MALNUTRITION

INFORMATION PACK

Gujarat CSR Authority

Table of Contents

1. Malnutrition in India 2
   1.1. Key statistics 4
      1.1.1. Key statistics-India & other countries-HDI 4
      1.1.2. Key statistics – Malnutrition 5
      1.1.3. Schemes and Programmes: National targets 6
2. Gujarat : Malnutrition issues 8
   2.1. Issues and concerns - Malnutrition 8
   2.2. Regional disparities: data by geographies 9
   2.3. Schemes and Programmes in the State of Gujarat 11
      Preventive Aspects of Gujarat State Nutrition Mission 11
      Curative Aspects of Gujarat State Nutrition Mission 12
   2.4. Gaps 13
3. Corporate initiatives in malnutrition 16
   3.1. Programmes by Flagship companies in Gujarat 16
   3.2. Programmes by Flagship companies - other states 16
4. Takeaway for companies 17
   4.1. Potential Project Ideas 18
   4.2. Support from GCSRA 19
5. E-Glossary 20

1. Malnutrition in India

The UNDP report ("India and the MDGs") dated February 2015 suggests that the country is on-track to achieve its hunger reduction targets. Accelerated economic progress in recent years has put us on-track to achieve halving hunger target just after the 2015 deadline. Nevertheless, India continues to remain **home to one quarter of the world's undernourished population, over a third of the world's underweight children.** Hunger leads to sluggish growth and requires complementary interventions in several other areas including access to balanced food and medical facilities by the poor, better child nutrition and immunization, adequate sanitation and hygiene, and faster-changing cultural practices to promote nurturing environments for the physiological and mental development of children and adolescent girls.

India at a glance

- In India 20% of children under 5 years of age suffer from wasting due to acute undernutrition.
- More than 1/3rd of the world's children who are wasted live in India.
- India accounts for more than 3 out of every 10 stunted children in the world

Source: *http://unicef.in/Story/1124/Nutrition#sthash.dwN12tS7.dpuf*

The Government has initiated a number of programmes intended for elimination of poverty (and reducing the incidence of hunger). However, poverty is multi-dimensional and its ill-effects are also multifaceted (visible in terms of incidence of hunger and its implications for health status of the population, especially the women and children who are comparatively more vulnerable). In order to improve the nutritional and health status of children in the age group 0-6 years, efforts are required to reduce the incidence of mortality, morbidity and malnutrition of children, and enhance the access of nutritional supplements to pregnant women and lactating mothers. The below chart shows the status of under nutrition in Children under the age 3 and Anemia among Children Age 6-35 Months[1], in the State of Gujarat ???.

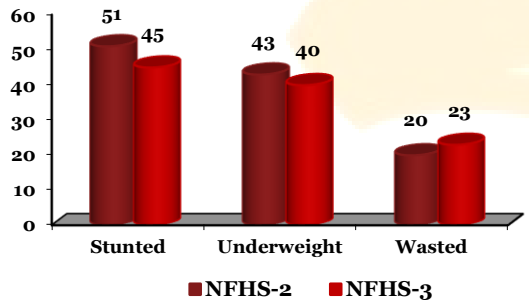


Figure 1: Under-nutrition in Children under age 3 (%) in India

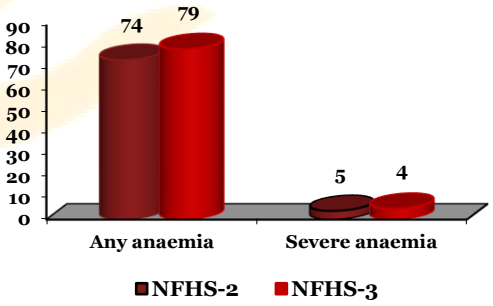


Figure 2: Anemia among Children Age 6-35 Months (%) in India

Immediate action to ensure India accelerates progress on hunger is to step up and incorporate improvements into the targeted child nutrition programmes such as the Integrated Child Development Services (ICDS) scheme, and other programmes relevant to children, such as the National Rural Health Mission (NRHM, now known as the NHM), the Scheme for Empowerment of Adolescent Girls-SABLA, the Public Distribution System (PDS) and sanitation programmes. The implementation of National Food Security Act should also be expedited by completing targeting and identification of intended beneficiaries to ensure that poor people get affordable access to healthy and nutritious food.

[1] NFHS-3 2005-6

As a budgetary allocation, India remains a country with limited spending on health (India's public health expenditure as a % of GDP is only 4%, when compared to the highly developed nations which spend nearly 9-10% of their GDP on health), as per figures released by World Bank in the Human Development Report for 2015. The Indian data on states (though a bit dated) cites Gujarat as spending 0.57% of its GDP on health as per the Indian Human Development report (2011), with public expenditure contributing towards 20.8% of the total health expenditure (while the national average is much higher at 28%)[2].

In such budgetary constraints, the impact that funds leveraged through CSR can create has a huge potential. This information pack accordingly attempts to lay down the national / state / regional status of malnutrition indices and captures some of the learning experiences (within the state and beyond) that can be adapted by companies to help execute impactful CSR projects.

[2] Chapter 5, India Human development Report, 2011, Oxford

1.1. Key statistics

1.1.1. Key statistics-India & other countries-HDI

Table 1: Comparison of Malnutrition outcomes - Human Development Index (HDI) among countries

Malnutrition Outcomes-Human Development Index(HDI)[3]

[3] UNDP Human Development Report 2015, page 239-241 refer Functions of GCSRA include - bringing in adequate clarity in new CSR regime, facilitating optimal utilisation of CSR funds, coordinating, monitoring & implementing various CSR activities in Gujarat, creating a web portal to highlight and facilitate CSR activities in the State, channelizing CSR funds as per HDI based sectoral priorities & also in 50 most backward talukas, creation of a CSR fund by receiving contribution from various companies and address policy and implementation issues. In line with the above, the following support is available from GCSRA for companies who are implementing or planning to implement CSR activities in the State.

Support available from GCSRA for companies:

1. **Development of CSR Strategy & Annual Plan**
   - Consultations and specific support on CSR strategy and project planning to the companies, with similar sectoral status papers (on the priority sectors) to be uploaded on the GCSRA website
2. **Development of CSR plan linked with EIA proposals**
   - Survey & needs assessment of area(s) for guiding development of a need-based CSR plan
   - Implementation of CSR plan in the area
3. **Support for creating a dedicated CSR team**
   - Assistance and support in recruitment of quality personnel and their capacity building
   - Developing systems for CSR project administration
4. **Development of innovative project ideas** for project investments as per States priority areas
5. **Development of sector specific funds meant to-**
   - Provide an effective mechanism to the small & mid-size Companies to implement small but impactful CSR programmes either jointly or alone
   - Under the same, Companies can either directly implement their programmes as part of the fund or contribute to the specific fund. Large Companies having year-end unspent CSR fund can also deposit the amount with any Fund with specific instruction
6. **Other implementation related assistance**
   - Identification of credible implementers - implementing agencies getting scrutinized through a structured due diligence process, for facilitating their selection
   - Assistance in developing Detailed Project Reports

Country	Infants exclusively breastfed (% ages 0–5 months)	Infants lacking immunization (% of one-year-olds) DTP	Infants lacking immunization (% of one-year-olds) Measles	Mortality rates (per 1,000 live births) Infant	Mortality rates (per 1,000 live births) Under-five	Child malnutrition (% under age 5) Stunting (moderate or severe)	Life expectancy at age 60 (years)	Physicians (per 10,000 people)	Public health expenditure (% of GDP)
	2008–2013[a]	2013	2013	2013	2013	2008–2013a	2010/2015[b]	2001–2013[a]	2013
India	46.4[c]	12	26	41.4	52.7	47.9[c]	17.0	7.0	4.0
Bangladesh	64.1	1	7	33.2	41.1	41.4	18.4	3.6	3.7
Bhutan	48.7	3	6	29.7	36.2	33.6	19.5	2.6	3.6
Cambodia	73.5	5	10	32.5	37.9	40.9	23.8	2.3	7.5
South Africa	8.3[c]	31	34	32.8	43.9	23.9	16.0	7.8	8.9
Viet Nam	17.0	17	2	19.0	23.8	23.3	22.4	11.6	6.0

The **proportion of undernourished people** i.e. individuals unable to obtain enough food regularly to conduct an active and healthy life, **decreased in developing regions** from **23.3 %** in 1990–1992 to **12.9 % in** 2014–2016. The **prevalence of stunting** among children **under the age of 5 fell** from **40 %** in 1990 to **25 % globally** in 2013.

- Registration of individual company's CSR plans on Authority's website and linking it with a query builder software for obtaining information of other companies
- Organising regional consultations and seminars for better understanding and networking
- Developing App based monitoring and project management software
- Review, monitoring and evaluation of the projects, including documentation support

GCSRA will ensure provision of full credit, visibility and publicity for the interventions of the funding company.

E-Glossary for further information.

1.1.2. Key statistics – Malnutrition

Table 2: Key malnutrition statistics of India and Gujarat[4]

Indicator	Gujarat	India
Child Feeding Practices and Nutritional Status of Children[5]		
Children under 3 years breastfed within one hour of birth (%)	27.1	23.4
Children age 0-5 months exclusively breastfed (%)	47.8	46.3
Children age 6-9 months receiving solid or semi-solid food and breastmilk (%)	57.1	55.8
Children under 3 years who are stunted[6] (%)	49.2	44.9
Children under 3 years who are wasted[7] (%)	19.7	22.9
Children under 3 years who are underweight[8] (%)	41.1	40.4
Nutritional Status of Ever-Married Adults (age 15-49)		
Women whose Body Mass Index is below normal (%)	32.3	33.0
Women who are overweight or obese (%)	20.3	14.8

Table 3: Key malnutrition statistics of Gujarat as per CNSG factsheet

Indicator	Gujarat
Child Feeding Practices	
Children 0-23 months who started breastfeeding within one hour of birth (%)	81.2
Children less than 6 months who were exclusively breastfed[9] (%)	92.6
Nutritional status of children 0-59 months, Gujarat	
Children who are stunted (%)[10]	37.2
Children who are wasted (%)[11]	11.3
Children are underweight (%)[12]	10.6

[4] NFHS 3 factsheet
[5] Based on the last 2 births in the 3 years before the survey to ever-married women. Based on WHO standard.
[6] too short for age
[7] too thin for height
[8] too thin for age
[9] Exclusive breastfeeding under six months: Percentage of infants 0-5 months of age who received only breast milk during the previous day
[10] Children, whose height-for-age is below -2 standard deviation units from the median of the WHO International Reference Population (2006), are considered too short for their age (stunted).
[11] Children, whose weight-for-height is below -2 standard deviation units from the median of the WHO International Reference Population (2006), are considered too thin for height (wasted).
[12] Children whose weight-for-age is below -2 standard deviation units from the median of the WHO International Reference Population (2006) are considered too thin for age (underweight).

1.1.3. Schemes and Programmes: National targets

India's efforts, mainly through the adoption of the NHM, have accelerated her progress in the status of child and maternal health. The ICDS Scheme implemented by Government of India is one of the world's largest and unique programmes for early childhood care and development. It is the foremost symbol of the Country's commitment to its children and nursing mothers, as a response to the challenge of providing pre-school non –formal education on one hand and breaking the vicious cycle of malnutrition, morbidity, reduced learning capacity and mortality on the other.

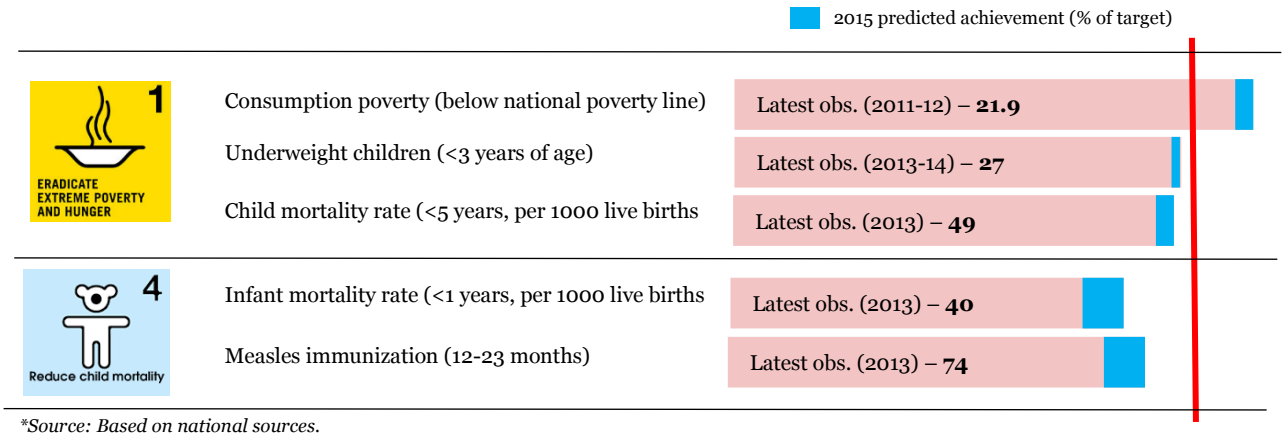
The beneficiaries under this scheme are children in the age group of 0-6 years, pregnant women and lactating mothers. As on 31st March 2015, 7072 projects and 13,46,186 AWCs are operational across 36 States/UTs, covering 1022.33 lakh beneficiaries under supplementary nutrition and 365.44 lakh 3-6 years children under pre-school component.[13]

Table 4: National goals (Malnutrition)

Programme	Goals/ Targets
Integrated Child Development Services (ICDS)	Target: To reduce under-nutrition among children aged 0–3 years to half of the NFHS-3 levels (NFHS -3 estimates under nutrition below 3 years at 40%, hence the 12th FYP is to reduce it to 20% by 2017). Goal: Initiation of breastfeeding within 1 hour of birth ✓ **Achievement: 25%** Goal: No prelacteal feeding ✓ **Achievement: 43%** Goal: Exclusive breastfeeding (6 months) ✓ **Achievement: 46%**
National Health Mission[14]	Reduce MMR to 1/1000 live births Reduce IMR to 25/1000 live births Reduce TFR to 2.1 Prevention and reduction of anemia in women aged 15–49 years Reduce household out-of-pocket expenditure on total health care expenditure

Figure 1: India's Progress on the Malnutrition goals of MDG

India's progress on the MDGs[15]



**Source: Based on national sources.*
Note: Latest data for underweight children (<3 years) based on national figure from Rapid Survey on Children, 2013-2014, Ministry of Women & Child Development, (2014) Government of India. Baseline estimate for maternal mortality rate in 1990 based on WHO (2014).

[13] *http://icds-wcd.nic.in/icds/icds.aspx*
[14] *http://nrhm.gov.in/nhm/about-nhm/goals.html*
[15] *India and the MDGs (Feb 2015) pg. 20*

Table 5: Summary of India's progress towards achieving MDGs (malnutrition specific)

Goal	Target (malnutrition specific)	Progress
MDG 1: Eradicate extreme poverty and hunger	Target 2: Halve, between 1990 and 2015, the proportion of people who suffer from hunger	Slow or almost off-track
MDG 4: Reduce Child Mortality	Target 5: Reduce by two-thirds, between 1990 and 2015, the Under- Five Morality Rate	Moderately on-track due to the sharp decline in recent years

In order to meet the **target 2 under MDG 1**, the proportion of under-weight children should decrease to 26% by 2015. The National Family Health Survey shows that, the proportion of underweight children below 3 years declined from 43% in 1998-99 to 40% in 2005-06. At this rate of decline the proportion of underweight children below 3 years is expected to reduce to 33% by 2015, which indicates India as falling short of the target.
The **target 5 under MDG 4** is to reduce the Under Five Mortality Rate (U5MR) to 42 deaths per 1000 live births by 2015. As per data from the Sample Registration System (SRS) 2013, the U5MR is at 49 deaths per 1000 live births and as per the historical trend, it is likely to reach 48 deaths per 1000 live births, missing the target narrowly. However, an overall reduction of nearly 60% has happened during 1990 to 2013, registering a faster decline in the recent past, and if this rate of reduction is sustained, the achievement by 2015 is likely to be very close to the target by 2015.

As per SRS 2013, the Infant Mortality Rate (IMR) is at 40 and as per the historical trend; it is likely to reach 39 by 2015, against the target of 27 infant deaths per 1000 live births by 2015. However, with the sharp decline in the recent years, the gap between the likely achievement and the target is expected to be narrowed.

This account of India's progress towards MDGs is helpful in identifying the immediate tasks to be fulfilled in order to improve the progress towards MDGs.

2. Gujarat : Malnutrition issues

2.1. Issues and concerns - Malnutrition

In Gujarat, 12 lakhs of children are born each year and many mothers die during this process of pregnancy and child birth. Malnutrition and lack of proper required healthcare for mothers and children are major determinants of maternal and child health. Poor development status of newborn, lack of adequate & timely care and poor nutrition lead to deaths of thousands of children before they even reach the age of one. These are serious maternal and child health problems and require urgent attention. Relatively speaking, the malnutrition status of Gujarat has been below par in comparison to other states. As per the **Comprehensive Nutrition Survey in Gujarat (CNSG, 2014):**

- In 2014, prevalence of underweight (too thin for age) in Gujarat is estimated to be at 10.4% whereas wasting (too thin for height) is estimated to be at 11.4%. Stunting (too short for age) is estimated to be at 37.2%.
- The *nutritional status of children is directly related to mothers' nutritional status*. The survey reveals that children born to short and thin mothers were more undernourished. The nutritional status was worse among children whose mother were in teens at the time of childbirth than those whose mothers were above 20 years.
- The prevalence of stunting, wasting and underweight was higher for boys than girls indicating a *better nutritional status of girls than boys*.
- Around half of the children aged 6-8 months were not fed complementary foods along with breast milk, depriving them of energy and other nutrients essential for their growth and development.
- Around 12% infant and young children fed with minimum dietary diversity. Junk food and low nutritional value foods were commonly given to the children 6 to 35 months.
- 39% of children were not receiving any service from ICDS and AWC. Only 40% of children aged between 36-59 months were going to the AWC. 40% of children aged 6-59 months were receiving take home ration.

In case of the proportion of under-nourished children, the gap for "wasted children" has significantly gone down and that for the underweight children has fallen marginally in the last decade after increasing during the nineties. However, the gap for the "stunted children" has shown a large increase mainly between 1998-2001 and 2008-10. The immunization indicators reveal that the gaps in all indicators have increased over a period of time. These expansions are significant in case of Polio and Measles vaccinations, percentage of hildren with vaccination card and children covered under all vaccinations. In case of children with no vaccination, the gap fell during the 90s and again increased during the last decade. Thus, relative performance of Gujarat in the health output indicators has not been consistent over time. *These gaps are indicative of the status of malnourishment and coverage of children under immunization is a matter of concern for the state.*

Among the other vital indicators such as Maternal Mortality Rate (MMR), Neo-Natal Mortality rate (NNR) and Under-5 Mortality Rate (U5MR), Gujarat ranked 6, 13 and 10 respectively during 2008-10, and ranked 12 and 6 for birth rate and death rate respectively (SRS Bulletin, 2011, Government of India, 2011 and (Vital Statistics-Indiastat, 2010). This relatively below par performance of Gujarat (compared to other states) do raise concerns and issues regarding the functioning and efficacy of the healthcare system.

2.2. Regional disparities: data by geographies

Below chart shows the district-wise data on the status of AWCs, as per Women and Child Development Department (MPR- March 2016), Gujarat.

Table 6: District wise status of AWCs:

S.No.	District	No. of AWC Sanction	No. of AWC Operational	AWC Reporting	AWC Providing SNP[16] 21+ Days
1	Ahmedabad	3,558	3,546	3,537	3,537
2	Amreli	1,629	1,621	1,615	1,615
3	Banaskantha	3,365	3,360	3,360	3,360
4	Vadodara	1,843	1,777	1,645	1,645
5	Bharuch	1,374	1,374	1,374	1,374
6	Narmada	952	950	951	951
7	Bhavanagar	1,897	1,876	1,876	1,876
8	Dang	441	440	440	440
9	Jamnagar	1,191	1,190	1,189	1,189
10	Junaghadh	1,428	1,428	1,428	1,428
11	Porbandar	490	489	489	489
12	Kachh	2,100	2,100	2,100	2,096
13	Mahesana	1,929	1,910	1,910	1,910
14	Patan	1,427	1,426	1,426	1,426
15	Panchamahals	2,000	1,929	1,929	1,929
16	Dahod	3,056	3,056	3,056	2,960
17	Rajkot	1,715	1,680	1,677	1,677
18	Sabarkantha	1,911	1,910	1,910	1,910
19	Surat	2,825	2,715	2,714	2,714
20	Surendranagar	1,375	1,375	1,372	1,372
21	Gandhinagar	1,068	1,068	1,068	1,068
22	Kheda	1,979	1,979	1,964	1,964
23	Anand	2,008	1,979	1,979	1,979
24	Valsad	1,899	1,860	1,860	1,860
25	Navsari	1,329	1,329	1,329	1,329
26	Tapi	1,049	1,049	1,049	1,049
27	Botad	571	566	566	566
28	Morbi	763	755	755	755
29	Mahisagar	1,316	1,298	1,298	1,298
30	Girsomanath	1,168	1,168	1,168	1,168
31	Devbhumi Dwarka	711	691	691	691
32	Chhota Udepur	1,182	1,182	1,058	1,058
33	Aravali	1,480	1,437	1,437	1,437
State Total		**53,029**	**52,513**	**52,220**	**52,120**

[16] *Supplementary Nutrition Programme*

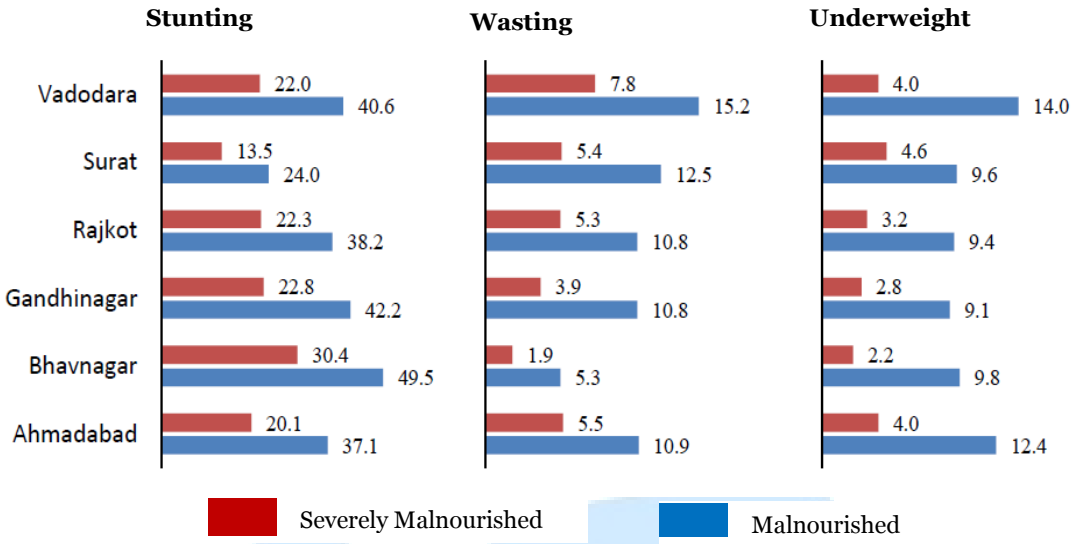
Below table shows the district-wise data on nutrition status of children, as per as per Women and Child Development Department (MPR- March 2016), Gujarat.

Table 7: District wise nutrition status of children

S. No.		Nutrition Status (no.)				Nutrition Status (%)			
	Districts	Normal	Mod Underwt.	Sev. Underwt.	Total Underwt.	% of Normal	% of Mod. Underwt.	% of Sev. Underwt.	% of total Underwt.
1	Ahmedabad	262,835	13,077	2,108	15,185	94.54	4.70	0.76	5.46
2	Amreli	94,326	2,729	560	3,289	96.63	2.80	0.57	3.37
3	Banaskantha	272,259	8,480	984	9,464	96.64	3.01	0.35	3.36
4	Vadodara	113,977	10.404	1,121	11,525	90.82	8.29	0.89	9.18
5	Bharuch	102,307	3,664	488	4,152	96.10	3.44	0.46	3.90
6	Narmada	44,806	4,978	436	5,414	89.22	9.91	0.87	10.78
7	Bhavanagar	146,721	11,013	1,969	12,982	91.87	6.90	1.23	8.13
8	Dang	19,940	5,199	460	5,659	77.89	20.31	1.80	22.11
9	Jamnagar	72,954	5,066	954	6,020	92.38	6.41	1.21	7.62
10	Junaghadh	92,117	2,120	446	2,566	97.29	2.24	0.47	2.71
11	Porbandar	32,405	670	199	869	97.39	2.01	0.60	2.61
12	Kachh	181,992	423	149	572	99.69	0.23	0.08	0.31
13	Mahesana	125,458	1,681	182	1,863	98.54	1.32	0.14	1.46
14	Patan	83,518	8,377	864	9,241	90.04	9.03	0.93	9.96
15	Panchamahals	132,321	9,910	1,369	11,279	92.15	6.90	0.95	7.85
16	Dahod	244,917	11,316	1,162	12,478	95.15	4.40	0.45	4.85
17	Rajkot	126,564	2,674	553	3,227	97.51	2.06	0.43	2.49
18	Sabarkantha	106,446	5,715	488	6,203	94.49	5.07	0.43	5.51
19	Surat	160,454	19,286	2,346	21,632	88.12	10.59	1.29	11.88
20	Surendranagar	104,525	6,515	1,312	7,827	93.03	5.80	1.17	6.97
21	Gandhinagar	75,826	4,767	685	5,452	93.29	5.87	0.84	6.71
22	Kheda	150,739	8,869	939	9,808	93.89	5.52	0.58	6.11
23	Anand	149,992	2,459	388	2,847	98.14	1.61	0.25	1.86
24	Valsad	109,124	4,844	669	5,513	93.49	4.15	0.57	4.72
25	Navsari	66,599	1,335	288	1,623	97.62	1.96	0.42	2.38
26	Tapi	44,078	4,932	799	5,731	88.49	9.90	1.60	11.51
27	Botad	52,362	762	140	902	98.31	1.43	0.26	1.69
28	Morbi	52,775	1,956	314	2,270	95.88	3.55	0.57	4.12
29	Mahisagar	86,185	5,204	497	5,701	93.80	5.66	0.54	6.20
30	Girsomanath	98,026	1,780	377	2,157	97.85	1.78	0.38	2.15
31	Devbhumi Dwarka	59,370	2,600	464	3,064	95.09	4.16	0.74	4.91
32	Chhota Udepur	78,058	9,259	842	10,101	88.54	10.50	0.96	11.46
33	Aravali	78,391	3,865	337	4,202	94.91	4.68	0.41	5.09
State Total		36,22,367	1,85,929	24,889	2,10,818	94.45	4.85	0.65	5.50

As per the table above, **Dang, Tapi and Surat** districts have the highest proportion of severely underweight children in Gujarat.

The below graph shows the prevalence of malnutrition among children <5 yrs across the six administrative divisions in Gujarat, as per **Comprehensive Nutrition Survey in Gujarat (CNSG),** conducted under the aegis of the Women & Child Development, Govt. of Gujarat in 2014.



2.3. Schemes and Programmes in the State of Gujarat

Gujarat state has already implemented various schemes like Chiranjeevi Yojana, Bal Bhog Yojana, Vitamin Yukta Poshan Ahar Yojana (nutritious food with vitamins), Kanya Kelavani Yatra for saving the precious lives of mothers and children, fighting against malnutrition, take care of primary education and particularly education of girl child. However, there is a need to consolidate efforts and redouble energies to address the problems of maternal and child Mortality.

Gujarat State Nutrition Mission

In order to improve the current status of nutrition, it was felt that the preventive and curative strategy needs to be very clearly evolved keeping in view the various stages of desirable interventions namely adolescence, 9 months of pregnancy to first 2 years of age (critical 1,000 days) and for children up to 6 years. The Gujarat State Nutrition Mission is expected to work for convergence of various key departments like Department of Women and Child Development (DWCD), Health, Education, Rural Development, Tribal Development, Urban Development, Water Supply Department etc. with a focused and accelerated approach to address the issue of child and maternal malnutrition, with a strategy of focussing on both **preventive** and **curative** aspects.

Preventive Aspects of Gujarat State Nutrition Mission

- accelerating community mobilization for strengthening comprehensive nutrition programmes through extensive Behavior Change Communication (BCC).
- Community support networks like Panchayati Raj Institutions, Self Help Groups, Sakhi Mandals, Doodh Mandlis etc. would be oriented and mobilized for increased focus on vulnerable groups.

- creating mass awareness on Infant and Young Child feeding practices, life cycle approach including pregnant and lactating mothers, involving Panchayati Raj Institutions and Village Health, Sanitation & Nutrition Committees.
- Focus on promotion of 10 proven interventions to prevent under nutrition and undertaking new / innovative interventions considered necessary.
- Strengthening of Ongoing Nutrition Supplementation programmes through MAMTA Diwas and Annaprashan Diwas.
- Strengthening Immunization, Referral & Promotion of Hygienic practices

Curative Aspects of Gujarat State Nutrition Mission

- a 3-tier approach for integrated management of malnutrition across different levels by creation of three different levels of infrastructure.
    i. The Intensive Nutrition Care Centre (INCC) as "**Ghanishth Poshan Abhiyan Kendra**" at Anganwadi centers for malnourished children without any medical needs. Under this program, malnourished children without any medical needs are enrolled in the INCC center for 30 working days were they are provided 5 times supervised diet + 2 times home diets in addition to micronutrient supplementation and medicines.
    ii. The Child Malnutrition Treatment Center as "**Bal Sewa Kendra**" at PHC/CHC/ Sub District level for malnourished children. Under this program, malnourished children with moderate medical needs are enrolled residentially in the CHC/ Sub District level hospital for 14 working days were they are provided 6-8 times supervised diet + micronutrient supplementation and medicines. During this period, the mothers of malnourished children are also provided wage loss compensation for the period they stay in the facility
    iii. Nutrition Rehabilitation Center as "**Bal Sanjeevani Kendra**" at District Hospital/ Medical College for malnourished children with significant medical care. Under this program, malnourished children with significant medical needs are enrolled residentially in the District level hospital or Medical College for 21-25 working days were they are provided 6-8 times supervised diet + micronutrient supplementation and medicines. During this period, mothers of malnourished children are also provided wage loss compensation for the period they stay in the facility.

Table 8: Programmes and schemes: Malnutrition

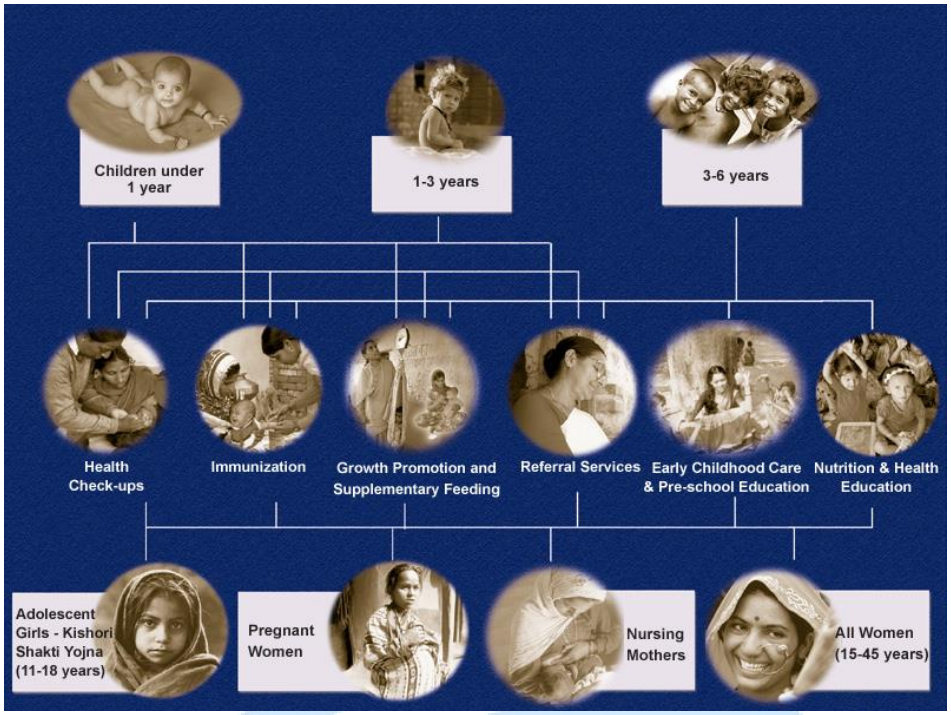
Programmes/ Schemes	Description
Bal Sakha Scheme	All babies born to BPL mothers in the State are to be covered for neonatal care by partnering pediatricians, including care in their Neonatal Intensive Care Unit (level 2) at no cost to the beneficiary. After stabilization of the Scheme, the Scheme may be extended to cover all infants up to one year age. Up to October -09, 284 private pediatricians were enrolled and 31,151 new born attended under the Bal Sakha scheme.
Bal Amrutam	Under 'Bal Amrutam', nutritious diet specially prepared by Amul Dairy will be distributed among children.
Kasturba Poshan Sahay Yojana - Conditional Cash Transfer	The State Govt. has launched the "Kasturba Poshan Sahay Yojana" on 29th February 2012 with the goal of reduction of morbidity and mortality linked to malnutrition and Anemia in the entire State of Gujarat for BPL mothers. Nutrition during pregnancy is very important. Mothers from poor family do not get adequate nutrition and spend more calories in hard labor job. Conditional cash transfer is a nutrition intervention which shall ensure the coverage of services, access to nutritious food and micronutrient supplement during the vital period of pregnancy. To facilitate adequate nutrition and rest during pregnancy, a cash support to all the BPL mothers of Rs. 6000/- per pregnant woman is to be given.
Mission Balam Sukham	Mission Balam Sukham was conceptualized to provide an enabling mechanism to the line different departments to come together under one umbrella for concerted efforts to address

Programmes/ Schemes	Description
	and improve the nutritional status of the children in Gujarat. Mission Balam Sukham was officially launched on 18th September 2012 through Hon'ble Chief Minister of Gujarat state with an aim to combat malnutrition across the state.
Mamta Ghar	This schemes facilitates access to the women in need of help to a continuum of care, including appropriate management of pregnancy, delivery, post-partum care and access to life-saving obstetric care when complications arise are crucial to Safe Motherhood.
KSY	Kishori Shakti Yojana (KSY), was implemented using the infrastructure of the ICDS. The objectives of this scheme was to improve the nutrition and health status of girls in the age group of 11 to 18 years, to equip them to improve and upgrade their home-based and vocational skills, and to promote their overall development, including awareness about their health, personal hygiene, nutrition and family welfare and management
Doodh Sanjeevini Yojan	The ICDS is carrying out the '*Doodh Sanjeevani Yojana'* in collaboration with the Tribal department in 10 selected Blocks of 6 Tribal districts in the State. Under this scheme, double fortified milk (100 ml) is provided to each child twice a week. The budget allowance is Rs. 2.45 per beneficiary for 1 time supply of 100 ml milk. This scheme is implemented with the help of local dairies.
Mission Shakti	Step to combat jaundice among infants, adolescents, young girls and pregnant women. As part of 'Mission Shakti', children and women found with symptoms of jaundice will be given free treatment through National Iron Plus Initiative.
Indira Gandhi Matritva Sahyog Yojana (IGMSY)	Indira Gandhi Matritva Sahyog Yojana (IGMSY), Conditional Maternity Benefit (CMB) is a centrally sponsored scheme for pregnant and lactating (P & L) women to improve their health & nutrition status to enabling better environment by providing cash incentives to them. The scheme was introduced in October, 2010 on pilot basis and now operational in 53 districts across the country. The scheme envisages providing cash directly to the beneficiaries through their Bank /Post Office Accounts. As per provision of the National Food Security Act, 2013, the Ministry has revised the entitlement of maternity benefit from Rs. 4000 to Rs. 6000/- per beneficiary.
SABLA	The 'Rajiv Gandhi Scheme for Empowerment of Adolescent Girls (RGSEAG)–'Sabla', a Centrally-sponsored scheme introduced in the year 2010-11 on a pilot basis. At present it is being implemented in 205 districts from all the States/UTs. Sabla aims at all-round development of adolescent girls of 11-18 years by making them 'self-reliant'. The scheme has two major components: Nutrition and Non Nutrition Component.

2.4. Gaps

The vicious cycle of Malnutrition starts with an underweight expectant mother, who is often burdened with pregnancy in her teens, inadequate spacing between successive children, has excessive workload and lacks access to appropriate nutrition and health care. This cycle continues with a low birth weight baby exposed to poor health, hygiene and nutrition practices which further develops into an underweight and stunted child. The Malnutrition cycle below indicates the various stages during early childhood (from age 0 to 6 years) and the corresponding malnutrition related requirements (interventions).

Table 9: Malnutrition cycle[17]



The life-cycle dynamics of the causes & consequences of malnutrition demand a holistic and inclusive approach to prevent and treat under-nutrition and nutritional insufficiency. While preventing fetal and early childhood malnutrition deserves attention, intervening at other critical points in the life cycle will further accelerate and consolidate positive change. Such critical windows of opportunity are adolescence and the first 1,000 days of an infant's life. Children under 1 year of age require regular health checkups and immunization along with growth promotion and supplementary feeding. The above presented malnutrition cycle also highlights the various stages during motherhood and links them with the interventions.

Table 10: Gaps in the support systems for addressing the nutrition challenge

Areas	Gaps in Gujarat
Household Food Security	A mismatch between the availability of food and good nutrition underlies a major cause of malnutrition in Gujarat. The major group vulnerable to malnutrition are women of child bearing age (15 – 44 years) especially those who are pregnant or nursing; and young children (up to 59 months of age). Lack of storage facilities in food deficient regions further deteriorates the situation.
Nutrition Policy and Planning	A need has been felt to mitigate the problem of malnutrition through an integrated inter-sectorial holistic approach covering various interventions across various sectors and departments.
Women and Child Care Service	Lack of fully-functional childcare centres for working mothers. Not substantial household visits by AWWs, ASHAs and nutrition workers. Lack of focus on early breastfeeding and complementary feeding practices.
Healthcare and Services	Not many nutrition experts at block level to prevent the intergenerational cycle of malnutrition. Need to further strengthen review, monitoring and follow up of severely malnourished children. Proper coordination between health workers and strengthening regional planning at district level required.

[17] Presentation by Dr. Kanupriya Chaturvedi, ICDS (www.bibalex.org/supercourse/supercoursePPT/40011-41001/40381)

Areas	Gaps in Gujarat
Infant and Young Child Caring and Feeding Practices	Poor feeding leading to Protein Energy malnutrition (PEM) and faulty caring practices as reflected by the health and nutrition indicators (NFHS3), appear to be the underlying cause of under-nutrition.
Healthcare Infrastructure	The infrastructure gap for the government hospitals and the number of available beds in them is extremely high at 96 per cent and 64 per cent respectively. The performance gap of Gujarat in terms of the Indian system of medicine AYUSH (Ayurveda Yoga Unani Siddha Homeopathy) is also large for the number of hospitals (99 per cent), beds (81 per cent) and dispensaries (86 per cent), as cited in the IIM-A report. [18]
Human resource	Gaps in terms of lack of availability of manpower (numbers per hundred thousand of population) in the public health system are high in case of paramedical staff and very high in case of the medical professionals especially with Aayush Doctors. Gaps for total and government doctors in Gujarat show that the non-availability of doctors is more severe in the public healthcare system than overall level in the state. [19] The health manpower is also a cause of concern in rural Gujarat.
Capacity/ skill building	Limited skill building facilities for developing a cadre of workers to deliver affiliated medical services e.g. Facility Newborn care etc. Lack of availability of trained MIS staff at facility level and for quality data
Quality control and effective information & reporting systems	Inadequate supervision in health care facilities with regard to implementation of services, and data management, including client based data generation, reporting and available trained staff for data collation and reporting

Table 11: Rural Health Infrastructure of Gujarat[20]

Particulars	Required	In position	Shortfall
Obstetricians & Gynaecologists at CHCs	320	31	289
Paediatricians at CHCs	320	2	318
Total specialists at CHCs (Surgeons, OB&GY, Physicians & Paediatricians)	1280	74	1,206
Pharmacist at PHCs & CHCs	1,567	879	688
Laboratory Technicians at PHCs & CHCs	1,567	1,401	166
Nursing Staff at PHCs & CHCs	3,487	2,705	782
Physicians at CHCs	320	9	311
General Duty Medical Officers-Allopathic at CHCs	1,060	747	313

[18] What Determines Performance Gap Index of Healthcare in Gujarat? (May 2014) http://www.iimahd.ernet.in/assets/snippets/workingpaperpdf/3253542092014-05-03.pdf
[19] Ibid page 14
[20] https://nrhm-mis.nic.in/RURAL%20HEALTH%20STATIST ICS/(A)RHS%20-%202015/Health%20Manpower%20in%20rural%20areas.pdf – Health manpower in Rural areas

3. Corporate initiatives in malnutrition

3.1. Programmes by Flagship companies in Gujarat

Companies	Programmes
Gujarat State Fertilizers & Chemicals Limited	**Improvement in Nutritional Level of School Children**: GSFC sponsors mid-day meal for 1,30,000 school & Aaganwadi children by supporting the nutrition program of Akshaya Patra Foundation - for providing balanced food for the school-going children in villages & Vadodara city.
Essar Foundation	The Foundation's project aims to improve the nutritional status of children in Khambhaliya Taluka of Jamnagar District, Gujarat. It has two specific objectives: (a) to raise the health and nutritional level of malnourished children below six years and (b) to reduce the number of children falling under highly malnourished zone.
Monsanto	**School Nutrition Project** with Akshaya Patra Foundation - the project addresses the predominant problem of malnutrition in children causing stunted growth in their formative years due to lack of access to good quality nutritious food & awareness on importance of nutrition in the daily diets for proper growth. The project aims to provide nutritious school meals to 45,000 children in 450 Government schools in Orissa, Uttar Pradesh, Karnataka, Rajasthan and Gujarat over 3 years, along with sensitization on hygiene and nutrition awareness to children, teachers & parents, for fostering education & bringing about a positive impact on the health and nutrition of children.

3.2. Programmes by Flagship companies - other states

Companies	Programmes
GlaxoSmithKline	In Chennai, GSK with Save the Children launched **'Aaharam'** to raise malnutrition awareness among mothers, families and communities. The activities carried out under Aaharam program: • Malnutrition screening of Children • Case Management of undernourished children • Following up on malnutrition afflicted children • Increased access to nutritious food through locally available food items
PepsiCo	The project catalyzes community-based interventions to deliver integrated health and nutrition solutions to children under 5, young mothers and pregnant and lactating women. Partner - Save the Children, works with community health educators to provide families important information about health, nutrition, water, sanitation and hygiene. Reach - 100,000 people in Rajasthan. The project reaches 50,000 beneficiaries including children under 5, young mothers and pregnant and lactating women through health and nutrition interventions. It reaches another 50,000 people through water and sanitation initiatives. PepsiCo's **Get Active & a Good Nutrition and Active Lifestyle Program for Children** -has seen robust growth and implementation. Designed and supported by the PepsiCo Health & Wellness team, the program have been implemented in schools in collaboration with prominent NGOs & Hriday, Swashrit and the Indian Medical Association. Get Active program have a central objective: to raise awareness on the importance of balanced nutrition and regular physical activity for a healthy lifestyle among school children.

4. Takeaway for companies

- Companies can invest in different thematic areas to address the gaps within the malnutrition space for the most backward regions or in regions of Gujarat where communities require support. They are welcome to reach out to GCSRA for further support to engage in partnerships either in the form of direct CSR project implementation or as technical assistance provider to organizations who plan to work in the specific sector.

  GCSRA has created a '**Malnutrition Control Fund'** for companies to effectively and meaningfully manage their CSR obligations. The following are the projects being considered under this fund:

  1. Supplementary nutrition for expectant mother for healthy growth of the child
  2. Linking Severely Acute malnourished (SAM) children with health services & providing supplementary feeding
  3. Supporting Information, Education & Communication activities for awareness generation and behaviour change especially for expectant and lactating mothers
  4. Arranging preliminary health check up to identify medical causes of malnutrition

- Companies can take support from GCSRA in training, capacity building on the CSR policy, governance and the various CSR value chain activities

- If required and deemed impactful, companies can contribute in joint venture projects with other companies on state priorities based on the Human Development Indicators

- The GCSRA partnership enables companies to develop networks with Government, civil society / NGOs and other relevant stakeholders for knowledge sharing, advocacy, sharing of best practices and challenges to support future strategic directions for CSR activities

- Effective investment in CSR by Companies will help in taking credit for creation of social wealth in the local community through the following by:
  - bringing their project development, planning & execution skills
  - bringing out-of-the box approaches to long standing social problems
  - designing projects with focus on "value for money"

- CSR activities with high impact are best image building exercise for Companies. Effective CSR Planning will help:
  - improve the visibility of the Company,
  - resolve conflict with local community,
  - improve branding of the Company, and
  - bring better credibility with (any) new business partners

4.1. Potential Project Ideas

Following are some potential CSR project ideas:

1. **Malnutrition Eradication Project-**The project aims to be implemented at selected districts/ talukas with higher incidence of severe malnutrition. The objectives of the project are as follows:
   - Improvement in maternal-foetal-infant health in the community
   - Eradication of malnutrition
   - Ensuring that 0–6 years old children are meeting Early Childhood Development (ECD) parameters.

2. **Construction & Renovation of Anganwadis-** The project aims to be implemented at selected districts suffering from severe acute malnutrition, high MMR and IMR. The villages which are vulnerable in terms of the remote accessibility and are located far from the urban human settlements are potential project areas. The objectives of the project are:
   - access to state of art construction technology and provision of 24x7 electricity & clean drinking water
   - provide the latest facilities e.g. sitting room, kitchen for cooking etc. and support services e.g. pre-school kit

3. **Supplementary nutrition for expectant mothers-** The project focuses on meeting women and children's nutritional needs and raising the standard of life for the community at large. The project is proposed for promotion of the Nutrition Centres for feeding pregnant and lactating mothers in few tribal talukas of Gujarat. The twin fold objective of the project aims at the following:
   - achieve approx. 500 grams (1/2 kg) improvement in current average levels of weight at birth among the participant families.
   - include best child rearing practices among participating mothers by linking them with ongoing interventions of the state's Health Department.

4.2. Support from GCSRA

Gujarat CSR Authority was established through Government of Gujarat, Industries & Mines Department Resolution dated 19-12-2014. The aim of setting up Gujarat CSR Authority was to -

- Develop a framework for CSR activities in the State
- Identify the best practices in on-going CSR activities
- Assist mid-sized and smaller Companies in effective implementation of their CSR strategy
- Develop into an active umbrella body for advocacy

GCSRA is a Society is headed by Hon. Chief Minister of Gujarat as the Chairperson of GCSRA and the Authority headed by a highly experienced, retired IAS office; with a high-ranking serving administrative officer in an executive role.

Functions of GCSRA include - bringing in adequate clarity in new CSR regime, facilitating optimal utilisation of CSR funds, coordinating, monitoring & implementing various CSR activities in Gujarat, creating a web portal to highlight and facilitate CSR activities in the State, channelizing CSR funds as per HDI based sectoral priorities & also in 50 most backward talukas, creation of a CSR fund by receiving contribution from various companies and address policy and implementation issues. In line with the above, the following support is available from GCSRA for companies who are implementing or planning to implement CSR activities in the State.

Support available from GCSRA for companies:

1. **Development of CSR Strategy & Annual Plan**
   - Consultations and specific support on CSR strategy and project planning to the companies, with similar sectoral status papers (on the priority sectors) to be uploaded on the GCSRA website
2. **Development of CSR plan linked with EIA proposals**
   - Survey & needs assessment of area(s) for guiding development of a need-based CSR plan
   - Implementation of CSR plan in the area
3. **Support for creating a dedicated CSR team**
   - Assistance and support in recruitment of quality personnel and their capacity building
   - Developing systems for CSR project administration
4. **Development of innovative project ideas** for project investments as per States priority areas
5. **Development of sector specific funds meant to-**
   - Provide an effective mechanism to the small & mid-size Companies to implement small but impactful CSR programmes either jointly or alone
   - Under the same, Companies can either directly implement their programmes as part of the fund or contribute to the specific fund. Large Companies having year-end unspent CSR fund can also deposit the amount with any Fund with specific instruction
6. **Other implementation related assistance**
   - Identification of credible implementers - implementing agencies getting scrutinized through a structured due diligence process, for facilitating their selection
   - Assistance in developing Detailed Project Reports
   - Registration of individual company's CSR plans on Authority's website and linking it with a query builder software for obtaining information of other companies
   - Organising regional consultations and seminars for better understanding and networking
   - Developing App based monitoring and project management software
   - Review, monitoring and evaluation of the projects, including documentation support

GCSRA will ensure provision of full credit, visibility and publicity for the interventions of the funding company.

5. *E-Glossary*

1. **Comparison of Malnutrition outcomes - Human Development Index (HDI)** among countries **: (UNDP HDI report 2015)**

i. Notes to Table 1

a Data refer to the most recent year available during the period specified.

b Data are annual average of projected values for 2010–2015.

c Refers to a year earlier than that specified.

ii. Definitions for Table 1

Infants exclusively breastfed: Percentage of children ages 0–5 months who are fed exclusively with breast milk in the 24 hours prior to the survey.

Infants lacking immunization against DPT: Percentage of surviving infants who have not received their first dose of diphtheria, pertussis and tetanus vaccine.

Infants lacking immunization against measles: Percentage of surviving infants who have not received the first dose of measles vaccine.

Infant Mortality Rate: Probability of dying between birth and exactly age 1, expressed per 1,000 live births.

Under-Five Mortality Rate: Probability of dying between birth and exactly age 5, expressed per 1,000 live births.

Stunted children: Percentage of children ages 0–59 months who are more than two standard deviations below the median height-for-age of the World Health Organization (WHO) Child Growth Standards.

Life expectancy at age 60: Additional number of years that a 60-year-old could expect to live if prevailing patterns of age-specific mortality rates stay the same throughout the rest of his or her life.

Physicians: Number of medical doctors (physicians), both generalists and specialists, expressed per 10,000 people.

Public health expenditure: Current and capital spending on health from government (central and local) budgets, external borrowing and grants (including donations from international agencies and nongovernmental organizations) and social (or compulsory) health insurance funds, expressed as a percentage of GDP.