



# CHILD MALNUTRITION IN INDIA: AN ANALYSIS OF STUNTING CHILDREN'S

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## ABSTRACT

Malnutrition is defined as an imbalance in dietary intake, particularly affecting children under five in India. This study seeks to identify the trends and factors contributing to malnutrition in this age group. Utilizing secondary qualitative data, the research employs thematic analysis. Findings indicate that, despite a decrease in the poverty rate, malnutrition remains a widespread issue. Key contributing factors include inadequate cultural practices, gender discrimination, and persistent poverty. The Indian government has implemented several initiatives aimed at improving the health and development of malnourished populations, such as ICDS and NHM etc.

**KEYWORDS:** Malnutrition, Children, stunting, India

## 1. INTRODUCTION

Malnutrition refers to a lack of essential nutrients in children, leading to various health issues. It is typically categorized into four types: wasting, stunting, micronutrient deficiencies, and underweight. Malnutrition has been a persistent problem in India since its independence, as reflected in recent data. For instance, in the 2019 Global Hunger Index, India ranked 102nd out of 117 countries. In India, malnutrition is often measured using indicators like the health of children under five. According to the ICMR, malnutrition was a significant risk factor contributing to child mortality in 2017.

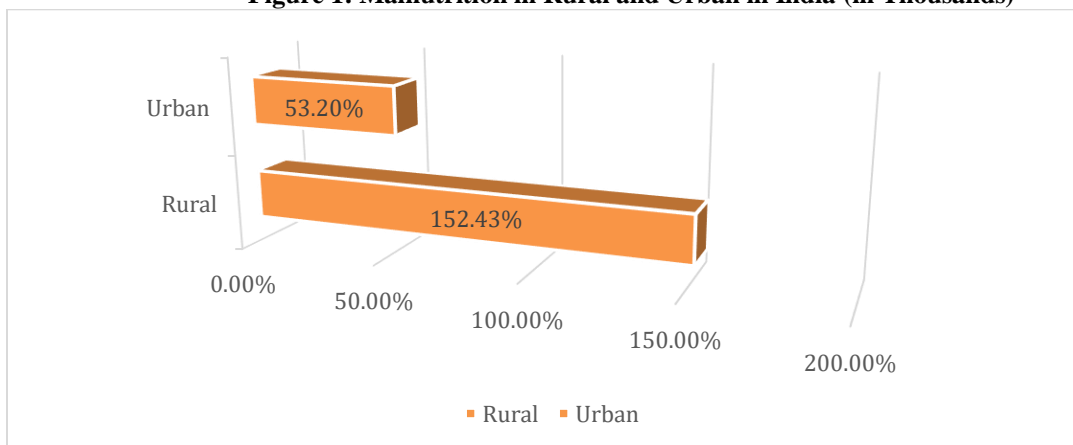
Several factors, both direct and indirect, contribute to the widespread issue of malnutrition in India. These include poverty, shifting dietary habits, internal migration, gender inequality, and poor sanitation. Data from the Government's Poshan tracker indicates that around 1.4 million children in India are severely malnourished. Malnourished children are typically classified into three categories: stunting, underweight, and wasting. In 2023, the Ministry of Women and Child Development reported that out of 56 million children, approximately 1.456 million, or 2.6% of the sample, were malnourished.

To gain a better understanding of malnutrition across different regions of India, Statista conducted a survey between 2019 and 2021, covering approximately 636,699 households. The survey revealed that malnutrition rates in rural areas were alarmingly high at 152.3%, compared to 53.21% in urban areas. These statistics highlight the severe malnutrition crisis in rural parts of India. This research article seeks to analyse the malnutrition situation in India, particularly among children under the age of five, using trend analysis and discrimination analysis.

## Objectives

1. To identify the Trends in Malnutrition among Stunting children in India
2. To explore the Factors contributing to Child Malnutrition in India
3. To assess the impact of Government initiatives on Child Malnutrition

**Figure 1: Malnutrition in Rural and Urban in India (in Thousands)**



(Source: WHO 2022)

## 2. RESEARCH METHODOLOGY

The methodology is outlined by detailing the data collection and analysis approach. This study utilizes data from secondary sources, which is qualitative in nature. Data has been gathered from various platforms such as NFHS Factsheet Report (National Family Health Survey), Govt of India, PIB (Press Information Bureau), WHO (World Health Organization), Statista, IIPS, and official Indian government websites. The chosen method of data analysis is thematic analysis, structured around four key themes. Thematic analysis was selected because it allows for the exploration of new areas, understanding different viewpoints, and identifying shared patterns and distinctions among participants. These advantages make thematic analysis a suitable choice for this study, and it will be further discussed in the findings section.

## 3. FINDINGS

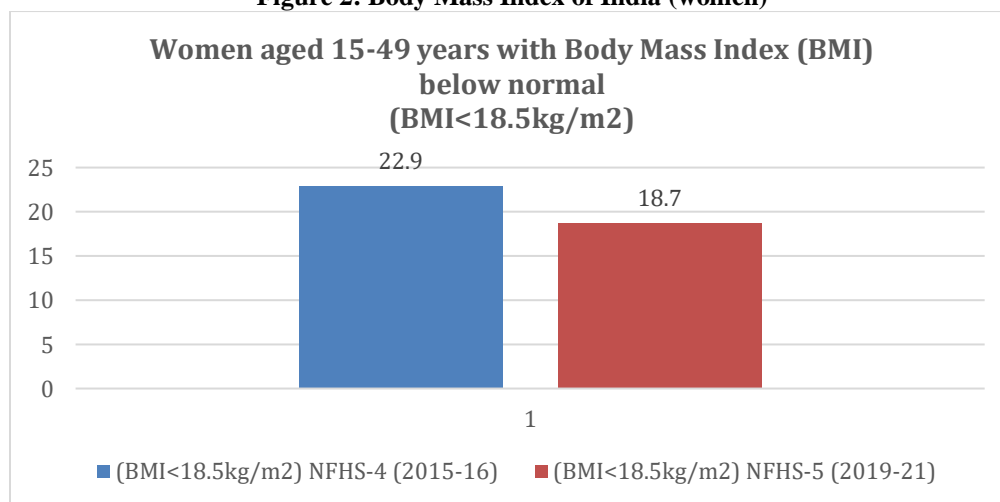
### 3.1 Trends of Child Malnutrition in India

In the 2023 Global Hunger Index, India ranked 111th out of 125 countries, highlighting ongoing challenges in combating hunger and malnutrition. However, recent data from the NFHS-5 report

(2019-2021) suggests progress in addressing nutritional needs. Stunting, a key indicator of chronic malnutrition, declined from 38.4% to 35.5%, while wasting, which indicates acute malnutrition, dropped from 21% to 19.3% (PIB, 2022). Additionally, the prevalence of underweight individuals decreased from 35.8% to 32.1% by 2022 (PIB, 2022). Body Mass Index (BMI) is a crucial metric in understanding malnutrition, as it reflects body mass relative to height. A BMI below 18.5 is considered insufficient and indicative of undernourishment. According to the PIB (2022), the average BMI among Indian women aged 15 to 49 was 22.9 in NFHS-4, which falls short of the healthy range. In NFHS-5, this improved slightly to 18.7 kg/m<sup>2</sup>, though still below optimal health standards.

While these figures indicate gradual improvements, they underscore the persistent issue of malnutrition in India. Continued efforts are needed to address both chronic and acute malnutrition to improve the health outcomes of the population, particularly for women and children, who are most vulnerable to its effects.

**Figure 2: Body Mass Index of India (women)**

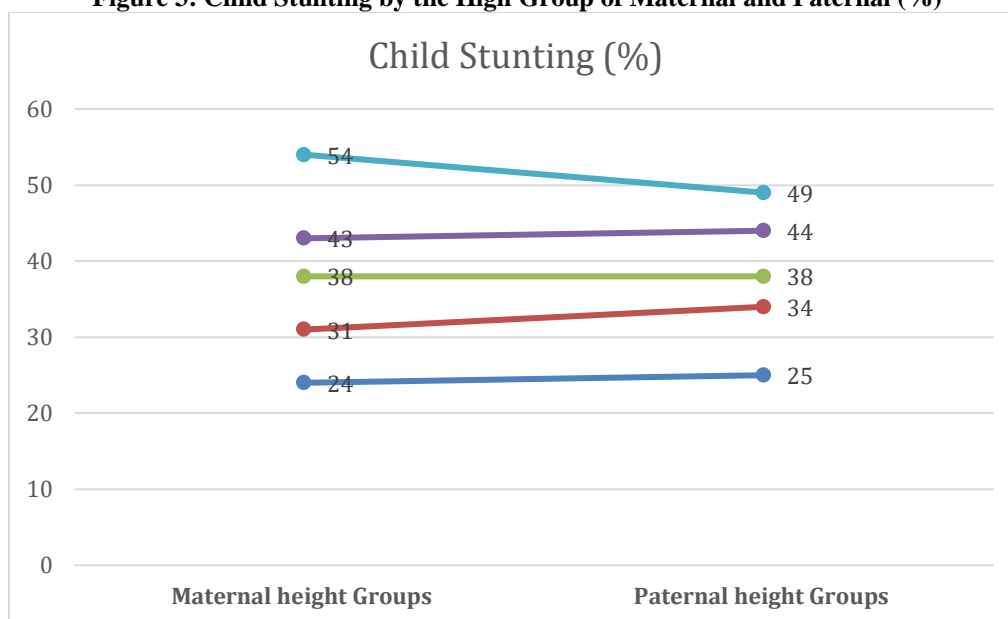


(Source: PIB, 2022)

As reported by PIB (2022), the shorter stature of Indian adults can be significantly attributed to malnutrition experienced during childhood. Over recent years, the prevalence of stunting in India has shown improvement, decreasing from 48% in 2016 to 38%. However, the long-term effects of childhood malnutrition continue to influence adult height. Among mothers, 54% are classified as having a very short height, defined as 147 cm or less, which can also impact their children's growth and health. In contrast, approximately 24% of mothers fall into the category of

having a very tall height. Additionally, the height of fathers plays a crucial role in child growth outcomes. For fathers with a height of 157 cm or less, there is an associated stunting rate of 49% in their children, underscoring the strong link between parental height, particularly paternal stature, and child malnutrition. This data highlights the ongoing challenges of addressing childhood malnutrition and its lasting effects on population health in India (Gupta et al., 2022).

Figure 3: Child Stunting by the High Group of Maternal and Paternal (%)



(Source: NFHS-4 factsheet, Govt of India)

The World Bank Group reported on undernourishment in India from 2014 to 2018 (Scroll, 2023). In 2014, the total number of undernourished individuals in India was slightly below 200 million. This number remained stable in 2015 but decreased in 2016 (Scroll, 2023). By 2018, there was a reduction in the population of undernourished people; however, in 2019, the figure surged back to 200 million (Scroll, 2023). The situation deteriorated further in 2020 with the onset of the COVID-19 pandemic and the subsequent lockdown, resulting in an increase to 224.3 million undernourished individuals in India (Scroll, 2023).

### 3.1 Impact of Child Malnutrition in India and its Economic Growth

In recent years, India has witnessed remarkable economic growth and development; however, malnutrition rates, particularly among children, continue to rise. The malnutrition situation in India can be classified into two main categories: undernutrition and overnutrition. Undernutrition causes stunting in young children, which poses significant challenges for the country's future. Child malnutrition can lead to both physical harm and irreversible cognitive damage, potentially passing effects down through generations. For example, India contributes to 33.33% of

the global population of stunted children (The Wire, 2021). This situation is likely to have a detrimental effect on the country's GDP, with estimates indicating that India could lose up to 4% of its annual GDP due to these issues (The Wire, 2021).

The percentages of stunted children reveal troubling scenarios in states like Bihar, Meghalaya, and Daman & Diu, while Kerala, Goa, and Sikkim exhibit the best rates of stunted growth. An analysis of data from NFHS-4 and NFHS-5 indicates that budget allocations for child health development have decreased due to the country's slow economic growth (The Wire, 2021). Five key factors contribute to child malnutrition in India: the child's age in months, maternal characteristics, socioeconomic status, the child's birth attributes, and the surrounding environment (The Wire, 2021).

Overall analysis by various economists suggests that the increasing rates of malnutrition in the country will hinder economic growth and projections. If India's youth are not adequately nourished, they will be unable to contribute effectively to the nation's economic development. Human resources are a vital asset for any country, and every nation aims to leverage this asset for its growth. Children who are



malnourished and suffer from issues like stunting and incomplete physical development will struggle to contribute to the country's advancement. This situation poses a significant threat to India's human resource potential and overall economic progress.

## DISCUSSION AND ANALYSIS

Malnutrition remains one of the most significant challenges faced by both the Indian government and its citizens. Since gaining independence in 1947, various governments have implemented different policies to address malnutrition in the country. However, the current analysis of malnutrition indicates a troubling situation. In the 2023 Global Hunger Index, India ranked 111th, which is far from commendable. Data from the NFHS also highlights some harsh realities regarding malnutrition, particularly through BMI statistics. In NFHS-4, the BMI of Indian women was approximately 22%, but this figure dropped to just 18.7% in NFHS-5. According to World Bank estimates, around 220 million people in India were undernourished in 2020-2021. Various factors contribute directly to malnutrition in India, with some of the most significant issues being monoculture agriculture, high poverty rates, and gender discrimination, particularly against women. These persistent problems continue to impact the prevalence of malnutrition among children under five years old in Indian society. Malnutrition manifests in three primary forms in these children: stunting, weight disproportion, and height disproportion. Stunting in children under five has particularly severe consequences for a country, as it limits their ability to reach their full potential in the future. This situation could hinder India's economic growth, even as it experiences remarkable progress.

Malnutrition is a long-standing issue that has prompted various governments to introduce different schemes aimed at improving the health and development of the population. Some of these initiatives include the "National Health Mission, PM Poshan, National Nutrition Policy, and the Mid-day Meal Scheme." The current government is actively working to finance these existing programs while also planning to launch new initiatives in the future. As highlighted in the previous discussion, malnutrition remains a critical concern for children under the age of five. While there are signs of progress, addressing the problem of malnutrition in India will require significant effort and investment

## CONCLUSION

Malnutrition is viewed as a global issue, especially prevalent in developing or emerging economies. This research focuses on understanding the malnutrition situation in India, along with its trends and underlying factors. The study is conducted through secondary data collection and analysed using thematic analysis. Four main themes have been developed, with the last theme addressing the current malnutrition status in the country. The earlier themes explore the causes of malnutrition, its effects, and the measures the government has taken to reduce it. The findings from the thematic analysis are thoroughly discussed, and the entire discussion is wrapped up in the conclusion section.

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