

Using sub-national data to inform integrated multi-sectoral system improvements for health and nutrition in Odisha State, India

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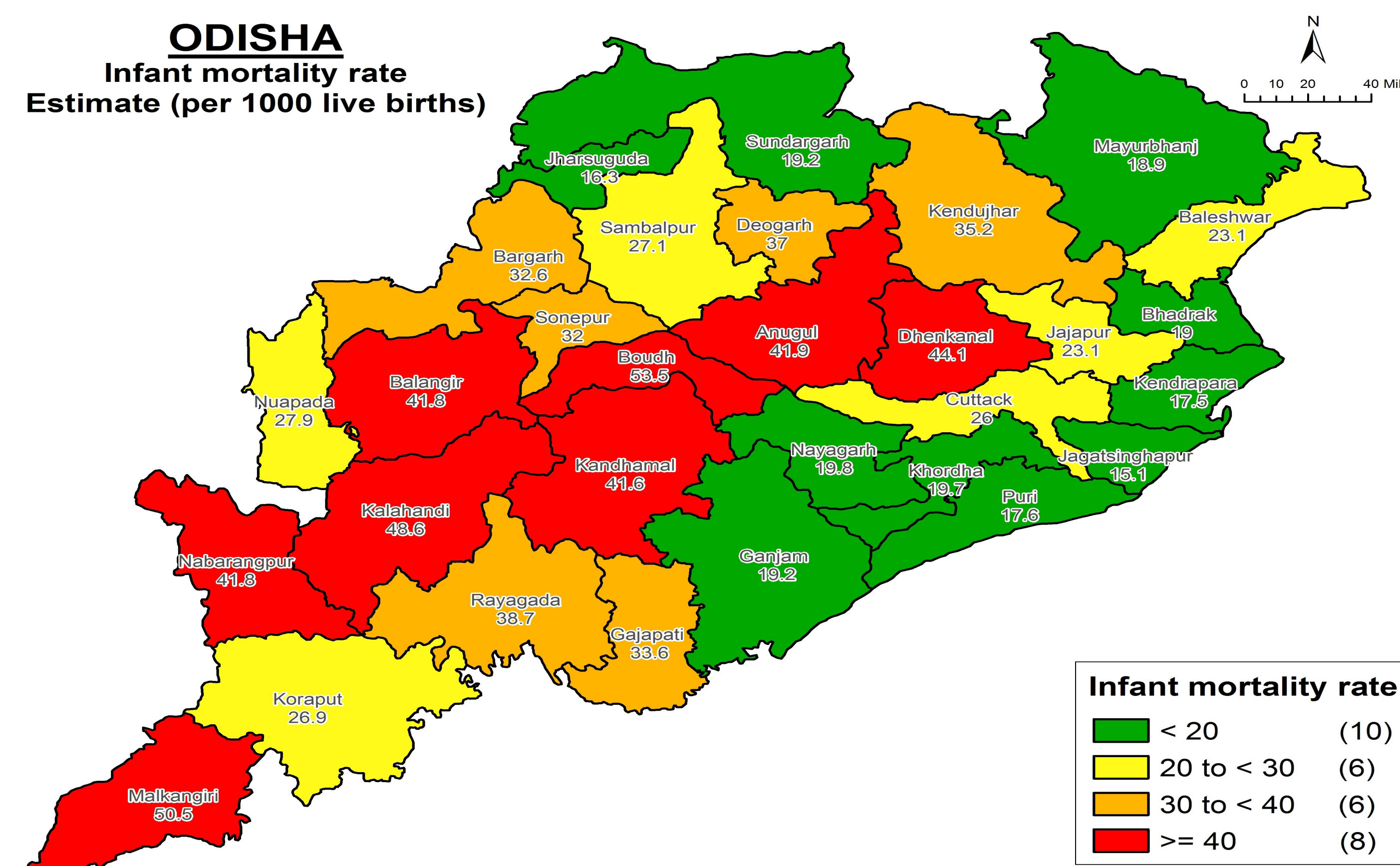
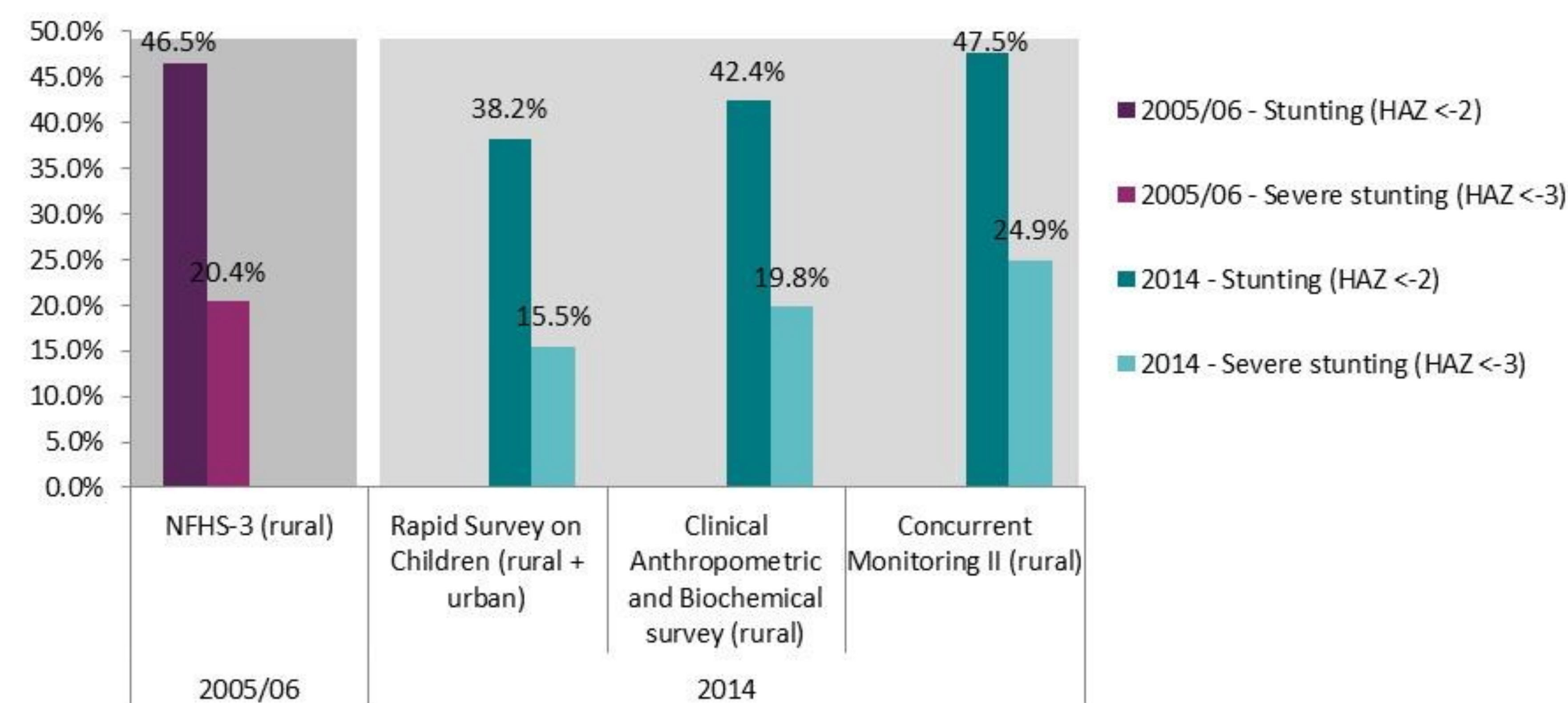
BACKGROUND

- In order to achieve sustained health outcomes, better data on service utilisation and outcomes is needed to inform government departments about the impact of their programmes on the health and nutritional status of communities.
- In India, most surveys do not provide sub-district estimates, which can hide block-level disparities and inequities, nor do they include integrated indicators on Health, Nutrition, Water, Sanitation and Hygiene (HNWASH).
- In response, the Government of Odisha have introduced Concurrent Monitoring (CCM), the first household level survey in India to provide household, block-level data disaggregated by socio-demographic characteristics.
- Findings from CCM round 2 (CCMII) and historical survey data were assessed to identify progress in Maternal, Newborn and Child Health (MNCH) and nutrition outcomes.

METHODS

- CCMII was implemented between March 2014 and February 2015 covering all 314 administrative blocks of rural Odisha.
- The survey focused on rural areas (covering remote to peri-urban areas), ensuring proportionate representation of remote and vulnerable households. Urban centres were excluded.
- CCMII used a multi-staged cluster sampling methodology and sample sizes were independently calculated to generate reliable block-level estimates.
- Data were collected from CCMII on key HNWASH indicators. Results were also extracted from other surveys implemented during the same period, for triangulation, as well as from the last India National Family Health Survey (NFHS) in 2005/06.
- Trends in key MNCH and nutrition indicators were assessed to identify progress since 2005/06, and mapped to assess geographic disparities.

Prevalence (%) of stunting in Odisha state in 2005/06 and 2014



REFERENCES

The full CCMII survey report can be accessed here: http://www.options.co.uk/sites/default/files/ccm_ii_final_-_2.pdf

RESULTS

- Results indicated progress in key MNCH indicators.
- At state level, infant and neonatal mortality have halved at 29.6 (95% CI 28.4-30.9) and 21.7 (95% CI 20.6-22.7) deaths per 1000 live births in 2014 (CCMII), compared to 64.7 and 45.5 in 2005/06 (NFHS), however district level disparities exist with coastal districts tending to show lower rates.
- Institutional delivery has increased at 82.1% (95% CI 81.5-82.6) in 2014, compared to 35.5% in 2005/06, and is more equitable, although progress is still needed to further reduce disparities as institutional delivery was 70% (95% CI 69.0-71.1) in Scheduled Tribe households compared to 89.2% (95% CI 88.8-89.6) in General, OBC, other caste group.
- However, progress in nutrition is poor. In 2014, CCMII found that 25.4% (95% CI 2.2-25.7) of children under five were acutely malnourished (WAZ<-2), and 47.5% (95% CI 47.2-49.9) were stunted (HAZ<-2), compared to 21% and 47% in 2005/06 (NFHS). Infant and young child feeding practices were sub-optimal. Only 41.5% (95% CI 41.2-41.7) of women reported timely initiation of breastfeeding, and timely introduction of complementary foods was low (46.8% [95% CI 46.0-47.6]).
- Exclusive breastfeeding of infants 0-6 months was higher (78.7% [95% CI 76.9-80.4]). One third of mothers of children under-five were underweight (BMI<18.5) (32.2%, 95%CI 31.7-32.4); one third (32.8% [95% CI 32.5-33.2]) were married below 19 years.

DISCUSSION

- CCM provided reliable and representative HNWASH results to inform sub-national management and decision making.
- In the past 10 years, Odisha state has experienced large improvements in maternal and child health, and increasingly equitable access to services.
- Despite these improvements in health, limited progress has been made in improving nutrition, and in particular of children under five.
- The prevalence of malnutrition remains high, and around half of children under five are stunted and therefore unlikely to reach their full developmental potential.
- Infant and young child feeding practices were poor, and efforts are needed to better understand how these can be improved in light of the often heavy livelihood and domestic demands on women of child bearing age.
- This differential progress in health and nutrition highlights an urgent need for multi-sectoral approaches to improving health and nutrition in Odisha, and sustained positive behaviours needed to reduce undernutrition.