The Nutrition Story of Odisha

Sample Registration Survey, 2016 reported ***8.3 lakh live births*** *in Odisha. More than* ***26 thousand*** *newborns did not survive their* ***first twenty eight days of life,*** *and more than* ***41 thousand did not live to celebrate their fifth birthday.***

Malnutrition of mother and child is a primary contributing factor for these untimely deaths.

Powered by

Optimal nutrition is essential for achieving **12** *out of 17 SDGs*

17
Aid allocated to nutrition has high returns. A $1 investment in nutrition has demonstrated a $16 return in economic growth

01
Being poor limits the ability of individuals to access adequate food

02
Agriculture and food security are cornerstones of nutrition

03
Up to **45%** of deaths in children under 5 are caused by undernutrition

04
Learning and focusing in school is difficult without a sufficient diet

05
When women control the family income, children's health and nutrition improve at a greater rate

06
Access to safe water and sanitation is an absolute prerequisite for nutrition

08
High levels of malnutrition in some countries may result in an 11% loss to GDP

12
Tackling resource use and degradation is key for sharing resources and improving access to quality food

13
Climate change may reduce food production and cause water scarcity

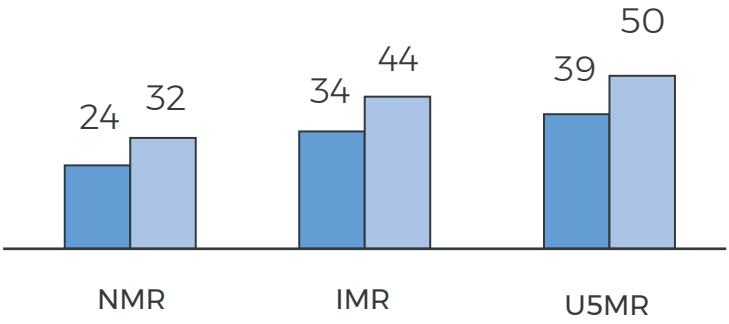
15
Soil degradation threaten our ability to grow food

16
War and conflict are major underlying factors of nutrition insecurity

Source - www.scalingupnutrition.org

www.sdrc.co.in

Odisha ranks poorly on neo-natal, infant, and under-five mortality indicators



Factors contributing to malnutrition

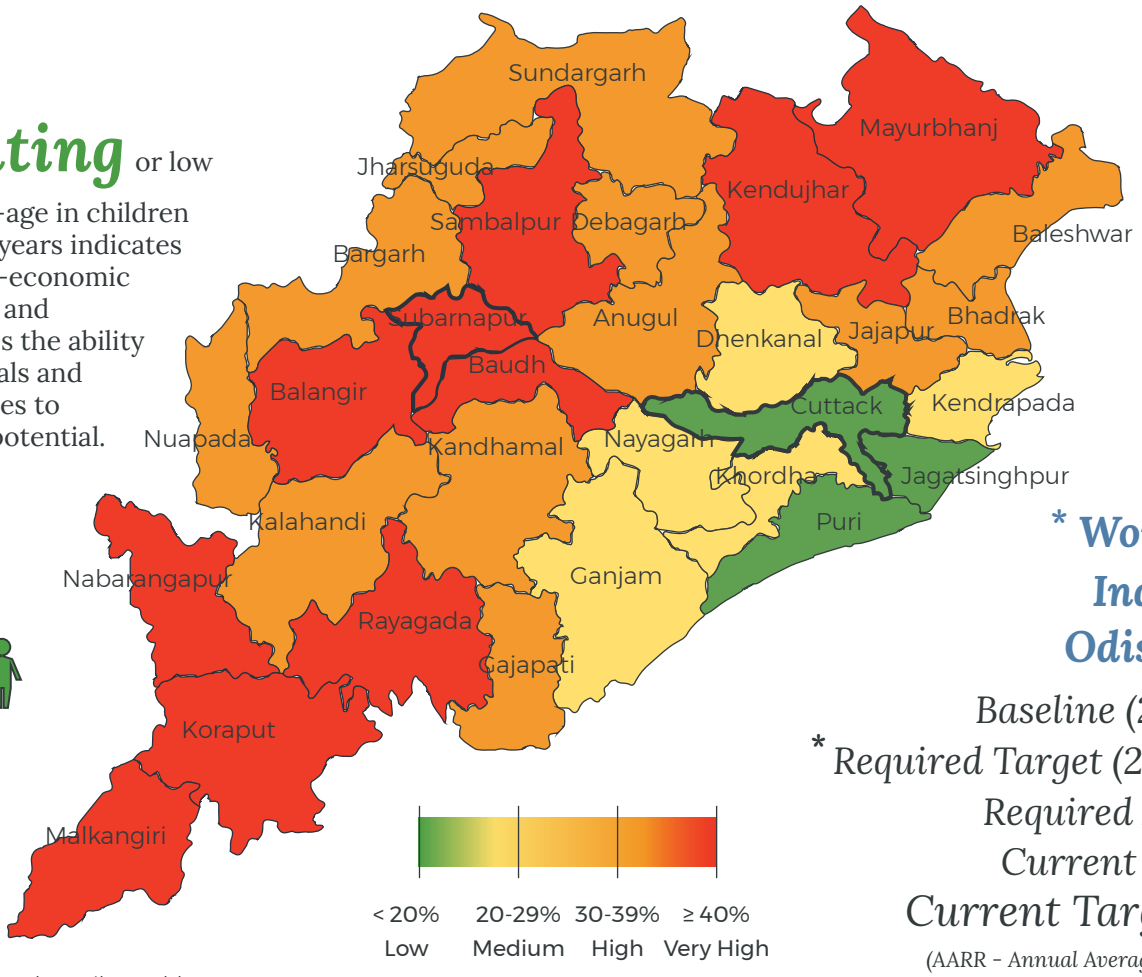
Household Level

- Inadequate breastfeeding
- Inadequate complementary feeding
- Poor quality foods
- Food and water supply
- Infection
- Poor nutrition during pre-conception, pregnancy and lacatation
- Preterm birth
- Inadequate sanitation and water supply
- Food insecurity

Community Level

- Education
- Political economy
- Agriculture and food systems
- Water, sanitation and environment
- Health and healthcare
- Society and culture

Stunting or low height-for-age in children below five years indicates poor socio-economic conditions and undermines the ability of individuals and communities to reach full potential.



{Source - National Family Health Survey (NFHS-4) 2015-2016}

*** World : 22.9%**

India : 38.4%

Odisha : 34.1%

Baseline (2016) : 34.1%

** Required Target (2025) : 20.5%*

Required AARR : 5.5%

Current AARR : 2.7%

Current Target : 26.6%

(AARR - Annual Average Rate of Reduction)

** World Health Assembly (WHA) target*

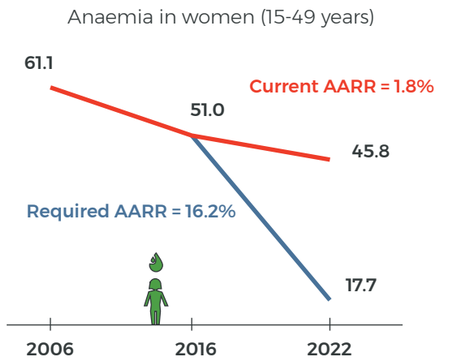
** Source - World Health Organisation (WHO)*

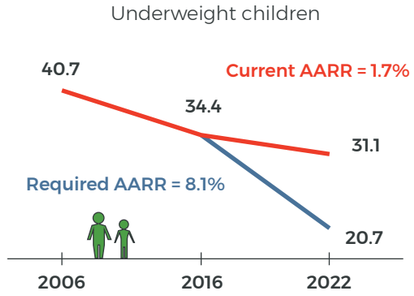
Key programmes launched at National and State Level

- *Integrated Child Development Services (ICDS)*
- *National Creche Scheme*
- *Indira Gandhi Matritwa Sahyog Yojana*
- SABLA
- *National Health Mission (NHM)*
- *Mid-day Meal (MDM)*
- *Integrated Child Development Services System Strengthening and Nutrition Improvement Program (ISSNIP)*
- ***Govt. of Odisha** launched **Special Program for Promotion of Millets in Tribal Areas** to revive millet cultivation and promote millet as promising nutrition source.*
  Covering 7 tribal districts of Odisha, it envisages to include millet in Nutrition Programs like ICDS, MDM and PDS.

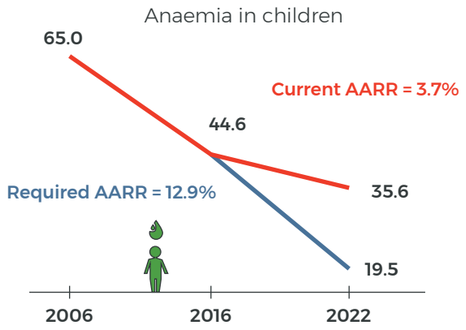
The National Nutrition Mission (NNM) will map various schemes related to nutrition, fixed targets and guide nutrition related interventions across ministries.
GoI has committed a three year budget of
₹ ***9046.17 crores.***

Odisha is off track to achieve NNM targets





(Source - NHFS 2015-2016)

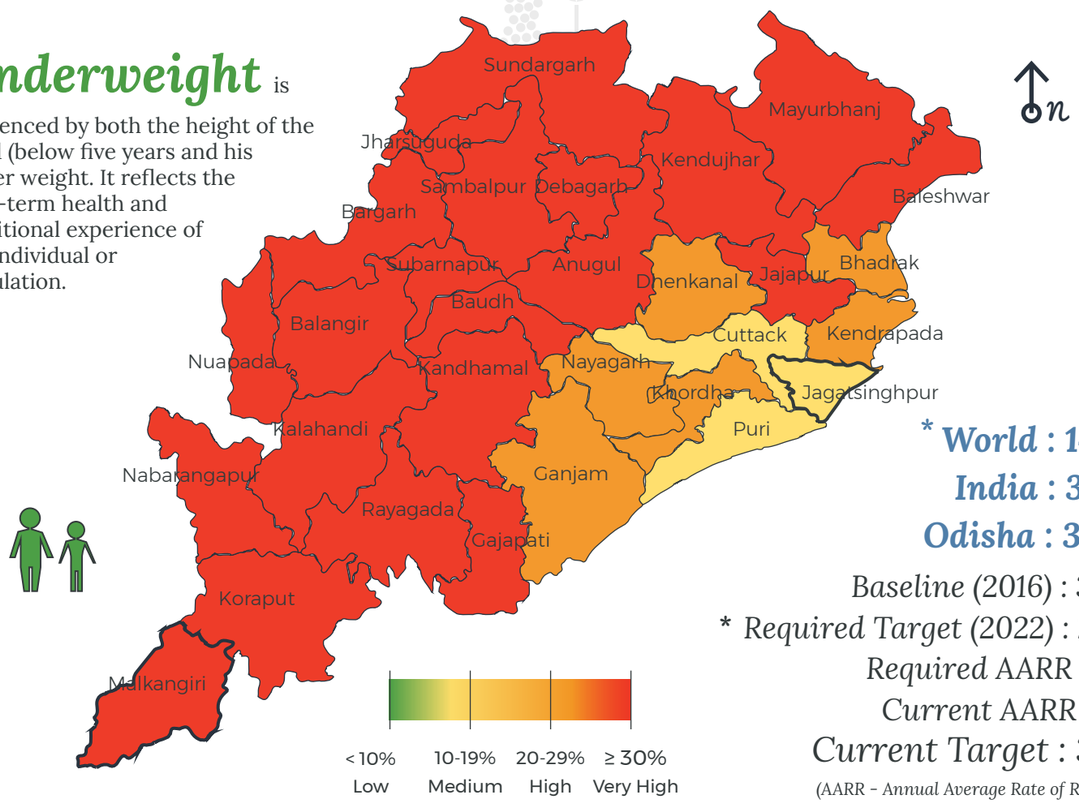


Nutrition information systems need to

- Strengthen national surveillance systems
- Improve data quality : Tracking low birth weight, standardised anemia measurement via biomarker
- Reduce long interval between assessments and standardise survey methodologies
- Provide comprehensive and harmonised data repository covering various data sources e.g, micronutrient survey, household food consumption surveys, geospatial surveys using different geograpic definitions

Underweight is

influenced by both the height of the child (below five years and his or her weight. It reflects the long-term health and nutritional experience of the individual or population.



{Source - National Family Health Survey (NFHS-4) 2015-2016}

**** World : 14.0%***
India : 35.7%
Odisha : 34.4%

Baseline (2016) : 34.4%
** Required Target (2022) : 20.7%*
Required AARR : 8.1%
Current AARR : 1.7%
Current Target : 31.1%

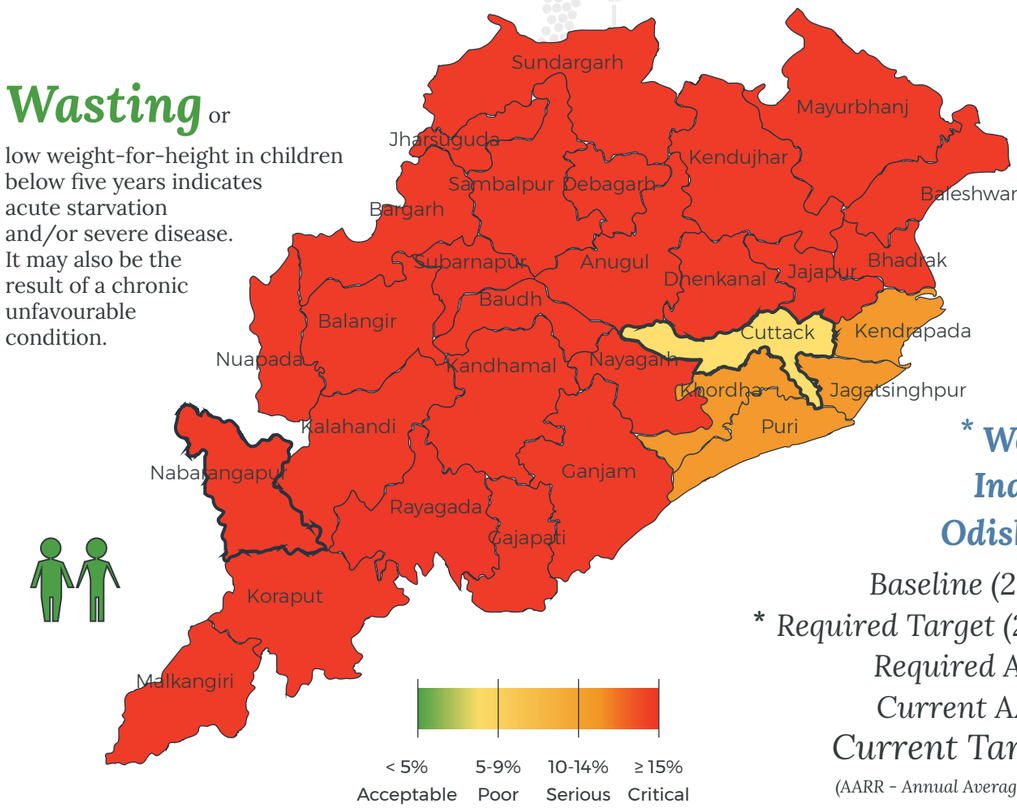
(AARR - Annual Average Rate of Reduction)

** National Nutrition Mission (NNM) target*

** Source - World Health Organisation (WHO)*

Wasting or

low weight-for-height in children below five years indicates acute starvation and/or severe disease. It may also be the result of a chronic unfavourable condition.



{Source - National Family Health Survey (NFHS-4) 2015-2016}

**** World : 7.7%***
India : 21.0%
Odisha : 20.4%

Baseline (2016) : 20.4%
** Required Target (2025) : 4.9%*
Required AARR : 14.7%
Current AARR : -0.4%
Current Target : 21.1%

(AARR - Annual Average Rate of Reduction)

** World Health Assembly (WHA) target*

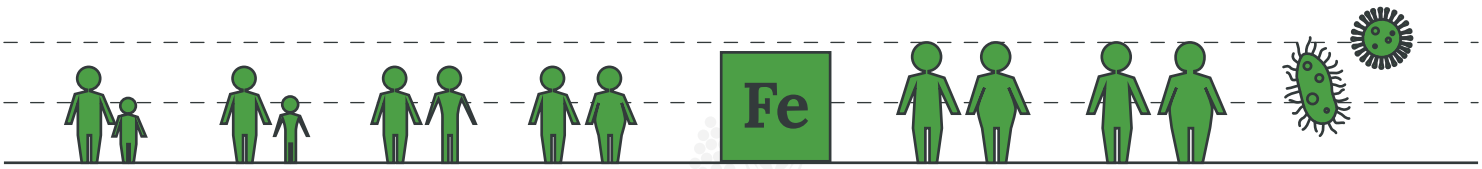
** Source - World Health Organisation (WHO)*

Strategies to achieve nutrition targets

- Strengthened institutional arrangements for improved access and utilization of ICDS services
- Decentralized planning identifying block priorities
- Ensuring community participation in planning, implementation and monitoring
- Strengthening service delivery for nutrition
- Result based monitoring and evaluation
- Early childhood education
- Interdepartmental convergence
- Integrated behaviour change communication

Key policy asks

- Set state level measurable targets for WHA and NNM goals
- Follow the life cycle approach with a focus on first 1000 days
- Establish institutional bodies - State Department of Food and Nutrition, Directorate of Nutrition, Bio-Fortification Mission, Bio-Safety Authority
- Introduce nutrition budgeting
- Formulate policy to control over nutrition and obesity and non communicable disease (NCD)
- Improve nutritional outcomes among migrant population through ration card portability and targeted anemia reduction programmes
- Concert convergence of nutrition with health, education, and other social welfare programmes



Children

Underweight *Low weight for age*

Stunting *Low height for age*

Wasting *Low weight for height*

Overweight *High weight for height*

Micro-nutrient deficiency *Iron, folic acid, vitamin A, zinc, iodine below healthy thresholds*

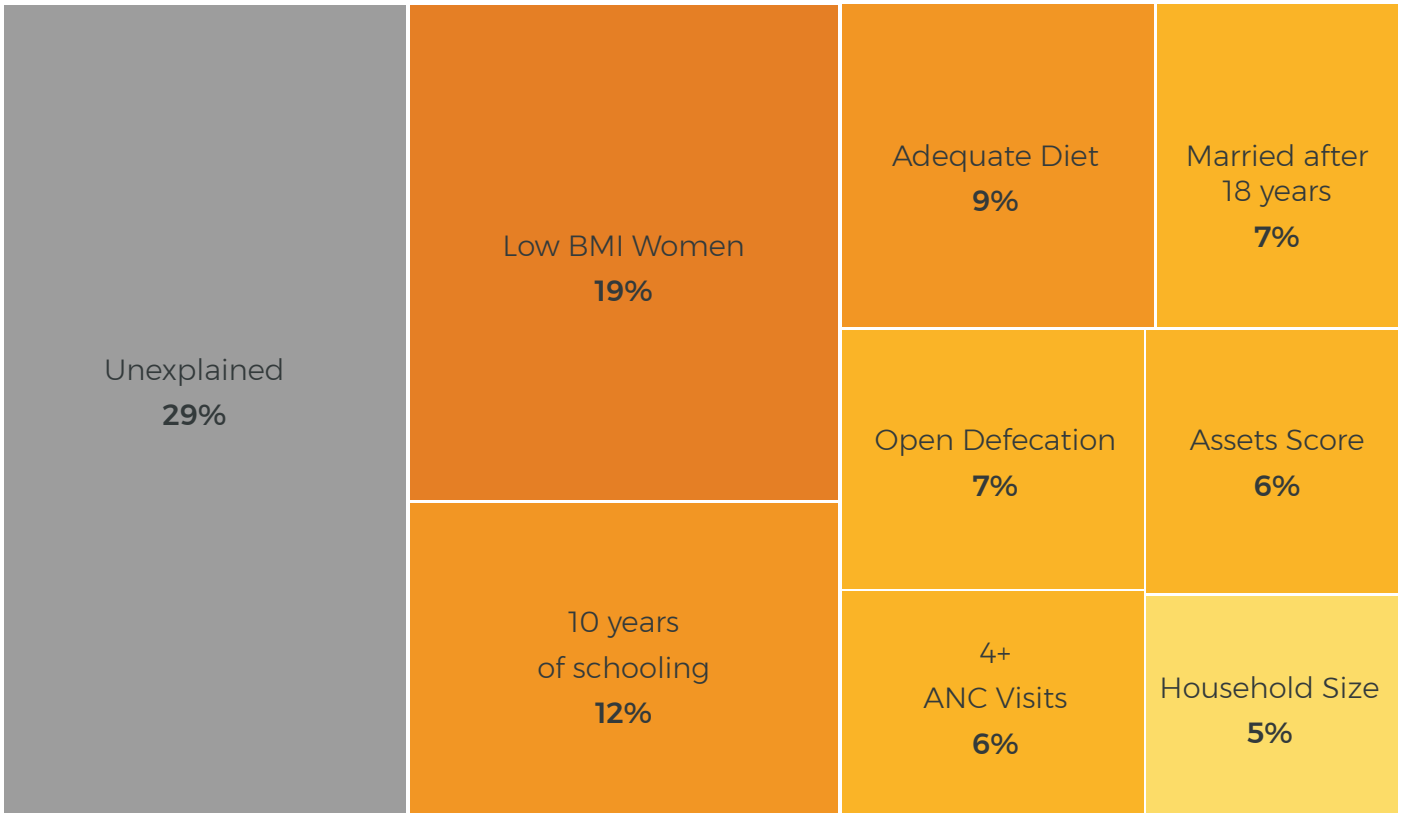
Adult

Overweight *BMI ≥ 25*

Obesity *BMI ≥ 30*

Non-communicable diseases *Diabetes, heart disease, and some cancers*

Address factors contributing to the differences in stunting prevelance between very high burden (stunting > 40%), and low burden (stunting < 20%)



(Source - International Food Policy Research Institute, IFPRI)

Area Name	BMI below normal (1)		Overweight or obese (2)		Anaemic			Vitamin A two dose coverage (5)	Early initiation of breastfeeding (6)	Children exclusively breastfed (7)	Children under 5 years who are		
	Women	Men	Women	Men	Women (3)	Pregnanat women (3)	Children (4)				Stunted	Wasted	Underweight
Anugul	21.8	22.1	17.6	17.4	44.0	58.0	37.4	63.3	77.3	-	31.8	21.6	35.3
Balangir	31.8	20.6	10.9	11.4	61.1	59.5	67.3	49.9	81.5	53.4	44.4	26.1	44.7
Baleshwar	25.4	15.5	15.8	22.8	41.1	55.6	28.6	67.1	61.3	67.5	33.2	18.0	33.7
Bargarh	31.1	13.8	14.5	17.3	68.5	61.5	68.3	69.0	70.0	-	39.1	24.2	39.0
Baudh	31.0	23.4	8.7	14.8	49.9	50.2	44.1	62.4	89.0	47.2	42.2	22.5	43.5
Bhadrak	30.3	19.7	13.9	22.5	43.5	33.0	22.7	77.5	67.2	-	34.9	15.3	28.2
Cuttack	19.2	15.3	28.5	25.0	37.8	-	18.9	81.7	72.8	-	15.3	9.1	17.1
Debagarh	31.4	20.3	10.8	10.8	42.6	41.1	30.0	70.3	72.4	69.0	33.4	19.9	37.5
Dhenkanal	25.6	23.3	18.8	16.2	39.4	25.8	39.4	66.6	74.8	-	26.1	19.0	29.2
Gajapati	22.1	16.8	11.2	13.7	58.5	38.6	57.9	50.5	73.4	52.8	32.5	18.4	32.1
Ganjam	21.5	17.7	20.9	16.4	41.3	-	37.4	52.2	71.5	60.2	28.9	16.4	21.3
Jagatsinghapur	17.3	17.4	25.7	28.3	35.8	27.5	23.4	81.7	67.9	-	19.5	12.6	16.5
Jajapur	28.4	21.0	17.5	9.4	43.3	11.1	30.0	78.3	53.4	70.6	30.3	16.5	30.0
Jharsuguda	27.9	27.3	18.6	16.0	69.2	59.5	67.1	74.1	72.7	55.7	34.9	24.8	36.5
Kalahandi	34.2	30.4	9.6	14.1	68.7	73.7	67.2	78.1	71.9	67.4	36.6	24.8	39.7
Kandhamal	28.1	23.8	8.2	7.0	52.7	49.5	42.7	79.3	54.8	81.4	38.4	23.1	43.1
Kendrapara	24.3	28.4	16.4	8.9	42.3	40.1	28.7	62.4	63.4	-	26.9	12.3	24.1
Kendujhar	28.9	19.9	13.9	22.9	40.5	40.3	32.7	71.7	56.8	62.5	44.6	19.0	44.3
Khordha	15.4	9.8	30.2	27.1	45.3	41.2	19.0	76.6	69.5	59.5	24.7	13.8	20.3
Koraput	34.5	24.7	10.2	18.3	63.3	60.5	71.4	54.0	71.0	70.2	40.3	28.5	44.4
Malkangiri	45.9	26.0	6.2	6.7	71.3	71.9	72.2	65.4	67.1	66.2	45.7	32.5	51.8
Mayurbhanj	31.6	16.4	8.6	16.4	42.4	45.6	34.5	74.6	60.4	81.4	43.5	17.2	43.8
Nabarangapur	36.1	26.4	6.8	7.8	71.5	73.8	71.9	76.7	62.0	71.7	45.8	36.0	51.0
Nayagarh	16.4	17.5	22.8	21.6	39.8	34.0	26.5	84.7	62.1	67.8	28.0	17.5	25.4
Nuapada	34.0	27.4	5.8	10.0	64.0	63.6	63.9	58.4	85.7	49.2	37.6	26.4	40.0
Puri	15.5	14.5	25.3	25.6	44.3	32.1	29.2	81.9	67.1	56.0	16.1	12.1	17.2
Rayagada	33.1	30.4	10.0	11.6	55.4	52.5	49.8	72.4	70.7	70.2	43.5	23.1	42.4
Sambalpur	28.1	21.4	16.8	15.5	73.0	70.7	70.5	53.3	65.4	81.2	40.2	28.6	45.3
Subarnapur	32.2	18.0	13.8	13.0	69.2	65.8	75.0	75.7	81.1	56.6	47.5	22.3	43.0
Sundargarh	27.2	15.2	13.6	13.8	71.4	52.6	75.3	65.8	77.9	67.5	37.2	31.4	44.2
Odisha	26.4	19.5	16.5	17.2	51.0	47.6	44.6	69.1	68.6	65.6	34.1	20.4	34.4
India	22.9	20.2	20.7	18.6	53.0	50.3	58.4	60.2	41.6	54.9	38.4	21.0	35.7

{Source - National Family Health Survey (NFHS-4) 2015-2016}

(1) BMI below normal (BMI < 18.5 kg/m2)
(2) Overweight or obese (BMI ≥ 25.0 kg/m2)
(3) Women in reproductive age group (15-49 yrs)
(4) Children age 6-59 months who are anaemic
(5) Children age 9-59 months who received a vitamin A dose in last 6 months
(6) Children under age 3 years breastfed within one hour of *birth*
(7) Children under age 6 months exclusively breastfed
'–' indicates data not available