

**Abstract:**

**Aim/Objectives:** The objectives of this study are two folds: first, we aim to investigate the level of socio-economic vulnerability among the tribal population of North-East India; secondly, we investigate the role of socio-economic vulnerability on malnutrition viz, Undernutrition and overweight/obesity of women aged (15-49) years.

**Data and Methods:** We used the National Family Health Survey 2019-21 (NFHS-5). We first calculated the *socioeconomic vulnerability index (SeVI)* using variables such as education level, place of residence, insurance, marital status, drinking water, sanitation toilet, cooking fuel, floor, wall, roof, electricity, radio, television, refrigerator, bicycle, motorcycle, and car. We rank the districts according to SeVI and plot them on the map via GIS software. Our main outcome variable is women's Body mass index (BMI). According to the WHO guidelines, BMI was divided into four groups: underweight (18.5 kg/m<sup>2</sup>), normal weight (18.5-24.9 kg/m<sup>2</sup>), overweight (25.0-29.9 kg/m<sup>2</sup>), and obese (>29.9 kg/m<sup>2</sup>).

We carried out a multinomial logistic regression analysis.

**Findings:** The results of this study provide important light on the complicated interplay between socioeconomic variables, demographic traits, and weight status among reproductive-age women in India's North-East. The results of the investigation showed being wealthy has increased the risk of getting obese, and the wealth quintile significantly affects the socio-economic vulnerability and malnutrition of women of reproductive age (15-49) among the tribal population of North-East India.

**Conclusion:** In conclusion, this study advances our understanding of socioeconomic vulnerability and its relationship to malnutrition among tribal women of reproductive age (15-49) in North-East India. The results highlight the necessity for comprehensive and culturally aware treatments that address socioeconomic gaps and consider the particular sociocultural setting of the area. Policymakers and stakeholders can devise focused measures to enhance the nutritional status and general well-being of women in the North-East area of India by considering the complex interplay of socioeconomic and demographic factors.