



Trends and Socioeconomic Disparities in Undernutrition among Muslim Women in India: Evidence from the Last Two Decades (1998 – 2021)

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Background and Motivation

- Women's nutritional status crucial for their well-being:** Focus on undernutrition trends among Muslim (15-49) women in India.
- Investigate disparities across socioeconomic dimensions and regions.
- Despite economic growth, India grapples with undernutrition, particularly among women and children.
- Focus on Marginalized Groups:** Muslim women face severe undernutrition with high socioeconomic disparities.
- Research Gap:** The study is the first to explore and examine the nutritional status of Muslim women in India.
- Initiatives:** Government programs like ICDS, NHM, JSY, PMMVY, and NFSA played crucial roles (MOHFW et al., 2019).
- There is a need to address socioeconomic inequalities in accessing nutrition programs.

Data and Methods

- Data Source:** Utilizes National Family Health Survey (NFHS) data from 1998-99, 2005-06, 2015-16, and 2019-21.
- BMI Calculation:** Ratio of weight (kg) to the square of height (meters); undernutrition indicated by BMI<18.5, severe undernutrition by BMI<16.
- Analyses ever-married Muslim women aged 15-49, excluding pregnant or recently pregnant women.
- Disparity Ratio:** Ratio of the highest to the lowest underweight prevalence, providing a comprehensive view.
- Predicted Probabilities:** Estimation of underweight probabilities across different socioeconomic categories.
- Regional Diversity:** Analysis conducted at the all-India level and across different geographic regions to address regional variations.

Key Findings

- Overall decline in undernutrition among Indian women from 36.3% in 1998 to about 14% in 2021.
- Religious Variation:** Decrease was observed for all women, prevalence dropping below 10% for Christians, Jains, and Sikhs.
- Education Gap:** Reduction in undernutrition gap based on women's education over the study period.
- Rural-Urban Disparity:** There is significant disparity, with rural areas showing over double the prevalence compared to urban areas.
- Wealth Quintiles:** Almost a fivefold difference in undernutrition prevalence between poorest (24%) and richest (5%) quintiles.
- Regional Disparities:** Central and Eastern regions, socioeconomically poorer, exhibit significantly higher undernutrition prevalence than the Southern region.
- Due to awareness, education, WASH practices (Kumar and Mohanty, 2023), and healthcare access, underweight prevalence declined from 34% (1998) to 11% (2021).

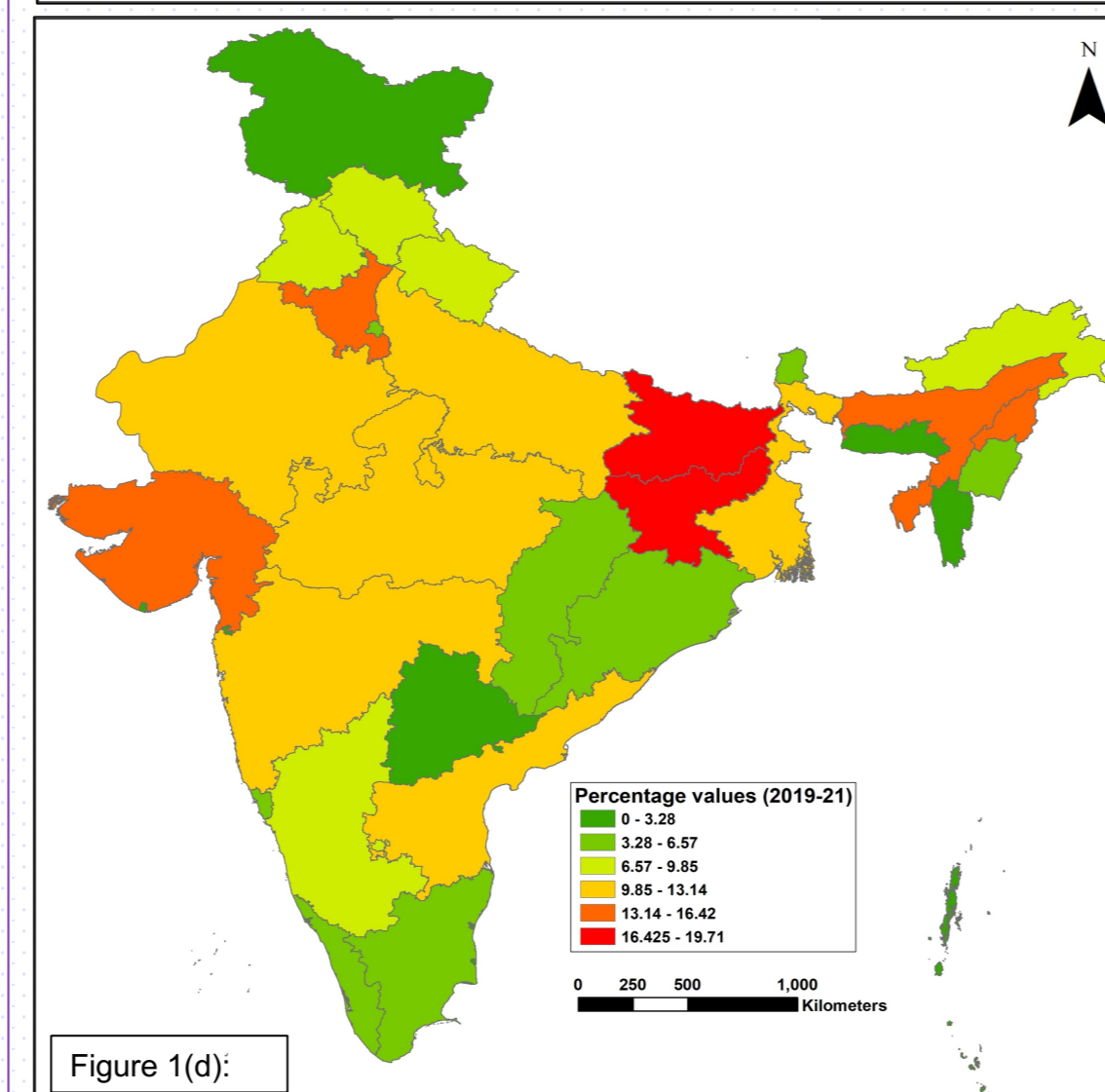
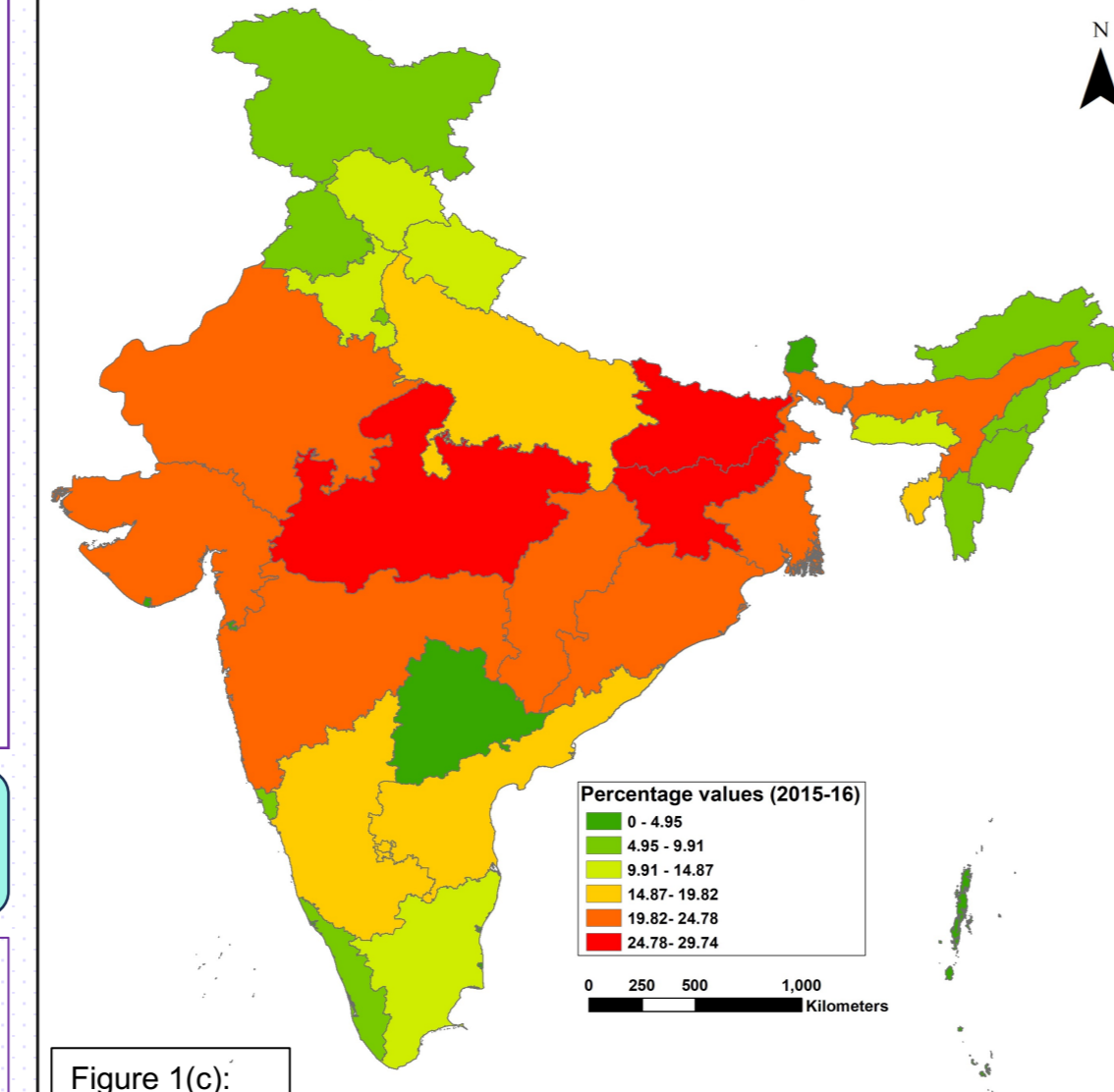
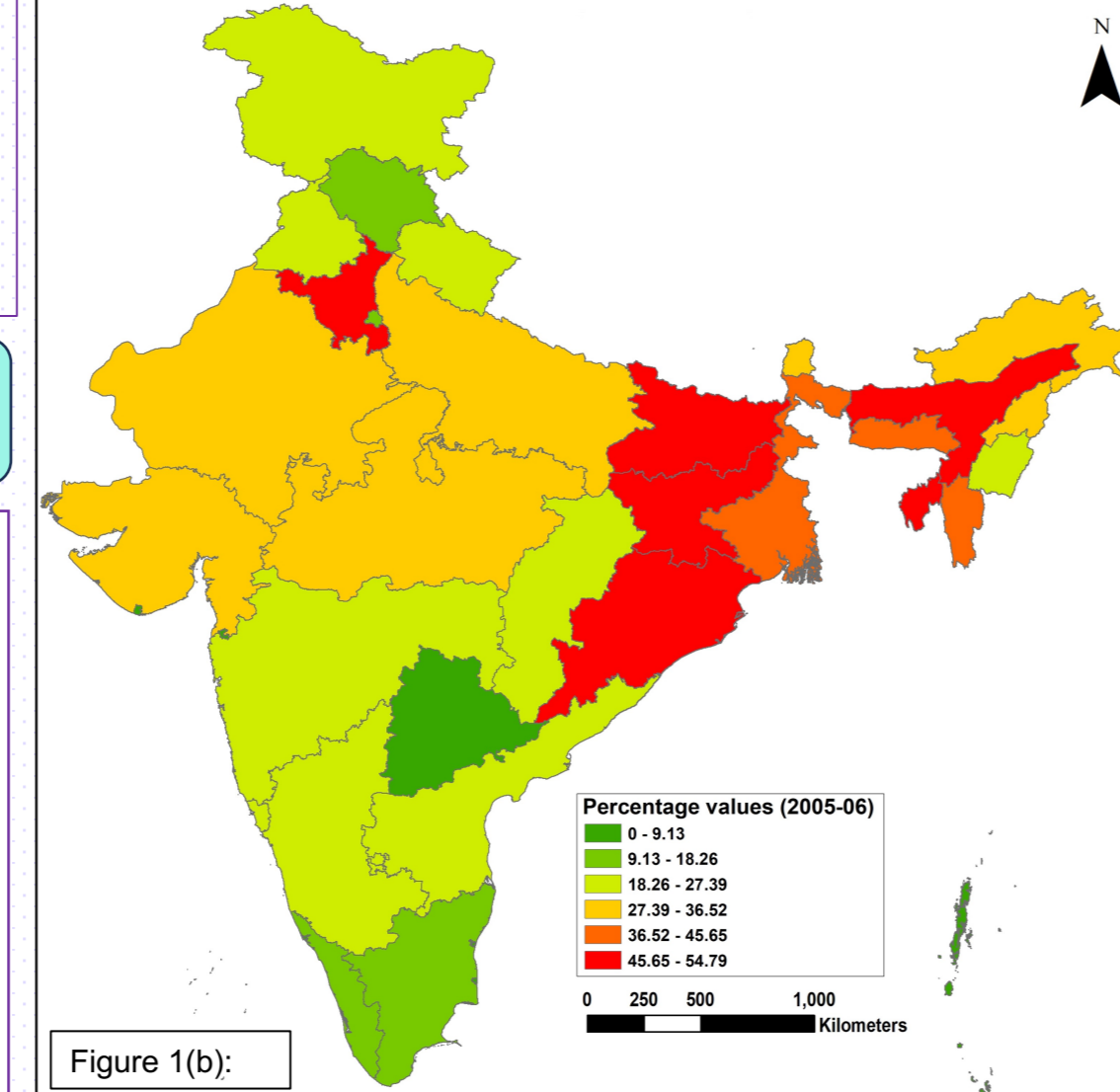
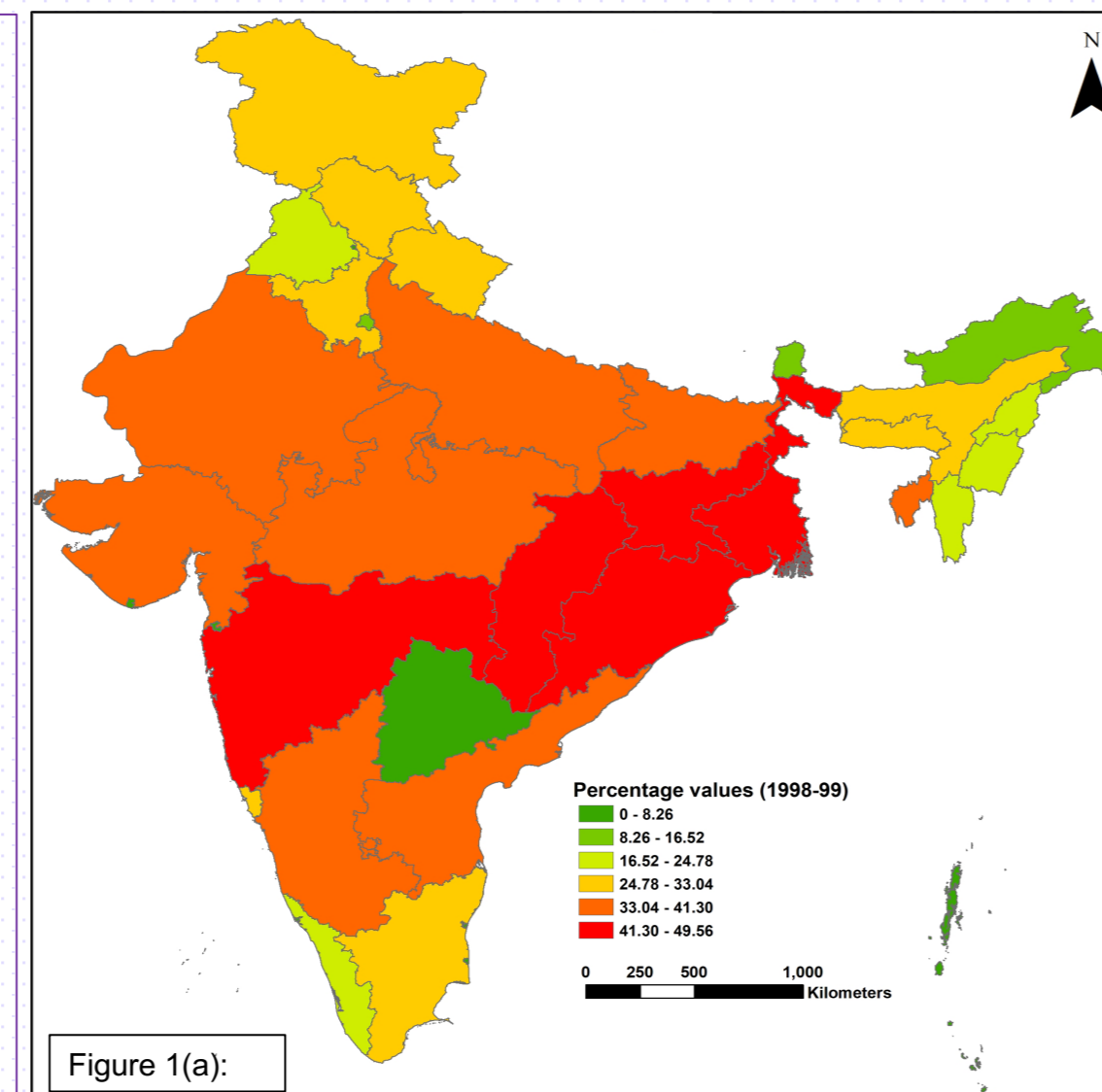


Figure 1 (a) to (d) shows the percentage prevalence of underweight among Indian women (1998-2021).

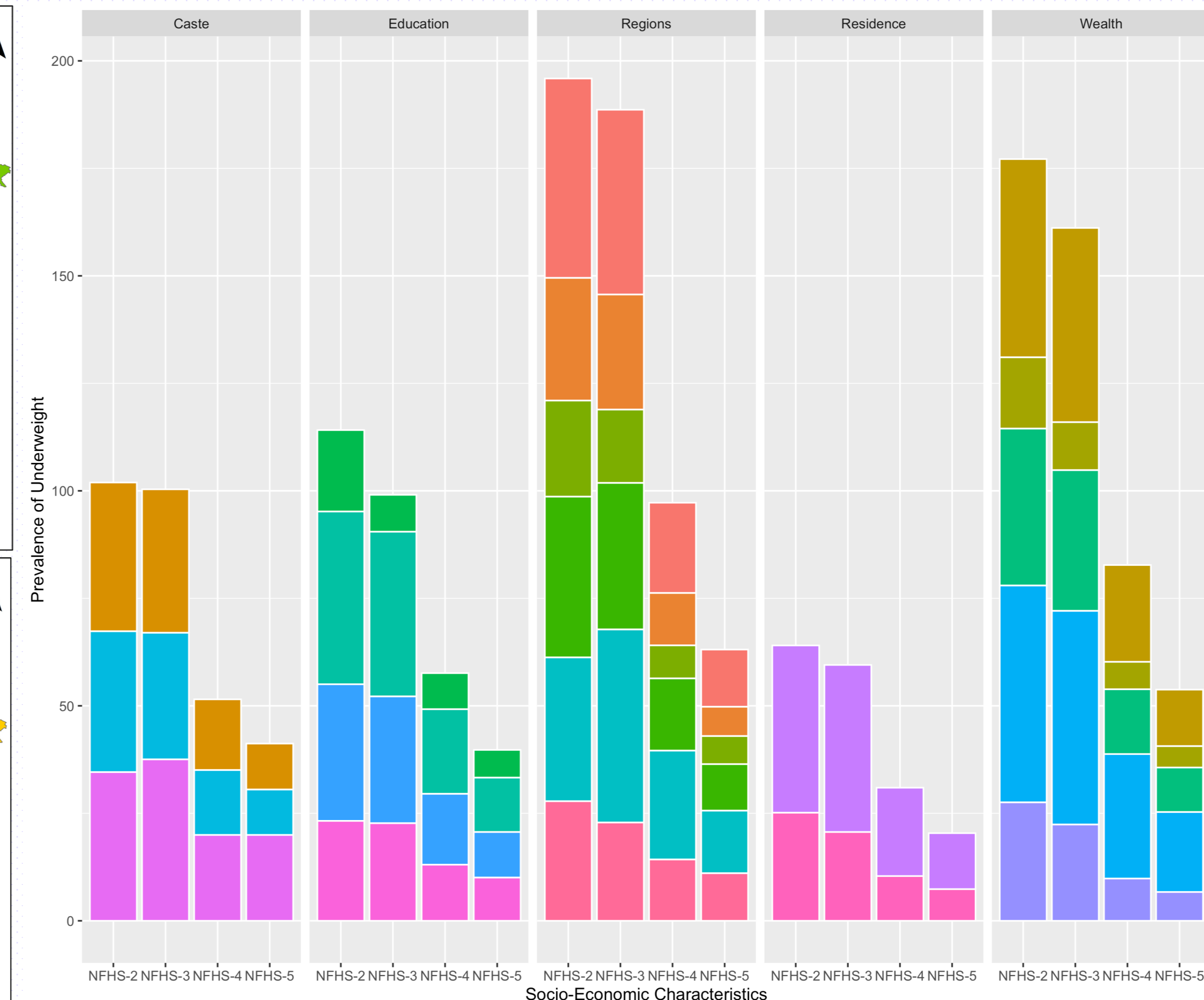


Figure 2: Percentage prevalence of underweight among Muslim women in India (1998-2021).

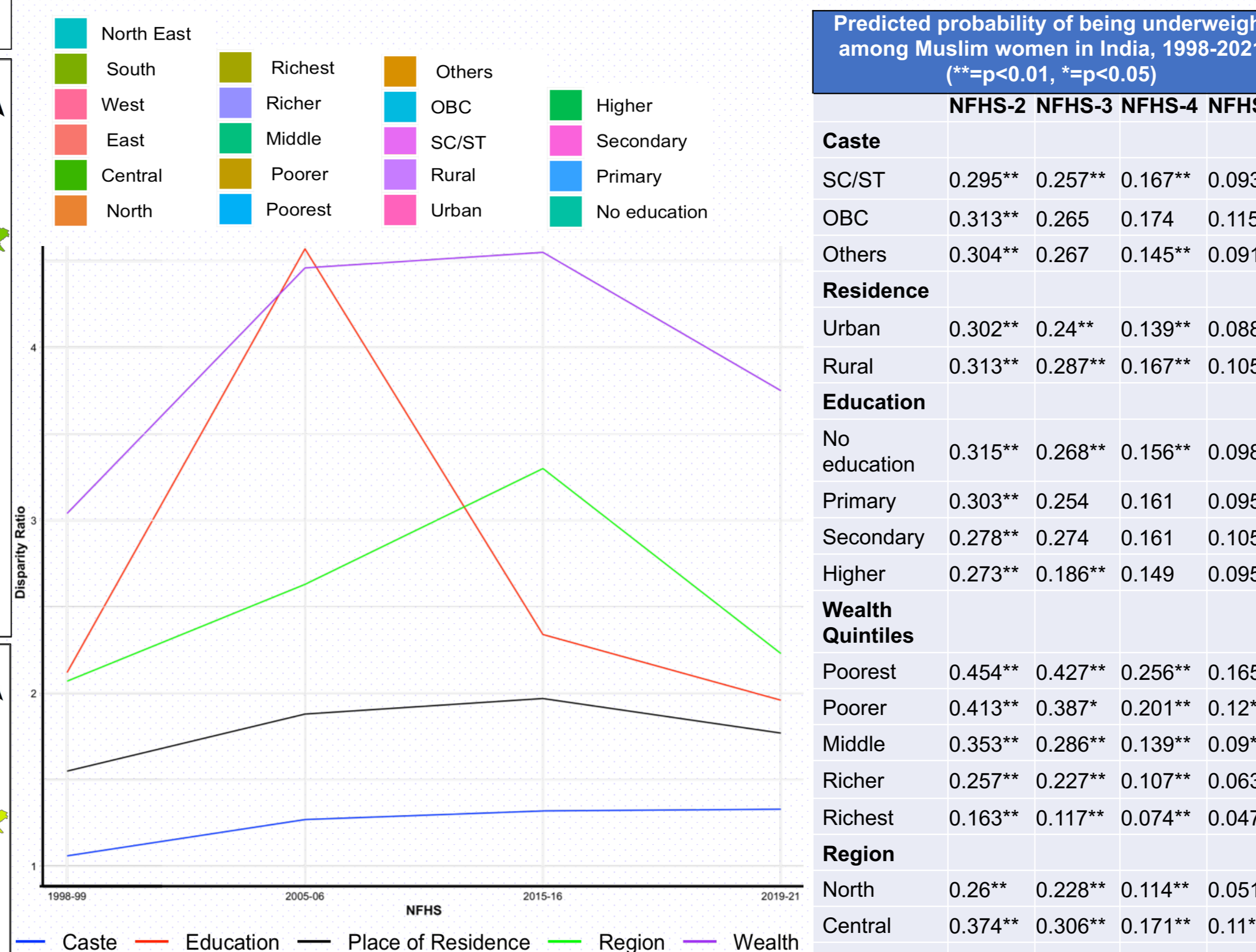


Figure 3: Socio-economic disparities based on disparity ratios concerning undernutrition among Muslim women in India (1998-2021).

References:

- Kumar, M., and Mohanty, P. C. (2023). Undernutrition and anaemia among Indian adolescents: Role of dietary diversity and hygiene practices. *Journal of Nutritional Science*, 12.
- MOHFW, UNICEF, and PC. (2019). *Comprehensive National Nutritional Survey 2016-18 National Report*. Ministry of Health and Family Welfare.
- WHO. (2017). Physical Activity Fact Sheet. *World Health Organization*, 2016). *Obesity Science and Practice*, 6(5)

Results

Concentration Index with respect to undernutrition:

- Captures socioeconomic inequalities in underweight prevalence based on wealth quintiles.
- Values towards -1 show a disproportionate distribution of the prevalence of underweight among poorer groups.

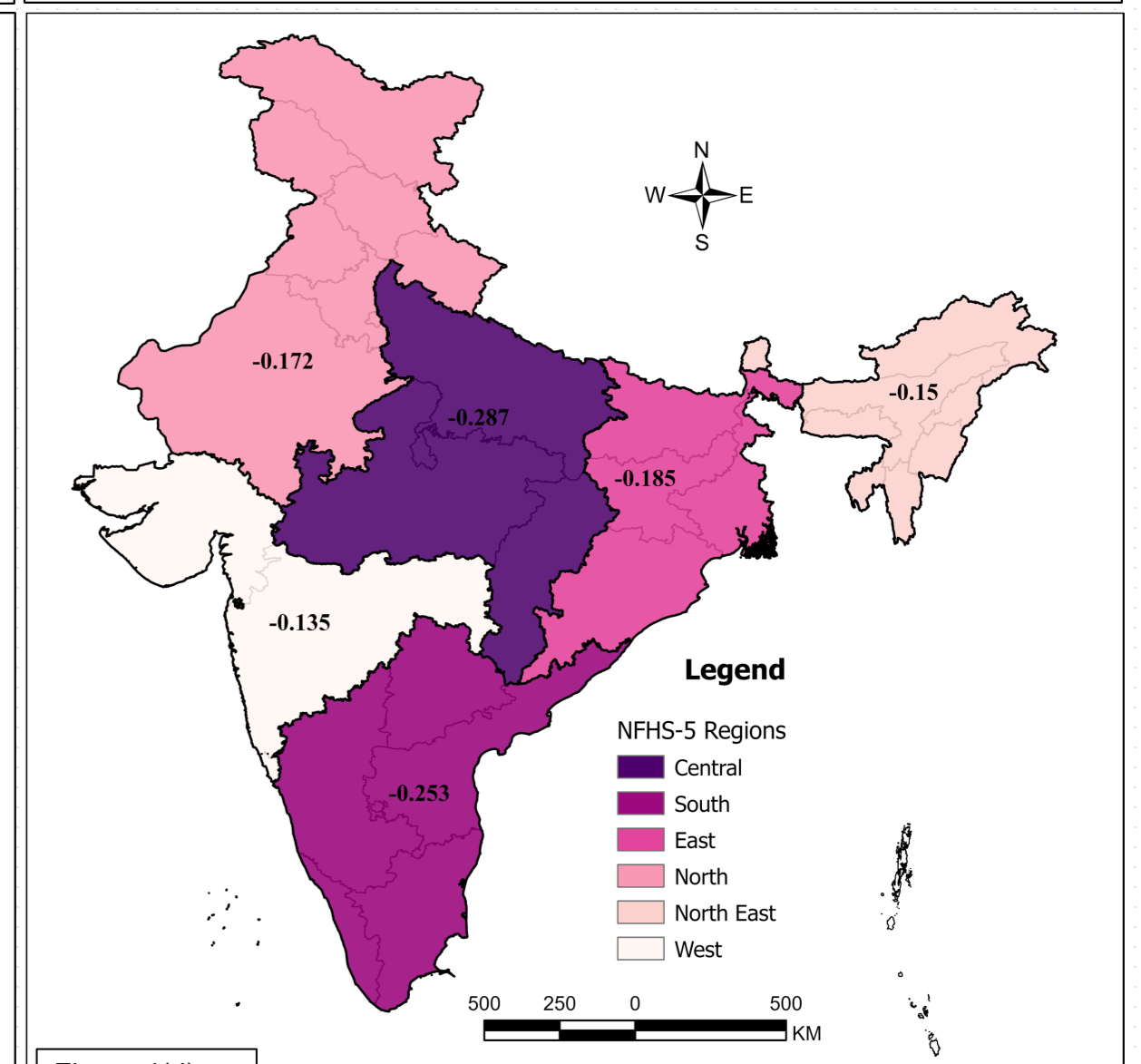
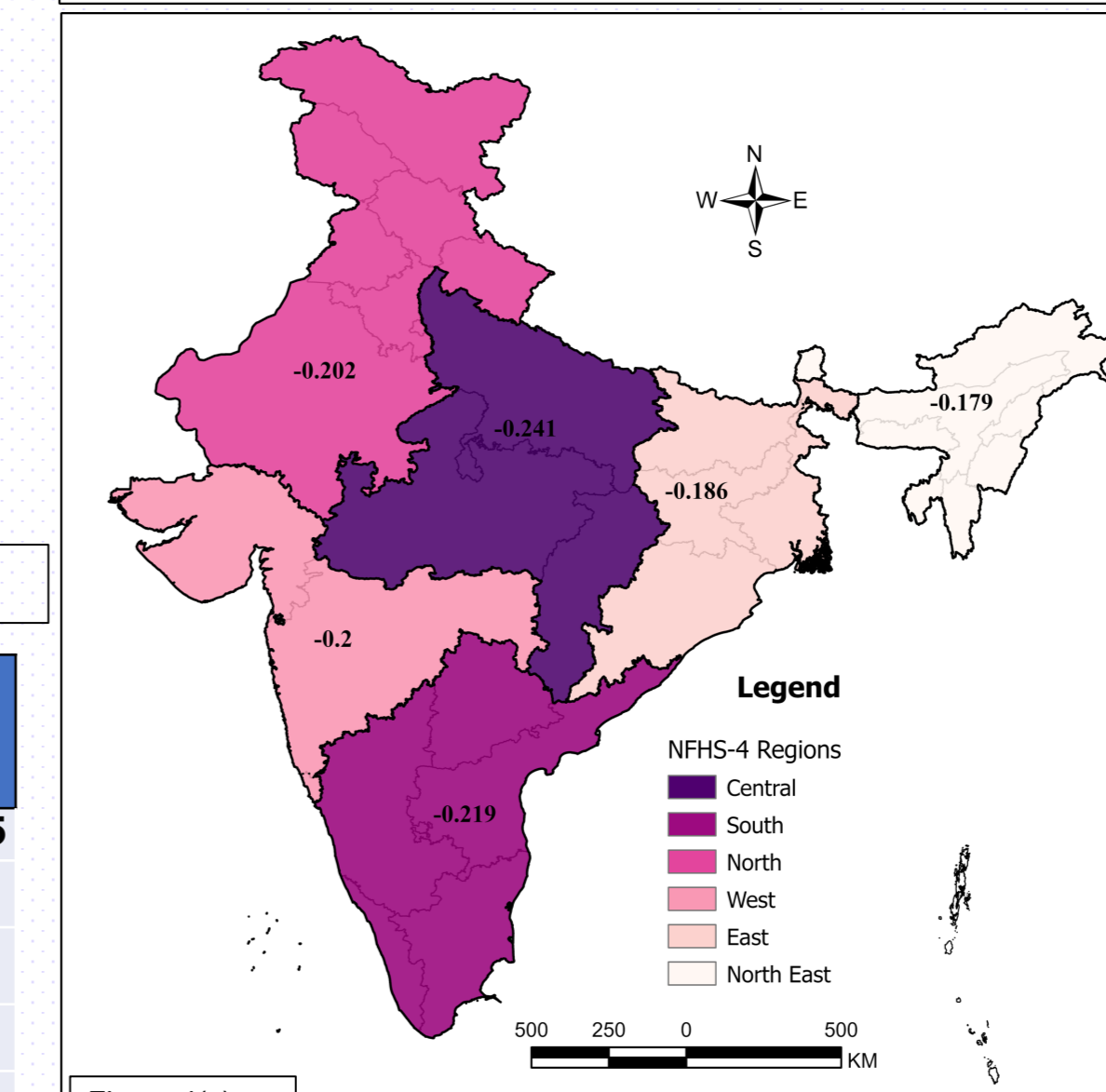
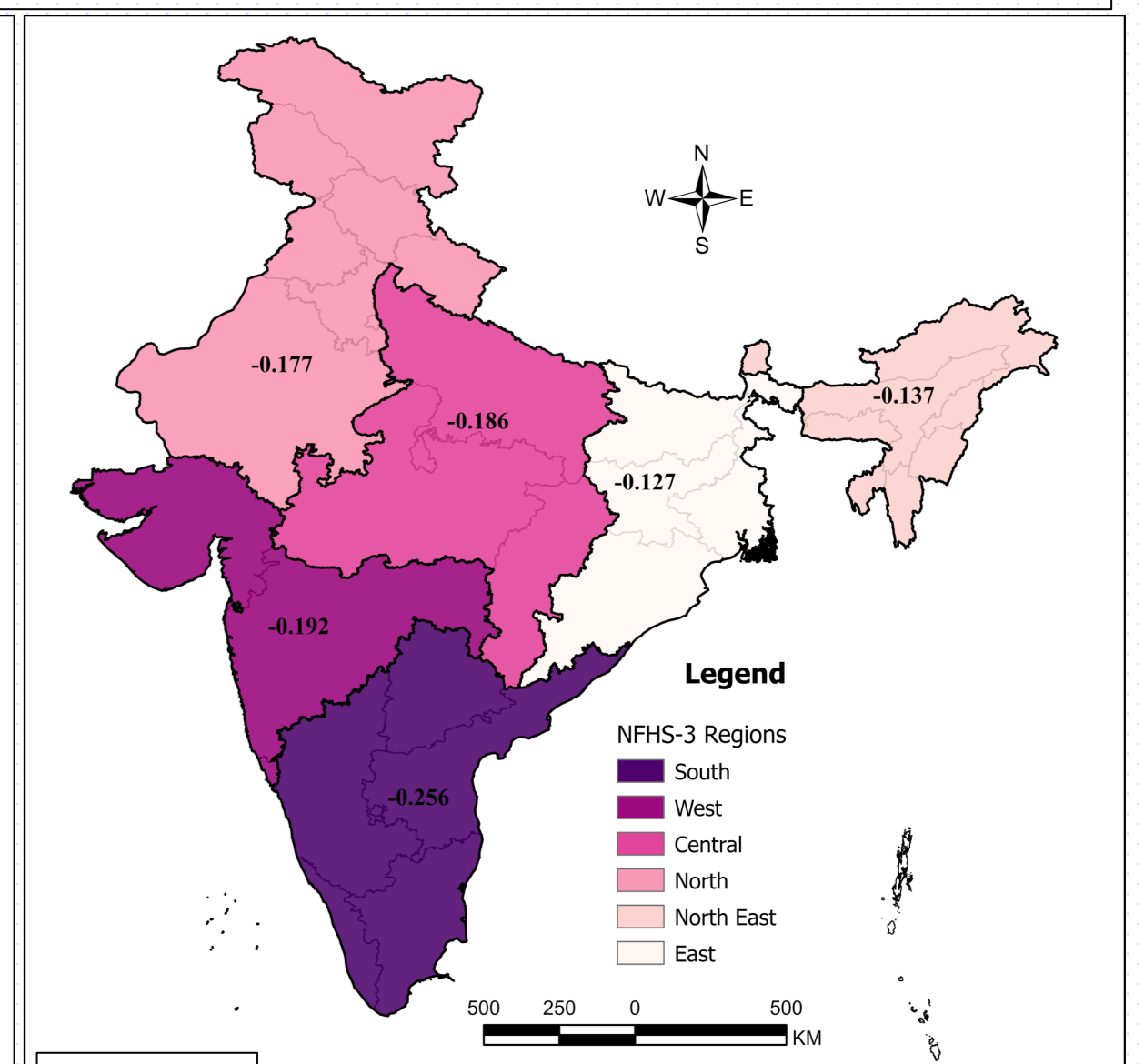
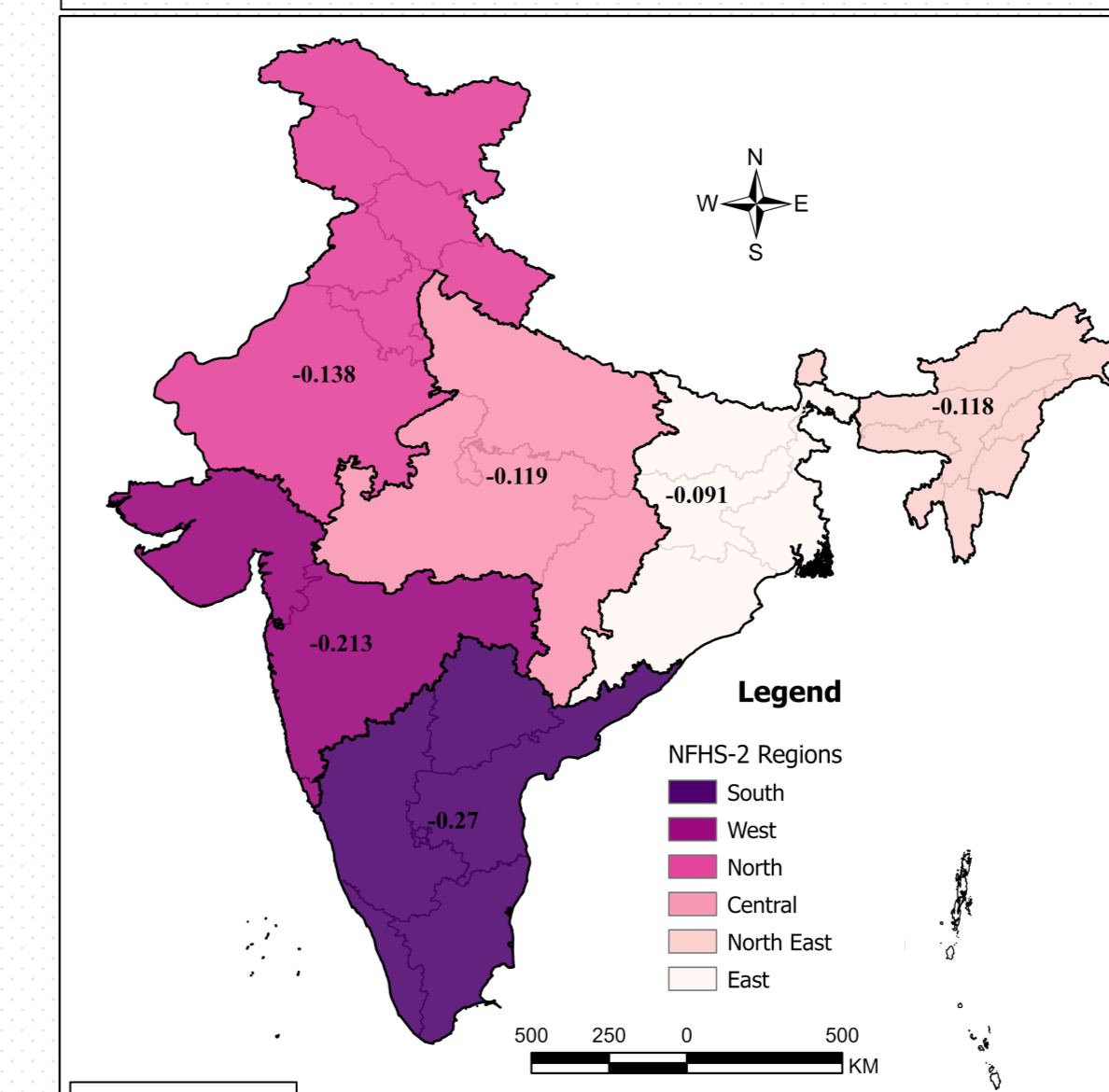


Figure 4 (a) to (d) shows trends in Economic Disparity based on the Concentration Index with respect to Undernutrition among Muslim Women in India (1998-2021).

Conclusions

- SDGs emphasise eliminating hunger** (2030-goal 2); nutrition is pivotal for holistic socioeconomic progress (WHO, 2017).
- Significant disparities exist** based on caste, education, geographic region, residence, and wealth quintiles.
- Socioeconomic Variation:** Higher prevalence in SC/ST community (14%), rural areas (13%), and women with no formal education (13%).
- Unidimensional health policies** focusing solely on average undernutrition might deepen socioeconomic disparities; therefore targeted efforts are needed.
- State-level focus**, utilisation, and budgetary allocations impact inter-state/regional nutritional disparities.
- Study strengths** include novelty, reliable data, and consistency with existing literature.
- Limitations** include inadequate demonstration of causal relationships and reliance on BMI as a measure.
- Future Research:** There is a need for future research on mediating factors influencing undernutrition among women in India, considering specific socioeconomic characteristics.