# POSHAN
## Led by IFPRI

# DISTRICT NUTRITION PROFILE

## About District Nutrition Profiles:

District Nutrition Profiles (DNPs) are available for 707 districts in India. They present trends for key nutrition and health outcomes and their cross-sectoral determinants in a district. The DNPs are based on data from the National Family Health Survey (NFHS)-4 (2015-2016) and NFHS-5 (2019-2020). They are aimed primarily at district administrators, state functionaries, local leaders, and development actors working at the district-level.
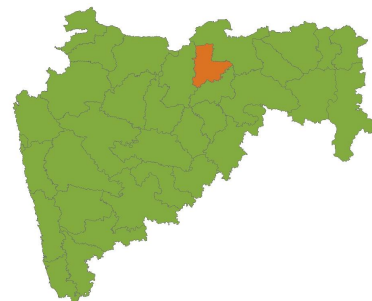
**Figure 1:** Map highlights district Akola in the state/UT of Maharashtra

## What factors lead to child undernutrition?

Given the focus of India's national nutrition mission on child undernutrition, the DNPs focus on the determinants of child undernutrition (Figure on the left). Multiple determinants of suboptimal child nutrition and development contribute to the outcomes seen at the district-level. Different types of interventions can influence these determinants. Immediate determinants include inadequacies in food, health, and care for infants and young children, especially in the first two years of life. Nutrition-specific interventions such as health service delivery at the right time during pregnancy and early childhood can affect immediate determinants. Underlying and basic determinants include women's status, household food security, hygiene, and socio-economic conditions. Nutrition-sensitive interventions such as social safety nets, sanitation programs, women's empowerment, and agriculture programs can affect underlying and basic determinants.

**Optimum fetal and child nutrition and development**

**IMMEDIATE DETERMINANTS**
Breastfeeding, nutrient-rich foods, caregiving practices, low burden of infectious diseases

**NUTRITION-SPECIFIC INTERVENTIONS**
Service delivery to mothers and infants along the continuum of care, access to health facilities

**UNDERLYING AND BASIC DETERMINANTS**
Women's status, sanitation and hygiene, food security, socio-economic conditions

**INTERVENTIONS THAT AFFECT UNDERLYING AND BASIC DETERMINANTS**
Women's empowerment, sanitation, agriculture, and social safety net programs

**Source:** Adapted from Black et al. (2008)

## District demographic profile, 2019-20 — Akola

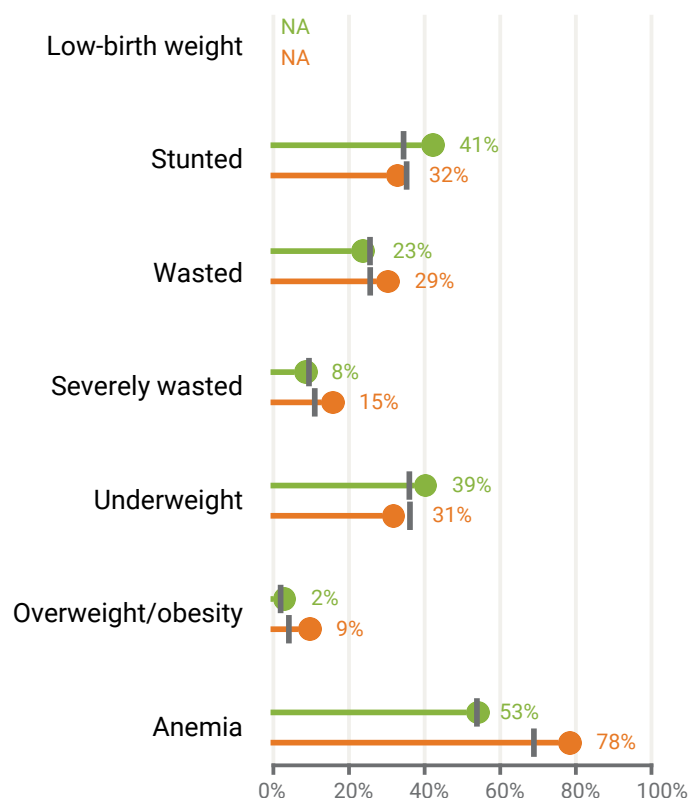| | |
|---|---|
| **925/1,000** Sex ratio (females per 1,000 males) of the total population | |
| **573,520** Number of women in reproductive age (15–49 yrs) | |
| **33,013** Number of pregnant women | |
| **32,786** Number of live births | |
| **142,271** Total number of children under 5 yrs | |
| **33,118** Children under 5 yrs whose births were registered | |

**Source:**
1. IFPRI estimates - The headcount was calculated as the product of the undernutrition prevalence and the total eligible projected population for each district in 2019. Projected population for 2019 was estimated using Census 2011.
2. NFHS-4 (2015-16) & NFHS-5 district & state factsheets (2019-20).

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# The state of nutrition outcomes among children (<5 years)   Akola



**Maharashtra** ● 2016 ● 2020

| Low-birth weight | NA / NA |
| Stunted | 41% (2016) / 32% (2020) |
| Wasted | 23% (2016) / 29% (2020) |
| Severely wasted | 8% (2016) / 15% (2020) |
| Underweight | 39% (2016) / 31% (2020) |
| Overweight/obesity | 2% (2016) / 9% (2020) |
| Anemia | 53% (2016) / 78% (2020) |

*Axis: 0% 20% 40% 60% 80% 100%*

## Burden on nutrition outcomes (2020)

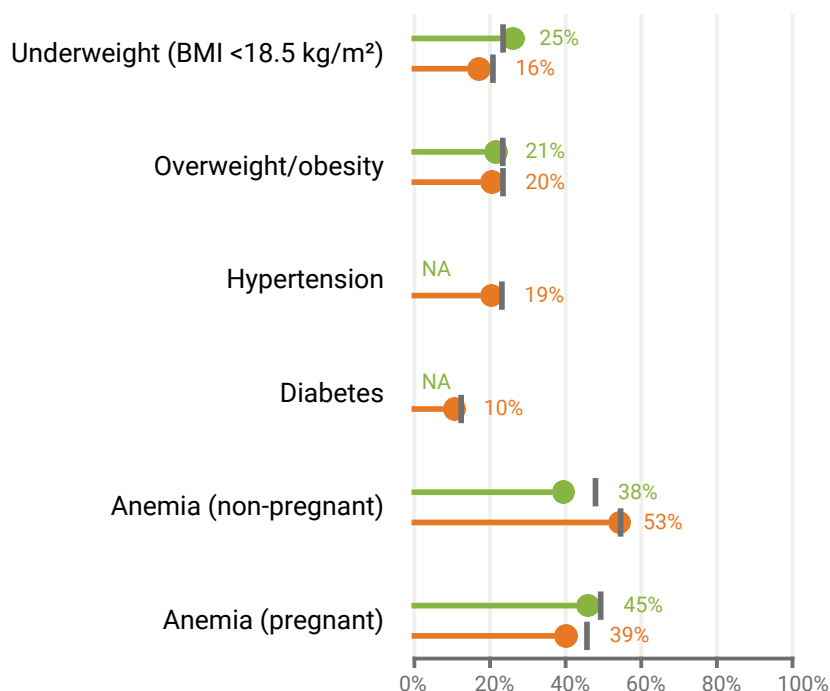| Indicators | No. of children (<5 yrs) |
| --- | --- |
| Low-birth weight | NA |
| Stunted | 45,228 |
| Wasted | 41,785 |
| Severely wasted | 20,914 |
| Underweight | 43,763 |
| Overweight/obesity | 12,292 |
| Anemia | 99,047 |
| **Total children** | **142,271** |

**Note:** NA refers to data are unavailable for a given round of NFHS data.

**Points of discussion:**
- What are the trends in undernutrition among children under five years of age (stunting, wasting, underweight, and anemia)?
- What are the trends in overweight/obesity among children under five years of age in the district?

# The state of nutrition outcomes among women (15-49 years)   Akola



**Maharashtra** ● 2016 ● 2020

| Underweight (BMI <18.5 kg/m²) | 25% (2016) / 16% (2020) |
| Overweight/obesity | 21% (2016) / 20% (2020) |
| Hypertension | NA / 19% (2020) |
| Diabetes | NA / 10% (2020) |
| Anemia (non-pregnant) | 38% (2016) / 53% (2020) |
| Anemia (pregnant) | 45% (2016) / 39% (2020) |

*Axis: 0% 20% 40% 60% 80% 100%*

## Burden on nutrition outcomes (2020)

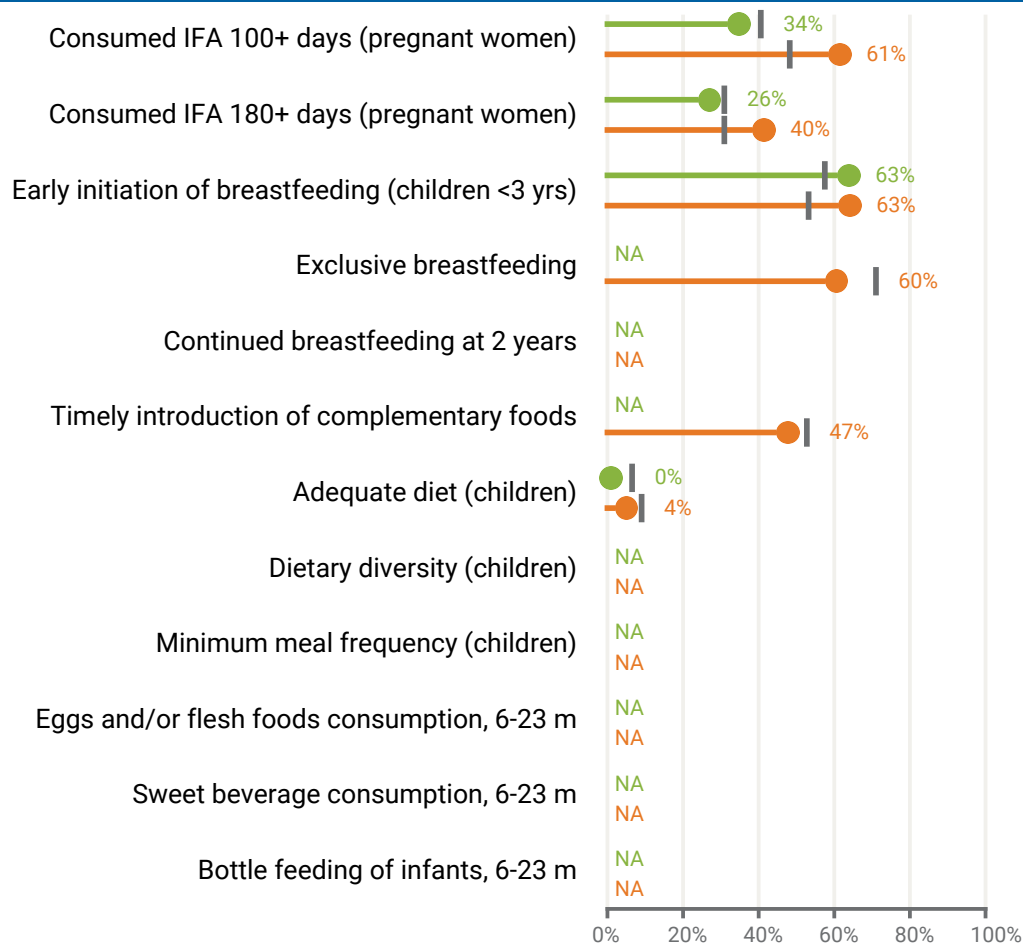| Indicators | No. of women (15-49 yrs) |
| --- | --- |
| Underweight | 92,509 |
| Overweight/obesity | 112,353 |
| Hypertension | 111,378 |
| Diabetes | 55,173 |
| Anemia (non-preg) | 305,342 |
| Anemia (preg) | 12,931 |
| **Total women (preg)** | **33,013** |
| **Total women** | **573,520** |

**Note:** NA refers to data are unavailable for a given round of NFHS data.

**Points of discussion:**
- What are the trends in underweight and anemia among women (15-49 yrs) in the district?
- What are the trends in overweight/obesity and other nutrition-related non-communicable diseases in the district?

## Immediate determinants — Akola

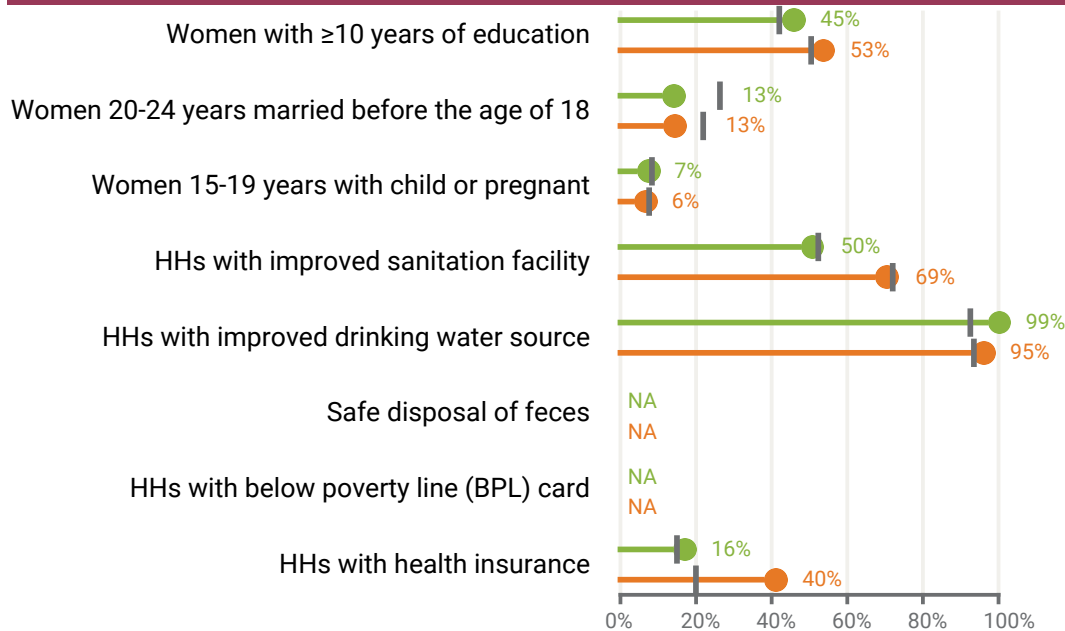| Indicator | 2016 | 2020 |
|---|---|---|
| Consumed IFA 100+ days (pregnant women) | 34% | 61% |
| Consumed IFA 180+ days (pregnant women) | 26% | 40% |
| Early initiation of breastfeeding (children <3 yrs) | 63% | 63% |
| Exclusive breastfeeding | NA | 60% |
| Continued breastfeeding at 2 years | NA | NA |
| Timely introduction of complementary foods | NA | 47% |
| Adequate diet (children) | 0% | 4% |
| Dietary diversity (children) | NA | NA |
| Minimum meal frequency (children) | NA | NA |
| Eggs and/or flesh foods consumption, 6-23 m | NA | NA |
| Sweet beverage consumption, 6-23 m | NA | NA |
| Bottle feeding of infants, 6-23 m | NA | NA |

Legend: Maharashtra, 2016, 2020

**Note:** NA refers to data are unavailable for a given round of NFHS data.

**Points of discussion:**
- What are the trends in infant and young child feeding (timely initiation of breastfeeding, exclusive breastfeeding, timely initiation of complementary feeding, and adequate diet)? What can be done to improve infant and young child feeding?
- What are the trends in IFA consumption among pregnant women in the district? How can the consumption be improved?
- What additional data are needed to understand diets and/or other determinants?

## Underlying determinants — Akola

| Indicator | 2016 | 2020 |
|---|---|---|
| Women with ≥10 years of education | 45% | 53% |
| Women 20-24 years married before the age of 18 | 13% | 13% |
| Women 15-19 years with child or pregnant | 7% | 6% |
| HHs with improved sanitation facility | 50% | 69% |
| HHs with improved drinking water source | 99% | 95% |
| Safe disposal of feces | NA | NA |
| HHs with below poverty line (BPL) card | NA | NA |
| HHs with health insurance | 16% | 40% |

Legend: Maharashtra, 2016, 2020

**Note:** NA refers to data are unavailable for a given round of NFHS data.

**Points of discussion:**
- How can the district increase women's literacy, and reduce early marriage, if needed?
- How does the district perform on providing drinking water and sanitation to its residents? Since sanitation and hygiene play an important role in improving nutrition outcomes, how can all aspects of sanitation be improved?
- How can programs that address underlying and basic determinants (education, poverty, gender) be strengthened?
- What additional data are needed on food systems, poverty or other underlying determinants?

Trends in coverage of interventions across the first 1,000 days — Akola

Legend: 2016 (green), 2020 (orange)

**Pre and during pregnancy**

| Intervention | 2020 | 2016 |
|---|---|---|
| Demand for FP satisfied | NA | NA |
| Iodized salt | 95% | 99% |
| Pregnancy registered (MPC card) | 91% | 98% |
| ANC first trimester | 75% | 81% |
| > 4 ANC visits | 76% | 80% |
| Weighing | NA | NA |
| Birth preparedness counselling | NA | NA |
| Breastfeeding counselling | NA | NA |
| Tetanus injection | 93% | 95% |
| Received IFA tab/syrup | 88% | |
| Deworming | 30% | |
| Food supplementation | 80% | 80% |

**Delivery and postnatal**

| Intervention | 2020 | 2016 |
|---|---|---|
| Institutional birth | 92% | 98% |
| Financial assistance (JSY) | 16% | |
| Skilled birth attendant | 86% | 94% |
| Postnatal care for mothers | 80% | 82% |
| Postnatal care for babies | 92% | |
| Food supplementation | NA | NA |
| Health & nutrition education | NA | NA |
| Health checkup (ICDS) | NA | NA |

**Early childhood**

| Intervention | 2016 | 2020 |
|---|---|---|
| Full immunization | 51% | 70% |
| Vitamin A | 80% | 88% |
| Pediatric IFA | NA | NA |
| Deworming | NA | NA |
| Food supplementation (6-35 months) | NA | NA |
| Weighing | NA | NA |
| Counselling on child growth | NA | NA |
| ORS during diarrhea | 71% | 74% |
| Zinc during diarrhea | 26% | 41% |
| Careseeking for ARI | 76% | 89% |
| Preschool at AWC | NA | NA |
| Health checkup from AWC | NA | NA |

**Note:** NA refers to data are unavailable for a given round of NFHS data.

**Points of discussion:**
- How does the district perform on health and nutrition interventions along the continuum of care? Does it adequately provide both prenatal and postnatal services to women of reproductive age, pregnant women, new mothers and newborns?
- How has access to health and ICDS services changed over time (food supplementation, health and nutrition education and health checkups)?