMS ⁴⁰	9	47
PDS ⁴¹	133.1	475.3
MGNREGA ⁴²	162	214

³² Source : RSoC, 2014

³³ Source : NRHM, 2013

³⁴ Source : MoHFW, 2013

³⁵ Source : Lok Sabha Unstarred Question # 846 dated 27.02.2015, 2012-13

³⁶ Source : Lok Sabha Annexured Unstarred Question # 409 dated 6.12.2013, 2012-13

³⁷ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/lsq15/15/as216.htm 2011-12

³⁸ Source : Report No. 558, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

³⁹ Source : Report No. 554, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

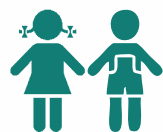
⁴⁰ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014, 2012-13

⁴¹ Source : Food Corporation of India 2013, 2012-13

⁴² Source : Lok Sabha Annexured Unstarred Question # 3835 dated 19.03.2015, 2012-13

FAST FACTS ON NUTRITION AND ITS DETERMINANTS IN UTTAR PRADESH

World Health Assembly Nutrition Targets



CHILDREN UNDER 5 YEARS

50.4%
Stunted¹
10%
Wasted¹

World Health Assembly Nutrition Targets


62.2%

 Infants 0-5 months old who are exclusively breastfed¹

22.5%

 Children under 3 years who have low birth weight (<2.5 kgs)¹

49.9%

 Women 15-49 years old with anemia²

Immediate Determinants


32%

 Infants 6-8 months old who receive solid, semi-solid or soft foods¹
15.1%

 Infants & young children 6-23 months old who achieve minimal diet diversity in complementary feeding¹

73.9%

 Children 6-59 months old with anemia²

5.2%

 Children 6-59 months old who had diarrhea in 15 days prior to survey¹

Immediate Determinants


15.5%

 Children 6-35 months old who received supplementary food under ICDS for 21 days in the month prior to survey¹

47%

 Children 12-23 months old who are fully immunized¹

38.6%

 Mothers of children under 36 months old who received three or more antenatal checkups¹

Underlying Determinants


11.6%

 Currently married women with 10 or more years of schooling³

27.7%

 Women aged 20-24 years who were married before the age of 18¹

36.7%

 Adolescent girls 15-18 years old with low BMI (<18.5)¹

Underlying Determinants


57.7%

 Households practicing open defecation¹

29.4%

 Population below state-specific poverty line⁴

Does state have a high-level nutrition mission?

YES
¹ Source : RSoC, 2014

² Source : NFHS-3, 2006

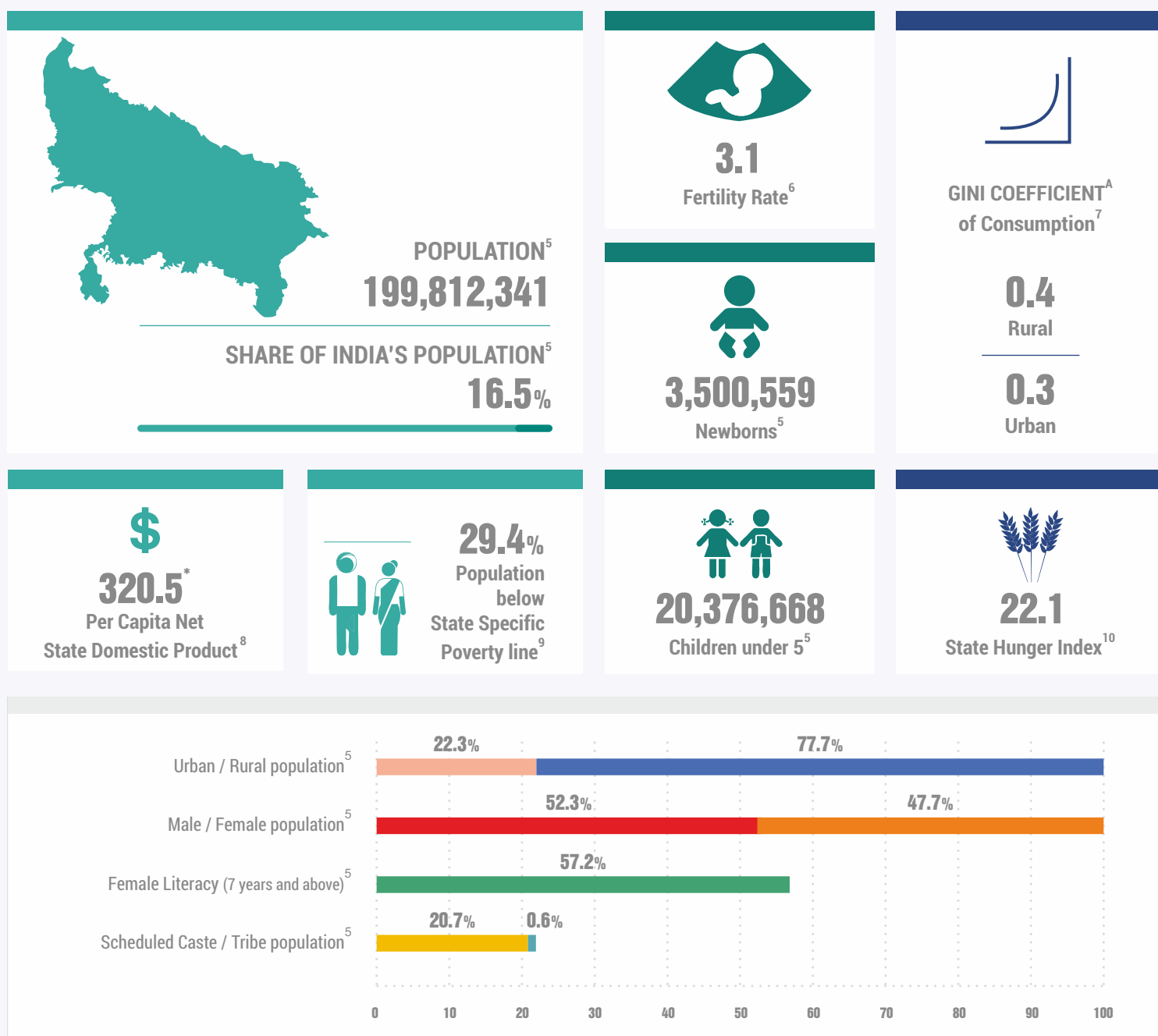
³ Source : DLHS-3, 2007-08

⁴ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Govt. of India

I. CONTEXT

A. DEMOGRAPHIC CONTEXT

This section highlights the demographic composition of the state in terms of male-female, rural-urban, and SC-ST ratios, literacy and fertility rates. In addition, it also includes the size of the population of newborns and children less than five years of age (as of the Census of India, 2011) to illustrate the size of the target population for nutrition-related interventions that need to reach this vulnerable population.



A : Gini coefficient is a measure of inequality of distribution. A Gini coefficient of 0 represents perfect equality, while a value of 100 implies perfect inequality. (See Appendix A for more information)

⁵ Source : Primary Census Abstract, Census, 2011

⁶ Source : SRS, 2013

⁷ Source : Planning Commission Estimates: NSSO 66th round-Employment and Unemployment Survey, 2009-10

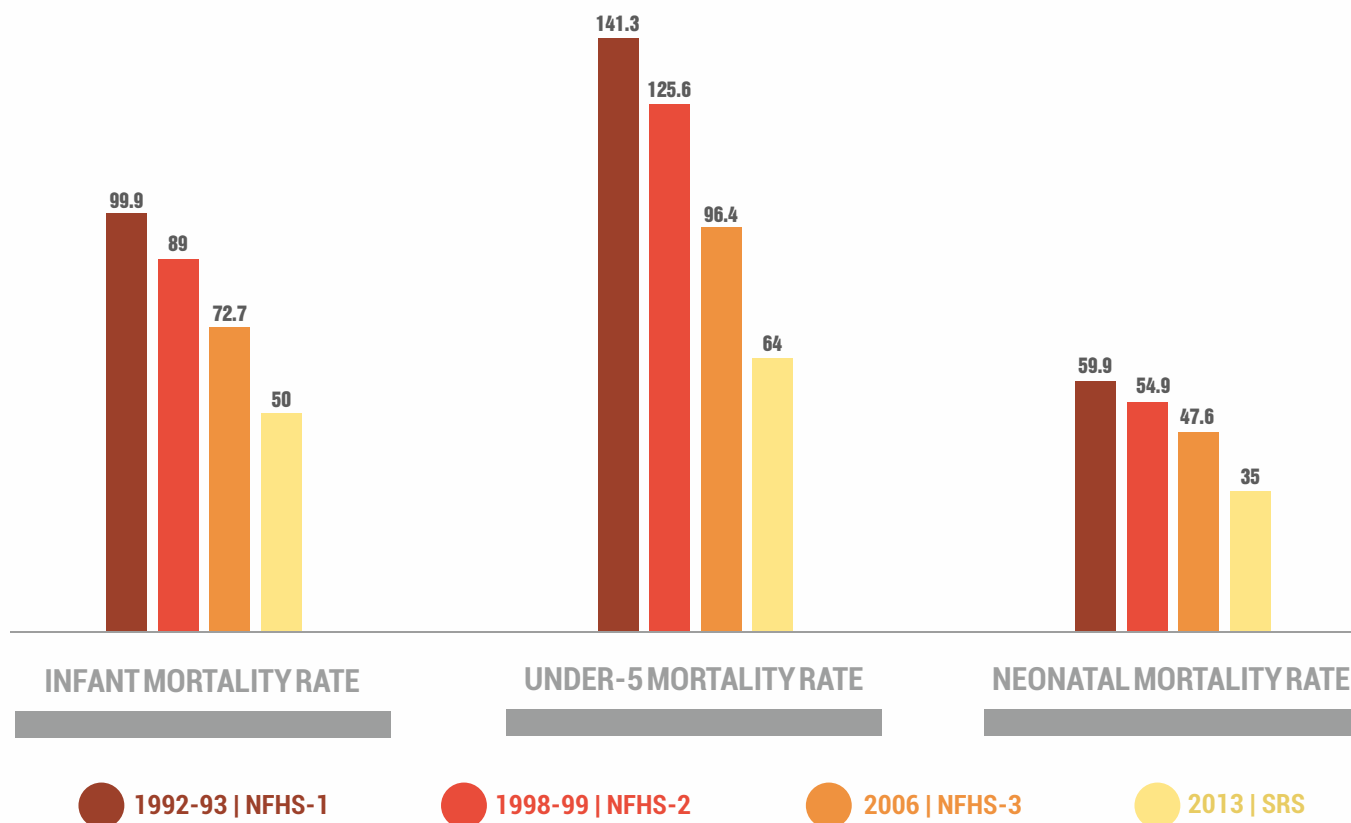
⁸ Source : Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14 : http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82

⁹ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Government of India, 2011-12 : http://planningcommission.nic.in/news/pre_pov2307.pdf

¹⁰ Source : IFPRI, India State Hunger Index, 2009

B. CHILD MORTALITY PER THOUSAND LIVE BIRTHS

This section illustrates trends in mortality in neonates, infants and children under 5 years, since 1992. The purpose of this is to highlight the success achieved by individual states in averting deaths of children since the economic growth of the 1990s.



II. NUTRITIONAL STATUS AMONG CHILDREN

This section presents data on nutrition outcome indicators (stunting, wasting, and underweight) and anemia prevalence. Anthropometric measures for children under 5 (stunting, wasting, and underweight) are presented over time periods, by age groups and by background characteristics. This data aims to convey the prevalence and severity of undernutrition in the state.

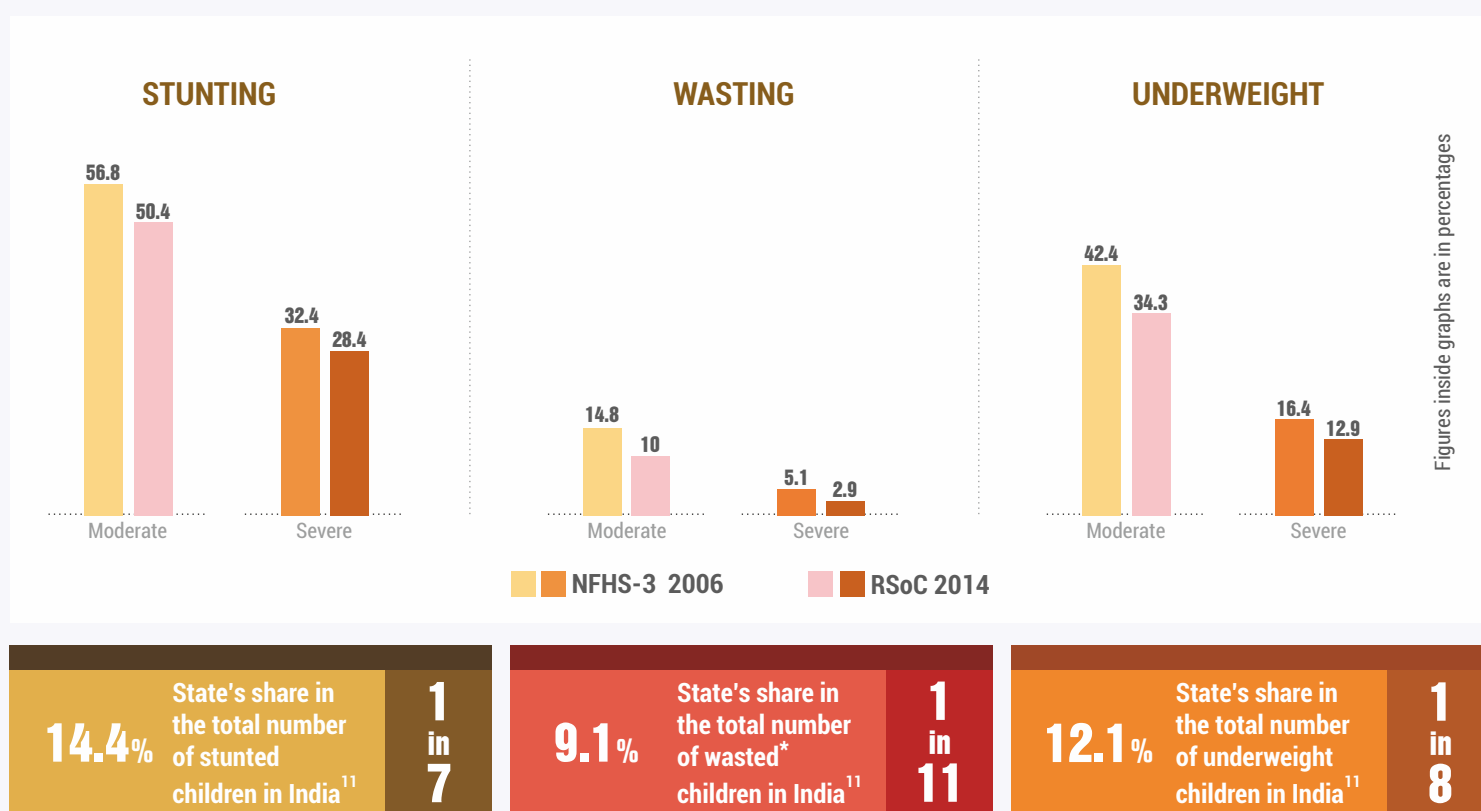
A. CHILD UNDERNUTRITION, BY TIME PERIOD

ANTHROPOMETRIC MEASURES

Stunting is inadequate height for age, which is indicative of chronic or cumulative nutritional deprivation in early childhood. A stunted child's height-for-age is below -2 standard deviations from the median height-for-age (termed HAZ) of the WHO Child Growth Standards, while a severely stunted child is below -3 standard deviations.

Wasting is inadequate weight for height, which points to acute or short-term undernutrition. A wasted child's weight-for-height (WHZ) is below -2 standard deviations from the WHO Child Growth Standards; a severely wasted child is below -3 standard deviations. (Another way to determine severe wasting or severe acute malnutrition is through a measurement of a child's mid-upper arm circumference (MUAC).

Underweight is inadequate weight for age, a composite indicator that encompasses stunting and wasting. An underweight child's weight-for-age (WAZ) is below -2 standard deviations from the WHO Child Growth Standards; again, a severely underweight child is below -3 standard deviations.

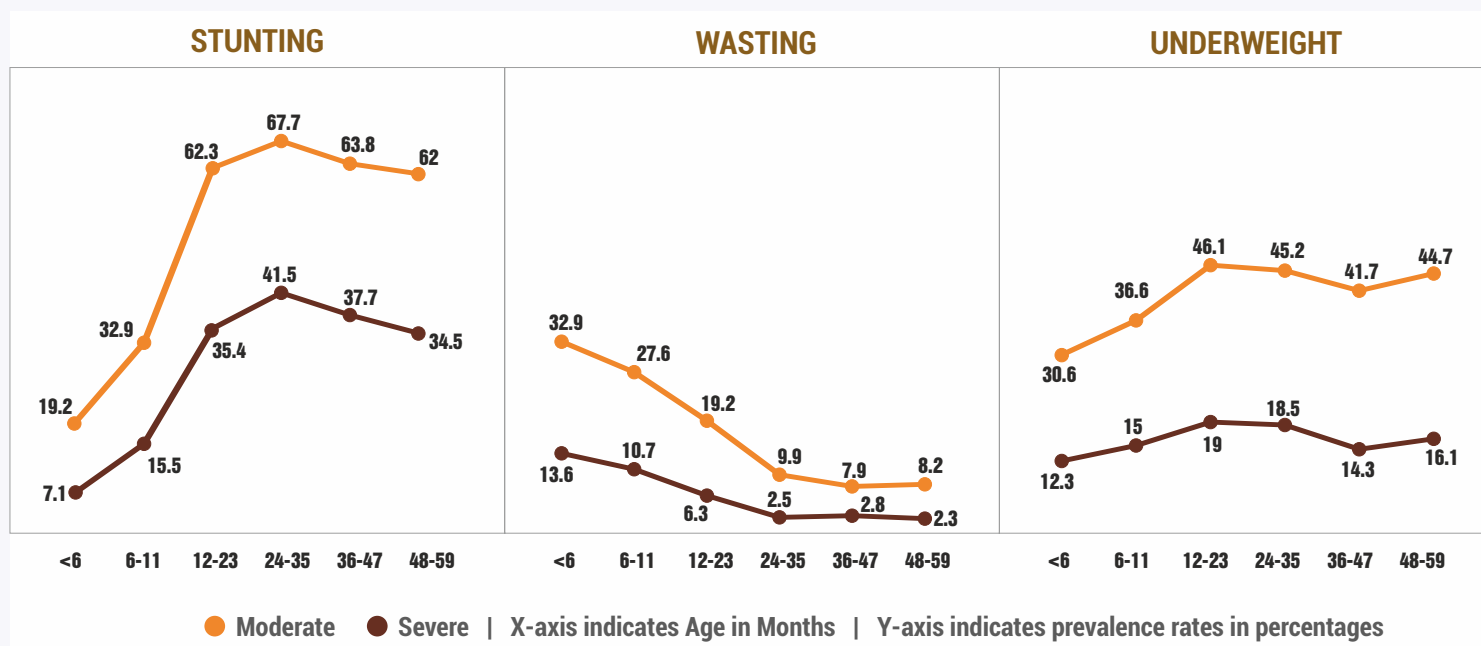


*Wasting is subject to seasonal variations either in food supply or disease prevalence and hence may not be comparable across groups of children measured at different times of the year within a survey round as well as between different survey rounds.

¹¹ Source : NFHS-3, 2006

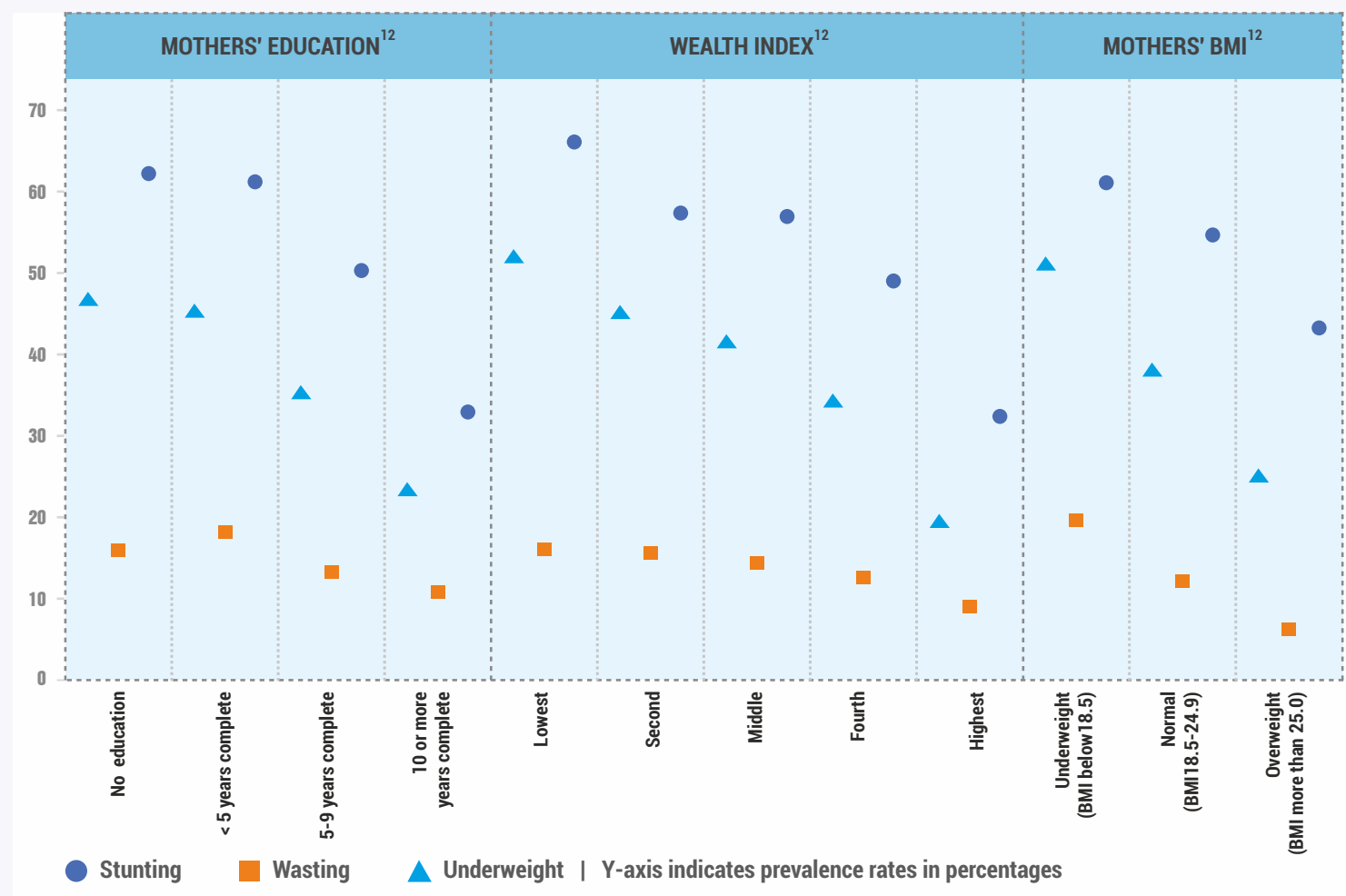
B. CHILD UNDERNUTRITION, BY AGE GROUPS¹²

Percentage of moderate (below -2 SD from the WHO growth standards) and severe (below -3 SD) stunting, wasting and underweight are available for 6 age groups among children under 5.



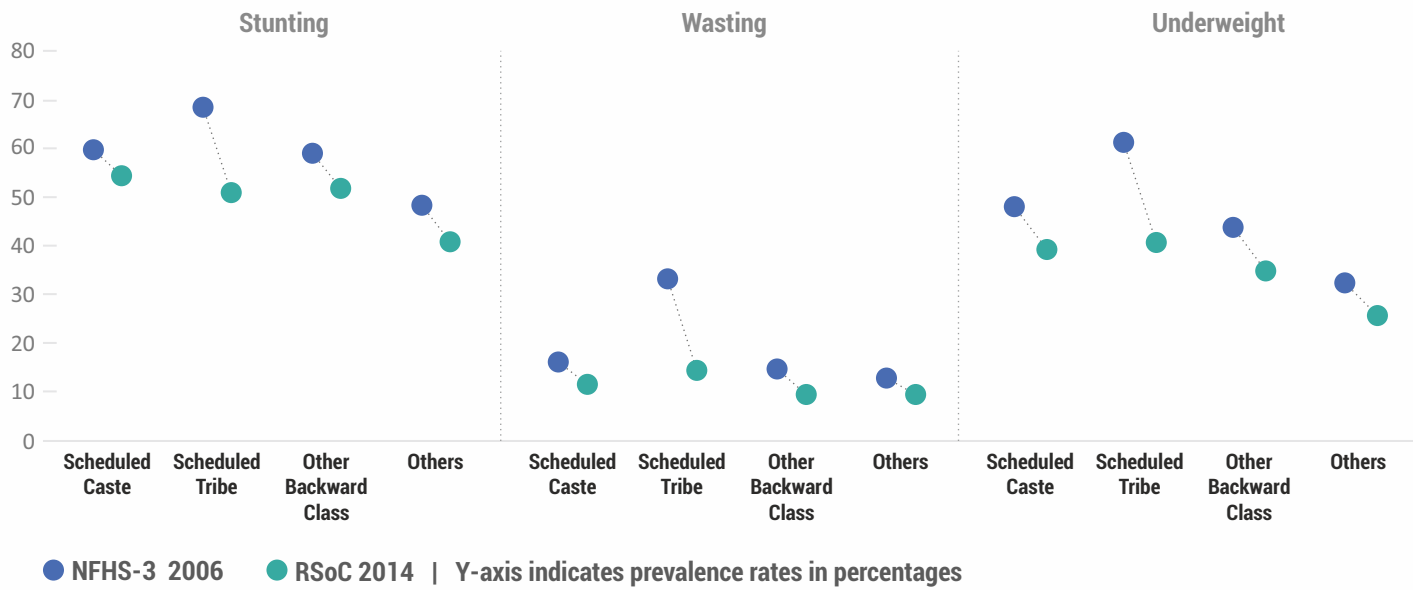
C. PREVALENCE OF CHILD UNDERNUTRITION, BY BACKGROUND CHARACTERISTICS

In this section, child undernutrition outcomes are presented, along with key socioeconomic drivers that are known to be associated with child nutrition, such as caste, residence, mother's health and education, and household income.

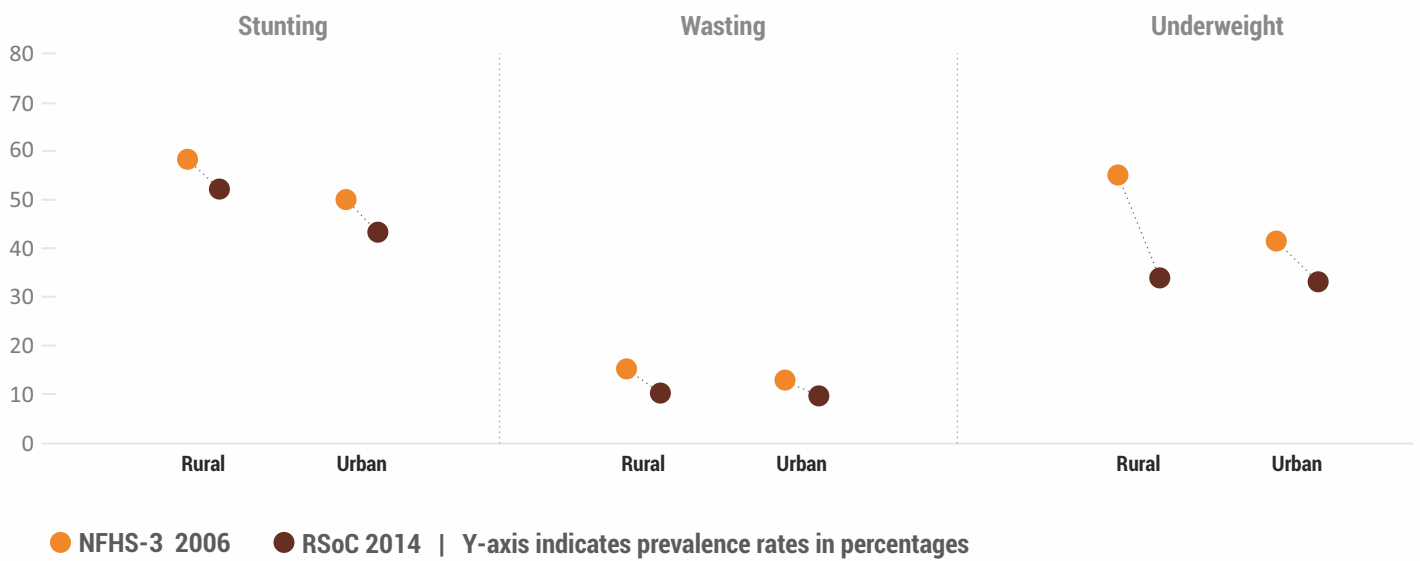


¹² Source : NFHS-3, 2006

CASTE

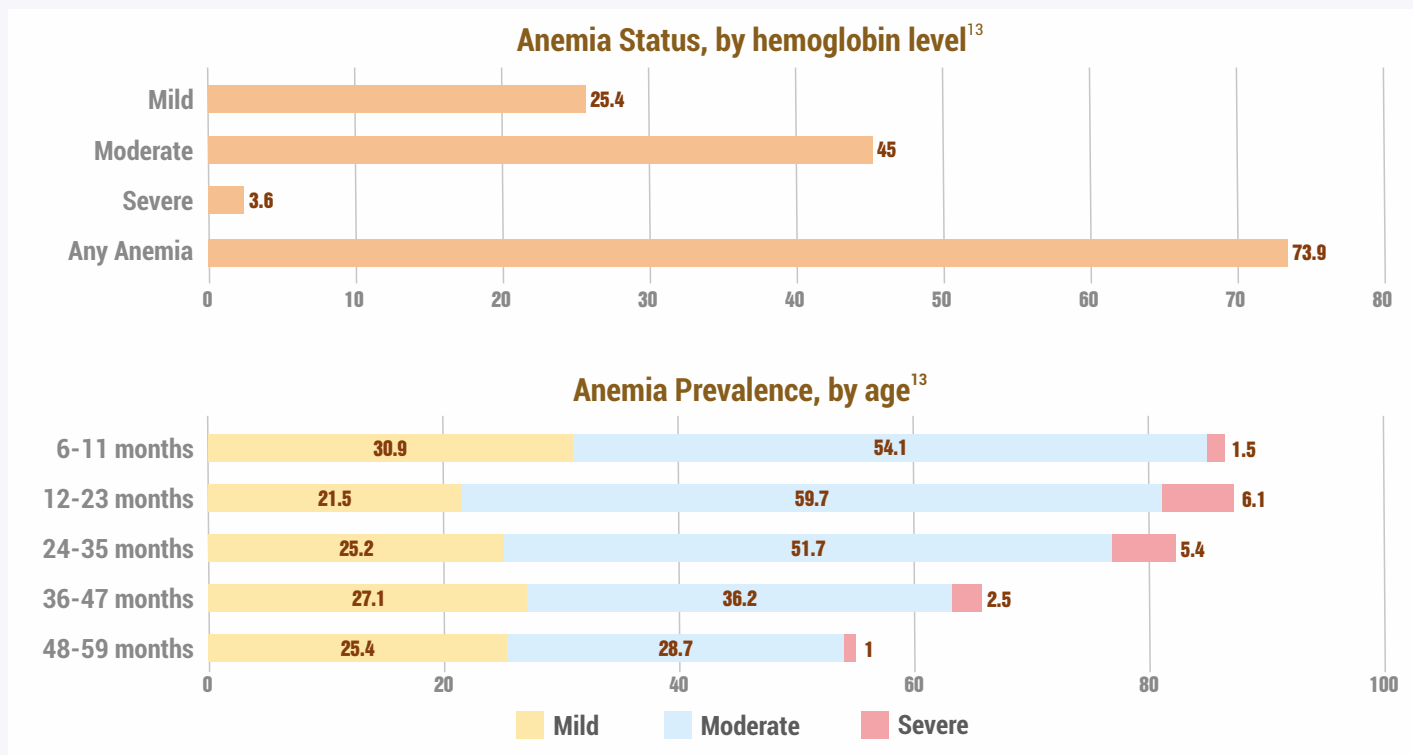


RESIDENCE



D. ANEMIA PREVALENCE

Anemia can impair physical and cognitive development among children and create long term impacts on productivity and wellbeing. This section features data on anemia prevalence by severity and age groups for children under 5.



¹³ Source : NFHS-3, 2006

III. IMMEDIATE DETERMINANTS

A. INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES¹⁵

This section presents indicators for assessing IYCF practices as recommended by the WHO and revised in 2008. Following optimal IYCF practices during the first 1,000 days is crucial for early child survival and growth as well as long-term health and wellbeing.

Children aged 0-23 months breastfed immediately/within an hour of birth		22.5%
	Children aged 0-5 months who were exclusively breastfed	62.2%
	Children aged 6-8 months who were fed complementary foods	32%
	For breastfed children (6-23 months)- A. Fed minimum number of times. Note : At least twice a day for breastfed infants 6-8 months old and at least three times a day for breastfed children 9-23 months old B. Had minimum dietary diversity Note : Minimum dietary diversity refers to four or more food groups^B fed to children aged 6-23 months	30.1% 15.1%

B. CHILD HEALTH¹⁵

Prevalence of childhood illnesses (in children aged 0-59 months)

Had diarrhea in 15 days prior to survey	5.2%
Had fever in 15 days prior to survey	11.3%
Had symptoms of Acute Respiratory Infection (ARI) in 15 days prior to survey	6.3%

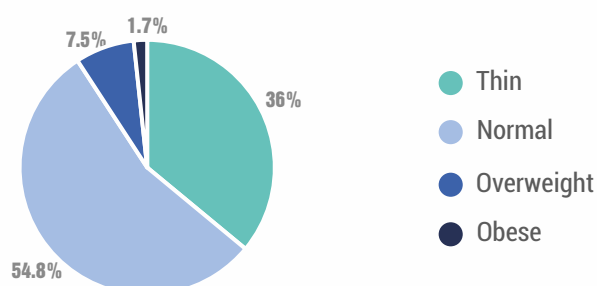
^B The 7 food groups include the following: i. grains, roots and tubers ii. legumes and nuts iii. dairy products (milk, yoghurt, cheese) iv. Flesh foods (meat, fish, poultry, and liver/organ meats) v. eggs vi. Vitamin-A rich fruits and vegetables vii. other fruits and vegetables.

C. NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

Maternal health and nutrition, as well as adolescent nutrition, have important consequences for intergenerational transmission of undernutrition. Data on Body Mass Index (BMI), anemia prevalence and height among women of reproductive age are presented in this section, as are data on adolescent BMI and anemia.

C.1. WOMEN 15-49 YEARS OLD¹⁶

BMI^c levels of women aged 15-49 years



^cBody Mass Index (BMI) is defined as the weight in kilograms by the square of the height in metres (kg/m²). It is a simple index of weight-for-height which is commonly used to classify underweight, overweight and obesity in adults. Range: BMI < 18.5 = total thin, BMI 18.5-24.9 = normal, BMI 25.0-29.9 = Overweight, BMI > 30.0 = Obese [per WHO Standards]



49.9%

Women aged 15-49 years are anemic

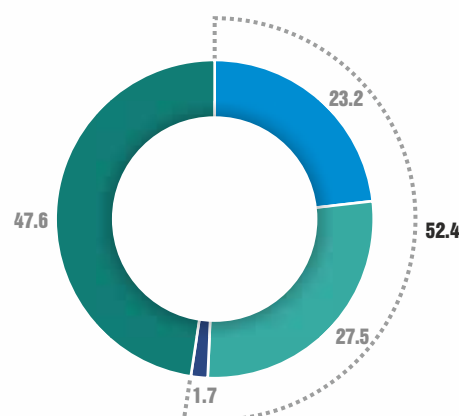
1.6%

Women aged 15-49 years are severely anemic

C.2. PREGNANT WOMEN¹⁶

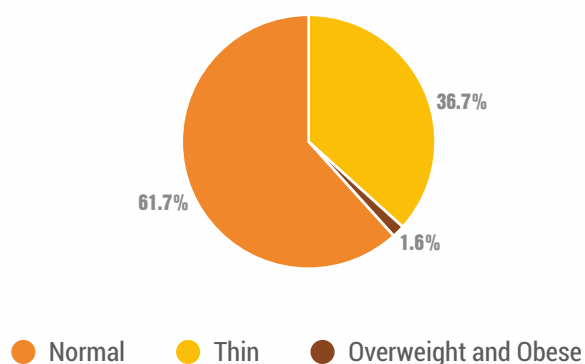
Anemia prevalence in pregnant women aged 15-49 years

● Mild ● Moderate ● Severe ● None ---- Any



C.3. ADOLESCENT GIRLS

BMI levels of adolescent girls aged 15-18 years¹⁷



48.6%

Adolescent girls aged 15-19 years are anemic¹⁶

1.6%

Adolescent girls aged 15-19 years are severely anemic¹⁶

¹⁶ Source : NFHS-3, 2006

¹⁷ Source : RSoC, 2014

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Women's status is recognized to contribute in significant ways to improving nutrition. This section presents indicators that are representative of women's social status, including measures of education, age at marriage and first birth, employment, decision making and domestic violence. It also includes the Gender Empowerment Measure that captures gender inequality along three dimensions: political participation and decision-making power, economic participation and decision-making power, and power over economic resources.



Currently married women who have 10 or more years of schooling¹⁸ **11.6%**



27.7% Women aged 20-24 years who were married before the age of 18¹⁹ | **20.2** Average age at marriage¹⁹

Gender Empowerment Measure^{D,20}

0.4

0.5

National Average²⁰



Female workforce participation rate²² **16.8%**

Currently married women who make decisions about²³:



27% Own healthcare



5.6% Major household purchase



27.4% Purchases for daily household needs



6.4% Visits to her family/friends/relatives



45% Women who have experienced any form of physical/sexual/emotional violence²³

47.7% Ever married women who justify hitting/wife-beating (for either of the reasons mentioned)²³

^D The Gender Empowerment Measure is a weighted average index based on indicators that are classified into three dimensions: a. political participation and decision-making power b. economic participation and decision-making power and c. power over economic resources. The index ranges from a minimum of 0 to a maximum of 1, with a higher score indicating greater empowerment of women. (More information available at <http://wcd.nic.in/publication/GDIGEReport/Part3.pdf>.)

¹⁸ Source : DLHS-3, 2007-08

¹⁹ Source : RSoC, 2014

²⁰ Source : MoWCD, 2006

²² Source : Women and Men in India, 16th Issue MoSPI, 2014

²³ Source : NFHS-3, 2006

B. WATER AND SANITATION

Poor hygiene and sanitation, by directly increasing exposure and susceptibility to infections, are associated with undernutrition among children. This section covers key indicators on access to safe drinking water and availability of sanitation facilities at the state level. It also includes the expenditure on toilet construction under the Total Sanitation Campaign.



97.5%

Households with access to improved sources of drinking water^{E, 24}

33.1%

Households using improved sanitation facility^{F, 24}



57.7%

Households practicing open defecation²⁴

298 M

Expenditure on toilets under Total Sanitation Campaign (TSC)^{G, 25}



1,065 M

National Average²⁵

C. AGRICULTURE AND FOOD SECURITY

Agriculture productivity and food security can affect household access to foods necessary for a healthy diet. Thus, this section presents indicators related to agricultural growth and food consumption patterns in the state, indicating the level of food security in the state relative to the national situation.



3%

Growth rate of agriculture from 2007-2012²⁶



19.39%

Share in India's total foodgrain production²⁷



Mean Calorie intake per person per day (in Kcal)²⁸

RURAL

URBAN

2200

2233

UTTAR PRADESH

INDIA AVG

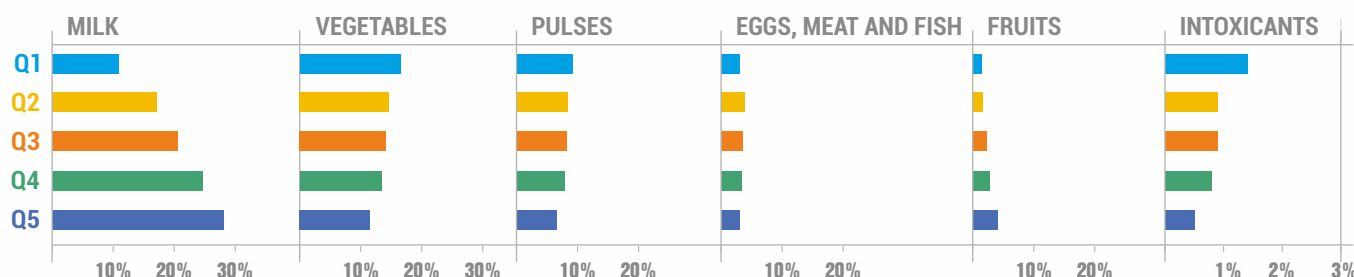
2144

2206

UTTAR PRADESH

INDIA AVG

Expenditure on food items by income quintiles²⁸



^E Improved sources of drinking water include: piped water into dwelling, piped water to yard/plot, public tap or standpipe, tubewell or borehole, protected dug well, protected spring, and rainwater (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>).

^F Improved sanitation means households using improved toilets that include: flush toilet, piped sewer system, septic tank, flush/pour flush to pit latrine, ventilated improved pit latrine, pit latrine with slab, composting toilet, special case (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>); excludes those households who are using improved toilets but sharing toilet facilities with other households.

^G Besides toilet construction subsidies, this expenditure also includes funding other activities such as solid and liquid waste management, IEC activities for sustainable demand generation for sanitation facilities, assistance to production centers of sanitary materials and rural sanitary marts, provision of construction of community sanitary complexes, provision of sanitation facilities in govt. schools and Anganwadis in govt. buildings etc.

²⁴ Source : RSoC, 2014

²⁵ Source : Indiastat, Rajya Sabha Unstarred Question No. 2950, dated on 30.08.2011, 2011-12

²⁶ Source : Indiastat, compiled by datanet from Rajyasabha & Lok Sabha unstarred questions no. 3039, 4535. 2007-12

²⁷ Source : Indiastat, Ministry of Agriculture, Government of India 2011-2012

²⁸ Source : NSSO, 68th round-Nutritional Intake in India, 2011-12

V. STATUS OF NUTRITION-RELEVANT INTERVENTIONS

A. NUTRITION-SPECIFIC INTERVENTIONS

The financial resources allocated to, and spent on direct nutrition-specific interventions can determine the scale, coverage and quality of interventions to reach vulnerable target populations. These services, in India, are delivered both by the Integrated Child Development Scheme (ICDS) and the National Health Mission (NHM). This section includes data on the coverage of interventions delivered by these two key centrally-sponsored schemes that directly impact maternal and child nutrition and health. We also include here information on the human resources and service availability of these schemes and expenditures.

A.1. COVERAGE OF ICDS AND NHM:

The Integrated Child Development Services (ICDS) aims to improve the nutrition and health status of children under-six through a package of services (supplementary nutrition, immunization, health check-up, referral services, etc.) delivered through frontline workers at the Anganwadi Centres (AWCs). This section provides information on expenditure on ICDS and coverage of its supplementary nutrition programme (SNP). This section also covers critical services provided by the health system, including provision of care for pregnant women and child immunization. Immunization plays a crucial role in complementing actions to improve nutrition. The link between undernutrition and infectious diseases is cyclical, poor nutrition increases vulnerability to infections, which in turn worsen nutrition status. Data on immunization among children are presented by residence. Here, full immunization refers to children covered with BCG, measles and 3 doses each of DPT and polio.

Beneficiaries who availed supplementary food under ICDS²⁹

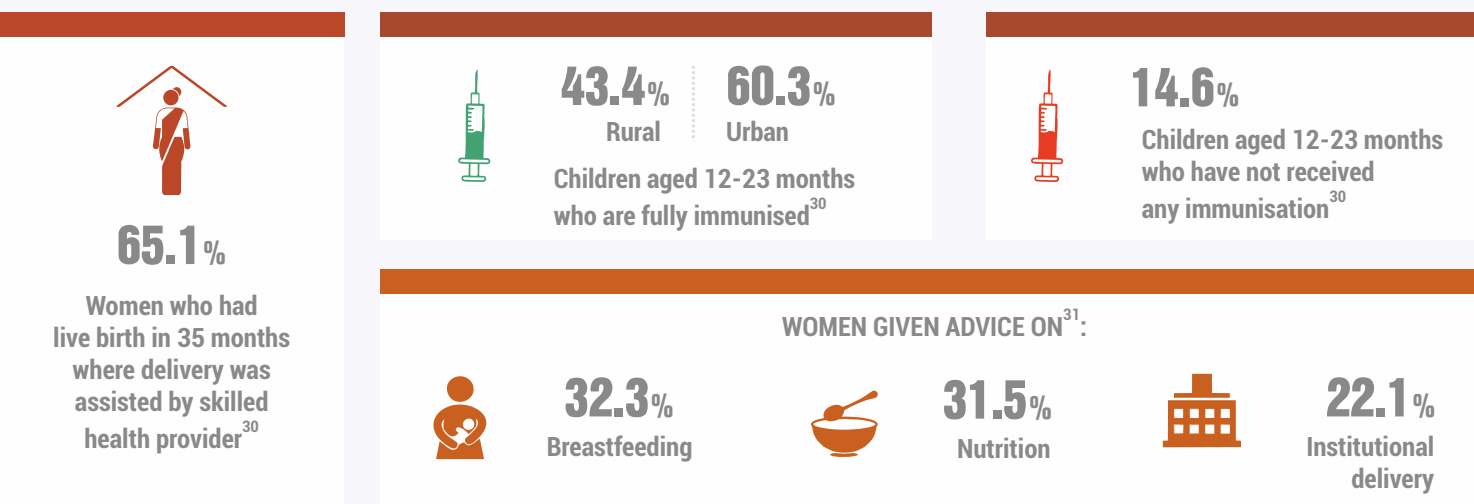
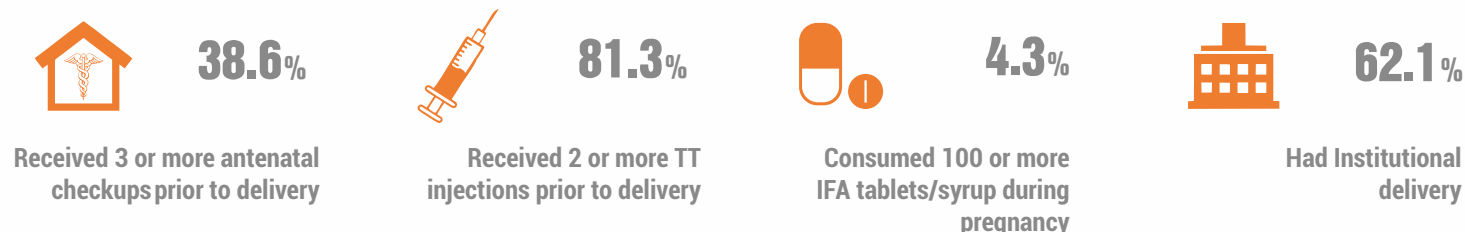
Children 6-35 months	22.8%
Children 36-71 months	22.5%
Pregnant women	23.8%
Lactating mothers	23.6%

Beneficiaries who received supplementary food for at least 21 days in the month prior to the survey

Children aged 6-35 months	15.5%
Children aged 36-71 months	12.4%
Pregnant women	12.7%
Lactating women	18.4%

²⁹ Source : RSoC, 2014

SERVICES PROVIDED TO WOMEN WHO HAD A LIVE BIRTH IN LAST 35 MONTHS³⁰



A.2. PERSONNEL CAPACITY OF ICDS AND NRHM:

This section features data on availability of healthcare personnel and services available to women of reproductive age (antenatal care, tetanus toxoid coverage, iron-folic acid supplementation coverage, institutional delivery and counseling). Household and individual access to health services can directly impact children's nutrition and welfare during the crucial first 1,000 days of life.

Availability of Anganwadi Centres and Workers (AWCs and AWWs) ^{H, 30}	Value
Pending or vacant Anganwadi workers to sanctioned number of workers ^{30a}	4.8%
AWWs living in the AWC village/ward	80.6%
AWWs having 10 or more years of schooling	96%
Median age of AWWs	38 years
AWCs serving to population more than the stipulated norm	92.1%

Growth Monitoring ³⁰	Value
AWCs having functional baby weighing scale	49.9%
AWCs having functional adult weighing scale	34.4%
Available WHO growth chart at AWCs	80.1%

^H Number of AWCs surveyed for Uttar Pradesh as per RSoC 2014 is 714.

³⁰ Source : RSoC, 2014

^{30a} Source : MoWCD, 2012

³¹ Source : DLHS-3, 2007-08

Training and Comprehensive Knowledge ³²	Value
AWWs having correct knowledge of intake of food by pregnant women	88.6%
AWWs having correct knowledge of normal birth weight of children	81.5%
AWWs having correct knowledge of initiation of breastfeeding within one hour	95.6%
AWWs having correct knowledge of exclusive breastfeeding for the first six months	95.8%
AWWs having correct knowledge of appropriate age of child for complementary feeding	50%

Health Service Delivery Personnel	Value
ASHAs selected ³³	85%
Current density of ASHA as per Census 2011 rural population ³³	1 per 1,140 persons
Pending or vacant ANM positions sub centres & PHCs ³⁴	NA

A.3. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SPECIFIC INTERVENTIONS

Expenditure on Schemes (in million dollars)	In million USD	National Average
ICDS (ICDS general + SNP + training) (women and children) ³⁵	417	75
NRHM expenditure (Central Government) ³⁶	362.4	68.8
NRHM expenditure (State Government) ³⁶	-45.6	9.3

B. NUTRITION-SENSITIVE INTERVENTIONS

This section includes information on expenditure and coverage of key centrally-sponsored schemes that indirectly impact maternal and child nutrition. These are: the Mid Day Meal Scheme (MDMS), Public Distribution System (PDS), and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

B.1. COVERAGE OF SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS

Coverage of Schemes	Value
MDMS (base: eligible children*) ³⁷	32.5%
PDS (base: rural and urban households reporting consumption) ³⁸	24.4%
MGNREGA (base: rural persons 18 years and above registered in MGNREG job card and demanded work during last 365 days) ³⁹	84.1%

* All children studying in primary & upper primary classes in schools supported under Sarva Shiksha Abhiyan and NCLP (National Child Labour Project) run by Ministry of Labour.

B.2. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS:

Expenditure on Schemes (in million dollars)	In million USD	National Average
MDMS ⁴⁰	184	47
PDS ⁴¹	2349.3	475.3
MGNREGA ⁴²	444	214

³² Source : RSoC, 2014

³³ Source : NRHM, 2013

³⁴ Source : MoHFW, 2013

³⁵ Source : Lok Sabha Unstarred Question # 846 dated 27.02.2015, 2012-13

³⁶ Source : Lok Sabha Annexured Unstarred Question # 409 dated 6.12.2013, 2012-13

³⁷ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/lsq15/15/as216.htm 2011-12

³⁸ Source : Report No. 558, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

³⁹ Source : Report No. 554, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

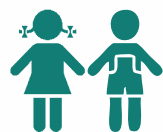
⁴⁰ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014, 2012-13

⁴¹ Source : Food Corporation of India 2013, 2012-13

⁴² Source : Lok Sabha Annexured Unstarred Question # 3835 dated 19.03.2015, 2012-13

FAST FACTS ON NUTRITION AND ITS DETERMINANTS IN UTTARAKHAND

World Health Assembly Nutrition Targets



CHILDREN UNDER 5 YEARS

34%
Stunted¹
9.3%
Wasted¹

World Health Assembly Nutrition Targets


48.1%

 Infants 0-5 months old who are exclusively breastfed¹

14.2%

 Children under 3 years who have low birth weight (<2.5 kgs)²

55.2%

 Women 15-49 years old with anemia¹

Immediate Determinants


60.4%

 Infants 6-8 months old who receive solid, semi-solid or soft foods²
21.4%

 Infants & young children 6-23 months old who achieve minimal diet diversity in complementary feeding²

61.4%

 Children 6-59 months old with anemia¹

3.2%

 Children 6-59 months old who had diarrhea in 15 days prior to survey²

Immediate Determinants


15.2%

 Children 6-35 months old who received supplementary food under ICDS for 21 days in the month prior to survey²

68.6%

 Children 12-23 months old who are fully immunized²

52%

 Mothers of children under 36 months old who received three or more antenatal checkups²

Underlying Determinants


26.7%

 Currently married women with 10 or more years of schooling¹

11.9%

 Women aged 20-24 years who were married before the age of 18²

32%

 Adolescent girls 15-18 years old with low BMI (<18.5)²

Underlying Determinants


21.6%

 Households practicing open defecation²

11.3%

 Population below state-specific poverty line³

Does state have a high-level nutrition mission?

NO
¹ Source : RSoC, 2014

² Source : NFHS-3, 2006

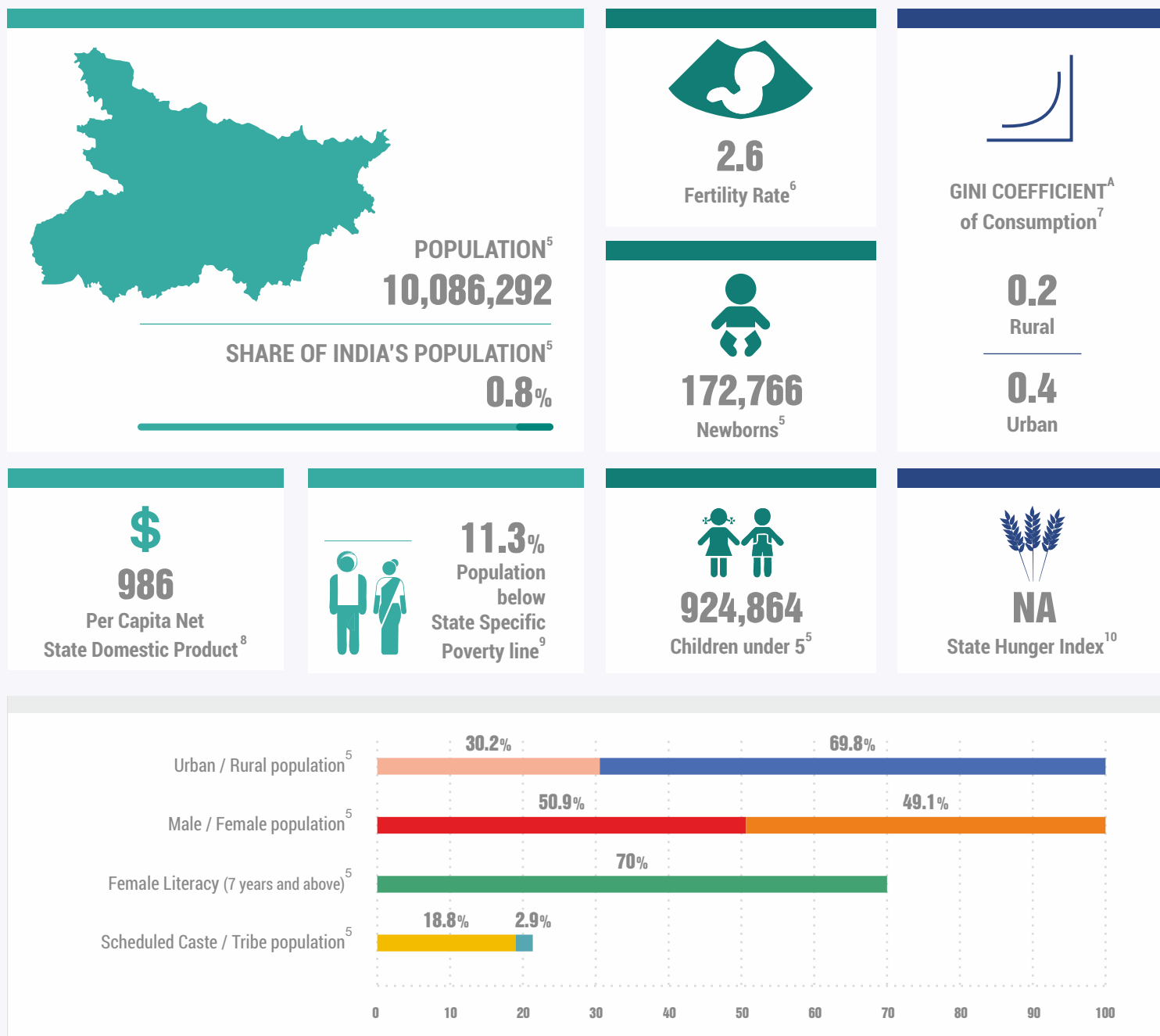
³ Source : DLHS-3, 2007-08

⁴ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Govt. of India

I. CONTEXT

A. DEMOGRAPHIC CONTEXT

This section highlights the demographic composition of the state in terms of male-female, rural-urban, and SC-ST ratios, literacy and fertility rates. In addition, it also includes the size of the population of newborns and children less than five years of age (as of the Census of India, 2011) to illustrate the size of the target population for nutrition-related interventions that need to reach this vulnerable population.



A : Gini coefficient is a measure of inequality of distribution. A Gini coefficient of 0 represents perfect equality, while a value of 100 implies perfect inequality. (See Appendix A for more information)

⁵ Source : Primary Census Abstract, Census, 2011

⁶ Source : SRS, 2009

⁷ Source : Planning Commission Estimates: NSSO 66th round-Employment and Unemployment Survey, 2009-10

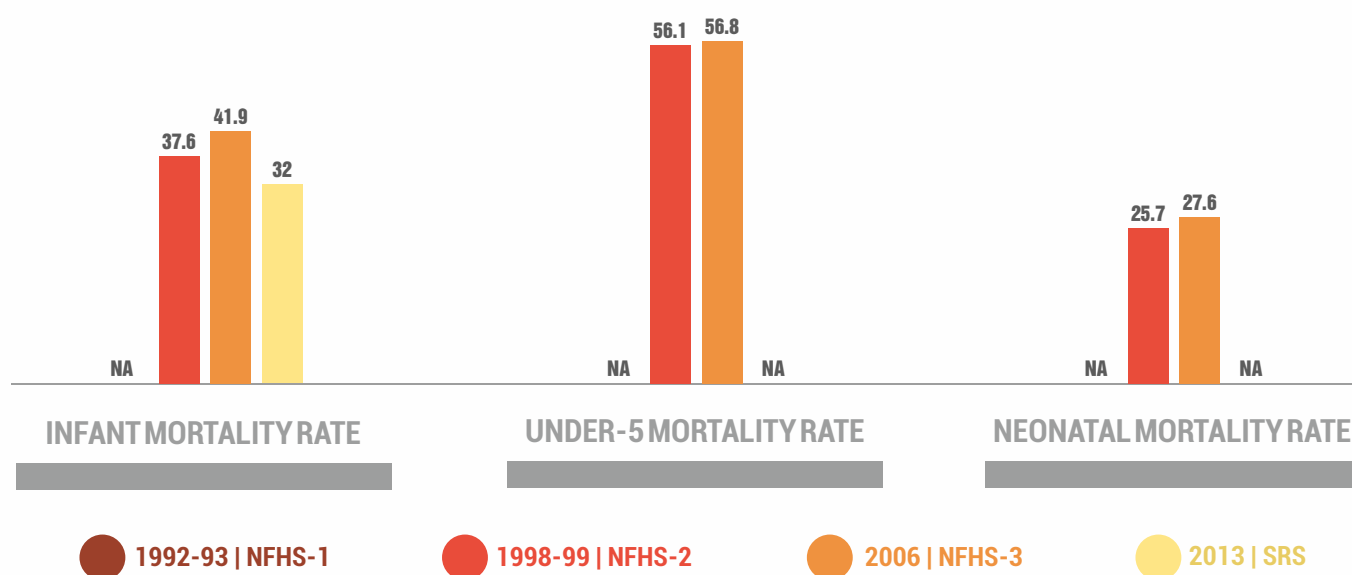
⁸ Source : Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14; http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82

⁹ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Government of India, 2011-12 : http://planningcommission.nic.in/news/pre_pov2307.pdf

¹⁰ Source : IFPRI, India State Hunger Index, 2009

B. CHILD MORTALITY PER THOUSAND LIVE BIRTHS

This section illustrates trends in mortality in neonates, infants and children under 5 years, since 1992. The purpose of this is to highlight the success achieved by individual states in averting deaths of children since the economic growth of the 1990s.



II. NUTRITIONAL STATUS AMONG CHILDREN

This section presents data on nutrition outcome indicators (stunting, wasting, and underweight) and anemia prevalence. Anthropometric measures for children under 5 (stunting, wasting, and underweight) are presented over time periods, by age groups and by background characteristics. This data aims to convey the prevalence and severity of undernutrition in the state.

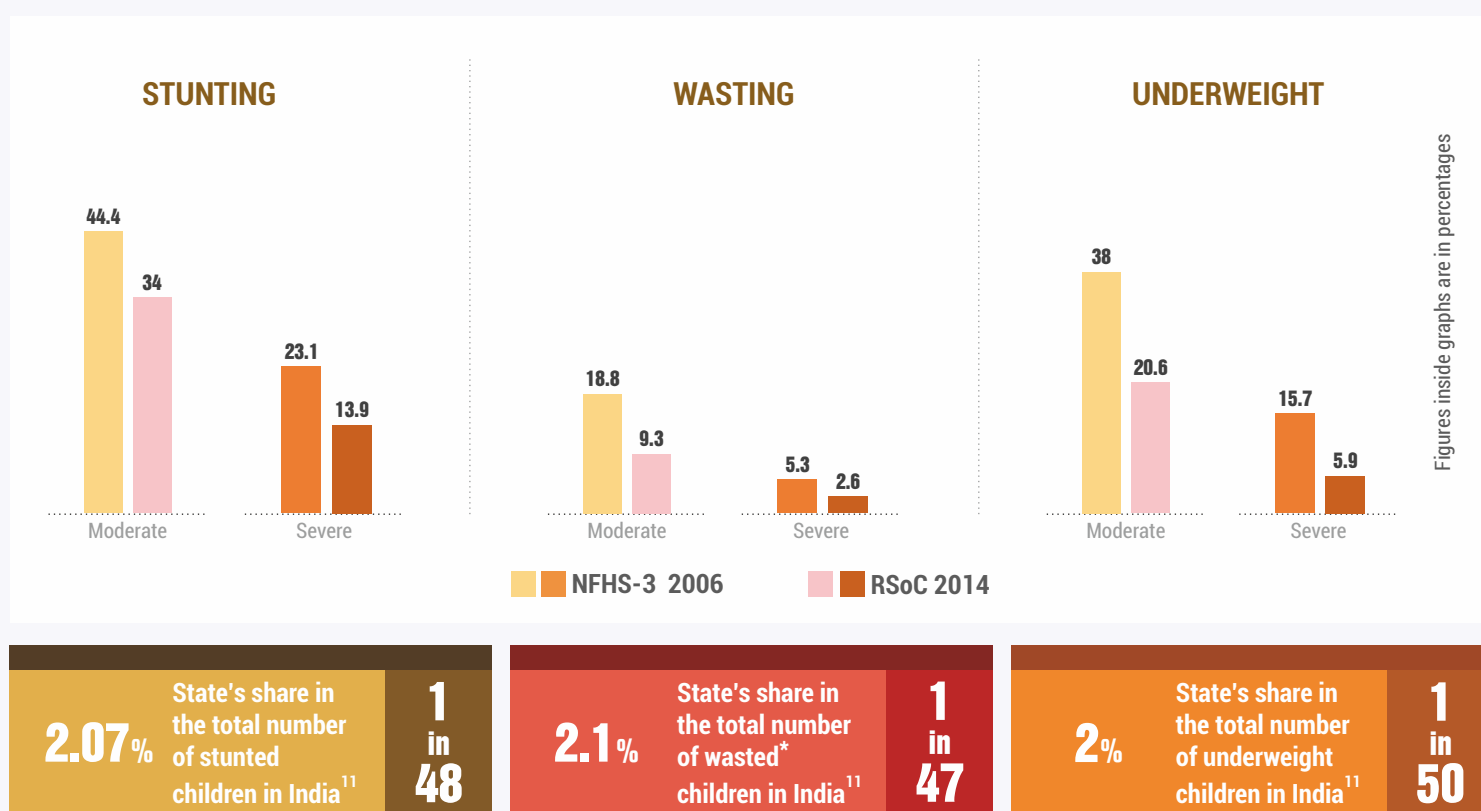
A. CHILD UNDERNUTRITION, BY TIME PERIOD

ANTHROPOMETRIC MEASURES

Stunting is inadequate height for age, which is indicative of chronic or cumulative nutritional deprivation in early childhood. A stunted child's height-for-age is below -2 standard deviations from the median height-for-age (termed HAZ) of the WHO Child Growth Standards, while a severely stunted child is below -3 standard deviations.

Wasting is inadequate weight for height, which points to acute or short-term undernutrition. A wasted child's weight-for-height (WHZ) is below -2 standard deviations from the WHO Child Growth Standards; a severely wasted child is below -3 standard deviations. (Another way to determine severe wasting or severe acute malnutrition is through a measurement of a child's mid-upper arm circumference (MUAC).

Underweight is inadequate weight for age, a composite indicator that encompasses stunting and wasting. An underweight child's weight-for-age (WAZ) is below -2 standard deviations from the WHO Child Growth Standards; again, a severely underweight child is below -3 standard deviations.

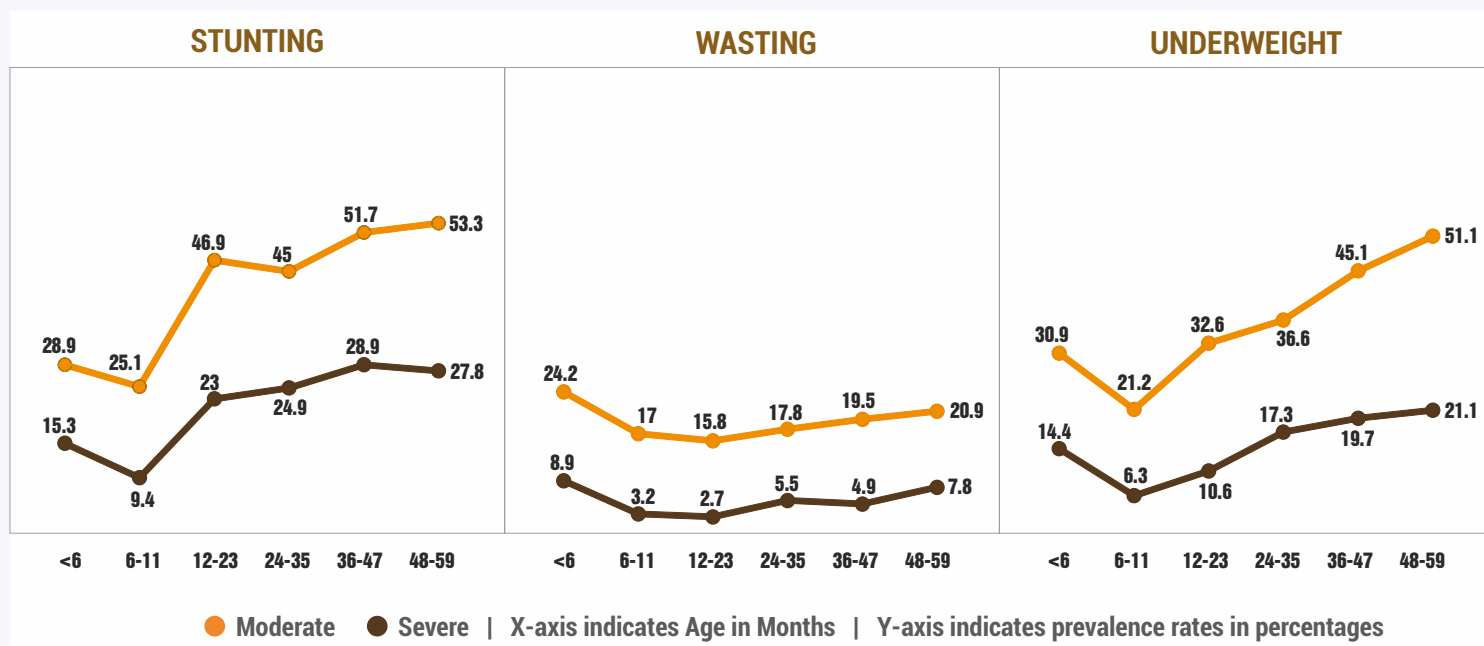


*Wasting is subject to seasonal variations either in food supply or disease prevalence and hence may not be comparable across groups of children measured at different times of the year within a survey round as well as between different survey rounds.

¹¹ Source : NFHS-3, 2006

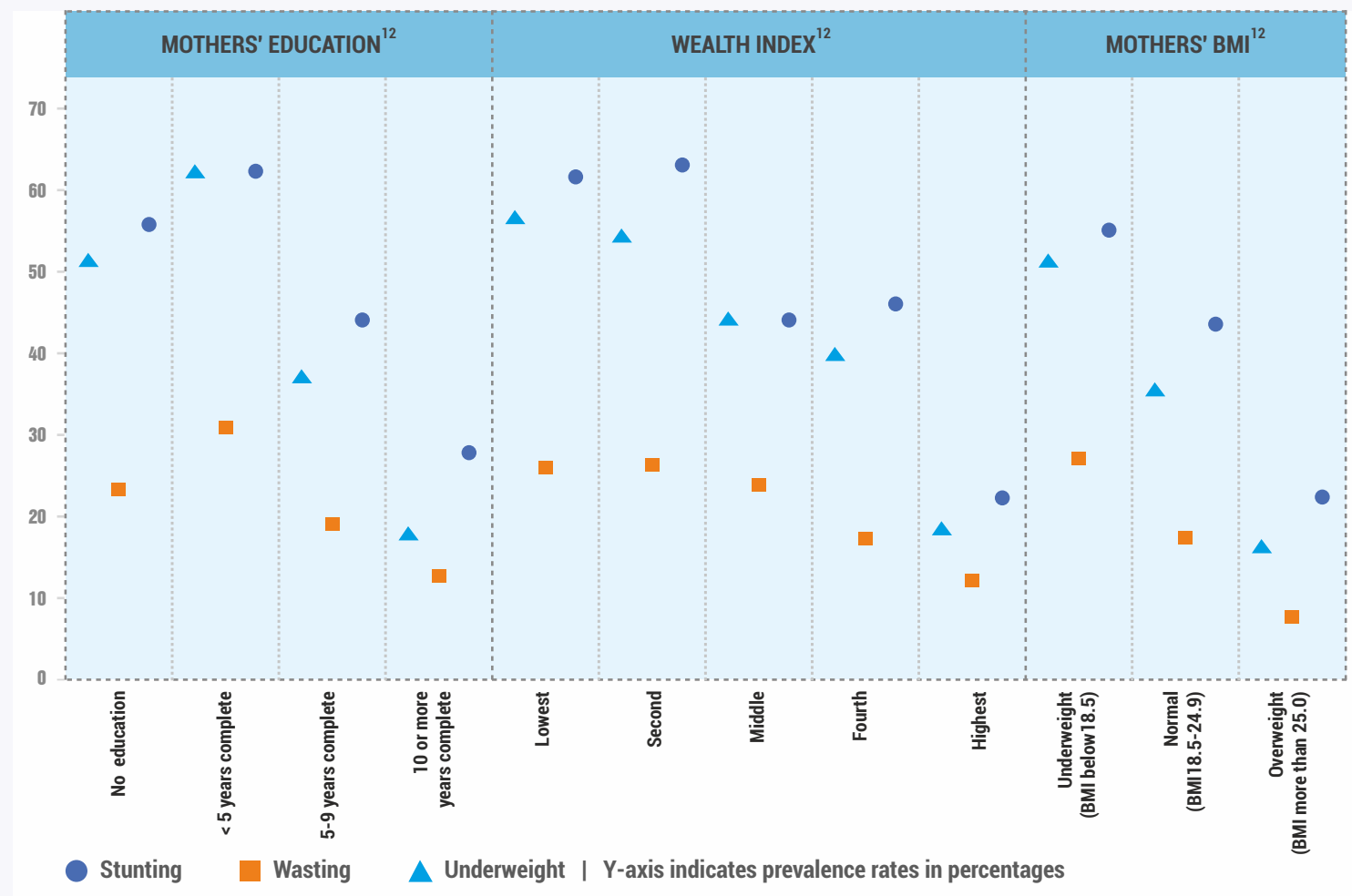
B. CHILD UNDERNUTRITION, BY AGE GROUPS¹²

Percentage of moderate (below -2 SD from the WHO growth standards) and severe (below -3 SD) stunting, wasting and underweight are available for 6 age groups among children under 5.



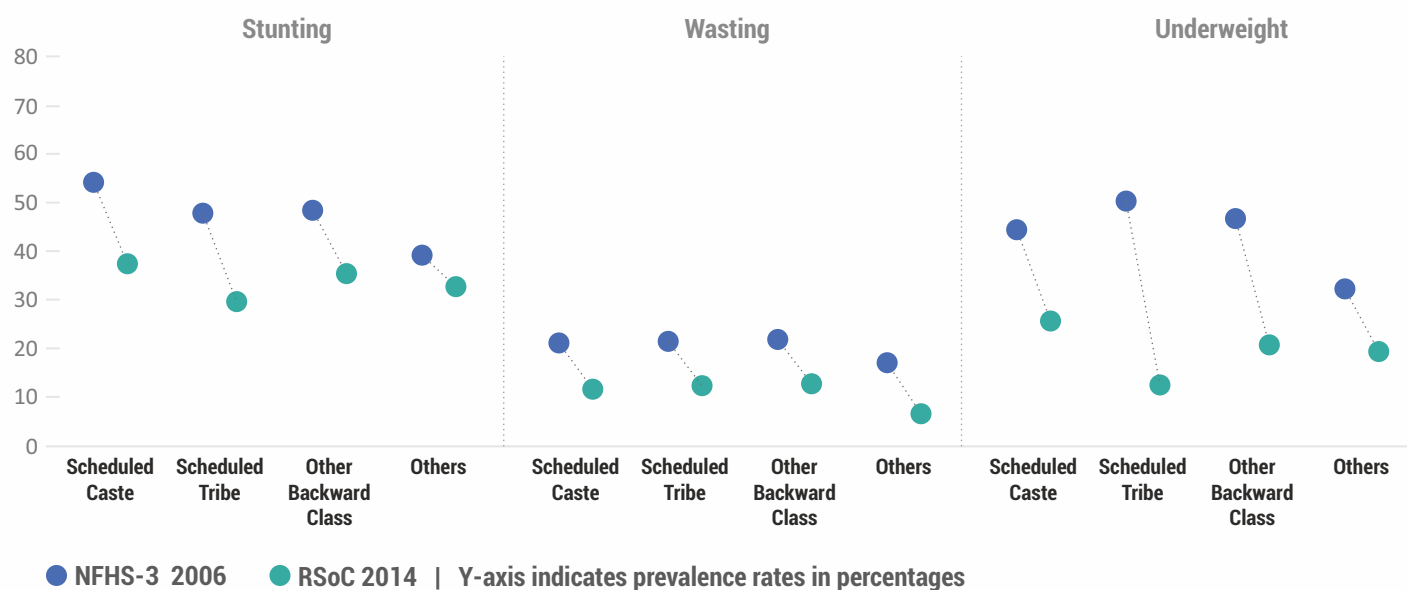
C. PREVALENCE OF CHILD UNDERNUTRITION, BY BACKGROUND CHARACTERISTICS

In this section, child undernutrition outcomes are presented, along with key socioeconomic drivers that are known to be associated with child nutrition, such as caste, residence, mother's health and education, and household income.

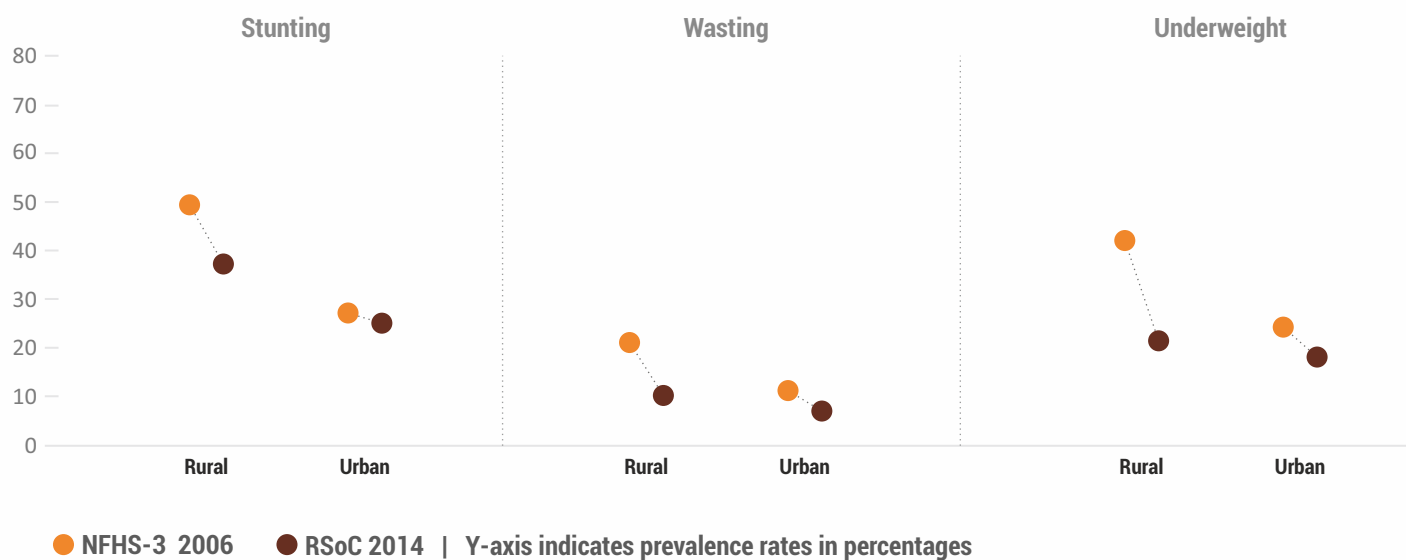


¹² Source : NFHS-3, 2006

CASTE

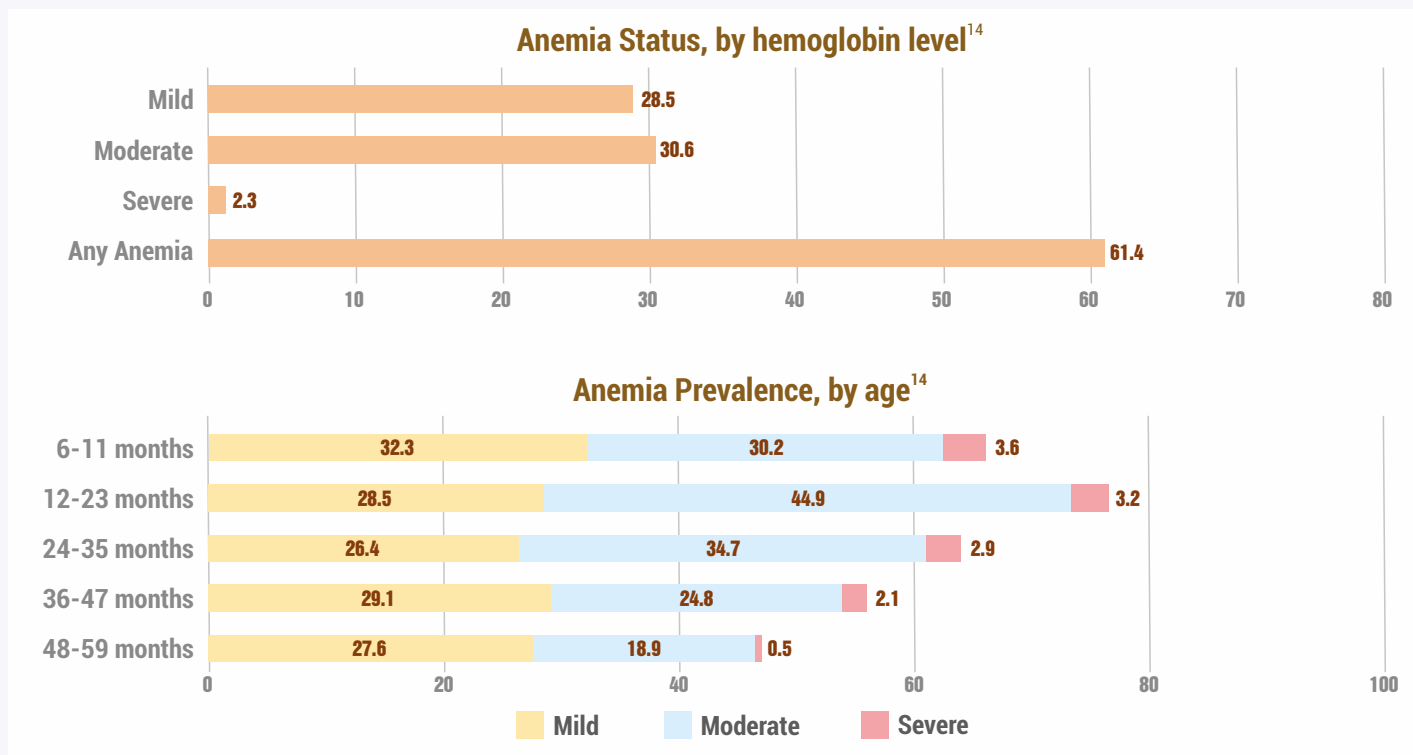


RESIDENCE



D. ANEMIA PREVALENCE

Anemia can impair physical and cognitive development among children and create long term impacts on productivity and wellbeing. This section features data on anemia prevalence by severity and age groups for children under 5.



¹⁴ Source : NFHS-3, 2006

III. IMMEDIATE DETERMINANTS

A. INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES¹⁵

This section presents indicators for assessing IYCF practices as recommended by the WHO and revised in 2008. Following optimal IYCF practices during the first 1,000 days is crucial for early child survival and growth as well as long-term health and wellbeing.

Children aged 0-23 months breastfed immediately/within an hour of birth		48.1%
	Children aged 0-5 months who were exclusively breastfed	48.1%
	Children aged 6-8 months who were fed complementary foods	60.4%
	For breastfed children (6-23 months)- A. Fed minimum number of times. Note : At least twice a day for breastfed infants 6-8 months old and at least three times a day for breastfed children 9-23 months old B. Had minimum dietary diversity Note : Minimum dietary diversity refers to four or more food groups^B fed to children aged 6-23 months	47.7% 21.4%

B. CHILD HEALTH¹⁵

Prevalence of childhood illnesses (in children aged 0-59 months)	
Had diarrhea in 15 days prior to survey	3.2%
Had fever in 15 days prior to survey	9.3%
Had symptoms of Acute Respiratory Infection (ARI) in 15 days prior to survey	6.1%

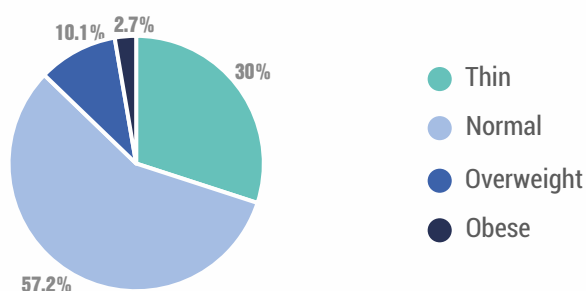
^B The 7 food groups include the following: i. grains, roots and tubers ii. legumes and nuts iii. dairy products (milk, yoghurt, cheese) iv. Flesh foods (meat, fish, poultry, and liver/organ meats) v. eggs vi. Vitamin-A rich fruits and vegetables vii. other fruits and vegetables.

C. NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

Maternal health and nutrition, as well as adolescent nutrition, have important consequences for intergenerational transmission of undernutrition. Data on Body Mass Index (BMI), anemia prevalence and height among women of reproductive age are presented in this section, as are data on adolescent BMI and anemia.

C.1. WOMEN 15-49 YEARS OLD¹⁶

BMI^c levels of women aged 15-49 years



^cBody Mass Index (BMI) is defined as the weight in kilograms by the square of the height in metres (kg/m²). It is a simple index of weight-for-height which is commonly used to classify underweight, overweight and obesity in adults. Range: BMI < 18.5 = total thin, BMI 18.5-24.9 = normal, BMI 25.0-29.9 = Overweight, BMI > 30.0 = Obese [per WHO Standards]



55.2%

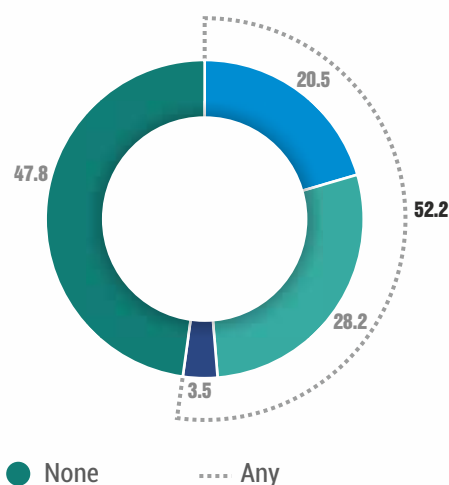
Women aged 15-49 years are anemic

1.5%

Women aged 15-49 years are severely anemic

C.2. PREGNANT WOMEN¹⁶

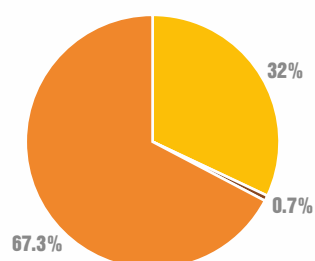
Anemia prevalence in pregnant women aged 15-49 years



● Mild ● Moderate ● Severe ● None ---- Any

C.3. ADOLESCENT GIRLS

BMI levels of adolescent girls aged 15-18 years¹⁷



● Normal ● Thin ● Overweight and Obese



59.3%

Adolescent girls aged 15-19 years are anemic¹⁶

1.7%

Adolescent girls aged 15-19 years are severely anemic¹⁶

¹⁶ Source : NFHS-3, 2006

¹⁷ Source : RSoC, 2014

IV. UNDERLYING DETERMINANTS

A. SOCIAL STATUS OF WOMEN

Women's status is recognized to contribute in significant ways to improving nutrition. This section presents indicators that are representative of women's social status, including measures of education, age at marriage and first birth, employment, decision making and domestic violence. It also includes the Gender Empowerment Measure that captures gender inequality along three dimensions: political participation and decision-making power, economic participation and decision-making power, and power over economic resources.



Currently married women who have 10 or more years of schooling¹⁸ **26.7%**



11.9% Women aged 20-24 years who were married before the age of 18¹⁹

21.1 Average age at marriage¹⁹

Gender Empowerment Measure^{D,20}

0.5

0.5

National Average²⁰



Female workforce participation rate²² **26.7%**

Currently married women who make decisions about²³:



24.1% Own healthcare



6.9% Major household purchase



29.3% Purchases for daily household needs



15.1% Visits to her family/friends/relatives



29.8% Women who have experienced any form of physical/sexual/emotional violence²³

51.7% Ever married women who justify hitting/wife-beating (for either of the reasons mentioned)²³

^D The Gender Empowerment Measure is a weighted average index based on indicators that are classified into three dimensions: a. political participation and decision-making power b. economic participation and decision-making power and c. power over economic resources. The index ranges from a minimum of 0 to a maximum of 1, with a higher score indicating greater empowerment of women. (More information available at <http://wcd.nic.in/publication/GDIGEReport/Part3.pdf>.)

¹⁸ Source : DLHS-3, 2007-08

¹⁹ Source : RSoC, 2014

²⁰ Source : MoWCD, 2006

²² Source : Women and Men in India, 16th Issue MoSPI, 2014

²³ Source : NFHS-3, 2006

B. WATER AND SANITATION

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97.8%

Households with access to improved sources of drinking water^{E, 24}

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Households practicing open defecation²⁴

8.4 M

Expenditure on toilets under Total Sanitation Campaign (TSC)^{G, 25}



1,065 M

National Average²⁵

C. AGRICULTURE AND FOOD SECURITY

Agriculture productivity and food security can affect household access to foods necessary for a healthy diet. Thus, this section presents indicators related to agricultural growth and food consumption patterns in the state, indicating the level of food security in the state relative to the national situation.



3%

Growth rate of agriculture from 2007-2012²⁶



0.7%

Share in India's total foodgrain production²⁷



Mean Calorie intake per person per day (in Kcal)²⁸

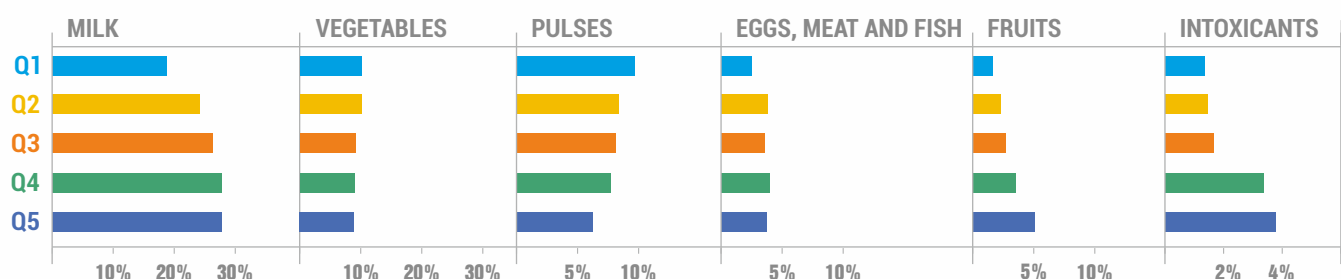
RURAL

NA 2233
UTTARAKHAND INDIA AVG

URBAN

NA 2206
UTTARAKHAND INDIA AVG

Expenditure on food items by income quintiles²⁸



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²⁴ Source : RSoC, 2014

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Beneficiaries who availed supplementary food under ICDS²⁹

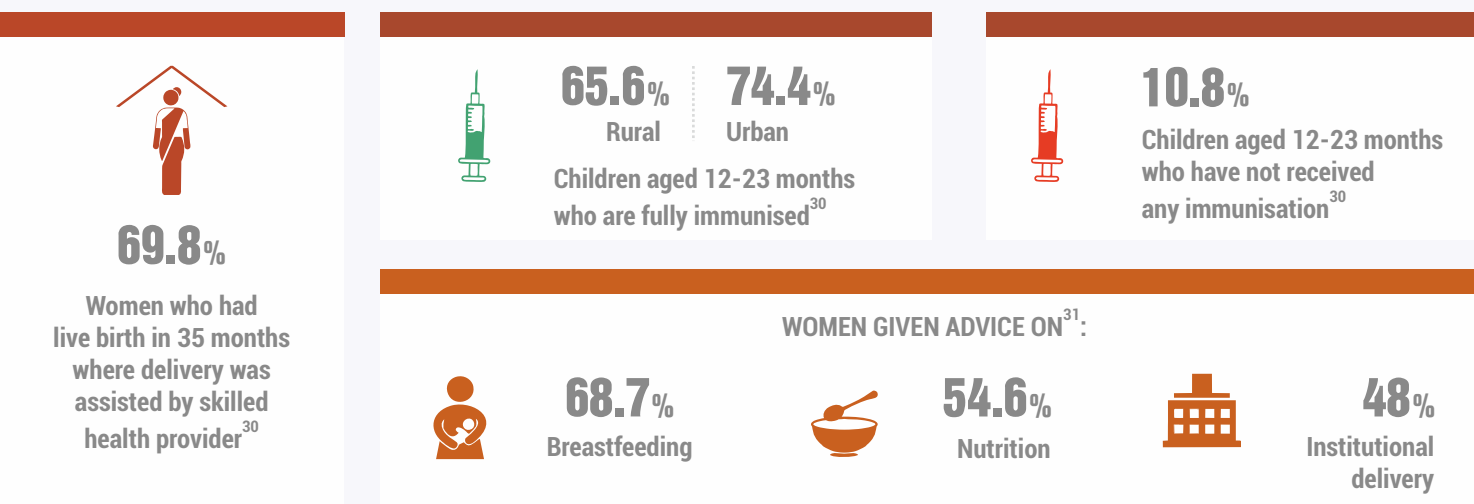
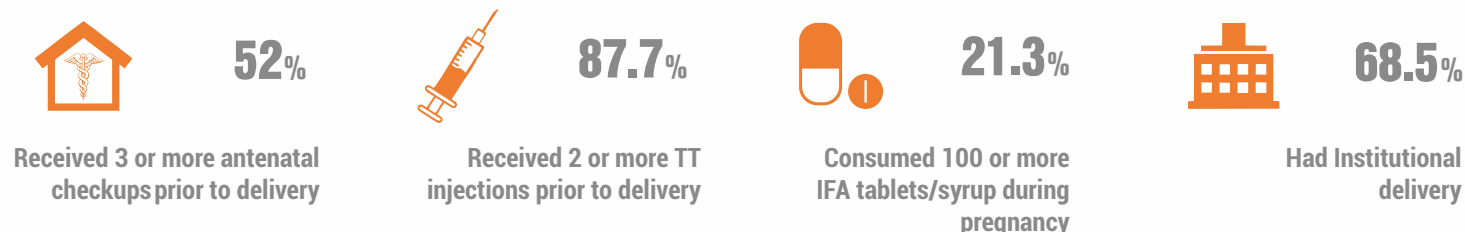
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Children 36-71 months	24.2%
Pregnant women	12.3%
Lactating mothers	21%

Beneficiaries who received supplementary food for at least 21 days in the month prior to the survey

Children aged 6-35 months	15.2%
Children aged 36-71 months	14.9%
Pregnant women	0%
Lactating women	14.7%

²⁹ Source : RSoC, 2014

SERVICES PROVIDED TO WOMEN WHO HAD A LIVE BIRTH IN LAST 35 MONTHS³⁰



A.2. PERSONNEL CAPACITY OF ICDS AND NRHM:

This section features data on availability of healthcare personnel and services available to women of reproductive age (antenatal care, tetanus toxoid coverage, iron-folic acid supplementation coverage, institutional delivery and counseling). Household and individual access to health services can directly impact children's nutrition and welfare during the crucial first 1,000 days of life.

Availability of Anganwadi Centres and Workers (AWCs and AWWs) ^{H, 30}	Value
Pending or vacant Anganwadi workers to sanctioned number of workers ^{30a}	23.1%
AWWs living in the AWC village/ward	78.7%
AWWs having 10 or more years of schooling	91.8%
Median age of AWWs	35 years
AWCs serving to population more than the stipulated norm	19.5%

Growth Monitoring ³⁰	Value
AWCs having functional baby weighing scale	70.2%
AWCs having functional adult weighing scale	14.5%
Available WHO growth chart at AWCs	82.6%

^H Number of AWCs surveyed for Uttarakhand as per RSoC 2014 is 144.

³⁰ Source : RSoC, 2014

^{30a} Source : MoWCD, 2012

³¹ Source : DLHS-3, 2007-08

Training and Comprehensive Knowledge ³²	Value
AWWs having correct knowledge of intake of food by pregnant women	72.1%
AWWs having correct knowledge of normal birth weight of children	74%
AWWs having correct knowledge of initiation of breastfeeding within one hour	96.9%
AWWs having correct knowledge of exclusive breastfeeding for the first six months	90.6%
AWWs having correct knowledge of appropriate age of child for complementary feeding	72.6%

Health Service Delivery Personnel	Value
ASHAs selected ³³	100%
Current density of ASHA as per Census 2011 rural population ³³	1 per 634 persons
Pending or vacant ANM positions sub centres & PHCs ³⁴	0%

A.3. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SPECIFIC INTERVENTIONS

Expenditure on Schemes (in million dollars)	In million USD	National Average
ICDS (ICDS general + SNP + training) (women and children) ³⁵	20	75
NRHM expenditure (Central Government) ³⁶	28.5	68.8
NRHM expenditure (State Government) ³⁶	9.8	9.3

B. NUTRITION-SENSITIVE INTERVENTIONS

This section includes information on expenditure and coverage of key centrally-sponsored schemes that indirectly impact maternal and child nutrition. These are: the Mid Day Meal Scheme (MDMS), Public Distribution System (PDS), and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

B.1. COVERAGE OF SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS

Coverage of Schemes	Value
MDMS (base: eligible children*) ³⁷	51.4%
PDS (base: rural and urban households reporting consumption) ³⁸	64.1%
MGNREGA (base: rural persons 18 years and above registered in MGNREG job card and demanded work during last 365 days) ³⁹	87.2%

* All children studying in primary & upper primary classes in schools supported under Sarva Shiksha Abhiyan and NCLP (National Child Labour Project) run by Ministry of Labour.

B.2. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS:

Expenditure on Schemes (in million dollars)	In million USD	National Average
MDMS ⁴⁰	21	47
PDS ⁴¹	173.1	475.3
MGNREGA ⁴²	52	214

³² Source : RSoC, 2014

³³ Source : NRHM, 2013

³⁴ Source : MoHFW, 2013

³⁵ Source : Lok Sabha Unstarred Question # 846 dated 27.02.2015, 2012-13

³⁶ Source : Lok Sabha Annexured Unstarred Question # 409 dated 6.12.2013, 2012-13

³⁷ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/lsq15/15/as216.htm 2011-12

³⁸ Source : Report No. 558, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

³⁹ Source : Report No. 554, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

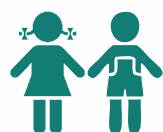
⁴⁰ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014, 2012-13

⁴¹ Source : Food Corporation of India 2013, 2012-13

⁴² Source : Lok Sabha Annexured Unstarred Question # 3835 dated 19.03.2015, 2012-13

FAST FACTS ON NUTRITION AND ITS DETERMINANTS IN WEST BENGAL

World Health Assembly Nutrition Targets



CHILDREN UNDER 5 YEARS

34.7%
Stunted¹
15.3%
Wasted¹

World Health Assembly Nutrition Targets


59.4%

 Infants 0-5 months old who are exclusively breastfed¹

16.9%

 Children under 3 years who have low birth weight (<2.5 kgs)¹

76.3%

 Women 15-49 years old with anemia²

Immediate Determinants


67.7%

 Infants 6-8 months old who receive solid, semi-solid or soft foods¹
33.7%

 Infants & young children 6-23 months old who achieve minimal diet diversity in complementary feeding¹

86.4%

 Children 6-59 months old with anemia²

3.5%

 Children 6-59 months old who had diarrhea in 15 days prior to survey¹

Immediate Determinants


0%

 Children 6-35 months old who received supplementary food under ICDS for 21 days in the month prior to survey¹

75.2%

 Children 12-23 months old who are fully immunized¹

89.7%

 Mothers of children under 36 months old who received three or more antenatal checkups¹

Underlying Determinants


22.6%

 Currently married women with 10 or more years of schooling²

44.7%

 Women aged 20-24 years who were married before the age of 18¹

34.5%

 Adolescent girls 15-18 years old with low BMI (<18.5)¹

Underlying Determinants


28.3%

 Households practicing open defecation¹

20%

 Population below state-specific poverty line³

Does state have a high-level nutrition mission?

NO
¹ Source : RSoC, 2014

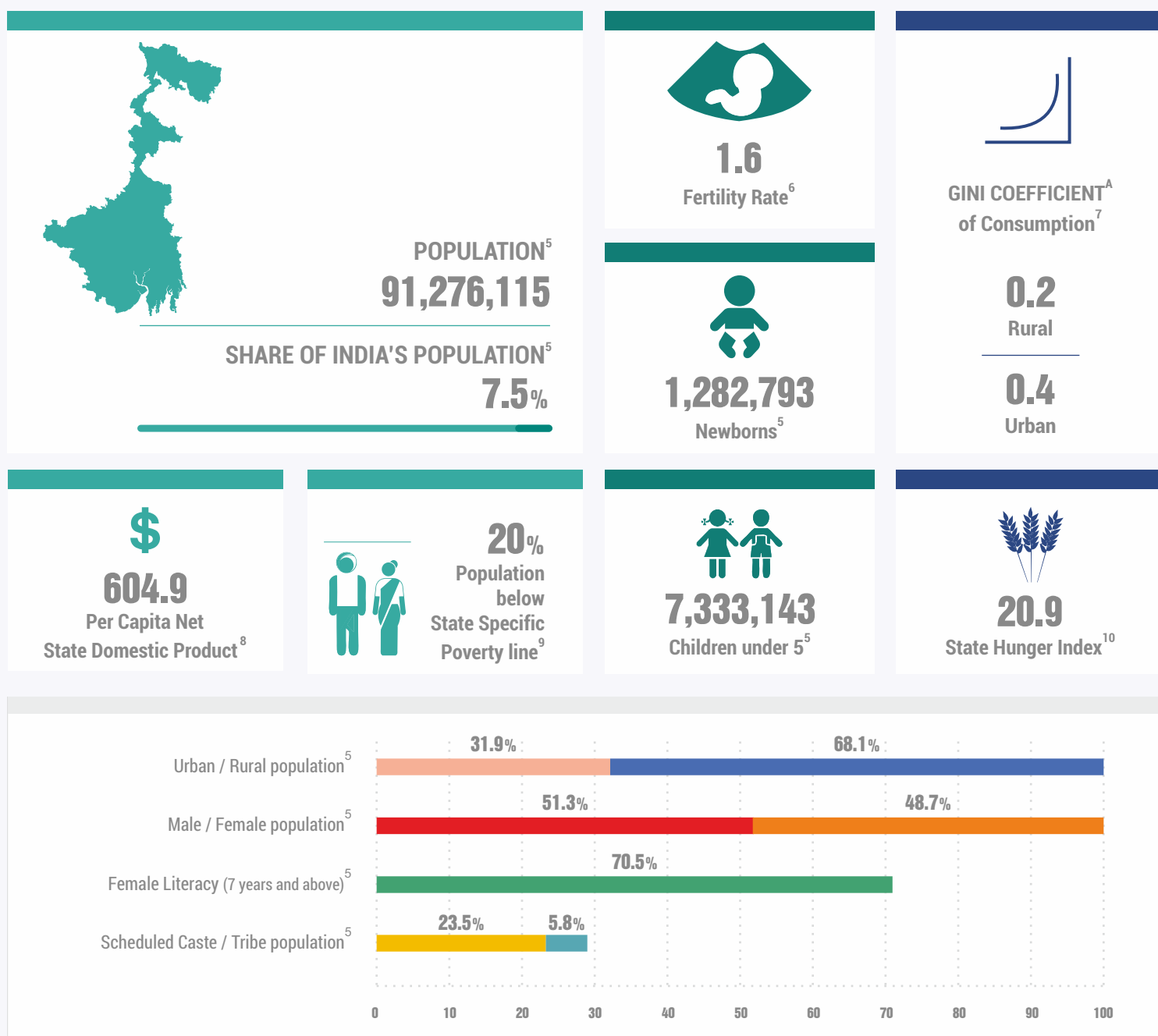
² Source : DLHS4, 2012-13

³ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Govt. of India

I. CONTEXT

A. DEMOGRAPHIC CONTEXT

This section highlights the demographic composition of the state in terms of male-female, rural-urban, and SC-ST ratios, literacy and fertility rates. In addition, it also includes the size of the population of newborns and children less than five years of age (as of the Census of India, 2011) to illustrate the size of the target population for nutrition-related interventions that need to reach this vulnerable population.



A : Gini coefficient is a measure of inequality of distribution. A Gini coefficient of 0 represents perfect equality, while a value of 100 implies perfect inequality. (See Appendix A for more information)

⁵ Source : Primary Census Abstract, Census, 2011

⁶ Source : SRS, 2013

⁷ Source : Planning Commission Estimates: NSSO 66th round-Employment and Unemployment Survey, 2009-10

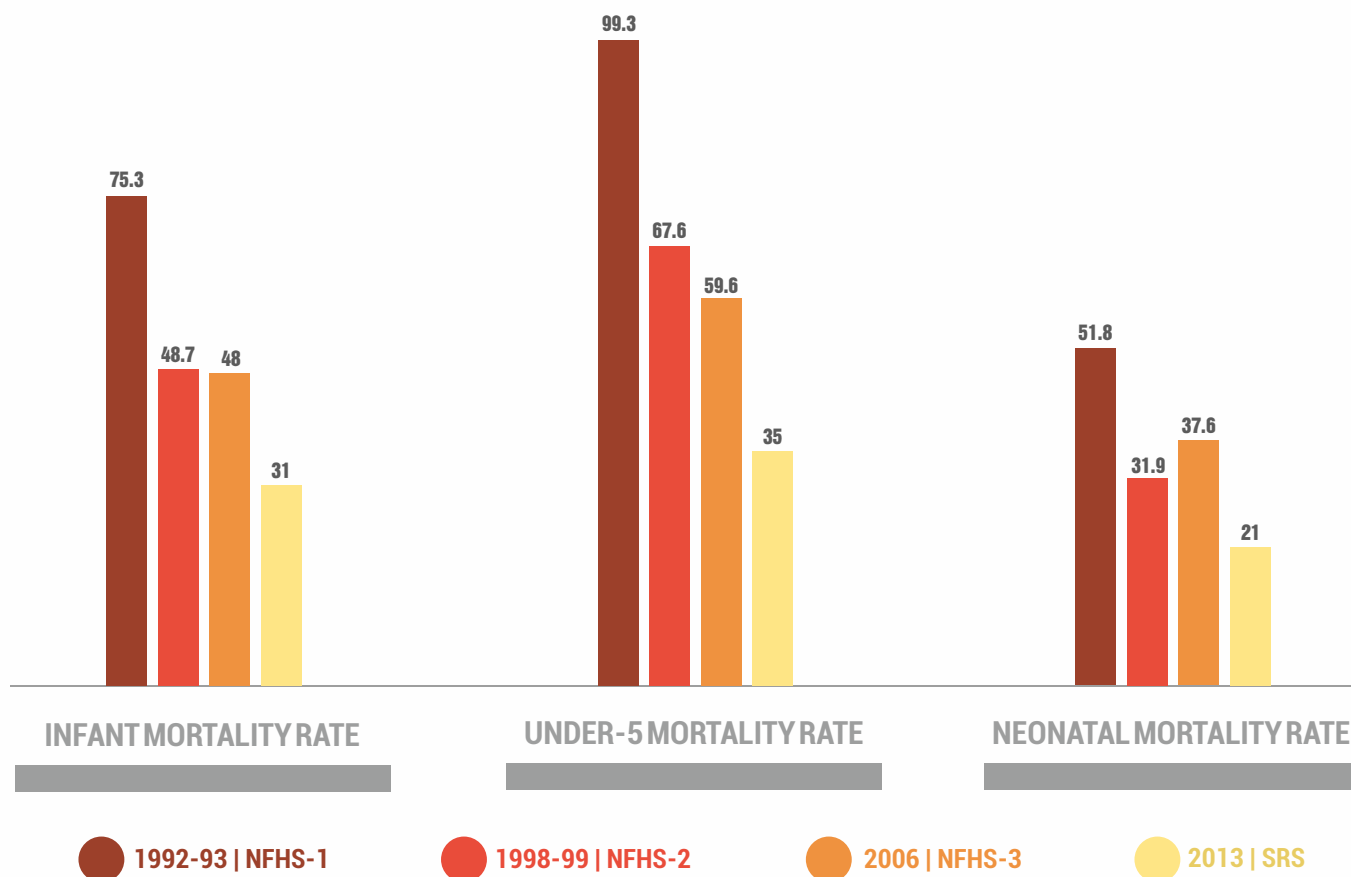
⁸ Source : Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14 : http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82

⁹ Source : Press Note on Poverty Estimates, 2011-12, Planning Commission, Government of India, 2011-12 : http://planningcommission.nic.in/news/pre_pov2307.pdf

¹⁰ Source : IFPRI, India State Hunger Index, 2009

B. CHILD MORTALITY PER THOUSAND LIVE BIRTHS

This section illustrates trends in mortality in neonates, infants and children under 5 years, since 1992. The purpose of this is to highlight the success achieved by individual states in averting deaths of children since the economic growth of the 1990s.



II. NUTRITIONAL STATUS AMONG CHILDREN

This section presents data on nutrition outcome indicators (stunting, wasting, and underweight) and anemia prevalence. Anthropometric measures for children under 5 (stunting, wasting, and underweight) are presented over time periods, by age groups and by background characteristics. This data aims to convey the prevalence and severity of undernutrition in the state.

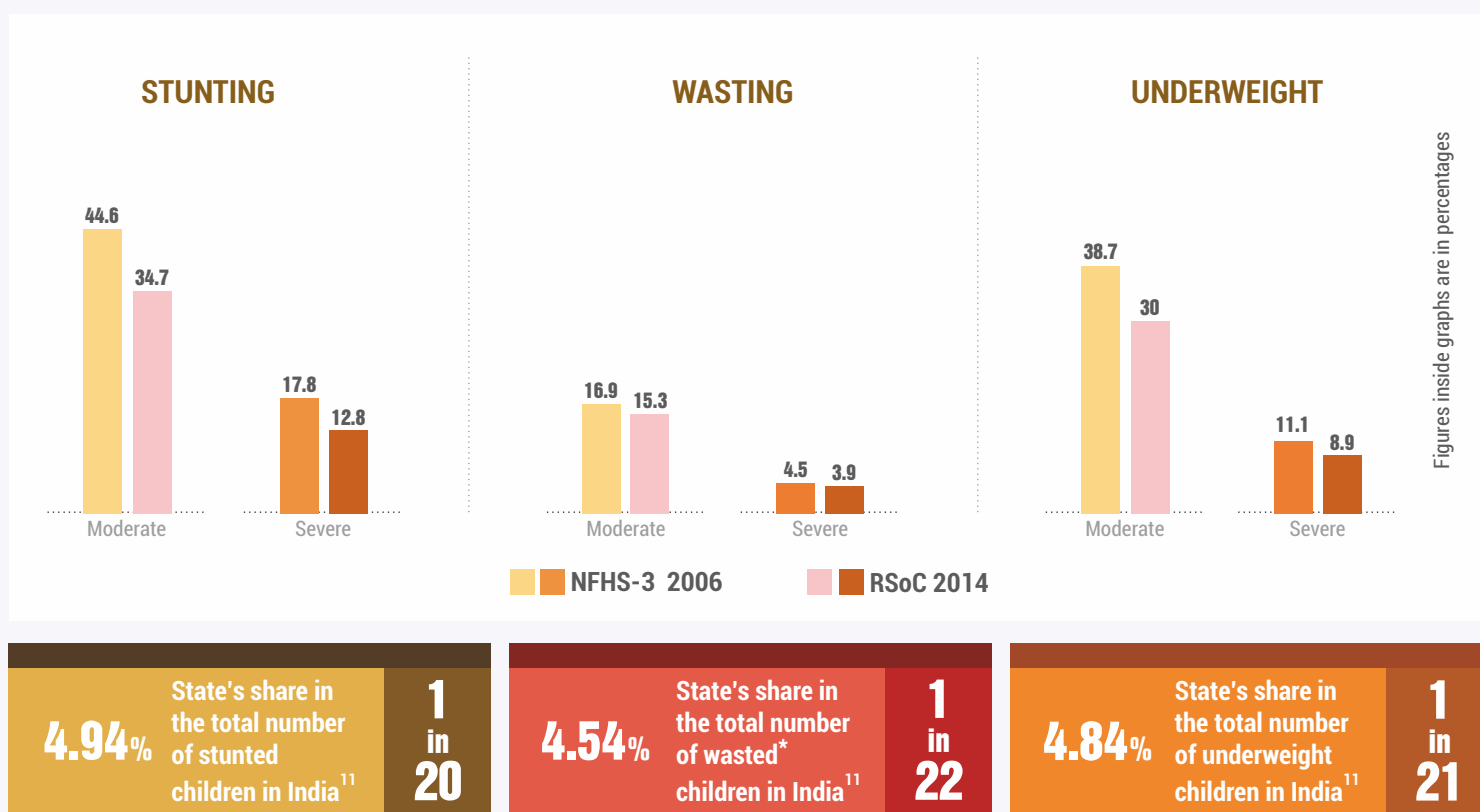
A. CHILD UNDERNUTRITION, BY TIME PERIOD

ANTHROPOMETRIC MEASURES

Stunting is inadequate height for age, which is indicative of chronic or cumulative nutritional deprivation in early childhood. A stunted child's height-for-age is below -2 standard deviations from the median height-for-age (termed HAZ) of the WHO Child Growth Standards, while a severely stunted child is below -3 standard deviations.

Wasting is inadequate weight for height, which points to acute or short-term undernutrition. A wasted child's weight-for-height (WHZ) is below -2 standard deviations from the WHO Child Growth Standards; a severely wasted child is below -3 standard deviations. (Another way to determine severe wasting or severe acute malnutrition is through a measurement of a child's mid-upper arm circumference (MUAC).

Underweight is inadequate weight for age, a composite indicator that encompasses stunting and wasting. An underweight child's weight-for-age (WAZ) is below -2 standard deviations from the WHO Child Growth Standards; again, a severely underweight child is below -3 standard deviations.

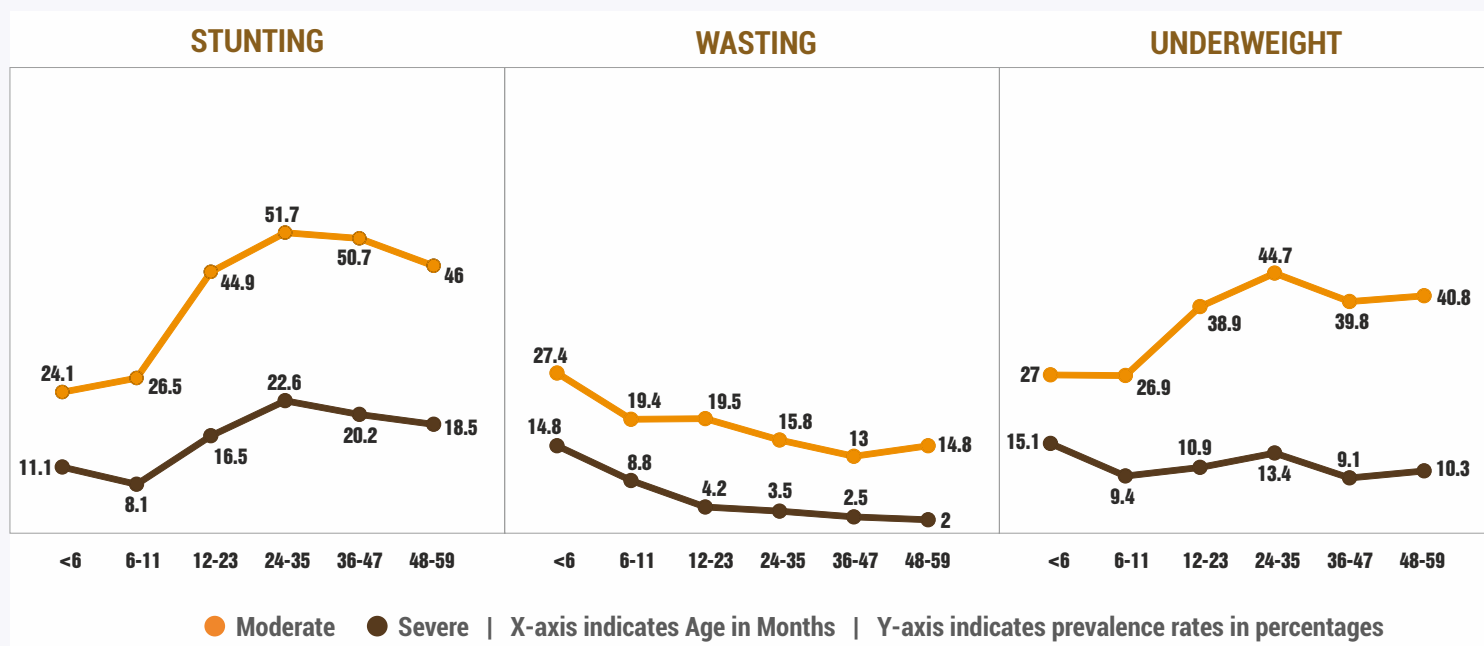


*Wasting is subject to seasonal variations either in food supply or disease prevalence and hence may not be comparable across groups of children measured at different times of the year within a survey round as well as between different survey rounds.

¹¹ Source : NFHS-3, 2006

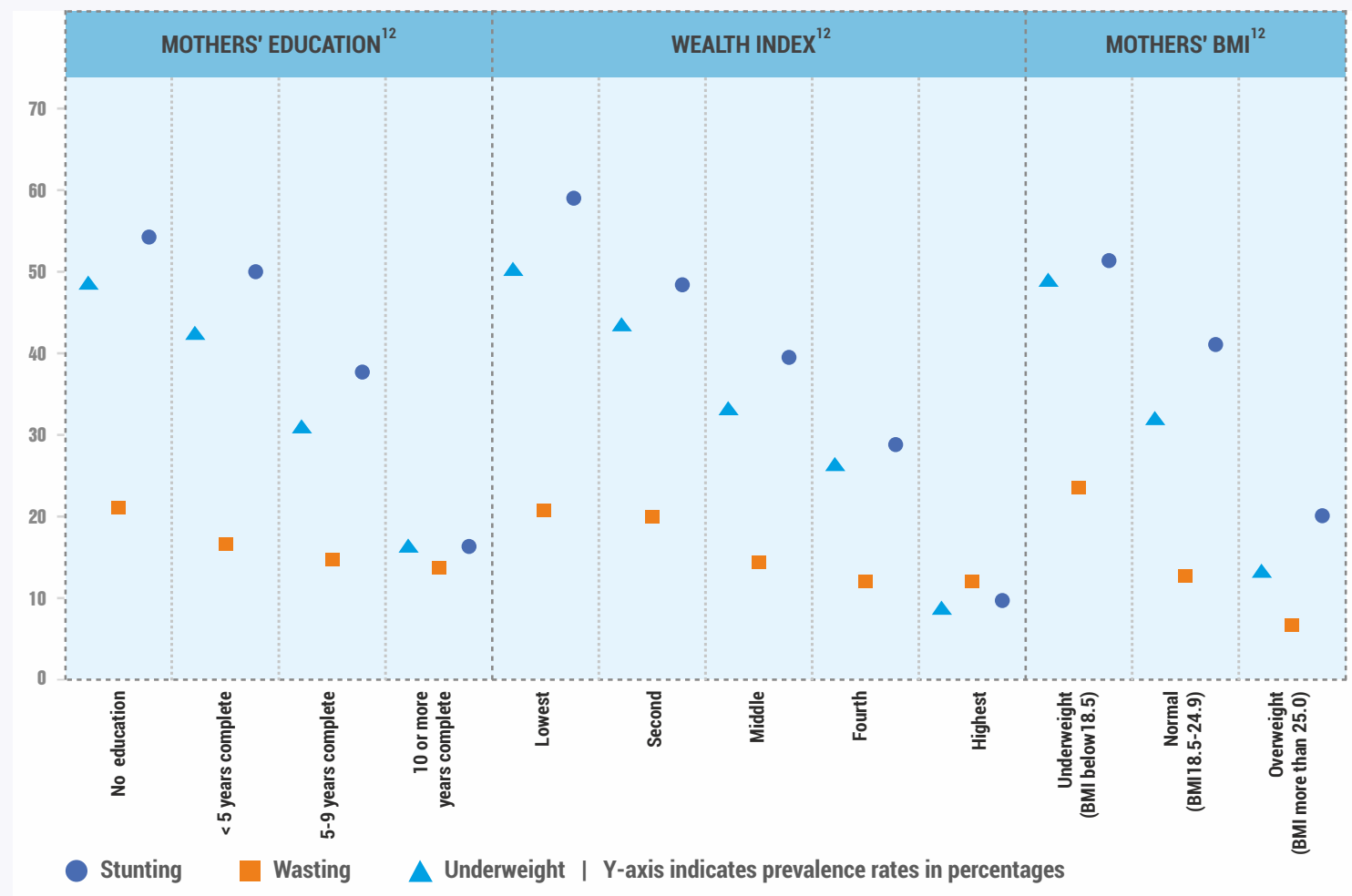
B. CHILD UNDERNUTRITION, BY AGE GROUPS¹²

Percentage of moderate (below -2 SD from the WHO growth standards) and severe (below -3 SD) stunting, wasting and underweight are available for 6 age groups among children under 5.

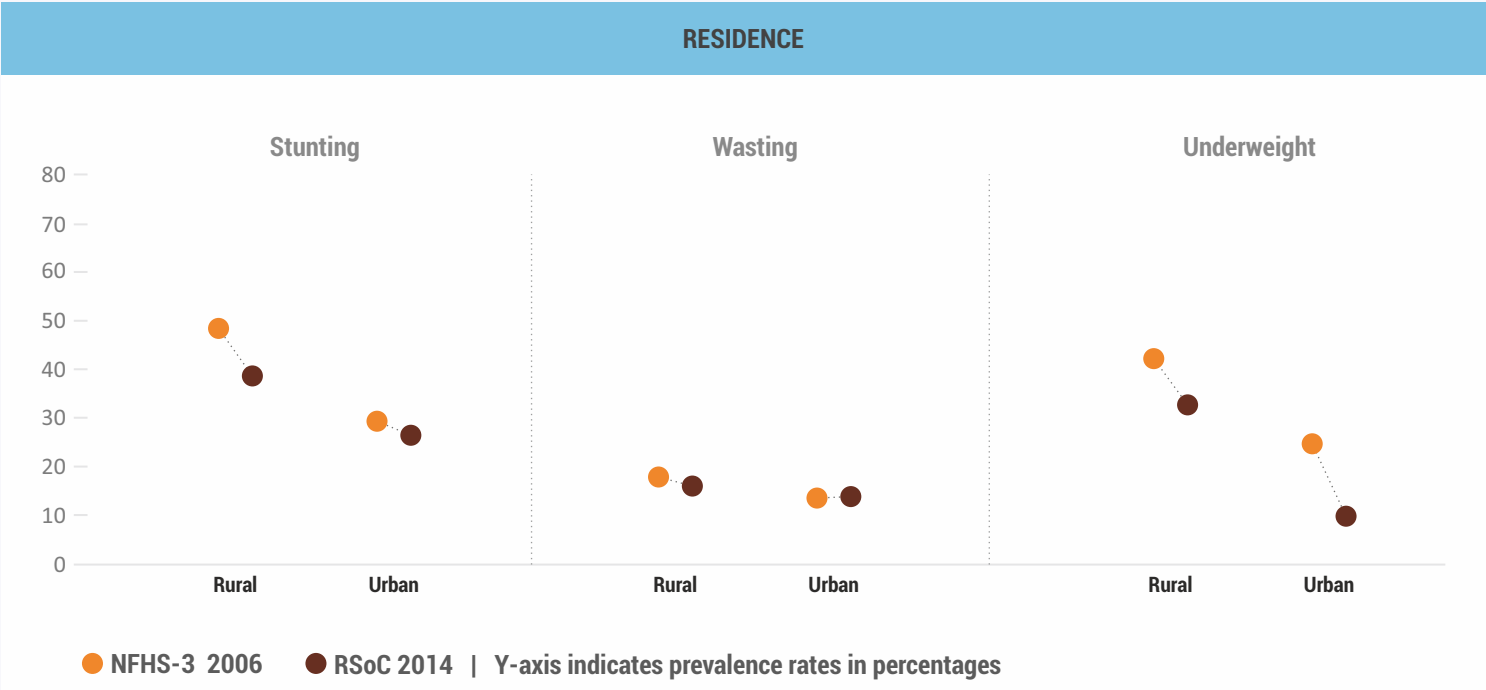
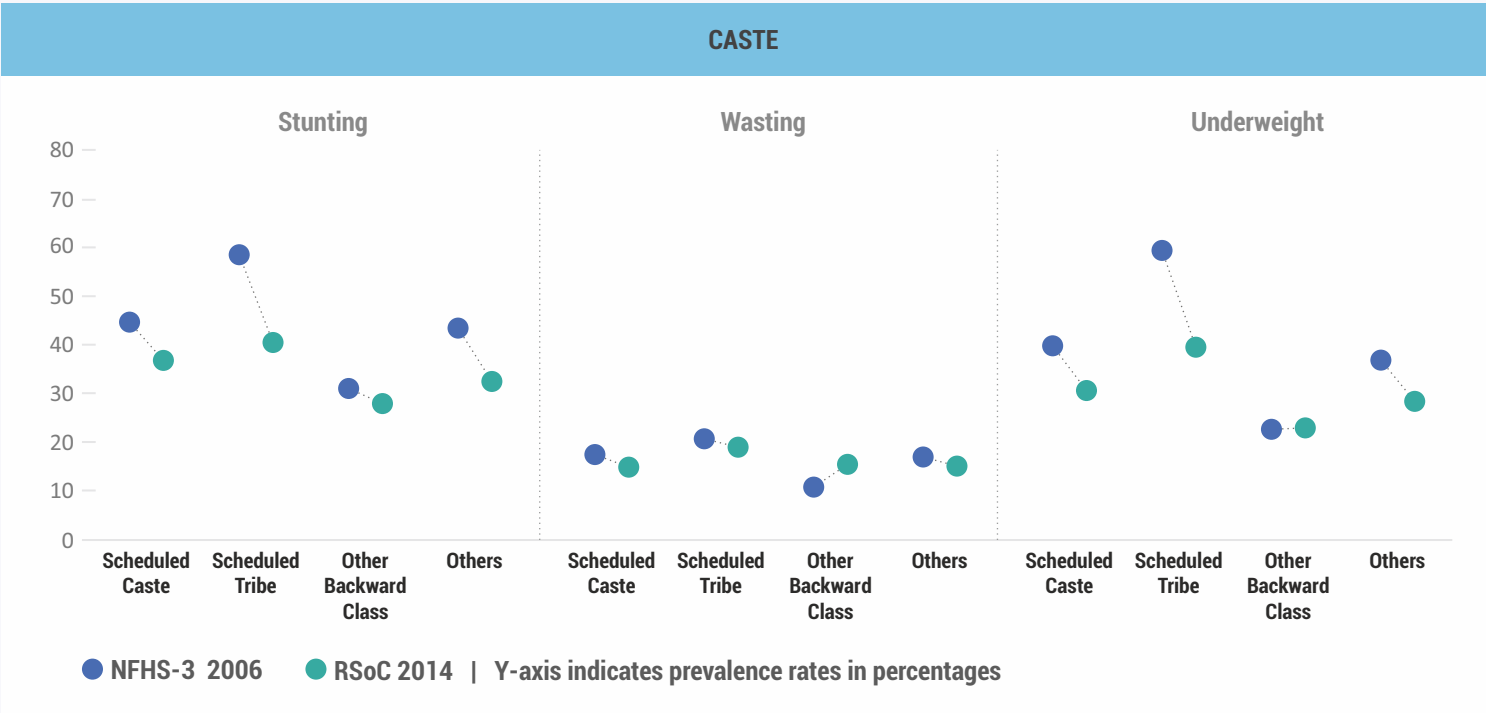


C. PREVALENCE OF CHILD UNDERNUTRITION, BY BACKGROUND CHARACTERISTICS

In this section, child undernutrition outcomes are presented, along with key socioeconomic drivers that are known to be associated with child nutrition, such as caste, residence, mother's health and education, and household income.

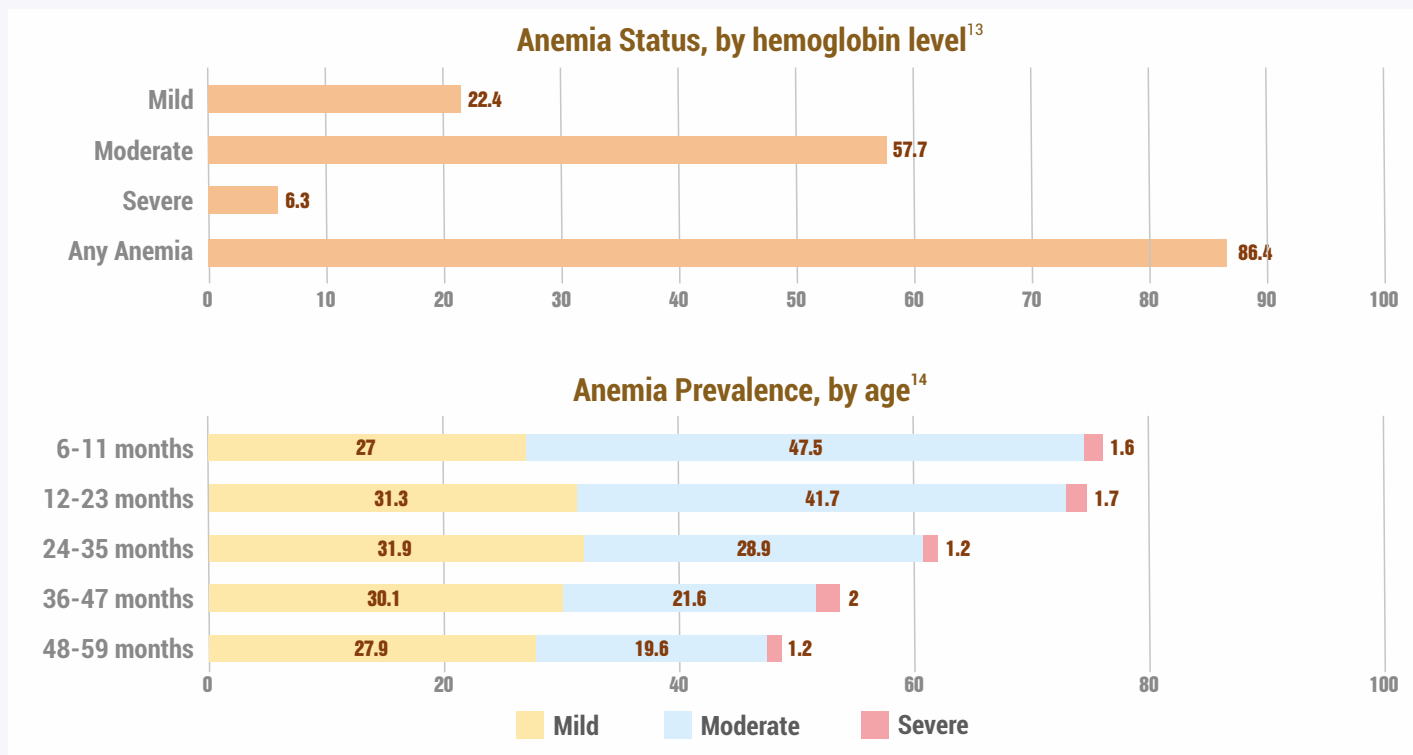


¹² Source : NFHS-3, 2006



D. ANEMIA PREVALENCE

Anemia can impair physical and cognitive development among children and create long term impacts on productivity and wellbeing. This section features data on anemia prevalence by severity and age groups for children under 5.



¹³ Source : DLHS-4, 2012-13

¹⁴ Source : NFHS-3, 2006

III. IMMEDIATE DETERMINANTS

A. INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES¹⁵

This section presents indicators for assessing IYCF practices as recommended by the WHO and revised in 2008. Following optimal IYCF practices during the first 1,000 days is crucial for early child survival and growth as well as long-term health and wellbeing.

Children aged 0-23 months breastfed immediately/within an hour of birth		43.3%
	Children aged 0-5 months who were exclusively breastfed	59.4%
	Children aged 6-8 months who were fed complementary foods	67.7%
	For breastfed children (6-23 months)- A. Fed minimum number of times. Note : At least twice a day for breastfed infants 6-8 months old and at least three times a day for breastfed children 9-23 months old B. Had minimum dietary diversity Note : Minimum dietary diversity refers to four or more food groups^B fed to children aged 6-23 months	41.6% 33.7%

B. CHILD HEALTH¹⁵

Prevalence of childhood illnesses (in children aged 0-59 months)

Had diarrhea in 15 days prior to survey	3.5%
Had fever in 15 days prior to survey	17%
Had symptoms of Acute Respiratory Infection (ARI) in 15 days prior to survey	13.8%

^B The 7 food groups include the following: i. grains, roots and tubers ii. legumes and nuts iii. dairy products (milk, yoghurt, cheese) iv. Flesh foods (meat, fish, poultry, and liver/organ meats) v. eggs vi. Vitamin-A rich fruits and vegetables vii. other fruits and vegetables.

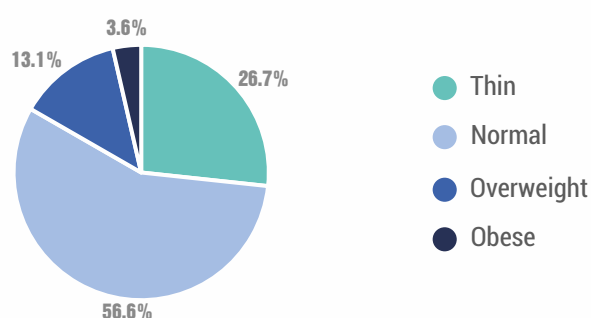
¹⁵ Source : RSoC, 2014

C. NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

Maternal health and nutrition, as well as adolescent nutrition, have important consequences for intergenerational transmission of undernutrition. Data on Body Mass Index (BMI), anemia prevalence and height among women of reproductive age are presented in this section, as are data on adolescent BMI and anemia.

C.1. WOMEN 15-49 YEARS OLD¹⁶

BMI^c levels of women aged 15-49 years



^cBody Mass Index (BMI) is defined as the weight in kilograms by the square of the height in metres (kg/m²). It is a simple index of weight-for-height which is commonly used to classify underweight, overweight and obesity in adults. Range: BMI < 18.5 = total thin, BMI 18.5-24.9 = normal, BMI 25.0-29.9 = Overweight, BMI > 30.0 = Obese [per WHO Standards]



76.3%

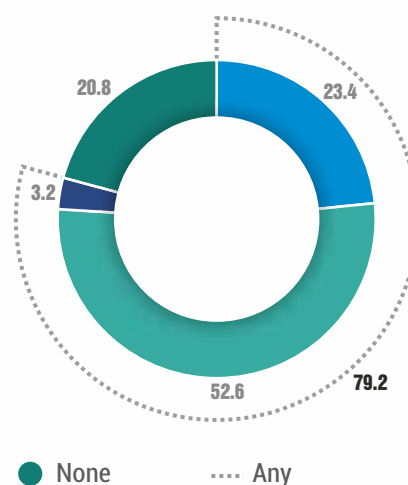
Women aged 15-49 years are anemic

3.2%

Women aged 15-49 years are severely anemic

C.2. PREGNANT WOMEN¹⁶

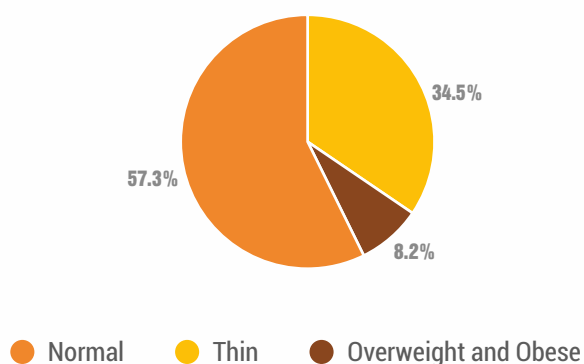
Anemia prevalence in pregnant women aged 15-49 years



● Mild ● Moderate ● Severe ● None ---- Any

C.3. ADOLESCENT GIRLS

BMI levels of adolescent girls aged 15-18 years¹⁷



62%

Adolescent girls aged 15-19 years are anemic¹⁶

1.8%

Adolescent girls aged 15-19 years are severely anemic¹⁶

¹⁶ Source : DLHS-4, 2012-13

¹⁷ Source : RSoC, 2014

^{17a} Source : NFHS-3, 2006

IV. UNDERLYING DETERMINANTS

A. SOCIAL STATUS OF WOMEN

Women's status is recognized to contribute in significant ways to improving nutrition. This section presents indicators that are representative of women's social status, including measures of education, age at marriage and first birth, employment, decision making and domestic violence. It also includes the Gender Empowerment Measure that captures gender inequality along three dimensions: political participation and decision-making power, economic participation and decision-making power, and power over economic resources.



Currently married women who have 10 or more years of schooling¹⁸ **22.6%**



44.7% Women aged 20-24 years who were married before the age of 18¹⁹

19.9 Average age at marriage¹⁹

Gender Empowerment Measure^{D,20}

0.4

0.5

National Average²⁰



Female workforce participation rate²² **18.1%**

Currently married women who make decisions about²³:



32.6% Own healthcare



9.1% Major household purchase



28.1% Purchases for daily household needs



16.7% Visits to her family/friends/relatives



41.8% Women who have experienced any form of physical/sexual/emotional violence²³

42.5% Ever married women who justify hitting/wife-beating (for either of the reasons mentioned)²³

^D The Gender Empowerment Measure is a weighted average index based on indicators that are classified into three dimensions: a. political participation and decision-making power b. economic participation and decision-making power and c. power over economic resources. The index ranges from a minimum of 0 to a maximum of 1, with a higher score indicating greater empowerment of women. (More information available at <http://wcd.nic.in/publication/GDIGEReport/Part3.pdf>.)

¹⁸ Source : DLHS-4, 2012-13

¹⁹ Source : RSoC, 2014

²⁰ Source : MoWCD, 2006

²² Source : Women and Men in India, 16th Issue MoSPI, 2014

²³ Source : NFHS-3, 2006

B. WATER AND SANITATION

Poor hygiene and sanitation, by directly increasing exposure and susceptibility to infections, are associated with undernutrition among children. This section covers key indicators on access to safe drinking water and availability of sanitation facilities at the state level. It also includes the expenditure on toilet construction under the Total Sanitation Campaign.



94.7%

Households with access to improved sources of drinking water^{E, 24}

43.3%

Households using improved sanitation facility^{F, 24}



28.3%

Households practicing open defecation²⁴

67.3 M

Expenditure on toilets under Total Sanitation Campaign (TSC)^{G, 25}



1,065 M

National Average²⁵

C. AGRICULTURE AND FOOD SECURITY

Agriculture productivity and food security can affect household access to foods necessary for a healthy diet. Thus, this section presents indicators related to agricultural growth and food consumption patterns in the state, indicating the level of food security in the state relative to the national situation.



4%

Growth rate of agriculture from 2007-2012²⁶



6.2%

Share in India's total foodgrain production²⁷



Mean Calorie intake per person per day (in Kcal)²⁸

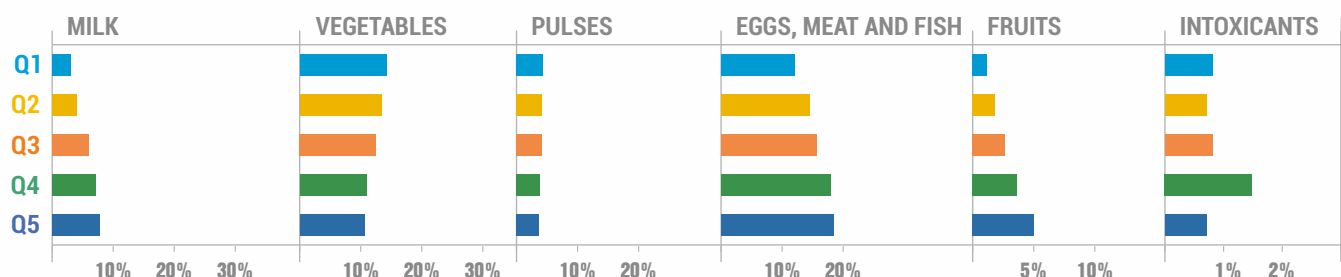
RURAL

2199 **2233**
WEST BENGAL INDIA AVG

URBAN

2130 **2206**
WEST BENGAL INDIA AVG

Expenditure on food items by income quintiles²⁸



^E Improved sources of drinking water include: piped water into dwelling, piped water to yard/plot, public tap or standpipe, tubewell or borehole, protected dug well, protected spring, and rainwater (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>).

^F Improved sanitation means households using improved toilets that include: flush toilet, piped sewer system, septic tank, flush/pour flush to pit latrine, ventilated improved pit latrine, pit latrine with slab, composting toilet, special case (as per Joint Monitoring Programme definition: <http://www.wssinfo.org/definitions-methods/watsan-categories/>); excludes those households who are using improved toilets but sharing toilet facilities with other households.

^G Besides toilet construction subsidies, this expenditure also includes funding other activities such as solid and liquid waste management, IEC activities for sustainable demand generation for sanitation facilities, assistance to production centers of sanitary materials and rural sanitary marts, provision of construction of community sanitary complexes, provision of sanitation facilities in govt. schools and Anganwadis in govt. buildings etc.

²⁴ Source : RSoC, 2014

²⁵ Source : Indiastat, Rajya Sabha Unstarred Question No. 2950, dated on 30.08.2011, 2011-12

²⁶ Source : Indiastat, compiled by datanet from Rajyasabha & Lok Sabha unstarred questions no. 3039, 4535. 2007-12

²⁷ Source : Indiastat, Ministry of Agriculture, Government of India 2011-2012

²⁸ Source : NSSO, 68th round-Nutritional Intake in India, 2011-12

V. STATUS OF NUTRITION-RELEVANT INTERVENTIONS

A. NUTRITION-SPECIFIC INTERVENTIONS

The financial resources allocated to, and spent on direct nutrition-specific interventions can determine the scale, coverage and quality of interventions to reach vulnerable target populations. These services, in India, are delivered both by the Integrated Child Development Scheme (ICDS) and the National Health Mission (NHM). This section includes data on the coverage of interventions delivered by these two key centrally-sponsored schemes that directly impact maternal and child nutrition and health. We also include here information on the human resources and service availability of these schemes and expenditures.

A.1. COVERAGE OF ICDS AND NHM:

The Integrated Child Development Services (ICDS) aims to improve the nutrition and health status of children under-six through a package of services (supplementary nutrition, immunization, health check-up, referral services, etc.) delivered through frontline workers at the Anganwadi Centres (AWCs). This section provides information on expenditure on ICDS and coverage of its supplementary nutrition programme (SNP). This section also covers critical services provided by the health system, including provision of care for pregnant women and child immunization. Immunization plays a crucial role in complementing actions to improve nutrition. The link between undernutrition and infectious diseases is cyclical, poor nutrition increases vulnerability to infections, which in turn worsen nutrition status. Data on immunization among children are presented by residence. Here, full immunization refers to children covered with BCG, measles and 3 doses each of DPT and polio.

Beneficiaries who availed supplementary food under ICDS²⁹

Children 6-35 months	71.9%
Children 36-71 months	69.6%
Pregnant women	55.6%
Lactating mothers	46.5%

Beneficiaries who received supplementary food for at least 21 days in the month prior to the survey

Children aged 6-35 months	0%
Children aged 36-71 months	33.2%
Pregnant women	35.6%
Lactating women	0%

²⁹ Source : RSoC, 2014

SERVICES PROVIDED TO WOMEN WHO HAD A LIVE BIRTH IN LAST 35 MONTHS³⁰



89.7%

Received 3 or more antenatal checkups prior to delivery



96%

Received 2 or more TT injections prior to delivery



22.5%

Consumed 100 or more IFA tablets/syrup during pregnancy



76.3%

Had Institutional delivery



78.9%

Women who had live birth in 35 months where delivery was assisted by skilled health provider³⁰



74.3%

Rural

77%

Urban

Children aged 12-23 months who are fully immunised³⁰



2.6%

Children aged 12-23 months who have not received any immunisation³⁰

WOMEN GIVEN ADVICE ON³¹:



75.7%

Breastfeeding



66.5%

Nutrition of mother and child



40.4%

Institutional delivery

A.2. PERSONNEL CAPACITY OF ICDS AND NRHM:

This section features data on availability of healthcare personnel and services available to women of reproductive age (antenatal care, tetanus toxoid coverage, iron-folic acid supplementation coverage, institutional delivery and counseling). Household and individual access to health services can directly impact children's nutrition and welfare during the crucial first 1,000 days of life.

Availability of Anganwadi Centres and Workers (AWCs and AWWs) ^{H, 30}	Value
Pending or vacant Anganwadi workers to sanctioned number of workers*	9.3%
AWWs living in the AWC village/ward	38.1%
AWWs having 10 or more years of schooling	73%
Median age of AWWs	41 years
AWCs serving to population more than the stipulated norm	41.6%

Growth Monitoring ³⁰	Value
AWCs having functional baby weighing scale	79.3%
AWCs having functional adult weighing scale	70.1%
Available WHO growth chart at AWCs	95.2%

^H Number of AWCs surveyed for West Bengal as per RSoC 2014 is 337.

³⁰ Source : RSoC, 2014

³¹ Source : DLHS-4, 2012-13

* Source : MoWCD, 2012

Training and Comprehensive Knowledge ³²	Value
AWWs having correct knowledge of intake of food by pregnant women	90.1%
AWWs having correct knowledge of normal birth weight of children	89.2%
AWWs having correct knowledge of initiation of breastfeeding within one hour	91.3%
AWWs having correct knowledge of exclusive breastfeeding for the first six months	96.9%
AWWs having correct knowledge of appropriate age of child for complementary feeding	43.5%

Health Service Delivery Personnel	Value
ASHAs selected ³³	79%
Current density of ASHA as per Census 2011 rural population ³³	1 per 1291 persons
Pending or vacant ANM positions sub centres & PHCs ³⁴	0%

A.3. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SPECIFIC INTERVENTIONS

Expenditure on Schemes (in million dollars)	In million USD	National Average
ICDS (ICDS general + SNP + training) (women and children) ³⁵	178	75
NRHM expenditure (Central Government) ³⁶	151.2	68.8
NRHM expenditure (State Government) ³⁶	4.8	9.3

B. NUTRITION-SENSITIVE INTERVENTIONS

This section includes information on expenditure and coverage of key centrally-sponsored schemes that indirectly impact maternal and child nutrition. These are: the Mid Day Meal Scheme (MDMS), Public Distribution System (PDS), and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

B.1. COVERAGE OF SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS

Coverage of Schemes	Value
MDMS (base: eligible children*) ³⁷	53.7%
PDS (base: rural and urban households reporting consumption) ³⁸	43.1%
MGNREGA (base: rural persons 18 years and above registered in MGNREG job card and demanded work during last 365 days) ³⁹	73.9%

* All children studying in primary & upper primary classes in schools supported under Sarva Shiksha Abhiyan and NCLP (National Child Labour Project) run by Ministry of Labour.

B.2. EXPENDITURE ON SCHEMES DELIVERING NUTRITION-SENSITIVE INTERVENTIONS:

Expenditure on Schemes (in million dollars)	In million USD	National Average
MDMS ⁴⁰	168	47
PDS ⁴¹	1242.2	475.3
MGNREGA ⁴²	642	214

³² Source : RSoC, 2014

³³ Source : NRHM, 2013

³⁴ Source : MoHFW, 2013

³⁵ Source : Lok Sabha Unstarred Question # 846 dated 27.02.2015, 2012-13

³⁶ Source : Lok Sabha Annexured Unstarred Question # 409 dated 6.12.2013, 2012-13

³⁷ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/lsq15/15/as216.htm 2011-12

³⁸ Source : Report No. 558, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

³⁹ Source : Report No. 554, NSSO 68th round-Employment and Unemployment Situation in India, 2011-12

⁴⁰ Source : Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014, 2012-13

⁴¹ Source : Food Corporation of India 2013, 2012-13

⁴² Source : Lok Sabha Annexured Unstarred Question # 3835 dated 19.03.2015, 2012-13

**APPENDIX A:
SOURCE NOTES AND
INDICATOR DEFINITIONS**

***FAST FACTS ON NUTRITION AND
ITS DETERMINANTS***

INDICATOR	DEFINITION	NUMERATOR	DENOMINATOR	DATA SOURCE & YEAR
Stunting (%)	Percentage of children 0–59 months who are below minus two (moderate and severe) standard deviations from median height-for-age of the WHO Child Growth Standards	Number of children 0–59 months who are below minus two standard deviations (moderate and severe) from median height-for-age of the WHO Child Growth Standards	Total number of children 0–59 months surveyed	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
Wasting (%)	Percentage of children 0–59 months who are below minus two (moderate and severe) standard deviations from median weight-for-height of the WHO Child Growth Standards	Number of children 0–59 months who are below minus two standard deviations (moderate and severe) from median weight-for-height of the WHO Child Growth Standards	Total number of children 0–59 months surveyed	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
Infants who were exclusively breastfed (%)	Percentage of infants 0-5 months who were exclusively breastfed	Number of infants between 0-5 months who were exclusively breastfed	Total number of infants between 0-5 months old surveyed	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
Low birth weight (%)	Percentage of children 0-35 months with birth weight less than 2500 grams/2.5 kilograms (out of those weighed)	Number of children 0-35 months who weighed less than 2500 grams (2.5kgs)	Total number of children 0-35 months weighed/surveyed	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
Anemia Prevalence among women (%) [Note-* For Andhra Pradesh, Arunachal Pradesh, Goa, Haryana, Himachal Pradesh, J&K, Karnataka, Kerala, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Punjab, Sikkim, Tamil Nadu, Tripura and West Bengal **For Assam, Bihar, Chhattisgarh, Delhi, Gujarat, India, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Uttar Pradesh and Uttarakhand]	Percentage of women between 15-49 years those who have mild, moderate, severe anaemia. [Hemoglobin levels shown in grams per decilitre are classified into different categories as - Mild a (10.0-10.9g/dl)/ Moderate (7.0-9.9g/dl)/ Severe (<7.0 g/dl) or Any (<11.0 g/dl)]	Number of women between 15-49 years who have mild, moderate, severe anaemia.	Total number of women between 15-49 years surveyed	*District Level Household & Facility Survey 4 (2012-13), Ministry of Health and Family Welfare, GoI ** National Family Health Survey (NFHS-3), Ministry of Health and Family Welfare 2006, GoI
Infants who receive solid, semi-solid or soft foods (%)	Percentage of infants between 6-8 months old who receive solid, semi-solid or soft foods	Number of infants between 6-8 months who receive solid, semi-solid or soft foods	Total number of children between 6-8 months of age surveyed	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
Breastfed infants & young children who had minimum dietary diversity (%)	Percentage of infants & young children between 6-23 months who had minimum dietary diversity (includes four or more food groups)	Number of infants & young children between 6-23 months who had a minimum dietary diversity	Total number of infants & young children between 6-23 months surveyed	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI

INDICATOR	DEFINITION	NUMERATOR	DENOMINATOR	DATA SOURCE & YEAR
Anemia Prevalence among children (%) Note-* For Andhra Pradesh, Arunachal Pradesh, Goa, Haryana, Himachal Pradesh, J&K, Karnataka, Kerala, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Punjab, Sikkim, Tamil Nadu, Tripura and West Bengal **For Assam, Bihar, Chhattisgarh, Delhi, Gujarat, India, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Uttar Pradesh and Uttarakhand]	Percentage of children between 6-59 months those who have mild, moderate and severe anemia. [Hemoglobin levels shown in grams per decilitre are classified into different categories as - Mild a (10.0-10.9g/dl)/ Moderate (7.0-9.9g/dl)/ Severe (<7.0 g/dl) or Any (<11.0 g/dl)]	Number of children between 6-59 months who have mild, moderate and severe anaemia	Total number of children between 6-59 months surveyed	*District Level Household & Facility Survey 4 (2012-13), Ministry of Health and Family Welfare, GoI **National Family Health Survey (NFHS-3), Ministry of Health and Family Welfare 2006, GoI
Children aged 0-59 months with diarrhea (%)	Percentage of children aged 0-59 months who had diarrhea in 15 days prior to survey	Number of children 0-59 months who had diarrhea in 15 days prior to survey	Total number of children aged 0-59 months age surveyed	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
Children between 6-35 months who received supplementary food under ICDS for at least 21 days in the month prior to the survey (%)	Percentage of children between 6-35 months who received supplementary food under ICDS for at least 21 days in the month prior to the survey	Number of children between 6-35 months who received supplementary food under ICDS for at least 21 days in the month prior to the survey	Total targeted children between 6-35 months surveyed per state	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
Children fully immunized (%)	Percentage of children (12-23 months age) who received one dose BCG, 3 doses of DPT/OPV each and 1 measles vaccine	Number of children between 12-23 months who received one dose BCG, 3 doses of DPT/OPV each and 1 measles vaccine	Total number of children between 12-23 months surveyed	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
Women who had live birth in 35 months prior to survey received three or more antenatal check-ups (%)	Percentage of women with a live birth in 35 months prior to survey who received 3 or more antenatal check ups	Number of women with a live birth in 35 months prior to the survey who received three or more antenatal check-ups	Total number of women with a live birth in 35 months prior to the survey	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
Women who have 10 or more years of schooling (%) [Note-*For Andhra Pradesh, Arunachal Pradesh, Goa, Haryana, Himachal Pradesh, J&K, Karnataka, Kerala, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Punjab, Sikkim, Tamil Nadu, Tripura and West Bengal **For Assam, Bihar, Chhattisgarh, Delhi, Gujarat, India, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Uttar Pradesh and Uttarakhand]	Percentage of ever married women between 15-49 years who have an educational level greater than primary level	Number of ever married sampled women between 15-49 years who have an educational level greater than primary level	Total number of ever married women between 15-49 years surveyed	*District Level Household & Facility Survey 4 (2012-13), Ministry of Health and Family Welfare, GoI ** District Level Household & Facility Survey 3 (2007-08), Ministry of Health and Family Welfare, GoI
Women aged 20-24 years who are married before the age of 18	Percentage of women between 20-24 years who are married before the age of 18	Number of women between 20-24 years who are married before the age of 18	Total number of women aged 20-24 years surveyed per state	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI

INDICATOR	DEFINITION	NUMERATOR	DENOMINATOR	DATA SOURCE & YEAR
Adolescent girls with different BMI levels (%)	Percentage of adolescent girls between 15-18 years	Number of adolescent girls between 15-18 years	Total number of adolescent girls between 15-18 years per state	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
Household practicing open defecation	Percentage of households practicing open defecation	Number of households practicing open defecation	Total number of households surveyed per state	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
State population below state-specific poverty line (as defined under Tendulkar Methodology) (%)	The Expert group of Dr. Tendulkar used the all-India urban poverty line basket as the reference to derive state-level rural and urban poverty in 2009. The Tendulkar methodology uses implicit prices derived from quantity and value data collected in household consumer expenditure surveys for estimating and updating the poverty lines for rural and urban areas in each state based on Mixed Reference Period.			Press Note on Poverty Estimates, 2011-12, Planning Commission, GoI

**APPENDIX A:
SOURCE NOTES AND
INDICATOR DEFINITIONS**

STATE NUTRITION DASHBOARDS

I. CONTEXT

A. DEMOGRAPHIC CONTEXT

INDICATOR	DEFINITION	NUMERATOR	DENOMINATOR	DATA SOURCE & YEAR
Total population	Total headcount of population in the administrative units of India at 0.00 hours of 1st March 2011			Primary Census Abstract, Census of India 2011, Series 1. Registrar General & Census Commissioner, India
Share of population	Percentage of population of the state	Total population of the state	Total population of India	Authors' estimates: Primary Census Abstract, Census of India 2011, Series 1. Registrar General & Census Commissioner, India
Fertility Rate [*Note- 2009 numbers are for Arunachal Pradesh, Goa, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura and Uttarakhand]	The average number of children a hypothetical cohort of women would have at the end of their reproductive period if they were subject during their whole lives to the fertility rates of a given period and if they were not subject to mortality. It is expressed as children per woman.	Average number of live births per women	Total number of women in the age group of 15-44 years of age in the calendar year	Sample Registration System Statistical Report 2013. Office of Registrar General & Census Commissioner India. Ministry of Home Affairs, GoI *Sample Registration System 2010, Office of Registrar General & Census Commissioner India. Ministry of Home Affairs, GoI
Newborns	Number of children born in a particular year			Primary Census Abstract, Census of India 2011, Series 1. Registrar General & Census Commissioner, India
Gini Coefficient of consumption	Gini coefficient is a measure of inequality of distribution. It measures the extent to which the distribution of income or consumption expenditure among individuals or households within an economy deviates from a perfectly equal distribution. A Lorenz curve plots the cumulative percentages of total income received against the cumulative number of recipients, starting with the poorest individual or household. The Gini index measures the area between the Lorenz curve and a hypothetical line of absolute equality, expressed as a percentage of the maximum area under the line. Thus a Gini index of 0 represents perfect equality, while an index of 100 implies perfect inequality. Assuming all people have non-negative income, a Gini coefficient ranges between 0, which expresses perfect equality (everyone has the same income/consumption) and 100, which expresses maximal inequality (only 1 person has the entire share of the income/consumption and others have none).	Area between the line of perfect equality and Lorenz curve	Area between the line of perfect equality and Lorenz curve + Area under the Lorenz curve	Planning Commission estimates: NSS 66th round, Employment & Unemployment Survey, 2009-10

INDICATOR	DEFINITION	NUMERATOR	DENOMINATOR	DATA SOURCE & YEAR
Per capita net state domestic product in 2013-14 at constant (2004-05) prices in USD (@INR60)		Net state domestic product in 2013-14 at constant (2004-05) prices in USD (@INR60)	Population of 2011 per state as per Census 2011	Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14: http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82
State population below state-specific poverty line (as defined under Tendulkar Methodology) (%)	The Expert group of Dr. Tendulkar used the all-India urban poverty line basket as the reference to derive state-level rural and urban poverty in 2009. The Tendulkar methodology uses implicit prices derived from quantity and value data collected in household consumer expenditure surveys for estimating and updating the poverty lines for rural and urban areas in each state based on Mixed Reference Period.			Press Note on Poverty Estimates, 2011-12, Planning Commission, Government of India: http://planningcommission.nic.in/news/pre_pov2307.pdf
Children under 5	Number of children between 0-59 months of age per state			Primary Census Abstract, Census of India 2011, Series 1. Registrar General & Census Commissioner, India
State Hunger Index	Index created to comprehensively measure and track hunger globally and by country and region.	Proportion of undernourished children as the percentage of the population, prevalence of children younger than the age of five who are underweight, mortality rate of children younger than the age of five	Total number of children 0-59 months surveyed	IFPRI, 2009 India state hunger index, comparisons of hunger across states https://www.ifpri.org/publication/comparisons-hunger-across-states
Urban Population (%)	Percentage of urban population to total population of the state	Total Urban population of the state	Total population of the state	Authors' estimates: Primary Census Abstract, Census of India 2011, Series 1. Registrar General & Census Commissioner, India
Rural Population (%)	Percentage of rural population to total population of the state	Total Rural population of the state	Total population of the state	Authors' estimates: Primary Census Abstract, Census of India 2011, Series 1. Registrar General & Census Commissioner, India
Total Male Population (%)	Percentage of male population of the state to the total population of India	Total male population of the state	Total population of the state	Authors' estimates: Primary Census Abstract, Census of India 2011, Series 1. Registrar General & Census Commissioner, India
Total Female Population (%)	Percentage of female population of the state to the total population of India	Total female population of the state	Total population of the state	Authors' estimates: Primary Census Abstract, Census of India 2011, Series 1. Registrar General & Census Commissioner, India

INDICATOR	DEFINITION	NUMERATOR	DENOMINATOR	DATA SOURCE & YEAR
Female literacy rate (%)	Percentage of literate females 7 years and above to total women population above 7 years of the state	Total number of literate women 7 years and above	Total female population above 7 years of age in the state	Authors' estimates: Primary Census Abstract, Census of India 2011, Series 1. Registrar General & Census Commissioner, India
Scheduled Caste (%)	Percentage of Scheduled Caste population to total population of the state	Total Scheduled Caste population of the state	Total population of the state	Authors' estimates: Primary Census Abstract, Census of India 2011, Series 1. Registrar General & Census Commissioner, India
Scheduled Tribe (%)	Percentage of Scheduled Tribe population to total population of the state	Total Scheduled Tribe population of the state	Total population of the state	Authors' estimates: Primary Census Abstract, Census of India 2011, Series 1. Registrar General & Census Commissioner, India

B. CHILD MORTALITY PER THOUSAND LIVE BIRTHS

Infant Mortality Rate	Probability of dying between birth and exactly one year of age expressed per 1,000 live births	Number of children dying between birth and exactly one year of age in a year in the state	Per 1,000 live births in a given year	National Family Health Survey (NFHS-1, 2 & 3), Ministry of Health and Family Welfare 1992-93, 1998-99 & 2005-06, GoI Sample Registration System Statistical Report 2013. Office of Registrar General & Census Commissioner India. Ministry of Home Affairs, GoI
Under 5 Mortality Rate	Probability of dying between birth and exactly five years of age expressed per 1,000 live births	Number of children dying between birth and exactly five years of age in a year in the state	Per 1,000 live births in a given year	National Family Health Survey (NFHS-1, 2 & 3), Ministry of Health and Family Welfare 1992-93, 1998-99 & 2005-06, GoI Sample Registration System Statistical Report 2013. Office of Registrar General & Census Commissioner India. Ministry of Home Affairs, GoI
Neonatal Mortality Rate	Number of neonates dying before reaching 28 days of age, per 1,000 live birth in a given year	Number of neonates dying before reaching 28 days of age in a year in the state	Per 1,000 live births in a given year	National Family Health Survey (NFHS-1, 2 & 3), Ministry of Health and Family Welfare 1992-93, 1998-99 & 2005-06, GoI Sample Registration System Statistical Report 2013. Office of Registrar General & Census Commissioner India. Ministry of Home Affairs, GoI

II. NUTRITIONAL STATUS AMONG CHILDREN

A. CHILD UNDERNUTRITION, BY TIME PERIOD

INDICATOR	DEFINITION	NUMERATOR	DENOMINATOR	DATA SOURCE & YEAR
Stunting (%)	Percentage of children 0–59 months who are below minus two (moderate and severe) standard deviations from median height-for-age of the WHO Child Growth Standards	Number of children 0–59 months who are below minus two standard deviations (moderate and severe) from median height-for-age of the WHO Child Growth Standards	Total number of children 0–59 months surveyed	National Family Health Survey (NFHS-3), Ministry of Health and Family Welfare 2006, GoI Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
Wasting (%)	Percentage of children 0–59 months who are below minus two (moderate and severe) standard deviations from median weight-for-height of the WHO Child Growth Standards	Number of children 0–59 months who are below minus two standard deviations (moderate and severe) from median weight-for-height of the WHO Child Growth Standards	Total number of children 0–59 months surveyed	National Family Health Survey (NFHS-3), Ministry of Health and Family Welfare 2006, GoI Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
Underweight (%)	Percentage of children 0–59 months who are below minus two (moderate and severe) standard deviations from median weight-for-age of the WHO Child Growth Standards	Number of children 0–59 months who are below minus two standard deviations (moderate and severe) from median weight-for-age of the WHO Child Growth Standards	Total number of children 0–59 months surveyed	National Family Health Survey (NFHS-3), Ministry of Health and Family Welfare 2006, GoI Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
State's share in the total number of stunted children in India	Proportion of stunted children 0-59 months in the state relative to the total number of stunted children in India	Total number of stunted children 0-59 months in the state	Total number of stunted children 0-59 months in India	Authors' estimate: National Family Health Survey (NFHS-3), Ministry of Health and Family Welfare 2006, GoI
State's share in the total number of wasted children in India	Proportion of wasted children 0-59 months in the state relative to the total number of wasted children in India	Total number of wasted children 0-59 months in the state	Total number of wasted children 0-59 months in India	Authors' estimate: National Family Health Survey (NFHS-3), Ministry of Health and Family Welfare 2006, GoI
State's share in the total number of underweight children in India	Proportion of underweight children 0-59 months in the state relative to the total number of underweight children in India	Total number of underweight children 0-59 months in the state	Total number of underweight children 0-59 months in India	Authors' estimate: National Family Health Survey (NFHS-3), Ministry of Health and Family Welfare 2006, GoI

B. CHILD UNDERNUTRITION, BY AGE GROUPS

Prevalence of undernutrition (moderate and severe stunting, wasting and underweight) among children under 5, by age in months (%)	Percentage of children 0-59 months who are stunted, wasted and underweight, by age in months			National Family Health Survey (NFHS-3), Ministry of Health and Family Welfare 2006, GoI

C. PREVALENCE OF CHILD UNDERNUTRITION, BY BACKGROUND CHARACTERISTICS

INDICATOR	DEFINITION	NUMERATOR	DENOMINATOR	DATA SOURCE & YEAR
Prevalence of undernutrition (stunting, wasting and underweight), by mothers' education, wealth index, mothers' BMI, caste and residence (%)	Percentage of children 0-59 months who are stunted, wasted and underweight by mothers' education, wealth index, mothers' BMI, caste and residence			National Family Health Survey (NFHS-3), Ministry of Health and Family Welfare 2006, GoI
Prevalence of undernutrition (stunting, wasting and underweight), by caste and residence (%)	Percentage of children 0-59 months who are stunted, wasted and underweight by caste and residence			Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI

D. ANEMIA PREVALENCE

Anemia Prevalence among children (%) [Note--* For Andhra Pradesh, Arunachal Pradesh, Goa, Haryana, Himachal Pradesh, J&K, Karnataka, Kerala, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Punjab, Sikkim, Tamil Nadu, Tripura and West Bengal **For Assam, Bihar, Chhattisgarh, Delhi, Gujarat, India, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Uttar Pradesh and Uttarakhand]	Percentage of children between 6 mo-59 months those who have mild, moderate and severe anemia. [Hemoglobin levels shown in grams per decilitre are classified into different categories as - Mild a (10.0-10.9g/dl)/ Moderate (7.0-9.9g/dl)/ Severe (<7.0 g/dl) or Any (<11.0 g/dl)]	Number of children between 6-59 months those who have mild, moderate and severe anaemia	Total number of children between 6-59 months surveyed	*District Level Household & Facility Survey 4 (2012-13), Ministry of Health and Family Welfare, GoI **National Family Health Survey (NFHS-3), Ministry of Health and Family Welfare 2006, GoI

III. IMMEDIATE DETERMINANTS

A. INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES

INDICATOR	DEFINITION	NUMERATOR	DENOMINATOR	DATA SOURCE & YEAR
Children aged 0-23 months who were breastfed within an hour of birth (%)	Percentage of children 0-23 months who were breastfed immediately within an hour of birth	Number of children between 0-23 months who were breastfed immediately within an hour of birth	Total number of children between 0-23 months surveyed per state	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
Children aged 0-5 months who were exclusively breastfed (%)	Percentage of children 0-5 months who were exclusively breastfed	Number of children 0-5 months old who were exclusively breastfed	Total number of children 0-5 months surveyed per state	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
Children aged 6-8 months who were fed complementary food (%)	Percentage of children 6-8 months who were fed complementary foods	Number of children between 6-8 months who were fed complementary foods	Total number of children between 6-8 months surveyed per state	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
Breastfed children aged 6-23 months who had minimum dietary diversity (%)	Percentage of breastfed children 6-23 months who had minimum dietary diversity includes four or more food groups	Number of children between 6-23 months who had a minimum dietary diversity	Total number of children between 6-23 months surveyed per state	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
Breastfed children aged 6-23 months who were fed a minimum number of times (%)	Percentage of breastfed children 6-8 months who were fed at least twice a day and breastfed children between 9-23 months who were fed at least three times a day	Number of breastfed children 6-8 months who were fed at least twice a day and breastfed children between 9-23 months who were fed at least three times a day	Total number of breastfed children between 6-23 months surveyed per state	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI

B. CHILD HEALTH

Children aged 0-59 months with diarrhea (%)	Percentage of children between 0-59 months had diarrhea in 15 days prior to survey	Number of children between 0-59 months who had diarrhea in 15 days prior to survey	Total number of children between 0-59 months surveyed per state	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
Children aged 0-59 months with fever (%)	Percentage of children between 0-59 months had fever in 15 days prior to survey	Number of children between 0-59 months who had fever in 15 days prior to survey	Total number of children between 0-59 months surveyed per state	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
Children aged 0-59 months with ARI (%)	Percentage of children between 0-59 months had ARI in 15 days prior to survey	Number of children between 0-59 months who had ARI in 15 days prior to survey	Total number of children between 0-59 months surveyed per state	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI

C. NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

INDICATOR	DEFINITION	NUMERATOR	DENOMINATOR	DATA SOURCE & YEAR
Women with different BMI levels (%) [Note--*For Andhra Pradesh, Arunachal Pradesh, Goa, Haryana, Himachal Pradesh, J&K, Karnataka, Kerala, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Punjab, Sikkim, Tamil Nadu, Tripura and West Bengal **For Assam, Bihar, Chhattisgarh, Delhi, Gujarat, India, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Uttar Pradesh and Uttarakhand]	Percentage of women between 15-49 years of age who are total thin, normal, overweight and obese. [Body Mass Index (BMI) is defined as the weight in kilograms by the square of the height in metres (kg/m ²). It is a simple index of weight-for-height which is commonly used to classify underweight, overweight and obesity in adults. Range: BMI<18.5=total thin, BMI 18.5-24.9=normal, BMI 25.0-29.9=Overweight, BMI>30.0=Obese [per WHO Standards]	Number of women between 15-49 years who are total thin, normal, overweight and obese.	Total number of women between 15-49 years surveyed	*District Level Household & Facility Survey 4 (2012-13), Ministry of Health and Family Welfare, Gol **National Family Health Survey (NFHS-3), Ministry of Health and Family Welfare 2006, Gol
Anemia Prevalence among women (%) [Note--*For Andhra Pradesh, Arunachal Pradesh, Goa, Haryana, Himachal Pradesh, J&K, Karnataka, Kerala, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Punjab, Sikkim, Tamil Nadu, Tripura and West Bengal **For Assam, Bihar, Chhattisgarh, Delhi, Gujarat, India, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Uttar Pradesh and Uttarakhand]	Percentage of women between 15-49 years those who have mild, moderate, severe anaemia. [Haemoglobin levels shown in grams per decilitre are classified into different categories as - Mild a (10.0-10.9g/dl)/ Moderate (7.0-9.9g/dl)/ Severe (<7.0 g/dl) or Any (<11.0 g/dl)]	Number of women between 15-49 years those who have mild, moderate, severe anaemia.	Total number of women between 15-49 years surveyed	*District Level Household & Facility Survey 4 (2012-13), Ministry of Health and Family Welfare, Gol **National Family Health Survey (NFHS-3), Ministry of Health and Family Welfare 2006, Gol
Anemia Prevalence among pregnant women (%) [Note--*For Andhra Pradesh, Arunachal Pradesh, Goa, Haryana, Himachal Pradesh, J&K, Karnataka, Kerala, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Punjab, Sikkim, Tamil Nadu, Tripura and West Bengal **For Assam, Bihar, Chhattisgarh, Delhi, Gujarat, India, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Uttar Pradesh and Uttarakhand]	Percentage of pregnant women between 15-49 years those who have mild, moderate, severe anaemia. [Haemoglobin levels shown in grams per decilitre are classified into different categories as - Mild a (10.0-10.9g/dl)/ Moderate (7.0-9.9g/dl)/ Severe (<7.0 g/dl) or Any (<11.0 g/dl)]	Number of pregnant women between 15-49 years those who have mild, moderate, severe anaemia.	Total number of women between 15-49 years surveyed	*District Level Household & Facility Survey 4 (2012-13), Ministry of Health and Family Welfare, Gol **National Family Health Survey (NFHS-3), Ministry of Health and Family Welfare 2006, Gol
Adolescent girls with different BMI levels (%)	Percentage of adolescent girls between 15-18 years	Number of adolescent girls between 15-18 years	Total number of adolescent girls women between 15-18 years surveyed	Rapid Survey on Children (2014), Ministry of Women and Child Development, Gol

INDICATOR	DEFINITION	NUMERATOR	DENOMINATOR	DATA SOURCE & YEAR
Anemia Prevalence among adolescent girls (%)	Percentage of adolescent girls between 15-19 years those who have mild, moderate, severe anaemia. [Haemoglobin levels shown in grams per decilitre are classified into different categories as - Mild a (10.0-10.9g/dl)/ Moderate (7.0-9.9g/dl)/ Severe (<7.0 g/dl) or Any (<11.0 g/dl)]	Number of adolescent girls between 15-19 years those who have mild, moderate, severe anaemia.	Total number of adolescent girls women between 15-19 years surveyed	National Family Health Survey (NFHS-3), Ministry of Health and Family Welfare 2006, GoI

IV. UNDERLYING DETERMINANTS

A. SOCIAL STATUS OF WOMEN

INDICATOR	DEFINITION	NUMERATOR	DENOMINATOR	DATA SOURCE & YEAR
Women who have 10 or more years of schooling (%) [Note--For Andhra Pradesh, Arunachal Pradesh, Goa, Haryana, Himachal Pradesh, J&K, Karnataka, Kerala, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Punjab, Sikkim, Tamil Nadu, Tripura and West Bengal **For Assam, Bihar, Chhattisgarh, Delhi, Gujarat, India, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Uttar Pradesh and Uttarakhand]	Percentage of ever married women between 15-49 years who have an educational level greater than primary level	Number of ever married sampled women between 15-49 years who have an educational level greater than primary level	Total number of ever married women between 15-49 years surveyed	*District Level Household & Facility Survey 4 (2012-13), Ministry of Health and Family Welfare, GoI ** District Level Household & Facility Survey 3 (2007-08), Ministry of Health and Family Welfare, GoI
Women aged 20-24 years who are married below 18 years (%)	Percentage of women between 20-24 years who are married below the age of 18	Number of women between 20-24 years who are married below the age of 18	Total number of women between 20-24 years surveyed per state	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
Average age at marriage	Average age at marriage			Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
Gender empowerment measure	Weighted average index based on indicators on three dimensions: i. political participation and decision-making power; ii. Economic participation and decision-making power; iii. Power over economic resources. For detailed list of indicators and illustration of GEM calculation please see: http://wcd.nic.in/publication/GDIGEReport/Part4.pdf	For each of the indicators along the three dimensions, an equally distributed equivalent percentage (EDEP) is calculated as a population-weighted average. Each EDEP is indexed by dividing it by 50 (assuming perfect equality in an ideal world). The GEM is a simple average of the indexed EDEPs assuming equal weights for each of the three dimensions		Gendering Human Development Indices: Recasting the Gender development Index and Gender Empowerment Measure for India, Ministry of Women and Child Development, GoI, 2009 http://wcd.nic.in/publication/GDIGEReport/Part3.pdf
Female workforce participation rate (%)	Percentage of female working population of the state [Note-Persons engaged in any gainful activity are considered 'workers' (or employed). They are the persons assigned any one or more of the nine activity categories under the first broad activity category i.e. "working or employed"]	Female working population of the state	Total working population of the state	Women and Men in India, 2014, 16th Issue. Social Statistics Division, CSO, MOSPI, GoI. http://mospi.nic.in/Mospi_New/upload/man_and_women/Women_Men_In_India_2014.htm http://mospi.nic.in/Mospi_New/upload/man_and_women/Chapter%204.pdf

INDICATOR	DEFINITION	NUMERATOR	DENOMINATOR	DATA SOURCE & YEAR
Currently married women who make decisions about own health care (%)	Percentage of currently married women 15-49 years of age had right to decide on own health care	Number of currently married women between 15-49 years who had right to decide on own health care	Total number of currently married women 15-49 years of age surveyed	National Family Health Survey (NFHS-3), Ministry of Health and Family Welfare 2006, GoI
Currently married women who make decisions about major household purchase (%)	Percentage of currently married women 15-49 years of age had right to decide on household purchase	Number of currently married women between 15-49 years who had right to decide on household purchase	Total number of currently married women 15-49 years of age surveyed	National Family Health Survey (NFHS-3), Ministry of Health and Family Welfare 2006, GoI
Currently married women who make decisions about purchases for daily household needs (%)	Percentage of currently married women 15-49 years of age had right to decide on purchases of daily household needs	Number of currently married women between 15-49 years who had right to decide on purchases of daily household needs	Total number of currently married women between 15-49 years surveyed	National Family Health Survey (NFHS-3), Ministry of Health and Family Welfare 2006, GoI
Currently married women who make decisions about visits to her family/friends/relatives (%)	Percentage of currently married women 15-49 years of age had right to decide on visiting their family/friends/relatives on own	Number of currently married women between 15-49 years who had right to decide on visiting their family/friends/relatives on own	Total number of currently married women 15-49 years of age surveyed	National Family Health Survey (NFHS-3), Ministry of Health and Family Welfare 2006, GoI
Ever married women who experienced any form of violence (physical/emotional/sexual) (%)	Percentage of ever married women who have experienced any form of physical/sexual/emotional violence	Number of ever married women between 15-49 years who have experienced any form of physical/sexual/emotional violence	Total number of ever married women 15-49 years of age surveyed	National Family Health Survey (NFHS-3), Ministry of Health and Family Welfare 2006, GoI
Ever married women who justify hitting/wife-beating (%)	Percentage of ever married women who justify hitting/wife-beating (for either of any reasons mentioned)	Number of ever married women between 15-49 years who justify hitting/wife-beating (for either of any reasons mentioned)	Total number of ever married women 15-49 years of age surveyed	National Family Health Survey (NFHS-3), Ministry of Health and Family Welfare 2006, GoI

B. WATER AND SANITATION

Households having access to improved sources of water (%)	Percentage of households in the state using an improved drinking water source	Number of households using improved drinking water source	Total number of households in the state	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
Households having improved sanitation facility (%)	Percentage of households have access to improved sanitation facility	Number of households using improved sanitation facilities which are not shared	Total number of households in the state	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
Households practicing open defecation (%)	Percentage of households practicing open defecation	Number of households who practice open defecation	Total number of households in the state	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI

INDICATOR	DEFINITION	NUMERATOR	DENOMINATOR	DATA SOURCE & YEAR
Expenditure on toilets under TSC (in million USD @INR 60)	Expenditure on TSC includes the following expenditures: toilets construction subsidies, funding of other activities such as solid and liquid waste management, IEC activities for sustainable demand generation for sanitation facilities, assistance to production centres of sanitary materials and rural sanitary marts, provision of construction of community sanitary complexes, provision of sanitation facilities in government schools and Anganwadis in government buildings.			Indiastat, 2011-12, Rajya Sabha Unstarred Question No. 2950, dated on 30.08.2011

C. AGRICULTURE AND FOOD SECURITY

Growth rate of agriculture (%)	Percentage growth in production of food grains and cash crops from year 2007-2012	Total production of food grains and cash crops in the given year per state	Total production of food grains and cash crops in the given year in India	Indiastat, compiled by datanet from Rajyasabha & Lok Sabha unstarred questions no. 3039, 45335, 2007-12
Share in India's total food grain production (%)	Percentage share of the state in the total food grain production of India	Total food grain production of the state in the given year	Total food grain production of India in the given year	Indiastat, Ministry of Agriculture, 2011-12, GoI
Mean calorie intake per person per day (in Kcal) for all monthly per capita expenditure classes (Rural & Urban)	Average quantity of calorie consumption (Kcal) per day per capita			NSSO, 68th round- Nutritional Intake in India, 2011-12. Ministry of Statistics and Programme Implementation, NSO
Expenditure on food items (pulses, milk, vegetables, fruits, eggs, meat, fishes and intoxicants) by income quintiles (%)	Percentage share of pulses, milk, vegetables, fruits and intoxicants in the total monthly per capita expenditure on food for each income quintile	Average monthly per capita expenditure on each of the following food groups: pulses, milk, vegetables, fruits and intoxicants per income quintile	Average monthly per capita expenditure on all food per income quintile	NSSO, 68th round- Nutritional Intake in India, 2011-12. Ministry of Statistics and Programme Implementation, NSO

V. STATUS OF NUTRITION-RELEVANT INTERVENTIONS

A. NUTRITION-SPECIFIC INTERVENTIONS

A.1 Coverage of ICDS and NHM: Beneficiaries who availed supplementary food under ICDS

INDICATOR	DEFINITION	NUMERATOR	DENOMINATOR	DATA SOURCE & YEAR
i. Children between 6-35 months who received supplementary food under ICDS (%)	Percentage of children between 6-35 months who received supplementary food under ICDS	Number of children between 6-35 months	Total targeted children between 6-35 months surveyed per state	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
ii. Children between 36-71 months who received supplementary food under ICDS (%)	Percentage of children between 36-71 months who received supplementary food under ICDS	Number of children between 36-71 months	Total targeted children between 36-71 months surveyed per state	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
iii. Pregnant women who received supplementary food under ICDS (%)	Percentage of pregnant women who received supplementary food under ICDS	Number of pregnant women who received supplementary food under ICDS	Total number of pregnant women surveyed per state	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
iii. Lactating women who received supplementary food under ICDS (%)	Percentage of lactating women who received supplementary food under ICDS	Number of lactating women who received supplementary food under ICDS	Total number of lactating women surveyed per state	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI

A.2 Coverage of ICDS and NHM: Beneficiaries who availed supplementary food under ICDS

i. Children between 6-35 months as beneficiaries who received supplementary food for at least 21 days in the month prior to the survey (%)	Percentage of children between 6-35 months as beneficiaries who received supplementary food for 21 days or more in the month prior to the survey	Number of children between 6-35 months as beneficiaries who received supplementary food for 21 days or more in the month prior to the survey	Total children between 6-35 months surveyed per state	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
ii. Children between 36-71 months as beneficiaries who received supplementary food for at least 21 days in the month prior to the survey (%)	Percentage of children between 36-71 months as beneficiaries who received supplementary food for at least 21 days in the month prior to the survey	Number of children between 36-71 months as beneficiaries who received supplementary food for at least 21 days in the month prior to the survey	Total number of children between 36-71 months surveyed per state	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
iii. Pregnant women as beneficiaries who received supplementary food for at least 21 days in the month prior to the survey (%)	Percentage of pregnant women as beneficiaries who received supplementary food for at least 21 days in the month prior to the survey	Number of pregnant women as beneficiaries who received supplementary food for at least 21 days in the month prior to the survey	Total number of pregnant women surveyed per state	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
iv. Lactating mothers as beneficiaries who received supplementary food for at least 21 days in the month prior to the survey (%)	Percentage of lactating mothers as beneficiaries who received supplementary food for at least 21 days in the month prior to the survey	Number of lactating mothers as beneficiaries who received supplementary food for at least 21 days in the month prior to the survey	Total number of lactating mothers surveyed per state	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI

A.3 Coverage of ICDS and NHM: Beneficiaries who received supplementary food under ICDS

Women who had live birth in 35 months prior to survey received three or more antenatal check-ups (%)	Percentage of women with a live birth in 35 months prior to survey who received 3 or more antenatal check ups	Number of women with a live birth in 35 months prior to the survey who received three or more antenatal check-ups	Total number of women with a live birth in 35 months prior to the survey	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI

INDICATOR	DEFINITION	NUMERATOR	DENOMINATOR	DATA SOURCE & YEAR
Women who had live birth in 35 months prior to survey received two or more TT injections (%)	Percentage of women with a live birth in 35 months prior to survey who received 2 or more TT injections	Number of women with a live birth in 35 months prior to the survey who received two or more TT injections	Total number of women with a live birth in 35 months prior to the survey	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
Women with a live birth in 35 months prior to survey who consumed 100 or more IFA tablets/syrups during pregnancy (%)	Percentage of women with a live birth in 35 months prior to survey who consumed 100 or more IFA tablets/syrups during pregnancy	Number of women (with a live birth in 35 months prior to the survey) who consumed 100 or more IFA tablets/syrups during pregnancy	Total number of women (with a live birth in 35 months prior to the survey) per state	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
Women with a live birth in 35 months prior to survey who had institutional delivery (%)	Percentage of women with a live birth in 35 months prior to survey who had institutional delivery	Number of live births in the last 3 years that were delivered in the health facility	Total number of live births in the last 3 years	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
Women with a live birth in 35 months prior to survey whose delivery was assisted by skilled health provider (%)	Percentage of women with a live birth in 35 months prior to survey whose delivery was assisted by skilled health provider	Number of live births in the last 3 years that were attended by skilled health personnel	Total number of live births in the last 3 years	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
Children fully immunized (Rural & Urban) (%)	Percentage of children (12-23 months age) receiving one dose BCG, 3 doses of DPT/OPV each and 1 measles vaccine	Number of children between 12-23 months receiving one dose BCG, 3 doses of DPT/OPV each and 1 measles vaccine	Total number of children between 12-23 months surveyed	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
Children not immunized (%)	Percentage of children aged 12-23 months who are not immunized	Number of children between 12-23 months who are not immunized	Total number of children in the age group of 12-23 months of age surveyed	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI

A.4 Coverage of ICDS and NHM: Women (15-49 years) given advice on:

Breastfeeding (%) [Note--*For Andhra Pradesh, Arunachal Pradesh, Goa, Haryana, Himachal Pradesh, J&K, Karnataka, Kerala, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Punjab, Sikkim, Tamil Nadu, Tripura and West Bengal **For Assam, Bihar, Chhattisgarh, Delhi, Gujarat, India, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Uttar Pradesh and Uttarakhand]	Percentage of women between 15-49 years given advice on breastfeeding	Number of women between 15-49 years given advice on breastfeeding	Total number of women between 15-49 years surveyed	*District Level Household & Facility Survey 4 (2012-13), Ministry of Health and Family Welfare, GoI ** District Level Household & Facility Survey 3 (2007-08), Ministry of Health and Family Welfare, GoI

INDICATOR	DEFINITION	NUMERATOR	DENOMINATOR	DATA SOURCE & YEAR
Nutrition (%) Note-*For Andhra Pradesh, Arunachal Pradesh, Goa, Haryana, Himachal Pradesh, J&K, Karnataka, Kerala, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Punjab, Sikkim, Tamil Nadu, Tripura and West Bengal **For Assam, Bihar, Chhattisgarh, Delhi, Gujarat, India, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Uttar Pradesh and Uttarakhand]	Percentage of women between 15-49 years given advice on nutrition of mother and child	Number of women between 15-49 years given advice on nutrition of mother and child	Total number of women between 15-49 years surveyed	*District Level Household & Facility Survey 4 (2012-13), Ministry of Health and Family Welfare, GoI ** District Level Household & Facility Survey 3 (2007-08), Ministry of Health and Family Welfare, GoI
Institutional Delivery (%) Note-*For Andhra Pradesh, Arunachal Pradesh, Goa, Haryana, Himachal Pradesh, J&K, Karnataka, Kerala, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Punjab, Sikkim, Tamil Nadu, Tripura and West Bengal **For Assam, Bihar, Chhattisgarh, Delhi, Gujarat, India, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Uttar Pradesh and Uttarakhand]	Percentage of women between 15-49 years given advice on institutional delivery	Number of women between 15-49 years given advice on institutional delivery	Total number of women between 15-49 years surveyed	*District Level Household & Facility Survey 4 (2012-13), Ministry of Health and Family Welfare, GoI ** District Level Household & Facility Survey 3 (2007-08), Ministry of Health and Family Welfare, GoI

A.5 Personnel capacity of ICDS and NRHM: Availability of Anganwadi Centres and Workers (AWCs and AWWs)

Pending/Vacant AWW positions to sanctioned workers (%)	Percentage of pending or vacant AWW positions to sanctioned numbers of workers	Number of pending or vacant AWW positions	Number of sanctioned AWW positions for the state	ICDS Data Tables, Ministry of Women and Child Development, 2012 http://www.wcd.nic.in/icdsdataatatables.htm , 2011-12
AWWs living in the AWC village/ward (%)	Percentage of AWWs living in the AWC village/ward	Number of AWWs living in the AWC village/ward	Total number of AWWs surveyed	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
AWWs having 10 or more years of schooling (%)	Percentage of AWWs having 10 or more years of schooling	Number of AWWs having 10 or more years of schooling	Total number of AWWs surveyed period	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
Median age of AWWs	Median age of the AWWs	Median age of the total number of AWWs surveyed		Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
AWCs serving to population more than the stipulated norm (%)	Percentage of AWCs serving to population more than the stipulated norm	Number of AWCs serving to population of the state	Total number of functioning AWCs in the state	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI

INDICATOR	DEFINITION	NUMERATOR	DENOMINATOR	DATA SOURCE & YEAR
A.6 Personnel capacity of ICDS and NRHM: Growth monitoring				
AWCs having functional baby weighing scale (%)	Percentage of AWCs having functional weighing scale for baby	Number of AWCs having functional baby weighing scale	Total number of AWCs surveyed	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
AWCs having functional adult weighing scale (%)	Percentage of AWCs having functional weighing scale for adults	Number of AWCs having functional adult weighing scale	Total number of AWCs surveyed	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
WHO growth chart available at AWCs (%)	Percentage of AWCs which have WHO growth charts	Number of AWCs which have WHO growth charts	Total number of AWCs surveyed	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
A.7 Personnel capacity of ICDS and NRHM: Training and comprehensive knowledge				
AWWs having correct knowledge of intake of food by pregnant women (%)	Percentage of AWWs having correct knowledge of intake of food by pregnant women	Number of AWWs having correct knowledge of intake of food by pregnant women	Total number of AWWs surveyed	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
AWWs having correct knowledge of normal birth weight of children (%)	Percentage of AWWs having correct knowledge of normal birth weight of children	Number of AWWs having correct knowledge of normal birth weight of children	Total number of AWWs surveyed	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
AWWs having correct knowledge of initiation of breastfeeding within one hour (%)	Percentage of AWWs having correct knowledge of initiation of breastfeeding within one hour	Number of AWWs having correct knowledge of initiation of breastfeeding within one hour	Total number of AWWs surveyed	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
AWWs having correct knowledge of exclusive breastfeeding for the first six months (%)	Percentage of AWWs having correct knowledge of exclusive breastfeeding for the first six months	Number of AWWs having correct knowledge of exclusive breastfeeding for the first six months	Total number of AWWs surveyed	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
AWWs having correct knowledge of appropriate age of child for complementary feeding (%)	Percentage of AWWs having correct knowledge of appropriate age of child for complementary feeding	Number of AWWs having correct knowledge of appropriate age of child for complementary feeding	Total number of AWWs surveyed	Rapid Survey on Children (2014), Ministry of Women and Child Development, GoI
A.8 Personnel capacity of ICDS and NRHM: Health service delivery personnel				
ASHAs selected (%)	Percentage of ASHAs selected as a relative to the proposed number of ASHAs as per the state's rural population	Number of ASHAs selected per state	Total number of ASHAs proposed as per the state's rural population	Update on ASHA programme-July 2013, National Rural Health Mission, Ministry of Health and Family Welfare, GoI http://nrhm.gov.in/images/pdf/communitisation/asha/R eports/Update_on_ASHA_Program_July_2013.pdf
Current density of ASHAs (as per Census 2011 rural population)	Based on the rural population for the state as per the latest Census, the current density is defined as 1 ASHA worker per 'x' persons (against the norm of 1 ASHA per 1,000 population)	Rural Population as per 2011 Census	Number of ASHAs selected as of June 2013 as reported by the states	Update on ASHA programme-July 2013, National Rural Health Mission, Ministry of Health and Family Welfare, GoI http://nrhm.gov.in/images/pdf/communitisation/asha/R eports/Update_on_ASHA_Program_July_2013.pdf

INDICATOR	DEFINITION	NUMERATOR	DENOMINATOR	DATA SOURCE & YEAR
Pending/Vacant ANMs in Sub centres and PHCs (%)	Percentage of pending or vacant ANM positions to sanctioned positions in sub centres and rural PHCs per state	Number of pending or vacant ANM positions in sub centres and rural PHCs per state	Total number of sanctioned ANM positions in sub centres and rural PHCs per state	Indiastat, Ministry of Health and Family Welfare, GoI (ON185) 2013 http://www.indiastat.com/table/health/16/manpowerinhealthsubcentres20012013/451478/885281/data.aspx

A.9 Expenditures on schemes delivering nutrition-specific interventions

ICDS	Funds released under ICDS Scheme [including ICDS (Gen.), SNP and Training] in million USD			Authors' estimates: Indiastat, Lok Sabha Unstarred Question. No. 846 dated 27.02.2015 http://164.100.47.132/Annexure_New/Isq16/4/au846.htm
NRHM	Expenditure of state & Central Governments on NRHM in million USD			Authors' estimates: Indiastat, Lok Sabha Annexured Unstarred Question # 409 dated 6.12.2013

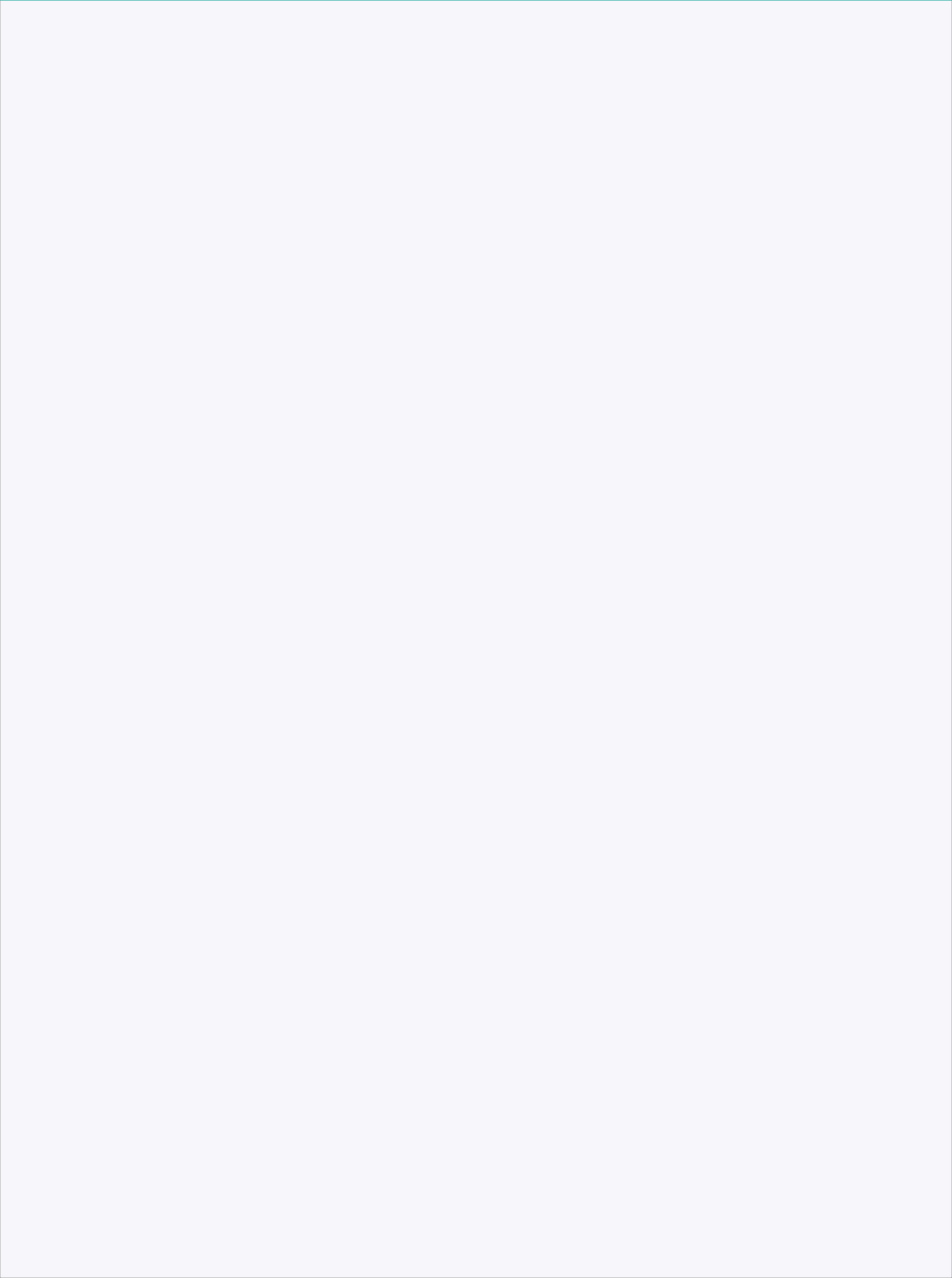
B. NUTRITION-SENSITIVE INTERVENTIONS

B.1 Coverage of schemes delivering nutrition-sensitive interventions

MDMS (%)	Percentage of all eligible children covered under Mid-day meal scheme during 2013-14 [Note-eligible children are all children studying in Primary and Upper Primary Classes in Government, Govt. Aided, Local Body, EGS and AIE Centres, Madarsa and Maqtabas supported under Sarva Shiksha Abhiyan and NCLP Schools run by Ministry of Labour]	Number of all eligible children	Total targeted number of eligible children per state	Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/Isq15/15/as216.htm
PDS (%)	Percentage of households reporting consumption through PDS	Number of rural-urban households reporting consumption through PDS	Total number of rural-urban households surveyed per state	Report No. 558, NSS 68th round (2011-12)-Household Consumption of Various Goods and Services in India. NSSO, Ministry of Statistics and Programme Implementation and GoI
MGNREGA (%)	Percentage of rural persons 18 years and above registered in MGNREG job card and worked during last 365 days prior to the survey	Number of rural persons 18 years and above registered in MGNREG job card and worked during last 365 days prior to the survey	Total number of rural persons 18 years and above registered in MGNREG job card who demanded work during last 365 days prior to the survey	Report No. 554, NSS 68th round (2011-12)-Employment and Unemployment Situation of India. NSSO, Ministry of Statistics and Programme Implementation and GoI

INDICATOR	DEFINITION	NUMERATOR	DENOMINATOR	DATA SOURCE & YEAR
B.2 Expenditure on schemes delivering nutrition-sensitive interventions				
MDMS	Expenditure incurred on Mid Day Meal Scheme in million USD			Authors' estimates: Indiatat, Part (c) of Lok Sabha Starred Question # 216 dated 05.02.2014 http://164.100.47.132/Annexure_New/lsq15/15/as216.htm
PDS	Total cost of offtake of rice and wheat per state in million USD			Authors' estimates: Food Corporation of India 2013
MGNREGA	Central government expenditure under MGNREGA in million USD			Authors' estimates: Indiatat, Lok Sabha Unstarred Question # 3835 dated on 19.03.2015

APPENDIX B:
LIST OF PERSPECTIVE PIECES,
BY EXPERT CONTRIBUTORS



We are deeply grateful to the experts who helped shape the India Health Report: Nutrition 2015 with their valuable perspectives on nutrition and its many challenges. The papers are listed below and are available on the following website: www.transformnutrition.org

	Title	Authors
1	Stunting in Children in India: it's Association with the Multiple Determinants of Nutrition	Ashi Kohli Kathuria John Lincoln Newman
2	Agriculture, Nutrition and Health in India: Linkages and disconnects	Swarna Sadasivam Vepa Vinodhini Umashankar R.V. Bhavani
3	Overnutrition – State, Drivers and Challenges	Kiruba Sankar KV Tinku Thomas Anura Kurpad
4	India's Malnutrition Enigmas: Why They Must Not Be a Distraction from Action	Lawrence Haddad
5	Nurturing Public Health Nutrition Education in India	Shweta Khandelwal Anura Kurpad
6	Repositioning Nutrition in India: What will it take?	Meera Shekar
7	Agriculture for Improving Nutrition in India	S. Mahendra Dev
8	India Health Report: Perspective Paper on Nutrition	M. G. Venkatesh Mannar
9	Adolescent Girls and Women's Nutritional Status in India: A critical Review of Current Understanding, Gaps and Challenges	Melissa Young Usha Ramakrishnan
10	Impact of Water, Environment and Sanitation on Nutrition	Indira Chakravarty
11	Overweight and Obesity - Causes, Consequences and Control Measures	Kamala Krishnaswamy Sudha Vasudevan
12	Addressing India's Nutrition Challenge	Nira Ramachandran
13	Maternal and Child Undernutrition in India and Implications for Public Health Policies	Shobha Rao
14	Examining Current Nutrition Policies in the Context of the Dual Burden: Malnutrition and Nutrition Transition	Anuradha Jain Rajib Das Gupta Rajiv Tandon
15	Can Food Alone Resolve "Malnutrition"?: Stunting, Open Defecation, and the Urgency of a Policy Response	Dean Spears
16	Investigating in Accelerating Coverage of Direct High Impact Essential Interventions	Rajiv Tandon

