

## 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.

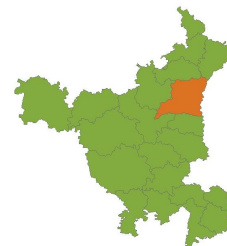


Figure 1: Map highlights district Karnal in the state/UT of Haryana



Source: Adapted from Black et al. (2008)

## 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.

## District demographic profile, 2019-20

Karnal

**892/1,000**  
Sex ratio (females per 1,000 males) of the total population

**513,857**  
Number of women in reproductive age (15-49 yrs)

**31,243**  
Number of pregnant women

**27,608**  
Number of live births

**151,127**  
Total number of children under 5 yrs

**27,433**  
Children under 5 yrs whose births were registered

Source:

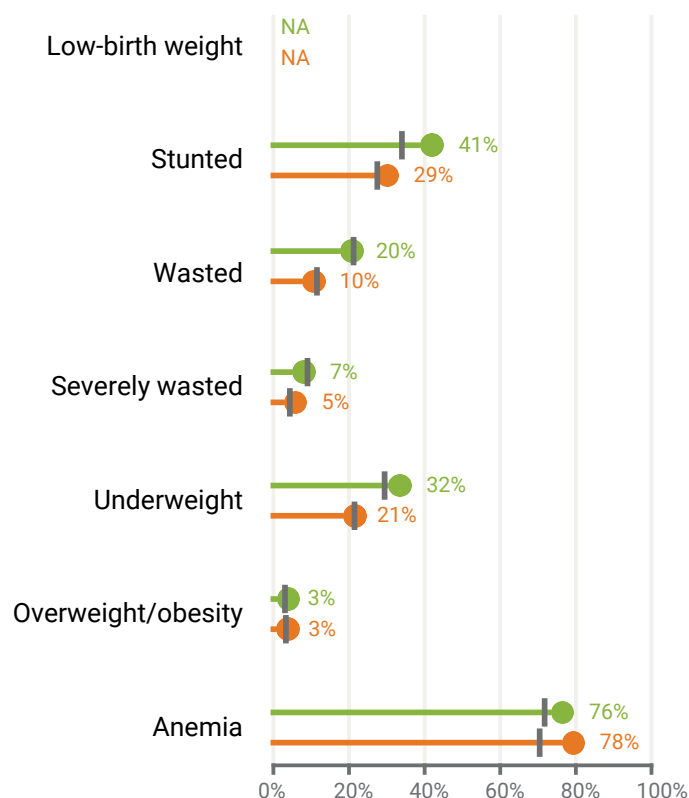
1. IFPRI estimates - The headcount was calculated as the product of the undernutrition prevalence and the total eligible projected population for each district in 2019. Projected population for 2019 was estimated using Census 2011.
2. NFHS-4 (2015-16) & NFHS-5 district & state factsheets (2019-20).

**Citation:** Singh, N., P.H. Nguyen, M. Jangid, S.K. Singh, R. Sarwal, N. Bhatia, R. Johnston, W. Joe, and P. Menon. 2022. District Nutrition Profile: Karnal, Haryana. New Delhi, India: International Food Policy Research Institute.

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

Karnal



Haryana

2016

2020

### Burden on nutrition outcomes (2020)

Indicators	No. of children (<5 yrs)
Low-birth weight	NA
Stunted	44,069
Wasted	14,780
Severely wasted	7,315
Underweight	31,026
Overweight/obesity	4,428
Anemia	106,339
<b>Total children</b>	<b>151,127</b>

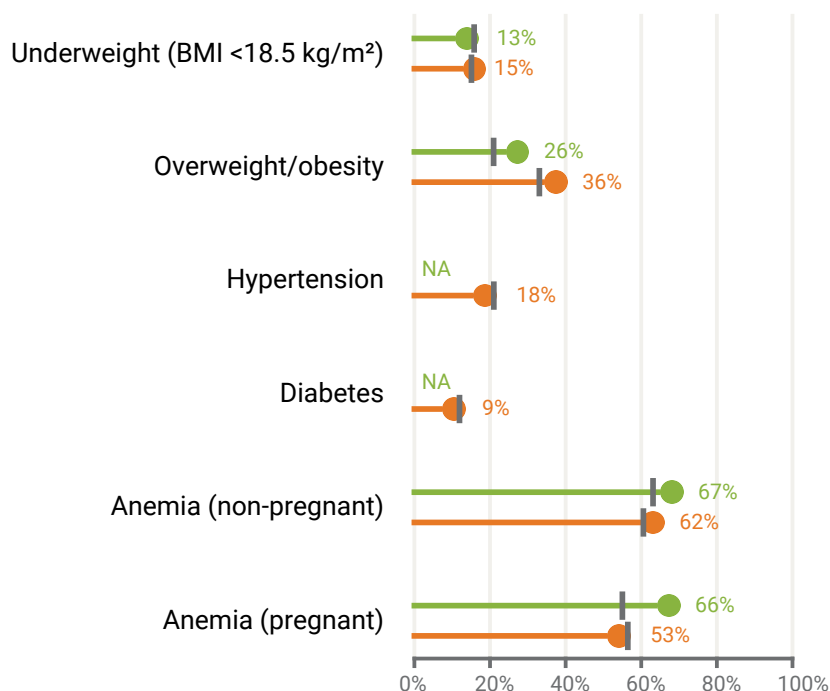
**Note:** NA refers to data are unavailable for a given round of NFHS data.

### 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)

Karnal



Haryana

2016

2020

### Burden on nutrition outcomes (2020)

Indicators	No. of women (15-49 yrs)
Underweight	76,462
Overweight/obesity	187,506
Hypertension	90,644
Diabetes	48,457
Anemia (non-preg)	319,156
Anemia (preg)	16,621
<b>Total women (preg)</b>	<b>31,243</b>
<b>Total women</b>	<b>513,857</b>

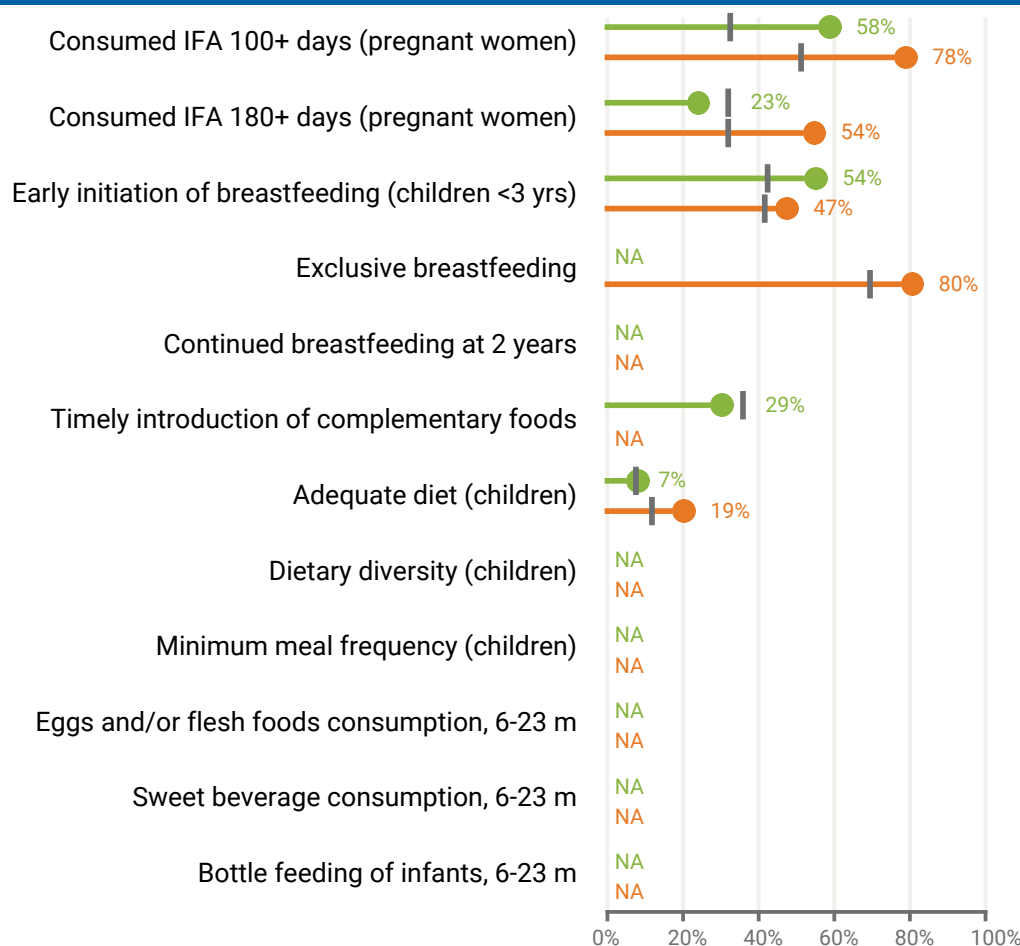
**Note:** NA refers to data are unavailable for a given round of NFHS data.

### 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

Karnal



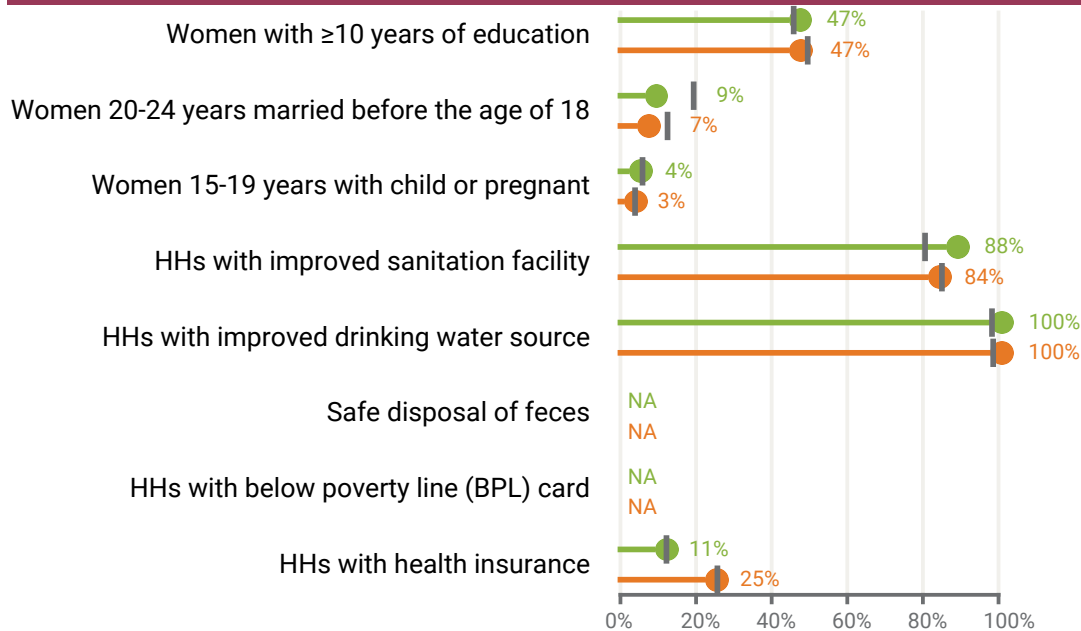
Note: NA refers to data are unavailable for a given round of NFHS data.

### 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

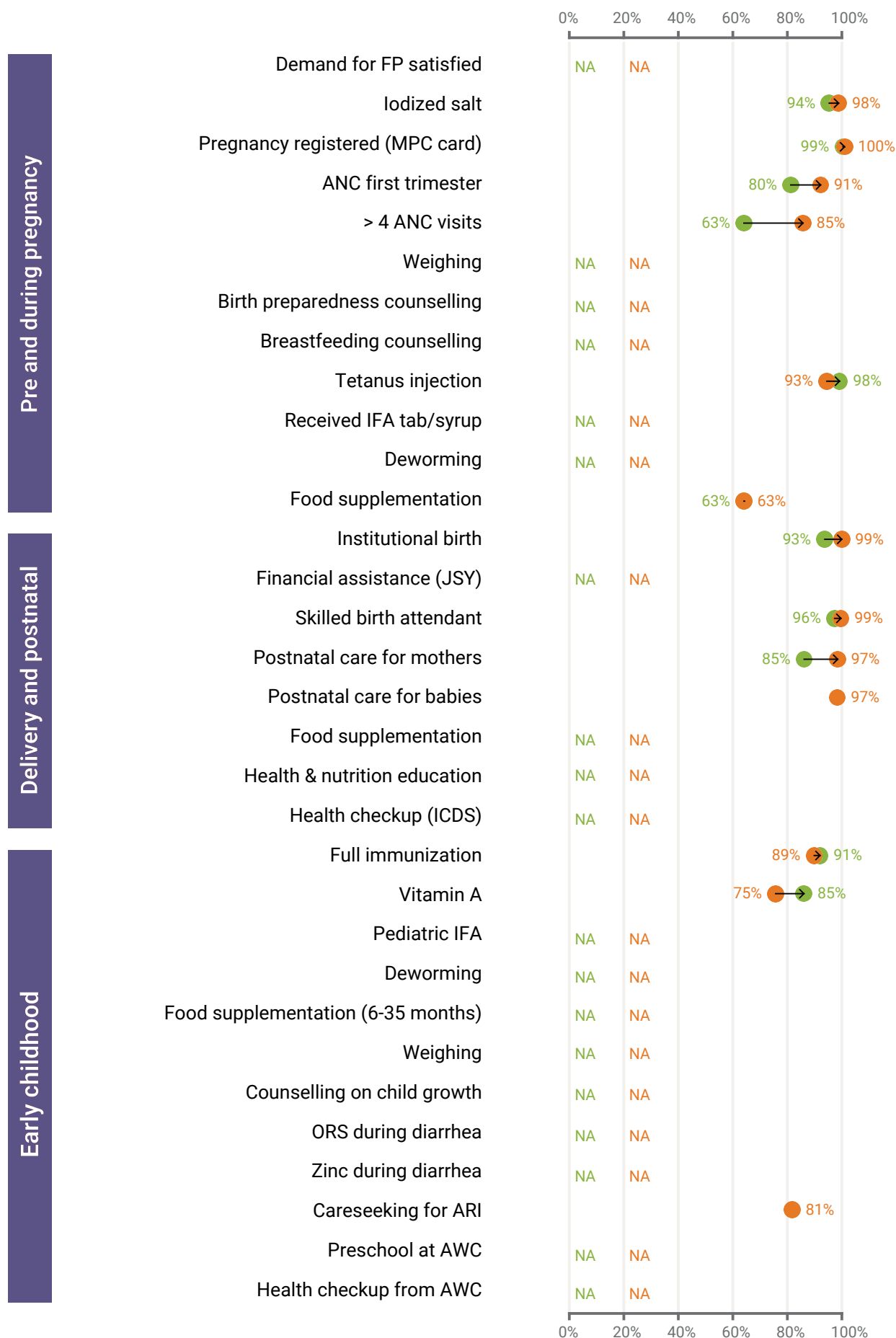
Karnal



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?



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)?