

Coverage of Nutrition and Health Interventions in SIKKIM *Insights from the National Family Health Survey-4*

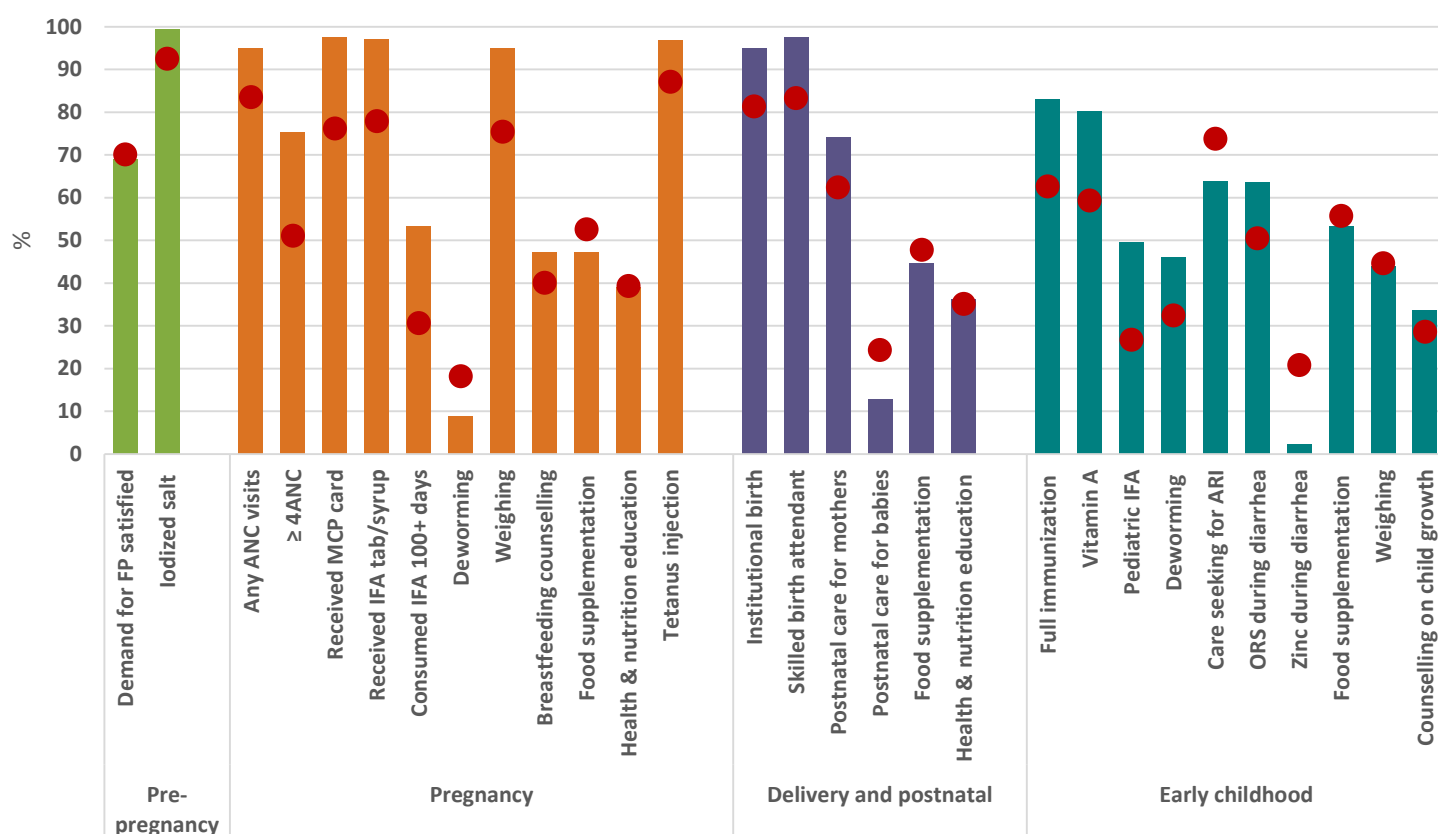
ABOUT THIS DATA NOTE

Nutrition-specific interventions are aimed at improving the proximal food, health, and care environment for women and children during the first 1000 days. They can help improve maternal and child health, improve diets and other nutrition practices, and reduce infections. These interventions span pregnancy, postnatal, and early childhood periods and include food and micronutrient supplementation, nutrition education and/or counselling, growth monitoring and promotion, as well as routine immunization, deworming, and care during illness. At 90% coverage, these interventions can contribute to 20% reduction in stunting and 61% reduction in severe wasting¹.

India's policy framework for health and nutrition is robust and includes most evidence-based nutrition and health interventions. Two large-scale national program platforms – the Integrated Child Development Services and the National Health Mission together provide the public sector delivery platforms with the mandate to deliver these interventions across the country. India's efforts at scaling up nutrition interventions are now also supported by the National Nutrition Mission.

This *Data Note* describes the coverage of a set of key nutrition and health interventions. The findings here are based on data from the National Family Health Survey 2015-2016. Indicators to capture the coverage of the interventions here are all calculated for women (15-49 years) with a child under five years of age. All analyses are based on the last-born child for each woman and indicator definitions are provided in Annex 1 of this Note. For some indicators, age categories may vary.

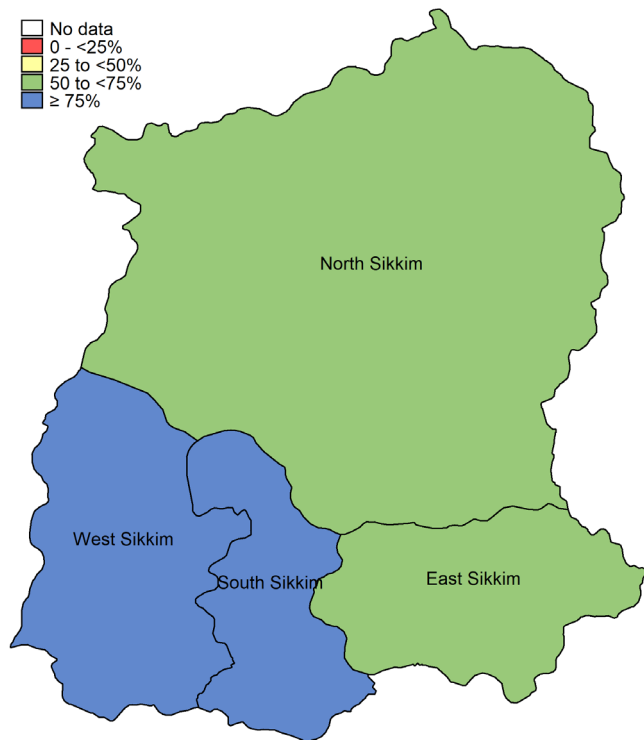
FIGURE 1 Coverage of interventions across the continuum of care, in 2016



Note: ANC = Antenatal care; ARI = Acute respiratory infection; FP = Family planning; IFA = Iron and folic acid; MCP = Mother and child protection; ORS = Oral rehydration salts; The bars represent state average, the dots represent India average.
Source: NFHS-4.

¹Bhutta, Z.A., J.K. Das, A. Rizvi, M.F. Gaffey, N. Walker, S. Horton, P. Webb, A. Lartey, R.E. Black, Lancet Nutrition Interventions Review G, et al. 2013. "Evidence-based interventions for improvement of maternal and child nutrition: what can be done and at what cost?" *The Lancet* 382(9890):452-477.

MAP 1 Percentage of women who received 4 or more ANC visits, by district, 2016

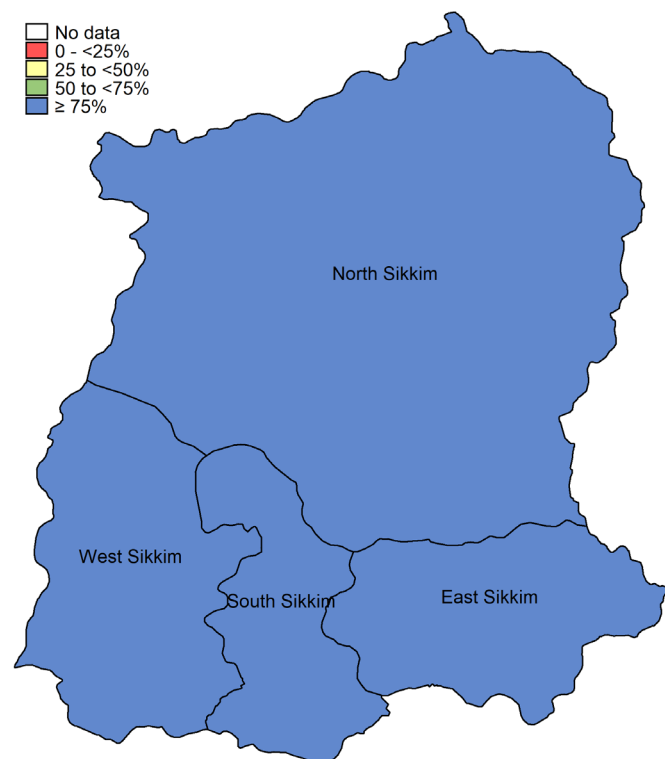


Top 2 districts, %	
West Sikkim	84.9
South Sikkim	84.7

Bottom 2 districts, %	
East Sikkim	68.1
North Sikkim	73.7

Source: NFHS-4.

MAP 2 Percentage of women who were weighed during pregnancy, by district, 2016

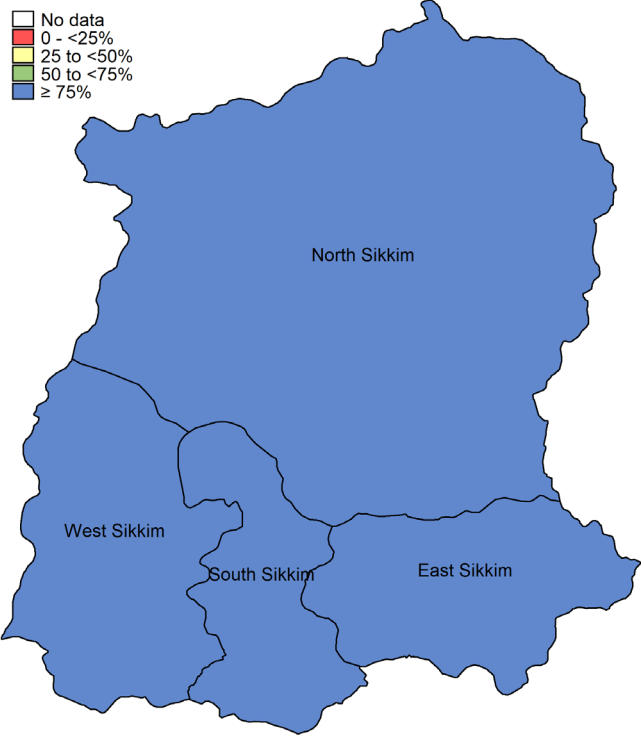


Top 2 districts, %	
South Sikkim	99.3
West Sikkim	97.6

Bottom 2 districts, %	
East Sikkim	92.0
North Sikkim	97.0

Source: NFHS-4.

MAP 3 Percentage of women who received or bought any IFA during pregnancy, by district, 2016

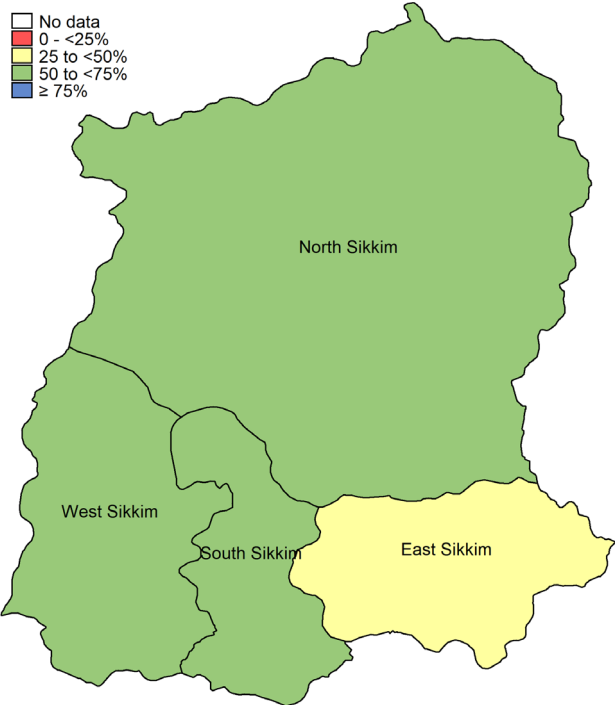


Top 2 districts, %	
South Sikkim	98.7
North Sikkim	98.7

Bottom 2 districts, %	
East Sikkim	96.1
West Sikkim	97.9

Source: NFHS-4.

MAP 4 Percentage of women who consumed IFA for 100+ days during pregnancy, by district, 2016

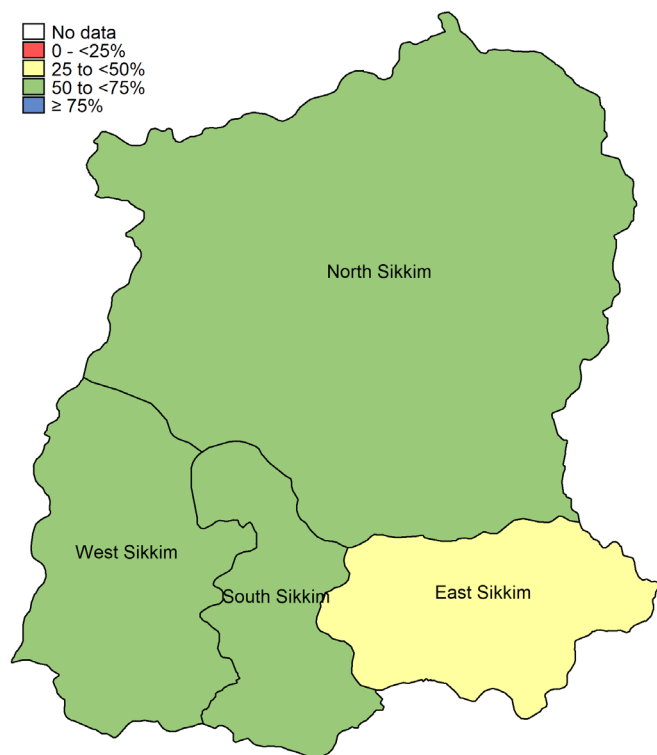


Top 2 districts, %	
North Sikkim	70.4
West Sikkim	66.8

Bottom 2 districts, %	
East Sikkim	42.7
South Sikkim	63.3

Source: NFHS-4.

MAP 5 Percentage of women who received breastfeeding counselling during pregnancy, by district, 2016

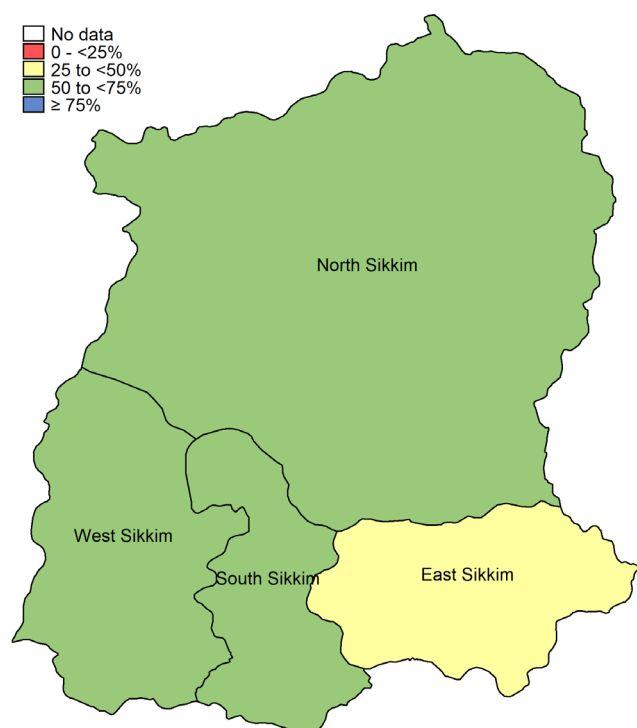


Top 2 districts, %	
West Sikkim	63.5
North Sikkim	56.6

Bottom 2 districts, %	
East Sikkim	38.0
South Sikkim	52.9

Source: NFHS-4.

MAP 6 Percentage of women who received food supplements during pregnancy, by district, 2016

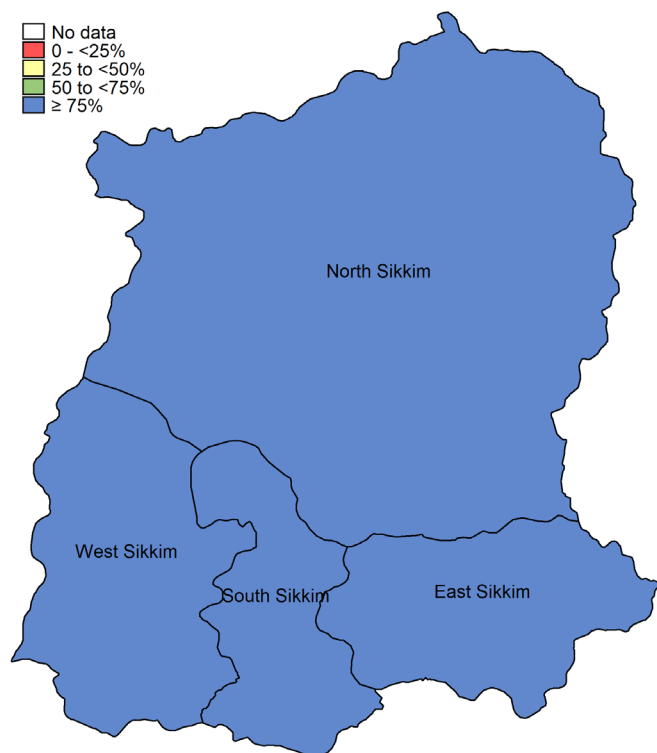


Top 2 districts, %	
North Sikkim	60.0
West Sikkim	57.1

Bottom 2 districts, %	
East Sikkim	39.7
South Sikkim	53.6

Source: NFHS-4.

MAP 7 Percentage of women who gave birth in a health facility, by district, 2016

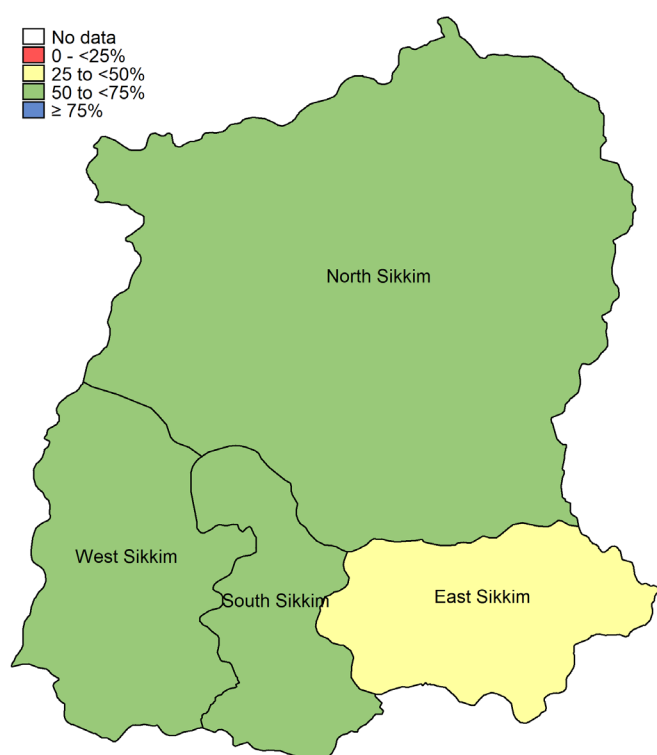


Top 2 districts, %	
South Sikkim	98.3
North Sikkim	96.6

Bottom 2 districts, %	
East Sikkim	93.3
West Sikkim	96.0

Source: NFHS-4.

MAP 8 Percentage of women who received food supplements during lactation, by district, 2016

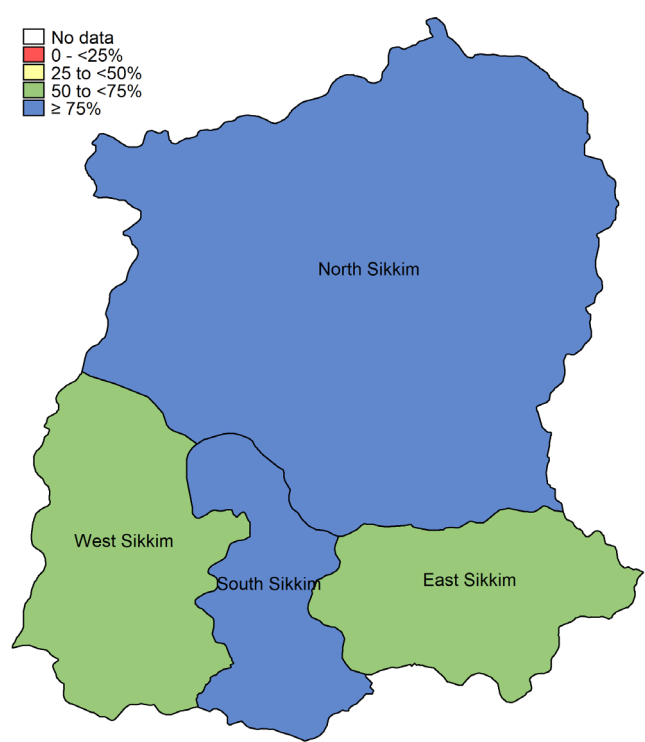


Top 2 districts, %	
North Sikkim	56.9
South Sikkim	55.3

Bottom 2 districts, %	
East Sikkim	35.6
West Sikkim	54.8

Source: NFHS-4.

MAP 9 Percentage of mothers who received postnatal care within two days of childbirth, by district, 2016

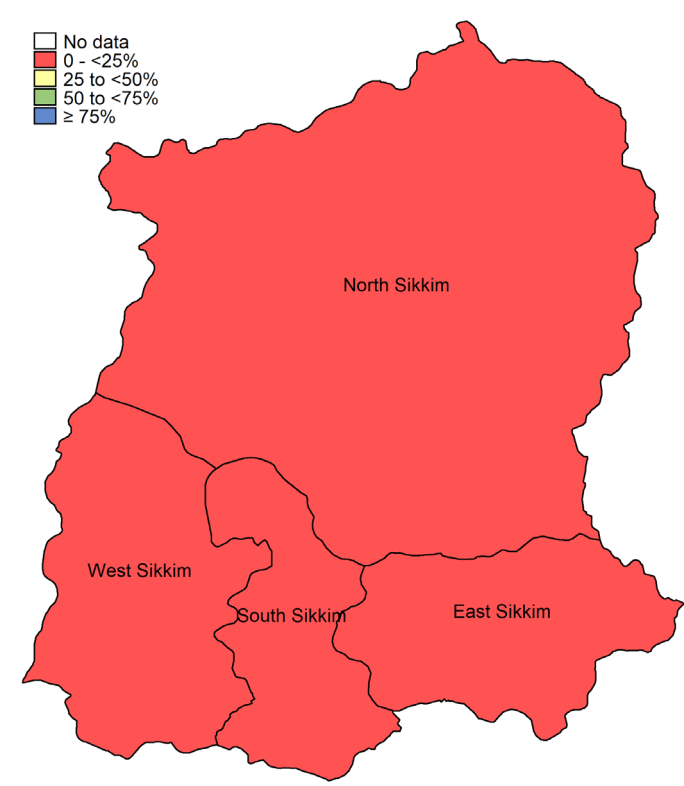


Top 2 districts, %	
North Sikkim	84.7
South Sikkim	82.7

Bottom 2 districts, %	
East Sikkim	70.2
West Sikkim	73.7

Source: NFHS-4.

MAP 10 Percentage of children (0-59 months) who received postnatal care within two days of their birth, by district, 2016

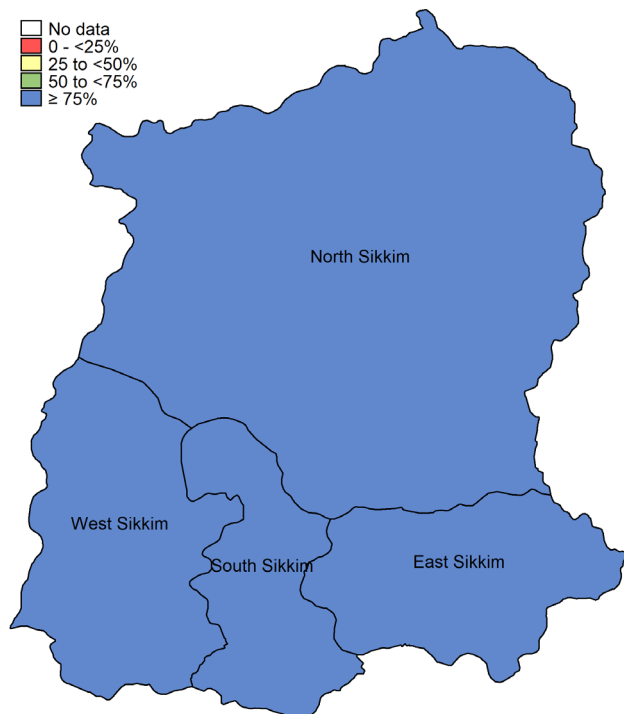


Top 2 districts, %	
South Sikkim	24.1
North Sikkim	17.1

Bottom 2 districts, %	
East Sikkim	7.2
West Sikkim	15.3

Source: NFHS-4.

MAP 11 Percentage of children (12-23 months) who were fully immunized, by district, 2016

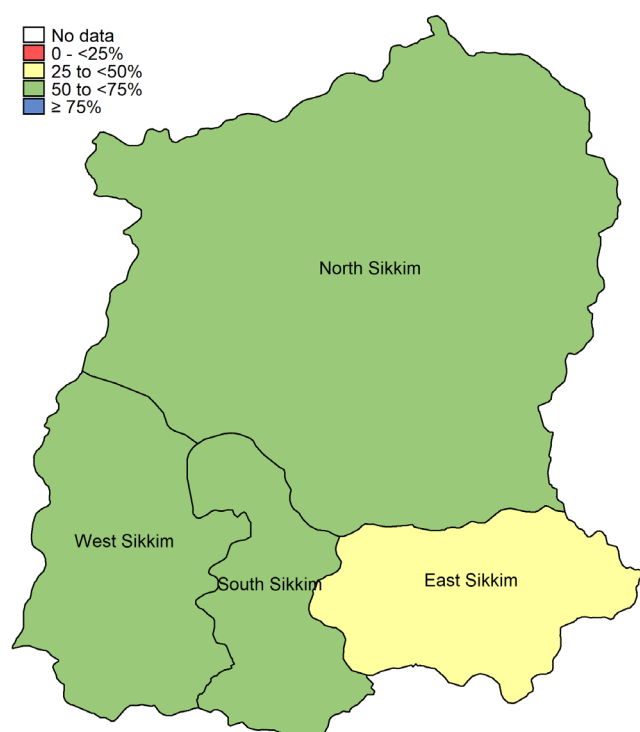


Top 2 districts, %	
South Sikkim	91.6
North Sikkim	89.9

Bottom 2 districts, %	
East Sikkim	79.0
West Sikkim	79.4

Source: NFHS-4.

MAP 12 Percentage of children (6-35 months) who received food supplements, by district, 2016

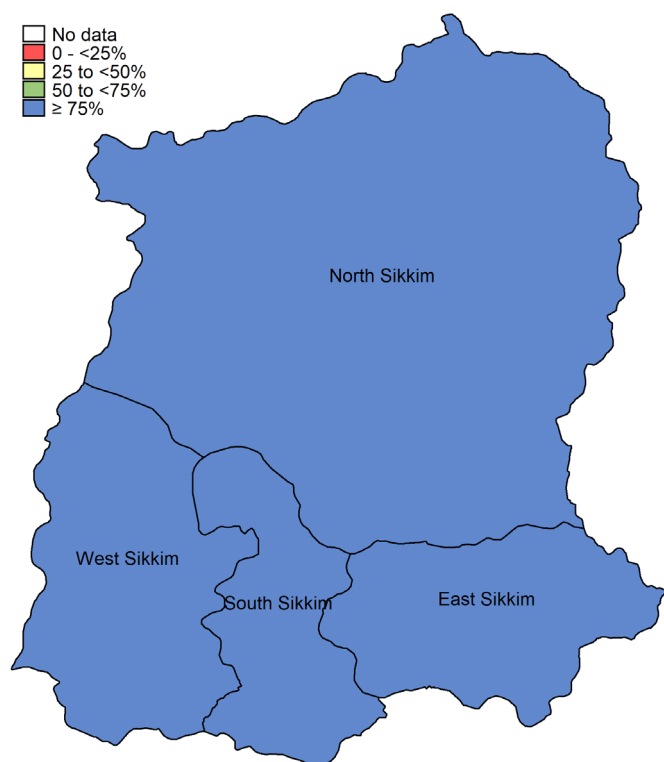


Top 2 districts, %	
North Sikkim	63.9
West Sikkim	63.3

Bottom 2 districts, %	
East Sikkim	48.1
South Sikkim	54.3

Source: NFHS-4.

MAP 13 Percentage of children (6-59 months) who received vitamin A supplements, by district, 2016

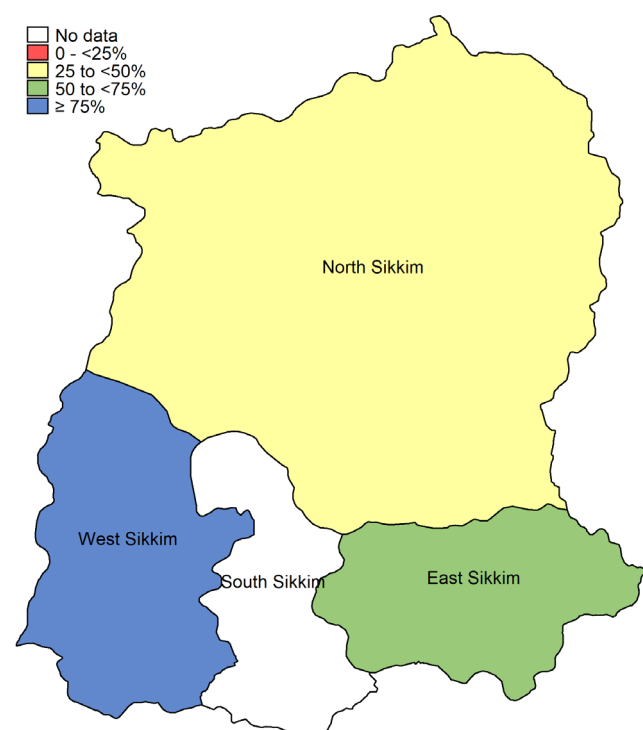


Top 2 districts, %	
North Sikkim	88.6
South Sikkim	82.8

Bottom 2 districts, %	
West Sikkim	75.2
East Sikkim	80.2

Source: NFHS-4.

MAP 14 Percentage of children (0-59 months) with diarrhea who received ORS, by district, 2016



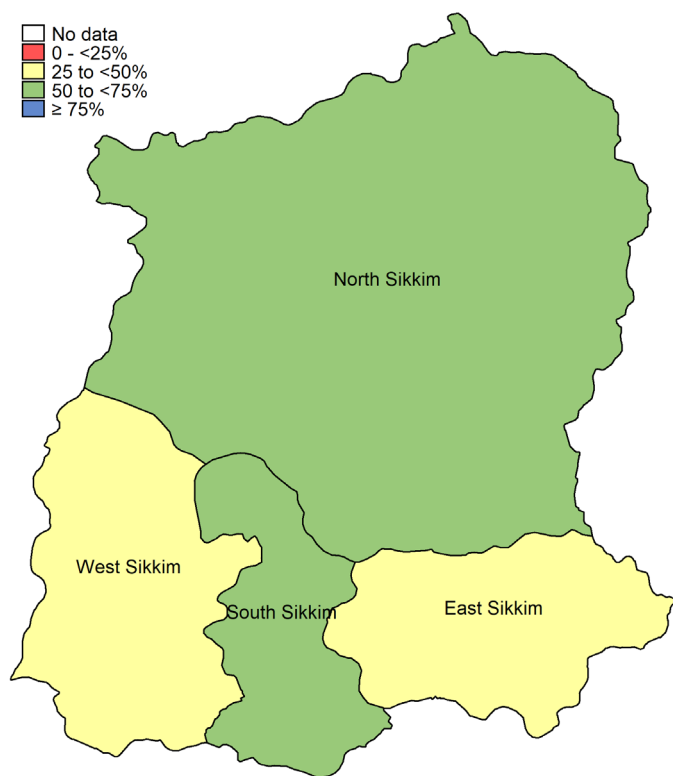
Top 2 districts, %	
West Sikkim	100.0
East Sikkim	63.4

Bottom 1 district, %	
North Sikkim	35.5

Source: NFHS-4.

Note: In South Sikkim, there were no reported cases of diarrhea in the last two weeks prior to the survey, among children (0-59 mo). Therefore, receipt of ORS/Zinc is not applicable..

MAP 15 Percentage of children (0-59 months) who were weighed in the last 12 months, by district, 2016

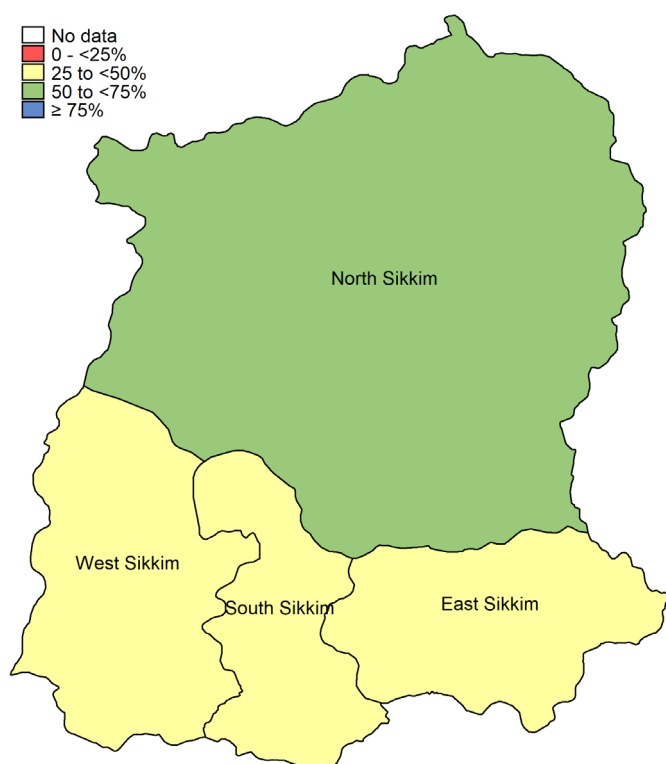


Top 2 districts, %	
North Sikkim	58.0
South Sikkim	51.0

Bottom 2 districts, %	
East Sikkim	38.0
West Sikkim	49.9

Source: NFHS-4.

MAP 16 Percentage of mothers with children (0-59 months) who were counselled about child growth after their child was weighed, by district, 2016



Top 2 districts, %	
North Sikkim	50.3
South Sikkim	45.8

Bottom 2 districts, %	
East Sikkim	26.9
West Sikkim	34.9

Source: NFHS-4.

DASHBOARD: Coverage of nutrition-specific interventions, by district, 2016

<25% 25-50% 50-75% ≥75%

State/District		SIKKIM	East District	North Sikkim	South Sikkim	West Sikkim
Pre-pregnancy	Demand for FP satisfied	68.9	55.8	71.9	73.5	80.2
	Iodized salt	99.4	99.3	99.2	99.2	99.8
Pregnancy	Any ANC visits	95.0	92.1	97.3	99.3	97.6
	≥4ANC	75.2	68.1	73.7	84.7	84.9
	Received MCP card	97.6	98.2	98.6	97.2	96.0
	Received IFA tab/syrup	97.1	96.1	98.7	98.7	97.9
	Consumed IFA 100+ days	53.2	42.7	70.4	63.3	66.8
	Deworming	8.7	7.0	9.2	15.5	6.3
	Weighing	94.9	92.0	97.0	99.3	97.6
	Breastfeeding counselling	47.1	38.0	56.6	52.9	63.5
	Food supplementation	47.1	39.7	60.0	53.6	57.1
	Health & nutrition education	39.0	33.8	54.7	47.1	40.7
	Tetanus injection	96.9	95.3	97.2	100.0	97.9
Delivery & postnatal	Institutional birth	95.0	93.3	96.6	98.3	96.0
	Skilled birth attendant	97.5	96.5	99.3	100.0	97.3
	Postnatal care for mothers	74.2	70.2	84.7	82.7	73.7
	Postnatal care for babies	12.8	7.2	17.1	24.1	15.3
	Food supplementation	44.6	35.6	56.9	55.3	54.8
	Health & nutrition education	36.1	30.3	50.4	45.7	38.4
Early childhood	Full immunization	82.9	79.0	89.9	91.6	79.4
	Vitamin A	80.2	80.2	88.6	82.8	75.2
	Paediatric IFA	49.6	50.2	53.7	46.4	50.6
	Deworming	46.1	46.9	50.8	46.4	42.7
	Care seeking for ARI	63.7	64.6	63.8	100.0	33.1
	ORS during diarrhea	63.6	63.4	35.5	*	100.0
	Zinc during diarrhea	2.3	0.0	24.9	*	0.0
	Food supplementation	53.4	48.1	63.9	54.3	63.3
	Weighing	44.1	38.0	58.0	51.0	49.9
	Counselling on child growth	33.6	26.9	50.3	45.8	34.9

Source: NFHS-4

*There were no reported cases of diarrhea in the last two weeks prior to the survey, among children (0-59 mo). Therefore, receipt of ORS/Zinc is not applicable.

Summary of findings

- **High coverage ($\geq 75\%$):** Sustained efforts are required to maintain the high coverage for the following interventions:
 - *Before & during pregnancy:* iodized salt, ANC visits, MCP card, IFA provision, weighing, tetanus toxoid injection.
 - *Delivery & postnatal:* institutional births, skilled birth attendant.
 - *Early childhood:* full immunization, vitamin A supplementation.
- **Low coverage ($< 50\%$):** The state should focus efforts on increasing coverage of the following interventions:
 - *Before & during pregnancy:* deworming, breastfeeding counselling, food supplementation, health & nutrition education.
 - *Delivery & postnatal:* postnatal care for babies, food supplementation, health & nutrition education.
 - *Early childhood:* IFA supplementation, deworming, zinc during diarrhea, weighing and counselling on child growth.
- **Missed opportunities:** Coverage of postnatal care is higher for mothers than for babies. Many women receive some IFA but fewer are consuming IFA for at least 100 days during pregnancy, and few women receive deworming pills.

ANNEX 1 Definition of indicators used in the analyses

Indicators	Definition
Pre-pregnancy	
Demand for FP satisfied	Percentage of women (15-49 years) who have their need for family planning satisfied with modern methods.
Iodized salt	Percentage of households with children under 5 years of age using iodized salt.
Pregnancy	
Any ANC visits	Percentage of women (15-49 years) with children under 5 years of age who were attended by any trained provider ever or at least once, when they were pregnant with their youngest child.
≥ 4 ANC	Percentage of women (15-49 years) with children under 5 years of age who were attended by any trained provider 4 or more times, when they were pregnant with their youngest child.
Received MCP card	Percentage of women (15-49 years) with children under 5 years of age who received the Mother and Child Protection card after pregnancy registration, when they were pregnant with their youngest child.
Received IFA	Percentage of women (15-49 years) with children under 5 years of age who received or bought any IFA tablets/syrup, when they were pregnant with their youngest child.
Consumed IFA for 100+ days	Percentage of women (15-49 years) with children under 5 years of age who consumed IFA tablets/syrup for 100 days or more, when they were pregnant with their youngest child.
Deworming	Percentage of women (15-49 years) with children under 5 years of age who received any deworming drug, when they were pregnant with their youngest child.
Weighing	Percentage of women (15-49 years) with children under 5 years of age who were weighed when they were pregnant with their youngest child.
Breastfeeding counselling	Percentage of women (15-49 years) with children under 5 years of age who received advice on breastfeeding from any provider, when they were pregnant with their youngest child.
Food supplementation	Percentage of women (15-49 years) with children under 5 years of age who received food supplements from the <i>anganwadi center</i> (AWC), when they were pregnant with their youngest child.
Health & nutrition education	Percentage of women (15-49 years) with children under 5 years of age who received health and nutrition education from the AWC, when they were pregnant with their youngest child.
Tetanus injection	Percentage of women (15-49 years) with children under 5 years of age who received at least 2 TT injections when they were pregnant with their youngest child.
Delivery and postnatal care	
Institutional birth	Percentage of women (15-49 years) with children under 5 years of age who delivered their youngest child in a health facility.
Skilled birth attendant	Percentage of women (15-49 years) with children under 5 years of age who were attended by skilled health personnel when they delivered their youngest child.
Postnatal care for mothers	Percentage of women (15-49 years) with children under 5 years of age who received postnatal care, while in facility or at home, two days after they delivered their youngest child.
Postnatal care for babies	Percentage of last-born children (0-59 months) in the last 5 years, who received postnatal care within two days after they were born.
Food supplementation	Percentage of women (15-49 years) with children under 5 years of age who received food supplements from the AWC, when they were breastfeeding their youngest child.
Health & nutrition education	Percentage of women (15-49 years) with children under 5 years of age who received health and nutrition education from the AWC, when they were breastfeeding their youngest child.
Early childhood	
Full immunization	Percentage of last-born children (12-23 months) in the last 5 years who received one dose of BCG vaccine, three doses of polio vaccine, three doses of DTP3 vaccine, and one dose of measles vaccine.
Vitamin A	Percentage of last-born children (6-59 months) in the last 5 years, who received vitamin A supplements in the six months preceding the survey.
Pediatric IFA	Percentage of last-born children (6-59 months) in the last 5 years, who received iron supplements in the last 7 days prior to the survey.
Deworming	Percentage of last-born children (12-59 months) in the last 5 years, who received albendazole or any other deworming drug in the last 6 months prior to the survey.
Care seeking for ARI	Percentage of last-born children (0-59 months) in the last 5 years, with suspected ARI symptoms in the last two weeks, who were taken to a health care provider.
ORS during diarrhea	Percentage of last-born children (0-59 months) in the last 5 years, with diarrhea in the last two weeks, who received ORS.
Zinc during diarrhea	Percentage of last-born children (2-59 months) in the last 5 years, with diarrhea in the last two weeks who received zinc.
Food supplementation	Percentage of last-born children (6-35 months) in the last 5 years, who received food supplements from the AWC in the last 12 months prior to the survey.
Weighing	Percentage of last-born children (0-59 months) in the last 5 years, who were ever weighed in the last 12 months.
Counselling on child growth	Percentage of women (15-49 years) with children under 5 years of age, who were counselled about their youngest child's growth after they were weighed in the last 12 months prior to the survey.

Led by IFPRI 

AUTHORS

Sumati Bajaj, Research Analyst, IFPRI

Rasmi Avula, Research Fellow, IFPRI

Phuong Hong Nguyen, Research Fellow, IFPRI

Lan Mai Tran, Independent Researcher

Samuel Scott, Associate Research Fellow, IFPRI

Purnima Menon, Senior Research Fellow, IFPRI

SUGGESTED CITATION

Bajaj, S., R. Avula, P.H. Nguyen, L.M. Tran, S. Scott and P. Menon. 2018. *Coverage of Nutrition and Health Interventions in Sikkim: Insights from the National Family Health Survey-4*. POSHAN Data Note 28. New Delhi, India: International Food Policy Research Institute.

ABOUT POSHAN

Partnerships and Opportunities to Strengthen and Harmonize Actions for Nutrition in India (POSHAN) is a multi-year initiative that aims to support the use of data and evidence in decision-making for nutrition in India. It is supported by the Bill & Melinda Gates Foundation and led by IFPRI in India.

ABOUT DATA NOTES

POSHAN Data Notes focus on data visualization to highlight geographic and/or thematic issues related to nutrition in India. They draw on multiple sources of publically available data.

CONTACT US

Email: IFPRI.POSHAN@cgiar.org

IFPRI-NEW DELHI INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE

NASC Complex, CG Block,
Dev Prakash Shastri Road,
Pusa, New Delhi 110012, India
T+91.11.66166565
F+91.11.66781699

IFPRI-HEADQUARTERS INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE

1201 Eye Street, NW,
Washington, DC 20005 USA
T. +1.202.862.5600
F. +1.202.467.4439
Skype: IFPRIhomeoffice
ifpri@cgiar.org
www.ifpri.org

This publication has been prepared by POSHAN. It has not been peer reviewed. Any opinions stated herein are those of the author(s) and do not necessarily reflect the policies of the International Food Policy Research Institute.

Copyright © 2018 International Food Policy Research Institute. All rights reserved. For permission to republish, contact ifpri-copyright@cgiar.org.