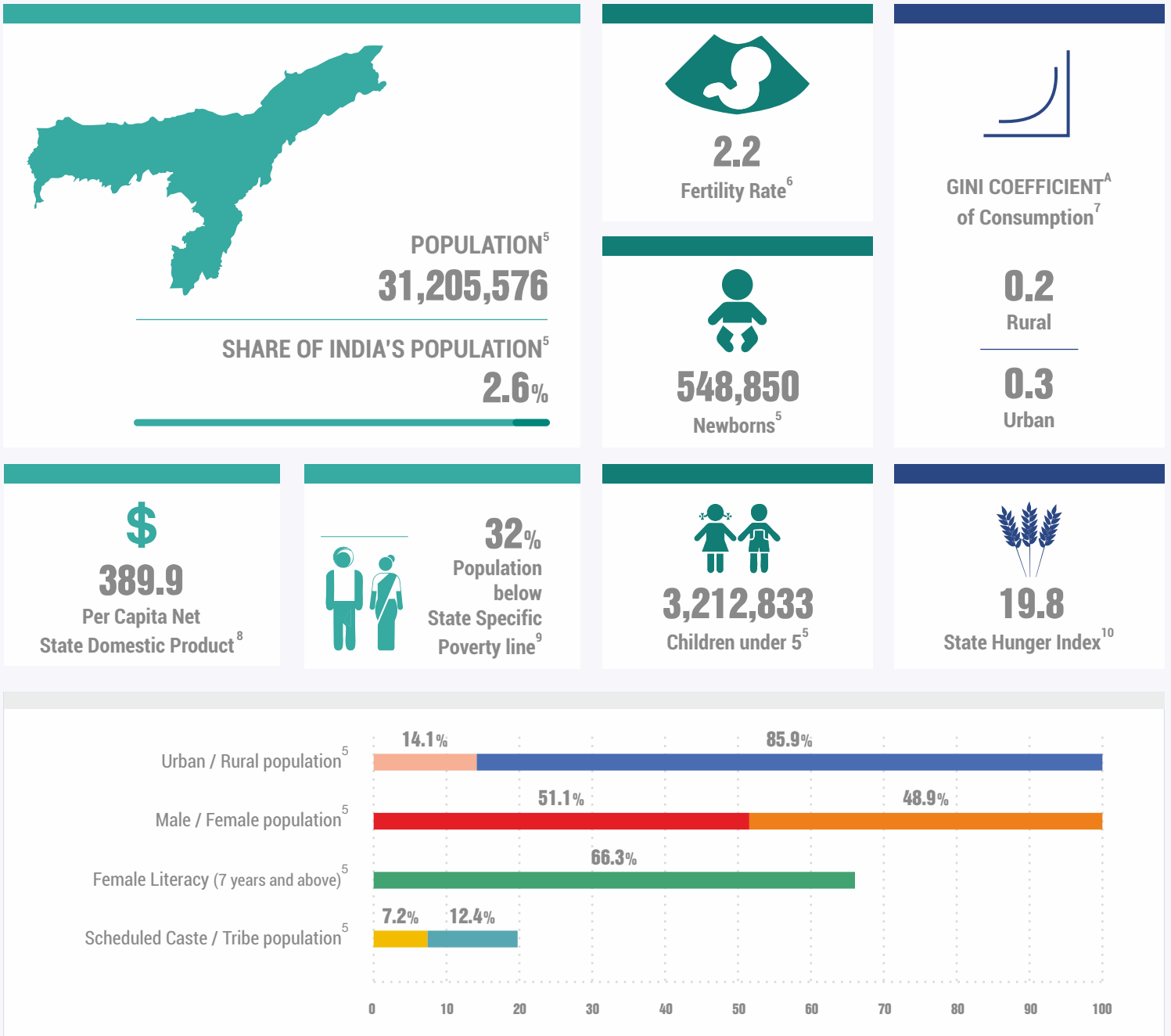


I. CONTEXT

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

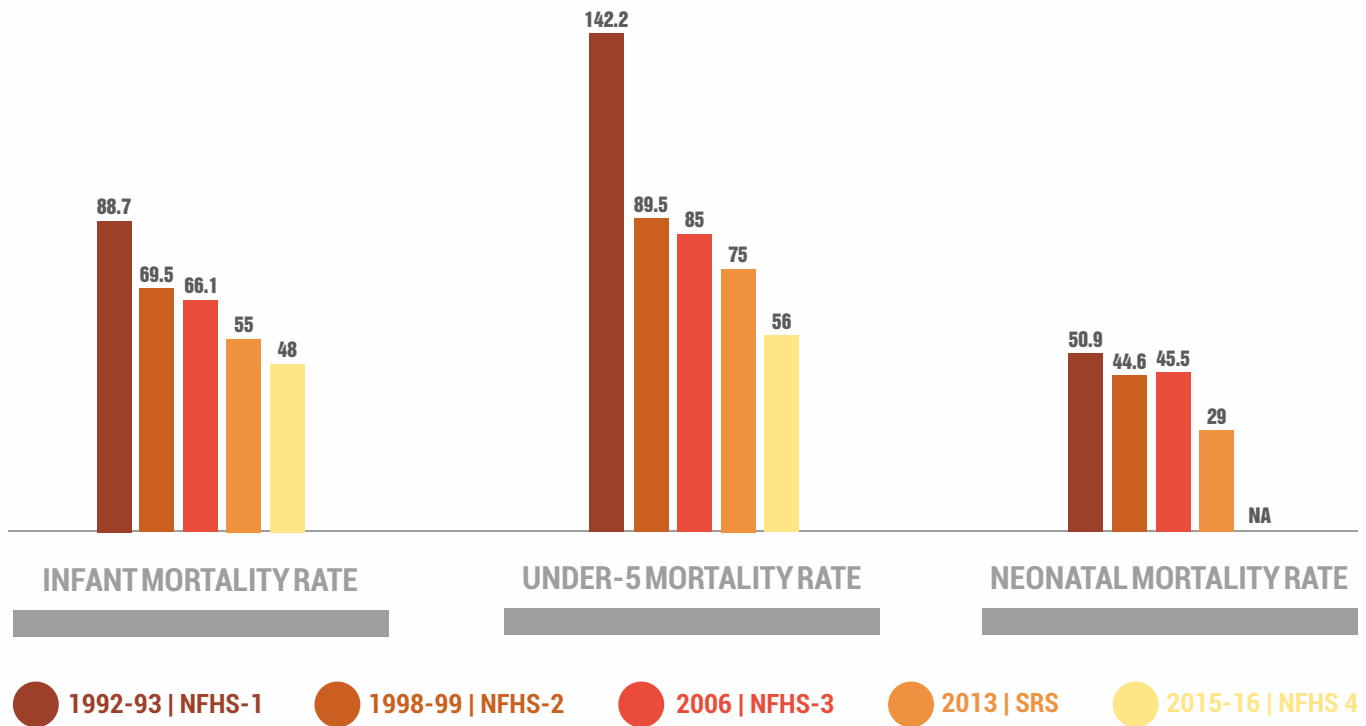
⁸ Source : Press Releases and Statements, Ministry of Statistics and Programme Implementation, 2013-14.; http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82

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

This section illustrates trends in mortality in neonates, infants and for children less than 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.

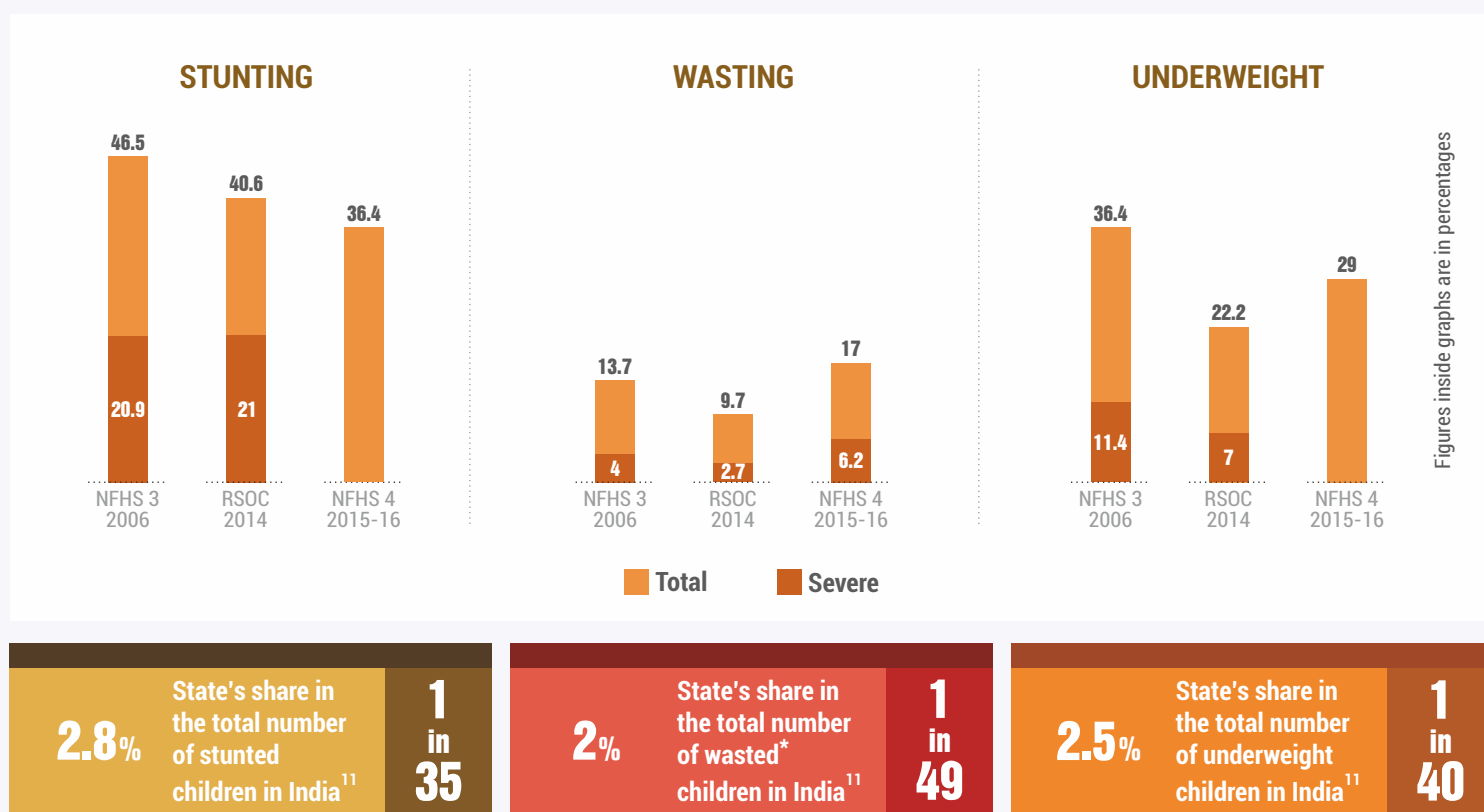
A. CHILD UNDERNUTRITION, BY TIME PERIOD

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.

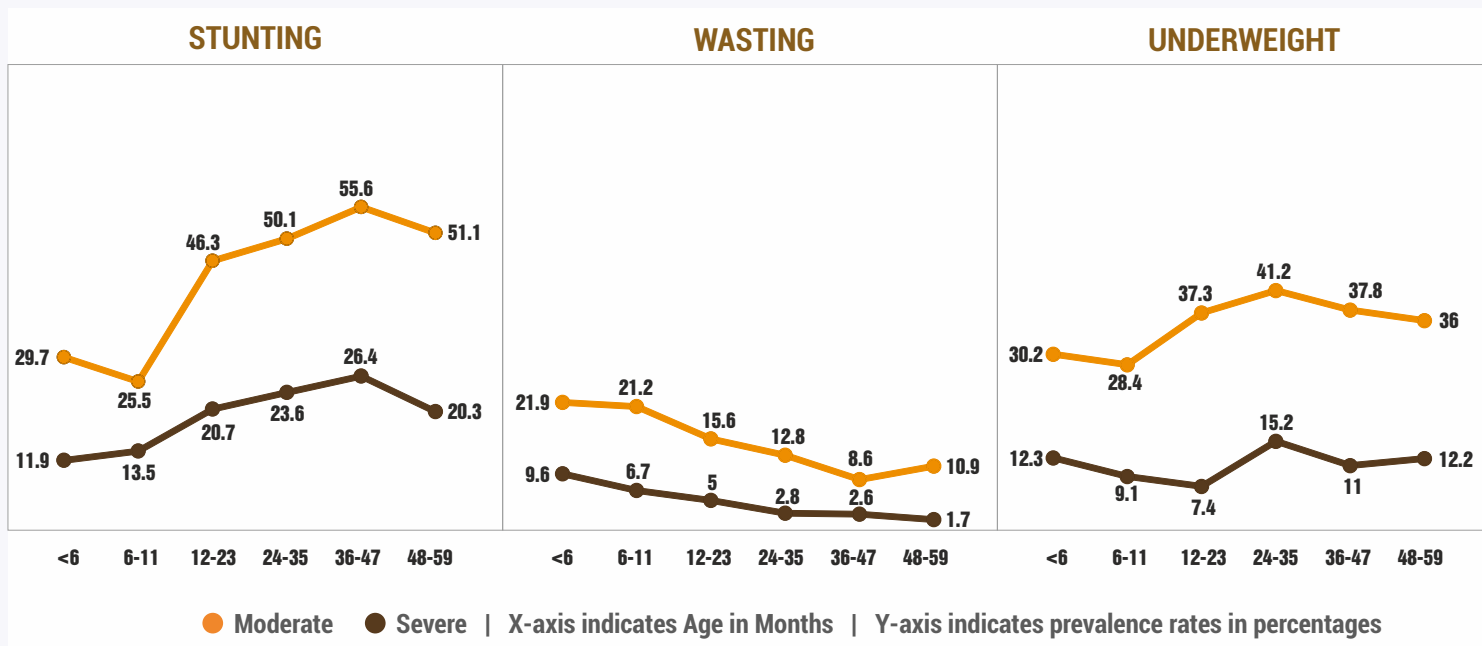


*Wasting is subject to seasonal variations either in food supply or disease prevalence and hence may not be comparable across groups of children measured at different times of the year within a survey round as well as between different survey rounds.

¹¹ Source : NFHS-3, 2006

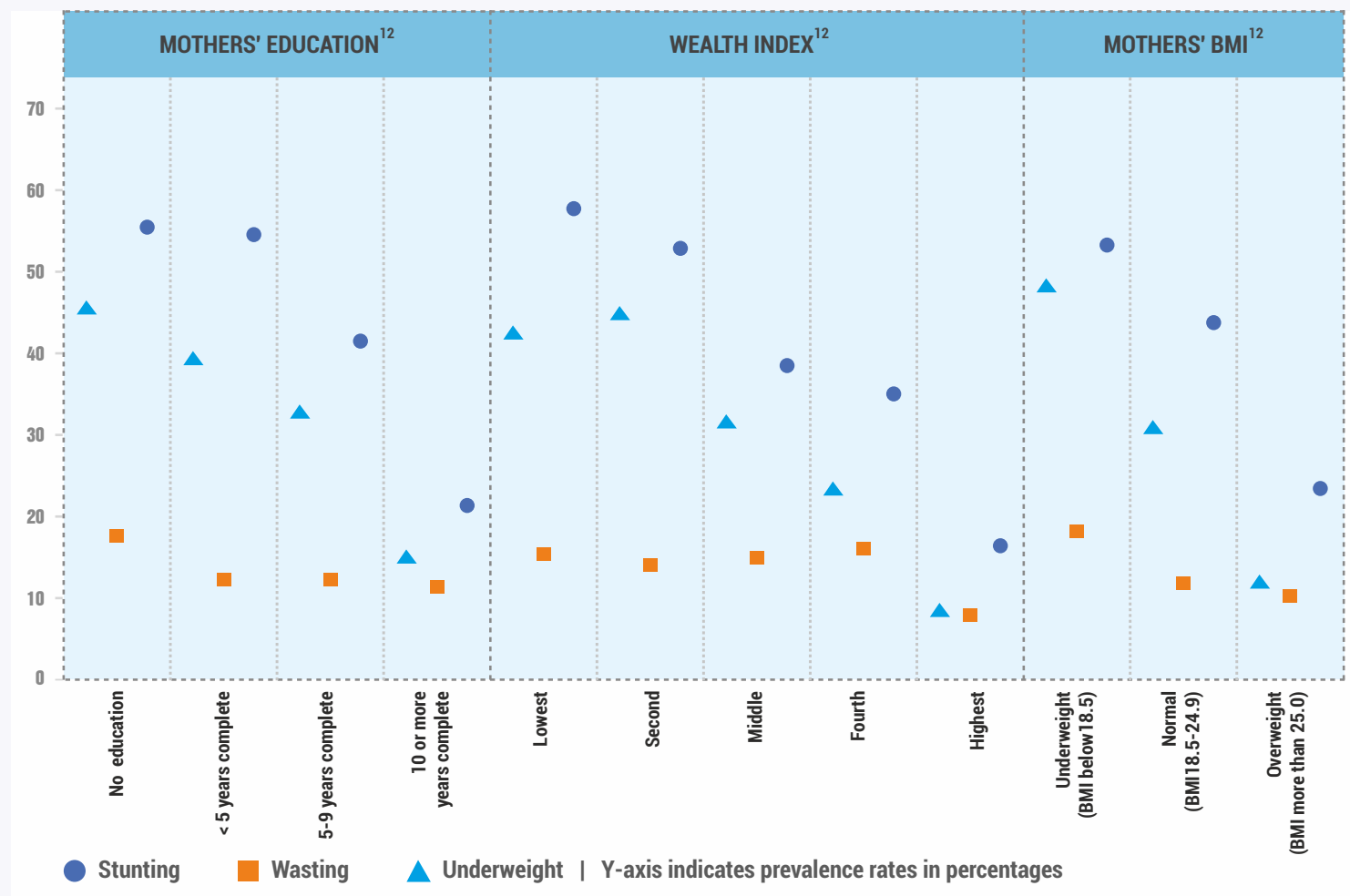
B. CHILD UNDERNUTRITION, BY AGE GROUPS¹²

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.



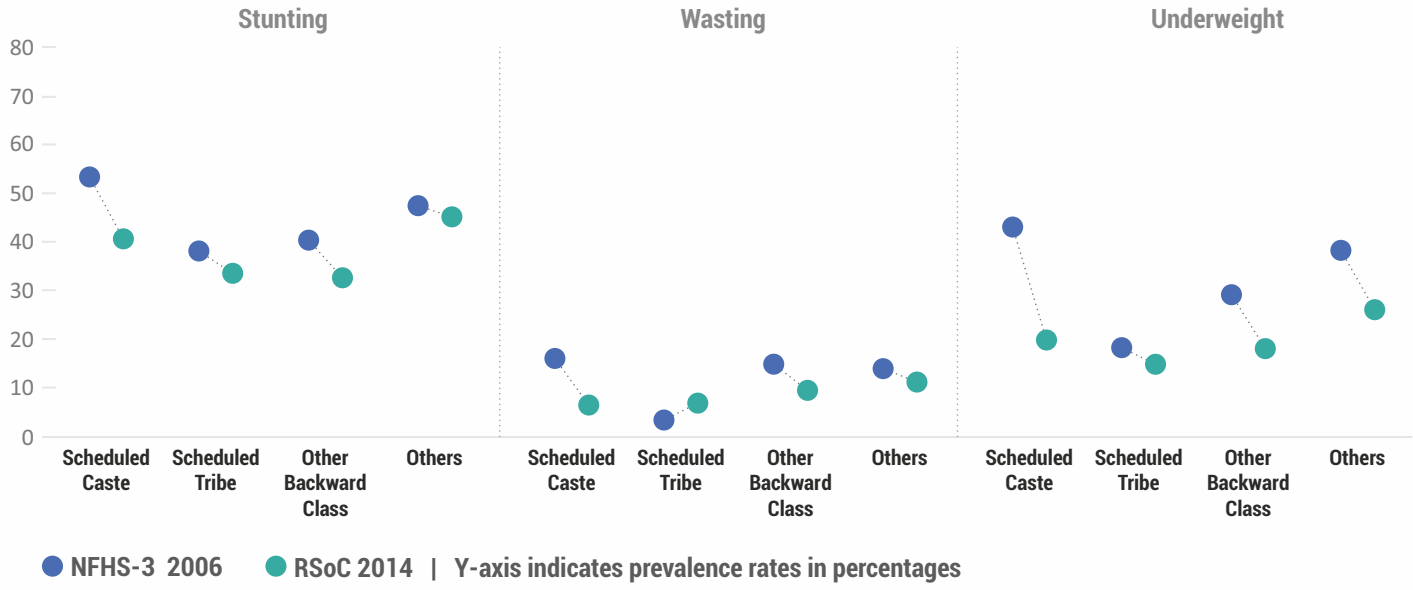
C. PREVALENCE OF CHILD UNDERNUTRITION, BY BACKGROUND CHARACTERISTICS

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.

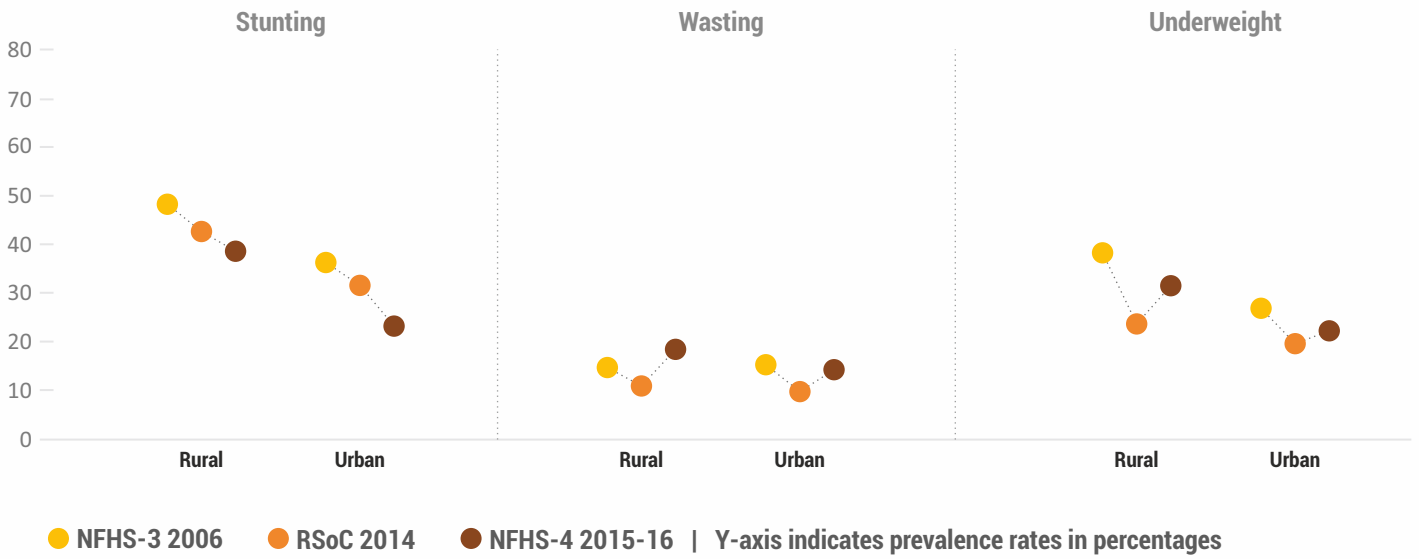


¹² Source : NFHS-3, 2006

CASTE

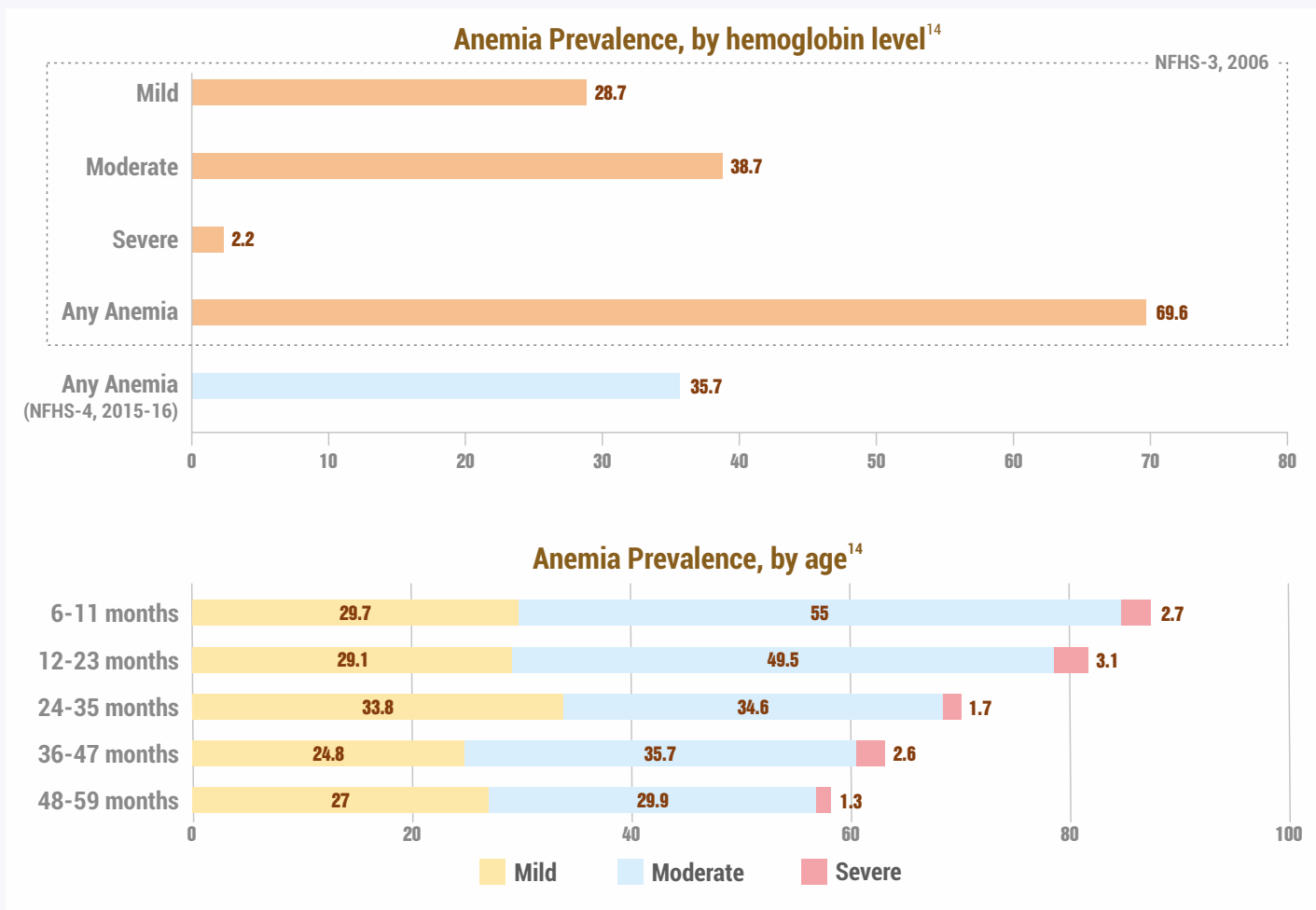


RESIDENCE



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) PRACTICES^{15i & 15ii}

This section presents indicators for assessing IYCF practices as recommended by the WHO and revised in 2008. Following optimal IYCF practices during the first 1000 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%	RSOC 2014
Children under age 3 years breastfed within one hour of birth	64.4%	NFHS 4 2015-16
Children aged 0-5 months who were exclusively breastfed	64.7%	RSOC 2014
Children under age 6 months exclusively breastfed (based on the youngest child living with the mother)	63.5%	NFHS 4 2015-16
Children aged 6-8 months who were fed complementary foods	76.1%	RSOC 2014
Children age 6-8 months receiving solid or semi-solid food and breastmilk (based on the youngest child living with the mother)	49.9%	NFHS 4 2015-16
For breastfed children (6-23 months)		
a. Fed a minimum number of times 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	25.6%	RSOC 2014
b. Had a minimum dietary diversity Minimum dietary diversity refers to four or more food groups to children age 6-23 months	17.8%	RSOC 2014
Breastfeeding children aged 6-23 months receiving an adequate diet (based on the youngest child living with the mother receiving 4 or more food groups and a minimum meal frequency)	8.7%	NFHS 4 2015-16

B. CHILD HEALTH^{15i & 15ii}

Prevalence of childhood illnesses (in children aged 0-59 months)	RSOC	NFHS-4
Had diarrhea in 15 days prior to survey	2.1%	2.9%
Had fever in 15 days prior to survey	10.4%	NA
Had symptoms of Acute Respiratory Infection (ARI) in 15 days prior to survey	4.3%	1%
Had fever or symptoms of ARI in the last 2 weeks preceding the survey who were taken to a health facility	NA	46.8%

¹⁵ⁱ 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.

¹⁵ⁱ Source : RSoC, 2014

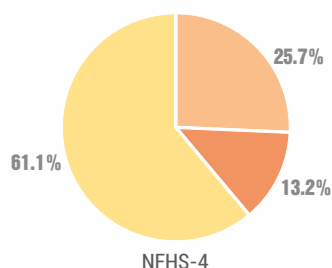
¹⁵ⁱⁱ Source : NFHS 4, 2015-16

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/stature among women of reproductive age are presented in this section, as are data on adolescent BMI and anemia.

C.1. WOMEN 15-49 YEARS OLD

BMI^C levels of women aged 15-49 years¹⁶



● Below Normal ● Normal ● Overweight / Obese

^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]

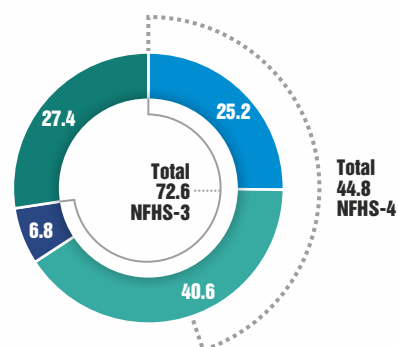


Women aged 15-49 years :

46% who are anemic¹⁶

C.2. PREGNANT WOMEN

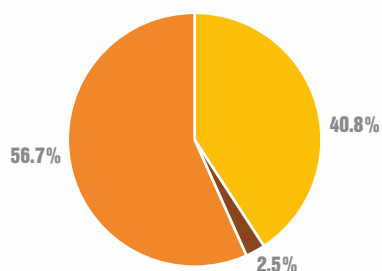
Anemia prevalence in pregnant women aged 15-49 years^{16 & 16i}



● Mild ● Moderate ● Severe ● None

C.3. ADOLESCENT GIRLS

BMI levels of adolescent girls aged 15-18 years¹⁷



● Normal ● Thin ● Overweight and Obese



67.8%
Adolescent girls aged 15-19 years
who are anemic¹⁶ⁱ

3.3%
Adolescent girls aged 15-19 years
who are severely anemic¹⁶ⁱ

¹⁶ Source : NFHS-4, 2015-16

¹⁶ⁱ 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.



Women aged 15-49 years who have 10 or more years of schooling¹⁸ **26.2%**



Currently married women who usually participate in household decisions¹⁸ **87.4%**



32.6% Women aged 20-24 years who were married before the age of 18¹⁸

21.4 Average age at marriage¹⁹



Female workforce participation rate²² **22.5%**

Gender Empowerment Measure^{D,20} **0.4**

0.5 National Average²⁰



Ever married women who have ever experienced spousal violence¹⁸ **24.5%**

^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 : NFHS-4, 2015-16

¹⁹ Source : RSoC, 2014

²⁰ Source : MoWCD, 2006

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

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.



83.8%

Households with access to improved sources of drinking water^{E, 23}

47.7%

Households using improved sanitation facility^{F, 23}



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

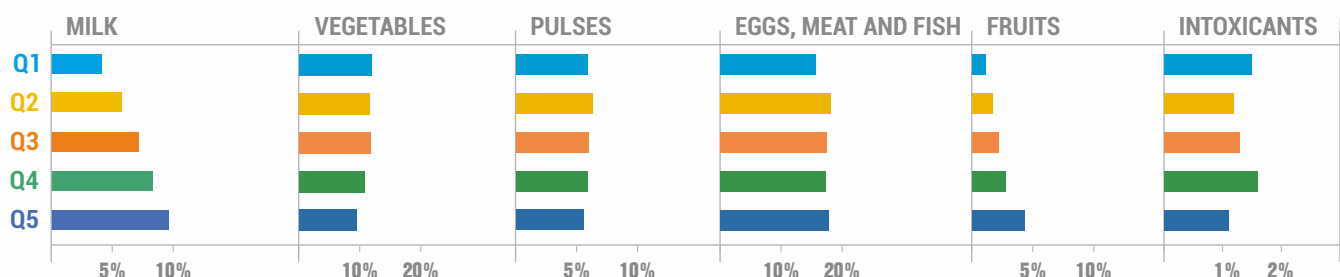
RURAL

2170 ASSAM
2233 INDIA AVG

URBAN

2110 ASSAM
2206 INDIA AVG

Expenditure on food items by income quintiles²⁸



^E Improved sources of drinking water include (NFHS4) : piped water into dwelling/yard/plot, public tap/standpipe, tube well or borehole, protected dug well, protected spring, rainwater, community RO plant.

^F Improved sanitation means households using improved toilets that include (NFHS 4): flush to piped sewer system, flush to septic tank, flush to pit latrine, ventilated improved pit (VIP)/biogas latrine, pit latrine with slab, twin pit/composting toilet which are not shared with any other household.

^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 : NFHS-4, 2015-16

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

²⁷ Source : Indiatat, 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). Therefore, 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.) which are delivered through frontline workers at the Anganwadi Centres (AWC). This section provides information on expenditure on ICDS, 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. 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 MOTHERS FOR THE LAST BIRTH IN FIVE YEARS PRIOR TO THE SURVEY³⁰ⁱ



55.1%

Had antenatal check-ups
in the first trimester

46.5%

Had at least
4 antenatal care visits

18.1%

Had full antenatal care



89.9%

Were protected against
neonatal tetanus



32%

Consumed iron folic acid
for 100 days or more



70.6%

Had Institutional
delivery



74.3%

Women in 5 years before
the surgery whose
delivery was assisted by
skilled health provider
(doctor/nurse/LHV/ANM/
other health personnel)³⁰ⁱ



44.4%

Rural

70.9%

Urban

Children aged 12-23 months
who were fully immunized³⁰ⁱ



6.5%

Children aged 12-23 months
who did not receive any
immunization³⁰ⁱⁱ

WOMEN GIVEN ADVICE ON³¹:



43.4%

Breastfeeding



35.1%

Nutrition



41.5%

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}	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.

³⁰ⁱ Source : NFHS-4, 2015-16

³⁰ⁱⁱ Source : RSoC, 2014

^{30a} Source : MoWCD, 2012

³¹ Source : DLHS 4, 2012-2013

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

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