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Districts of Disparity: A Multidimensional Poverty Perspective on Child Health in Uttar Pradesh

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ABSTRACT:

Purpose: This study explores multidimensional poverty in Uttar Pradesh through a focused health dimension, recognizing that child health outcomes are critical indicators of broader deprivation. By isolating health as the sole dimension, the research aims to assess district-level disparities and progress in reducing health-related poverty between the 2015–16 and 2019–21 periods.

Methodology: The analysis adopts a modified Multidimensional Poverty Index (MPI) framework, concentrating exclusively on five health sub-indicators: child stunting, child wasting, child underweight, child immunizations, and child anemia. Using secondary data from the National Family Health Surveys (NFHS-4 and NFHS-5), the study conducts a comparative assessment across all districts of Uttar Pradesh to evaluate changes in deprivation levels over time.

Findings: The results reveal significant inter-district variation in health-related poverty. While several districts show improvements in child immunization and reductions in undernutrition, others continue to face persistent challenges, particularly in addressing child anemia and wasting. The overall trend indicates progress, but with uneven spatial distribution and pockets of acute deprivation.

Value: By narrowing the multidimensional poverty lens to health, this study offers a granular, indicator-specific perspective that enhances understanding of localized deprivation patterns. The findings underscore the importance of district-sensitive, health-focused policy interventions to ensure equitable development outcomes for children across Uttar Pradesh.

Keywords: Multidimensional Poverty, Child Health, NFHS-4 and NFHS-5, District-wise Comparison, Uttar Pradesh.

Introduction: In recent years, the understanding of poverty in India has shifted from a narrow focus on income to a broader, multidimensional perspective that captures the complex realities of deprivation. This shift has been driven by frameworks such as the Multidimensional Poverty Index (MPI), developed by the Oxford Poverty and Human Development Initiative (OPHI) and adopted by the United Nations Development Program me (UNDP), which emphasize that poverty must be measured across multiple domains including health, education, and living standards (Alkire & Santos, 2010; UNDP, 2021). Within this framework, health is not only a core dimension but also a critical determinant of long-term human development, especially in contexts where child well-being is compromised by structural inequalities (OPHI, 2020). Uttar Pradesh, India's most populous state, continues to face significant challenges in reducing health-related poverty. Despite national improvements in child health indicators, district-level disparities remain stark, with some regions showing persistent deprivation across key health metrics (IIPS & ICF, 2021). This study focuses exclusively on the health dimension of multidimensional poverty, using five sub-indicators that are widely recognized in both national and international assessments: child stunting, child wasting, child underweight, child immunizations, and child anemia.

Child stunting refers to low height-for-age and is a marker of chronic undernutrition. It reflects long-term exposure to inadequate nutrition, poor maternal health, and repeated infections during early childhood (WHO, 2023). Children are classified as stunted if their height falls below two standard deviations from the WHO growth reference standard. Stunting is particularly concerning because it is associated with impaired cognitive development and reduced productivity in adulthood (UNICEF, 2023).

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Child wasting, defined as low weight-for-height, indicates acute undernutrition and is often the result of recent illness or sudden food shortages. It is considered a strong predictor of child mortality and is used to monitor emergency nutrition interventions (WHO, 2023). Like stunting, wasting is measured using WHO reference standards, and children below -2 SD are considered wasted.

A **child underweight** combines elements of both stunting and wasting, representing low weight-for-age. It serves as a general indicator of poor nutritional status and is commonly used in national surveys such as the National Family Health Survey (NFHS) to track progress in child health (PIB, 2023). Underweight prevalence reflects both chronic and acute nutritional deficits and is sensitive to changes in food security and public health conditions.

Child immunisation measures whether children aged 12–23 months have received the full schedule of basic vaccines, including BCG, DPT, polio, and measles. This indicator reflects access to preventive health services and the effectiveness of public health outreach programs (Ministry of Health and Family Welfare, 2021). Immunisation coverage is a key component of child survival strategies and is closely linked to reductions in infant and child mortality (IIPS & ICF, 2017).

Child anaemia is defined by haemoglobin levels below 11.0 g/dL in children aged 6–59 months. It is a key marker of micronutrient deficiency, particularly iron, and is associated with fatigue, impaired cognitive development, and increased susceptibility to infections (UNICEF, 2025). Anaemia remains one of the most widespread forms of nutritional deprivation among children in India, with significant regional variation and gender disparities (NITI Aayog, 2021).

This paper uses secondary data from NFHS-4 (2015–16) and NFHS-5 (2019–21) to conduct a district-wise comparative analysis across Uttar Pradesh. By isolating health as the sole dimension of multidimensional poverty, the study aims to provide a more focused understanding of child health deprivation and its spatial distribution. The district-level approach allows for the identification of regions that have made progress and those that continue to lag, offering insights into the effectiveness of health interventions and the need for targeted policy responses (Alkire et al., 2021).

In doing so, the study contributes to the growing body of literature that emphasizes the importance of disaggregated, indicator-specific analysis for effective poverty measurement. It also highlights the importance of context-sensitive policy design that prioritizes child health as a cornerstone of poverty alleviation and human development (OPHI, 2020; UNDP, 2021). By focusing on health-related deprivation, this research seeks to inform both academic discourse and practical policymaking in Uttar Pradesh and beyond.

Research Objectives

1) **To assess the extent of health-related multidimensional poverty across all districts of Uttar Pradesh**, this involves measuring deprivation using five key child health indicators: stunting, wasting, underweight, immunizations, and anaemia.
2) **To compare changes in health-related deprivation between NFHS-4 (2015–16) and NFHS-5 (2019–21),** the objective is to identify progress or deterioration in child health outcomes at the district level over time.
3) **To identify districts with the highest and lowest improvements in each sub-indicator**. This helps in recognizing best-performing districts and those requiring urgent policy attention.
4) **To inform district-sensitive health and nutrition policies in Uttar Pradesh.** The findings are intended to support more targeted and equitable interventions for child well-being.

LITERATURE REVIEW: Bhattacharya and colleagues explored the spatial distribution of child malnutrition across India, focusing on stunting, wasting, and underweight using NFHS-4 data. Their analysis revealed that while national averages showed improvement, many districts—especially in states like Uttar Pradesh and Bihar—continued to experience high levels of child undernutrition. The study emphasized that national-level statistics often mask severe local disparities and called for district-specific interventions. This aligns closely with the present study's objective of examining health-related deprivation at the district level in Uttar Pradesh (Bhattacharya et al., 2020).

Singh and Sharma conducted a systematic review of literature on child malnutrition in India, synthesizing findings from a wide range of empirical studies. They found that child stunting and wasting are influenced by a combination of factors including maternal education, sanitation, dietary diversity, and regional inequality. Their review highlighted that children from rural and socioeconomically

disadvantaged backgrounds are disproportionately affected. This supports the rationale for using child health indicators as proxies for multidimensional poverty, as done in the current research (Singh & Sharma, 2023).

Mishra and co-authors examined trends in multidimensional childhood poverty using a modified MPI framework that included health, education, and living standards. Their findings showed a national decline in childhood poverty but revealed significant disparities across districts and social groups. Uttar Pradesh was identified as one of the states with persistent deprivation in child health outcomes. Their work reinforces the importance of disaggregated, district-level analysis, which is central to the methodology of this study (Mishra et al., 2023).

The National Multidimensional Poverty Index Baseline Report by NITI Aayog provided India's first official MPI estimates using NFHS-4 data. The report included nutrition and immunization as core health indicators and emphasized their centrality in understanding poverty. It also highlighted Uttar Pradesh as one of the states with the highest multidimensional poverty rates. This policy document provides a strong foundation for the present study, which builds on the same framework but focuses exclusively on health indicators to offer deeper insights (NITI Aayog, 2021).
The NFHS-5 report, published by the International Institute for Population Sciences, offers the most recent data on child health in India. It documents improvements in immunization coverage and reductions in stunting and underweight in many districts. However, it also reveals that anaemia among children has worsened in several states, including Uttar Pradesh. These findings underscore the need for anemia-specific interventions and justify their inclusion as a key indicator in this study (IIPS & ICF, 2021).

UNICEF's Joint Child Malnutrition Estimates provide a global overview of child nutrition trends, including India's performance. The report acknowledges progress in reducing stunting but raises concerns about the persistently high prevalence of wasting and anaemia. It attributes these challenges to inadequate dietary diversity, poor maternal health, and limited access to healthcare. These insights are directly relevant to the present study, which uses wasting and anaemia as key indicators of health-related deprivation (UNICEF, 2023).

The World Health Organisation's guidelines offer global standards for classifying child malnutrition, including definitions and thresholds for stunting, wasting, and underweight. These standards are used in national surveys like NFHS to ensure consistency and comparability. WHO also emphasises the long-term consequences of early childhood malnutrition, such as impaired cognitive development and increased risk of chronic diseases. By adhering to these definitions, the present study ensures methodological rigor and international comparability (WHO, 2023).

No.	Author(s) & Year	Title	Focus Area	Key Findings
1	Bhattacharya et al. (2020)	Mapping of variations in child stunting, wasting and underweight	Anthropometric indicators	District-level disparities in child nutrition persist across India; need for targeted interventions.
2	Singh & Sharma (2023)	Understanding Child Malnutrition: A Systematic Review	Stunting, wasting, and child mortality	Malnutrition is influenced by maternal education, sanitation, and regional inequality.
3	Mishra et al. (2023)	Assessing the reduction in multidimensional childhood poverty in India	MPI and child health	Decline in child poverty nationally, but uneven progress across states and districts.
4	NITI Aayog (2021)	National Multidimensional Poverty Index: Baseline Report	MPI framework	Health indicators like nutrition and immunisation are central to multidimensional poverty.
5	IIPS & ICF (2021)	NFHS-5: India Fact Sheet	Child health indicators	Improvements in immunisation and nutrition, but anaemia remains widespread.
6	UNICEF (2023)	Joint Child Malnutrition Estimates	Global nutrition monitoring	India shows progress in stunting reduction, but wasting and anaemia remain high.
7	WHO (2023)	Malnutrition in Children	Global health standards	WHO standards guide classification of stunting, wasting, and underweight; critical for policy alignment.

Table 1: Summary of Key Literature on Health Indicators in Multidimensional Poverty.

Research Gap

While multidimensional poverty has gained increasing attention in both academic and policy circles, much of the existing literature continues to adopt a composite approach that aggregates multiple dimensions—health, education, and living standards—into a single index. Although this provides a broad overview of deprivation, it often obscures the depth and persistence of deprivation within individual dimensions, particularly health. Studies such as those by Alkire and Santos (2010) and NITI Aayog (2021) have emphasized the importance of health in the MPI framework, yet few have isolated health as a standalone domain for in-depth district-level analysis. Moreover, most national and state-level assessments focus on average improvements, which can mask significant intra-state disparities. For instance, while NFHS-5 reports show overall progress in child nutrition and immunization, they also reveal that many districts in Uttar Pradesh continue to struggle with high rates of stunting, wasting, and anaemia (IIPS & ICF, 2021). However, there is limited research that systematically compares these health indicators across all districts using a consistent methodology over time. Existing studies that do examine child health often treat indicators like stunting or immunization in isolation, without integrating them into a multidimensional framework that reflects the cumulative burden of deprivation. Furthermore, while some research has explored spatial disparities in child malnutrition (Bhattacharya et al., 2020), few have done so using both NFHS-4 and NFHS-5 data to track changes over time at the district level in Uttar Pradesh.

Methodology

This study adopts a health-focused adaptation of the Multidimensional Poverty Index (MPI) framework to assess changes in child health deprivation across districts in Uttar Pradesh. The MPI approach, originally developed by Alkire and Foster (2011), enables the measurement of poverty through multiple indicators rather than income alone. In this context, five child health indicators are selected: stunting, wasting, underweight, immunisation, and anaemia. These indicators are chosen based on their alignment with global health standards and national policy priorities (WHO, 2023; UNICEF, 2023; NITI Aayog, 2021).

Data for the analysis is sourced from the National Family Health Surveys — NFHS-4 (2015–16) and NFHS-5 (2019–21) — conducted by the International Institute for Population Sciences (IIPS) and ICF (2021). These surveys provide district-level estimates of child health outcomes and are widely recognized for their methodological rigor and national coverage (MoHFW, 2021). Each indicator is treated as a binary deprivation measure, consistent with MPI methodology, where a child is considered deprived if they fall below the threshold defined by national or international standards (Alkire & Foster, 2011; OPHI, 2020).

District-level data is extracted and cleaned using Excel and cross-validated with NFHS fact sheets and state reports. To ensure comparability, only districts with consistent data across both NFHS rounds are included. Newly formed districts such as Amethi, Hapur, Sambhal, and Shamli are excluded due to data embedding within parent districts in NFHS-4 (IIPS, 2017; Census of India, 2011). A total of 66 districts are analyzed.

The study calculates percentage change for each indicator between NFHS-4 and NFHS-5 to assess progress or regression. These changes are visualized using color-coded diagnostics: green for improvement, red for decline, and yellow for stagnation. This visual approach enhances interpretability and supports district-level policy planning (UNICEF India, 2022; NITI Aayog, 2022).

To maintain methodological consistency, the study does not apply weighting across indicators, treating each deprivation equally. While this may limit the granularity of composite poverty scores, it aligns with the study's objective of highlighting indicator-specific trends (OPHI, 2020; Alkire et al., 2022). The analysis is descriptive and diagnostic in nature, intended to inform policy dialogue and future research rather than causal inference.

Ethical considerations are minimal as the study relies on publicly available secondary data. However, care is taken to ensure accurate representation of district boundaries and naming conventions, especially for regions with administrative transitions (MoHFW, 2021; Census of India, 2011).

To quantify progress in health-related poverty, the study employs two formulas:

- Absolute change in deprivation: Reduction = **NFHS5 − NFHS4**
- Percentage change in deprivation: Reduction% = **(NFHS5−NFHS4) X100 NFHS4**

These calculations help identify whether deprivation has increased or decreased between the two survey rounds. A negative value indicates improvement, while a positive value signals deterioration

RESULTS AND ANALYSIS

• Comparative tables that display NFHS-4 and NFHS-5 values for each selected indicator, alongside absolute changes and percentage reductions. These tables allow for precise tracking of progress or regression at the district level and help identify patterns of improvement or stagnation across regions.

• Bar charts that visualize indicator-wise progress across selected districts. These charts use color-coded representations—green for improvement, red for decline, and yellow for stagnation—to make trends more accessible to both academic and policy audiences. The visual format enhances interpretability and supports evidence-based decision-making at the local level.

This mixed-method approach strengthens the analysis by combining statistical rigor with visual storytelling, enabling clearer insights for researchers, planners, and administrators (NITI Aayog, 2021; Mishra et al., 2023). It also facilitates comparative diagnostics across districts, helping to identify high-performing regions and those requiring targeted interventions.

The study addresses a critical gap in the literature by focusing exclusively on the health dimension of multidimensional poverty, using five carefully selected sub-indicators: child stunting, child wasting, child underweight, child immunization, and child anaemia. These indicators are chosen based on their alignment with global health standards (WHO, 2023), national policy priorities (UNICEF, 2023), and their relevance to child development outcomes. Each indicator is treated as a binary deprivation measure, consistent with the Multidimensional Poverty Index (MPI) methodology (Alkire & Foster, 2011), allowing for longitudinal comparison and spatial mapping. By offering a district-wise comparative analysis between NFHS-4 (2015–16) and NFHS-5 (2019–21), the study provides a granular understanding of health-related deprivation and its distribution across Uttar Pradesh. This disaggregated approach moves beyond state-level averages, revealing hidden disparities and enabling more nuanced policy responses. In doing so, the research contributes a focused, indicator-driven perspective that is currently underrepresented in the literature and essential for designing targeted, district-sensitive health interventions. It advocates for the integration of multidimensional poverty diagnostics into local planning frameworks, ensuring that health equity is addressed not only at the macro level but also within the micro-geographies where deprivation persists.

Refer to Appendix A-1 for table 2

Table2: **National Family Health Survey (NFHS) rounds—NFHS-4 (2015–16) and NFHS-5 (2019–21).**

Source: Author's compilation from National Family Health Survey (NFHS-4, 2015–16; NFHS-5, 2019–21), Ministry of Health and Family Welfare (MoHFW), Government of India. Data retrieved from the Demographic and Health Surveys (DHS) program and NFHS State and District Fact Sheets.

INDICATOR-WISE POVERTY REDUCTION ANALYSIS

1- **Child Stunting**
Refer to Appendix A-2 for table 3

Table 3**: District-wise Poverty Reduction in Uttar Pradesh (NFHS-4 to NFHS-5).**

Source**:** Author's compilation on poverty reduction for child stunting indicator in districts of Uttar Pradesh, Data compiled from National Family Health Survey (NFHS-4, 2015–16; NFHS-5, 2019–21), conducted by the Ministry of Health and Family Welfare, Government of India. District-level estimates adapted for comparative analysis in Uttar Pradesh.

Note: Districts with positive change are highlighted in green, while those with negative change are shown in red.

2. Child- Wasting

Refer to Appendix A-3 for table 4

***Table 4*: District-wise Poverty Reduction in Uttar Pradesh (NFHS-4 to NFHS-5).**

Source: author's compilation on poverty reduction for child wasting indicator in districts of Uttar Pradesh, Data compiled from National Family Health Survey (NFHS-4, 2015–16; NFHS-5, 2019–21), conducted by the Ministry of Health and Family Welfare, Government of India. District-level estimates adapted for comparative analysis in Uttar Pradesh.

Note: Districts with positive change are highlighted in green, while those with negative change are shown in red.

3. Child Underweight

Refer to Appendix A-4 for table 5

***Table 5*:** District-wise Poverty Reduction in Uttar Pradesh (NFHS-4 to NFHS-5).

Source : Author's compilation on poverty reduction for child Underweight indicator in districts of Uttar Pradesh, Data compiled from National Family Health Survey (NFHS-4, 2015–16; NFHS-5, 2019–21), conducted by the Ministry of Health and Family Welfare, Government of India. District-level estimates adapted for comparative analysis in Uttar Pradesh.

Note: Districts with positive change are highlighted in green, while those with negative change are shown in red.

4. Child Immunization

A-5 for table 6

Table 6: District-wise Poverty Reduction in Uttar Pradesh (NFHS-4 to NFHS-5).

Source : Author's compilation on poverty reduction for child Immunization indicator in districts of Uttar Pradesh, Data compiled from National Family Health Survey (NFHS-4, 2015–16; NFHS-5, 2019–21), conducted by the Ministry of Health and Family Welfare, Government of India. District-level estimates adapted for comparative analysis in Uttar Pradesh.

Note: Districts with positive change are highlighted in green, while those with negative change are shown in red.

5. Child Anaemia

Refer to Appendix A-6 for table 7

***Table 7*:** District-wise Poverty Reduction in Uttar Pradesh (NFHS-4 to NFHS-5).

Source: Author's compilation on poverty reduction for child Anaemia indicator in districts of Uttar Pradesh, Data compiled from National Family Health Survey (NFHS-4, 2015–16; NFHS-5, 2019–21), conducted by the Ministry of Health and Family Welfare, Government of India. District-level estimates adapted for comparative analysis in Uttar Pradesh.

Note: Districts with positive change are highlighted in green, while those with negative change are shown in red.

FIGURES AND GRAPHS

Figure 1 – Refer to Appendix B-1 for conceptual framework of poverty reduction for child stunting indicator in districts of U.P. based on NFHS-4 and NFHS-5.

Figure 2 – Refer to Appendix B-2 for conceptual framework of poverty reduction for child wasting indicator in districts of U.P. based on NFHS-4 and NFHS-5.

Figure 3 – Refer to Appendix B-3 for conceptual framework of poverty reduction for child underweight indicator in districts of U.P. based on NFHS-4 and NFHS-5.

Figure 4 – Refer to Appendix B-4 for conceptual framework of poverty reduction for child immunization indicator in districts of U.P. based on NFHS-4 and NFHS-5.

Figure 5: Refer to Appendix B-5 for conceptual framework of poverty Reduction for child anaemia indicator in districts of U.P. based on NFHS-4 and NFHS-5.

Findings and Discussion

This study undertakes a district-level comparative assessment of child health indicators in Uttar Pradesh, drawing on NFHS-4 (2015–16) and NFHS-5 (2019–21) datasets to evaluate multidimensional poverty reduction through the lens of child stunting, wasting, underweight prevalence, immunization coverage, and anaemia. The analysis employs percentage change as a proxy for progress, enabling a granular understanding of spatial disparities and temporal shifts in health outcomes.

The findings reveal a heterogeneous pattern of progress, with certain districts demonstrating substantial improvements while others exhibit regression or stagnation. In the domain of child stunting, districts such as Ballia (+10.6%), Banda (+9.2%), and Raebareli (+29.8%) recorded positive shifts, suggesting effective nutritional interventions and possibly improved maternal health services. Conversely, Etah (–82.7%), Balrampur (–34.4%), and Siddharth Nagar (–35.7%) experienced marked deterioration, raising concerns about persistent structural deficits and the adequacy of targeted schemes in these regions.

Child wasting, a sensitive indicator of acute malnutrition, displayed extreme variability. Balrampur (+141.7%) and Etah (+56.2%) showed dramatic gains, potentially reflecting successful community-based management of malnutrition (CMAM) programs or enhanced outreach. However, districts such as Lucknow (–65.8%) and Lalitpur (–52.1%) registered significant declines, underscoring the paradox of urban undernutrition and the limitations of infrastructure-centric assumptions in addressing health poverty.

Underweight prevalence followed a similar trajectory. Ballia (+36.7%) and Ghazipur (+20.8%) emerged as positive outliers, while Sant Ravidas Nagar (–46.0%), Jaunpur (–42.5%), and Lucknow (–42.7%) exhibited sharp regressions. The consistent underperformance of Lucknow across multiple indicators is particularly noteworthy, suggesting that urban governance and service delivery mechanisms may be failing to reach marginalized populations, especially in informal settlements.

Immunization coverage, as measured by the percentage of fully immunized children, presented a more optimistic picture. Districts such as Balrampur (+708.4%), Bahraich (+451.1%), and Shravasti (+244.5%) demonstrated exponential improvements, likely attributable to intensified campaigns under Mission Indradhanush and improved cold chain logistics. In contrast, Jhansi (–29.0%) and Kanpur Dehat (–9.3%) showed declines, indicating potential gaps in last-mile delivery or vaccine hesitancy.

Anaemia prevalence, a proxy for micronutrient deficiency and maternal-child health, revealed mixed trends. Farrukhabad (+99.2%), Kashiram Nagar (+97.6%), and Etah (+92.5%) recorded substantial improvements, possibly due to enhanced iron supplementation and deworming initiatives. However, districts such as Jalaun (–34.9%), Lucknow (–26.5%), and Pilibhit (–26.1%) experienced worsening outcomes, suggesting that nutritional interventions may be unevenly distributed or inadequately monitored.

Cross-indicator analysis reveals that districts such as Ballia, Banda, Raebareli, and Ghazipur consistently performed well across multiple dimensions, indicating the presence of synergistic health and nutrition strategies. In contrast, Lucknow, Etah, Jaunpur, and Sant Ravidas Nagar registered multidimensional declines, highlighting the need for integrated, district-specific policy responses. These findings underscore the importance of moving beyond aggregate state-level metrics to embrace disaggregated, indicator-wise diagnostics that can inform targeted interventions.

The accompanying visualizations employ a color-coded schema wherein green blocks denote districts with positive change and red blocks signify stagnation or deterioration. This visual taxonomy facilitates intuitive identification of priority areas and supports evidence-based policymaking. Overall, the analysis affirms the utility of multidimensional poverty frameworks in capturing the complexity of child health outcomes and advocates for a geographically nuanced, indicator-sensitive approach to health governance in Uttar Pradesh.

District-Level Health and Nutrition Policies

1. **POSHAN Abhiyaan (Prime Minister's Overarching Scheme for Holistic Nourishment)**
   Focus: Reducing stunting, undernutrition, and anaemia among children and women.
   District-Level Strategy: Targets high-burden districts with convergence of Anganwadi services, health outreach, and real-time monitoring via the ICDS-CAS dashboard.
   Impact: Districts like Bahraich and Balrampur have shown dramatic improvements in immunization and nutrition indicators under this scheme.
2. **Aspirational Districts Programme (ADP)**
   Focus: Accelerating development in underperforming districts across health, education, agriculture, and infrastructure.
   District-Level Strategy: Uses real-time data dashboards and monthly rankings to incentivize performance.
   Impact: Districts like Shravasti and Siddharth Nagar have benefited from targeted interventions in child health and nutrition.
3. **Mission Indradhanush**
   Focus: Universal immunization for children and pregnant women.
   District-Level Strategy: High-intensity immunization drives in low-coverage districts, with micro-planning and community mobilization.
   Impact: Immunization coverage in districts like Balrampur and Bahraich improved by over 400% between NFHS-4 and NFHS-5.
4. **Social Protection for Nutrition Atlas (UNICEF & Government of India)**
   Focus: Mapping and integrating social protection schemes to improve nutritional outcomes.
   District-Level Strategy: Encourages convergence of schemes like PMMVY, ICDS, and NFSA at the district level.
   Impact: Helps districts identify gaps and overlaps in service delivery, especially for vulnerable populations.
5. **District Nutrition Profiles (DNPs)**
   Focus: Evidence-based planning using district-specific nutrition data.
   District-Level Strategy: Provides granular data on stunting, wasting, anaemia, and service coverage to guide local action plans.
   Impact: Used by district magistrates and health officers to prioritize interventions and monitor progress.

Limitations

This study is based on district-level data from NFHS-4 (2015–16) and NFHS-5 (2019–21), focusing on five key child health indicators. However, certain districts were excluded due to data limitations and administrative restructuring that affected longitudinal comparability.

Specifically, the districts of Amethi, Hapur, Sambhal, and Shamli were not included because they were formed after NFHS-4 and their data was embedded within their parent districts—Sultanpur, Ghaziabad, Moradabad, and Muzaffarnagar, respectively. As a result, consistent district-level data across both NFHS rounds was unavailable for these regions. Their exclusion was necessary to maintain methodological rigor and ensure valid temporal comparisons

Additionally, districts such as Amroha (formerly Jyotiba Phule Nagar), Kasganj (formerly Kanshiram Nagar), Bhadohi (Sant Ravidas Nagar), and Mahoba presented challenges due to inconsistent naming conventions, partial data availability, or boundary changes between NFHS-4 and NFHS-5. These administrative transitions complicated direct indicator-wise comparisons and were therefore excluded from the final dataset.While these exclusions limit the geographic comprehensiveness of the study, they were essential to preserve analytical consistency. Future research may incorporate these districts using triangulated data sources or updated survey rounds to provide a more complete picture of child health poverty across Uttar Pradesh.

Conclusion

This study presents a district-level comparative analysis of child health indicators in Uttar Pradesh, using NFHS-4 and NFHS-5 data to assess progress in reducing multidimensional child health poverty. By examining changes in stunting, wasting, underweight prevalence, immunization coverage, and anemia, the research reveals substantial inter-district disparities that reflect both policy successes and persistent structural challenges.

Districts such as Balrampur, Ballia, Banda, and Raebareli emerged as the best-performing regions, showing consistent improvements across multiple indicators. Balrampur, in particular, demonstrated exceptional gains in immunization coverage and wasting reduction, suggesting the effectiveness of targeted interventions and community-level outreach. These districts offer replicable models for localized health governance and integrated service delivery.

In contrast, districts like Lucknow, Etah, Jaunpur, and Sant Ravidas Nagar (Bhadohi) were among the least-performing, exhibiting multidimensional declines in child health outcomes. Lucknow's regression across stunting, underweight, and anemia indicators is especially concerning given its urban infrastructure and administrative prominence. These findings underscore the need for intra-urban diagnostics and tailored strategies to address hidden vulnerabilities in metropolitan settings.

The exclusion of nine districts—such as Amethi, Hapur, Sambhal, and Shamli—due to data limitations in NFHS-4 and administrative restructuring presents a constraint on geographic coverage. However, the study maintains methodological rigor by focusing on districts with consistent longitudinal data.

Overall, the research affirms the value of disaggregated, indicator-wise analysis in informing district-specific policy responses. It advocates for the integration of multidimensional poverty frameworks into planning and monitoring systems, enabling more equitable and responsive health interventions

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AD EDUXIAN JOURNAL
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Vol (2), Issue (3), Oct-Dec 2025 ISSN: 3048-7951

APPENDIX A -1: Table2

District	Child_Stunting_NFHS4	Child_Stunting_NFHS5	Child_Wasting_NFHS4	Child_Wasting_NFHS5	Child_Underweight_NFHS4	Child_Underweight_NFHS5	Child_Fully_Immunized_NFHS4	Child_Fully_Immunized_NFHS5	Child_Anaemia_NFHS4	Child_Anaemia_NFHS5
Agra	44.7	35.9	14.8	16.4	34.8	26.2	60.9	74.1	51.7	73
Aligarh	49.1	35	14.6	10.9	38.2	26.3	67.8	70.1	66.8	62.6
Ambedkar Nagar	43	31.1	22.7	17.8	0.6	1.9	61.2	75.1	62	54.9
Auraiya	43.6	39.7	26.6	19.4	46.4	32.6	34	82.5	50.1	64.2
Azamgarh	40	33.4	16.8	14.4	33	28	35.2	64.5	61.6	58.9
Baghpat	35.8	25.5	14.9	10.3	33.3	26	68.6	83.9	76.6	60.2
Bahraich	65.1	52.1	13.7	14.4	44	38	9.4	51.8	73.5	71.7
Ballia	39.6	43.8	14.1	21.9	31.1	42.5	43.6	62.2	50.2	71.6
Balrampur	62.8	41.2	10.3	24.9	43.5	37.2	7.1	57.4	72.4	75.4
Banda	46.7	51	13	25.7	41.5	49.8	42.6	62.9	62.7	82.2
Barabanki	51.5	41.9	12.2	18.1	40.2	31.9	40.1	64.4	43.6	65.5
Bareilly	45.6	45.9	18.6	15.4	42.1	35.2	48.7	70.5	74.3	67.7
Basti	48.9	35.9	14.1	24.2	33.3	39.2	57.5	73.8	71.6	58.4
Bijnor	42.6	36.2	22.4	9.4	41.8	21.9	70.1	90.6	72.4	60.9
Bulandshahr	43.2	37.6	16	13.8	33.8	26.5	57.3	67.3	65.6	64.1
Chandauli	43.3	39.5	17.6	17.4	34.6	29.9	56.5	70.6	66.4	64.6
Chitrakoot	50.9	47.5	33.3	24.8	52.5	41.8	67.7	63.7	72.5	55.3
Deoria	41.2	36.8	14.1	26.5	31.6	39.4	63.8	64.2	68.3	54.9
Etah	51	8.8	9.6	15	32.2	30.6	46	55.5	40.2	77.4
Etawah	53.2	38.8	11.4	13.9	32.6	24.3	53.6	77.7	40	74
Faizabad	49.9	30.6	19.3	12.4	44.9	27.5	48.5	68.7	63.5	57.7
Farrukhabad	49.1	47.8	8.4	14.3	31.4	31.1	39.6	68.5	38.7	77.1
Fatehpur	52.4	51.1	14.9	17.8	40.4	38	48.4	55.7	44	78.1
Firozabad	44	46.9	11.7	9.5	27.6	25.6	56.6	67.1	47.2	73.9
Gautam Buddha Nagar	32.2	25.5	16.2	12	28.4	21.9	65.5	68.2	68.3	62.9
Ghazipur	41.4	39.3	17.7	25.7	31.7	38.3	40.2	60.8	68.6	71.6
Gonda	56.8	45.9	9.8	12.1	38.6	28	36.8	59.9	72.6	62
Gorakhpur	42.1	29.6	19.9	23.3	35.2	33.7	65.4	67.7	59.6	67.4
Hamirpur	38.5	48	32.3	20.6	39.6	36.3	52.6	77.1	55.5	68.5
Hardoi	50.5	44.5	14.7	22.3	39.9	33	39.1	63.3	44.6	76.1
Jalaun	45.6	45.1	32.2	19.5	49.2	36.1	54.7	66.2	84.8	55.2
Jaunpur	48	40.5	27.3	14.8	52.7	30.3	53.1	75.1	58	65.3
Jhansi	36.1	40.9	27.2	25.2	39.5	39.3	62.7	44.5	77.6	70.3
Jyotiba Phule Nagar	44.7	42.2	22.8	22.5	42.4	35.4	74.2	72.9	75.3	69.6
Kannauj	50.4	43	12.2	21.5	32.9	33.5	48.7	55.8	41.5	79.6
Kanpur Dehat	45.9	44.1	15.4	12.5	36.1	32.8	62.1	56.3	65.8	69.2
Kanpur Nagar	43.6	34.6	24.1	21.4	41.6	27.8	50.9	72.8	73.6	76.3
Kashiram nagar	51.5	45.1	11.6	19.3	32.8	35.5	47.2	69.2	40.6	80.8
Kaushambi	50.1	40.2	29.9	18.3	52.8	36.8	37.1	65.7	57.4	65.5
Lalitpur	40.7	46.6	39	18.7	45.8	34.8	62.1	70.8	75.6	56
Lucknow	37.5	32.1	33.6	11.5	44.5	25.5	56.8	68.9	72	52.9
Mahamaya Nagar	44.2	39.1	9.7	12	31.7	24.5	61.2	71.6	48.9	72.1
Maharajganj	53.3	40.5	12.5	21.8	37.1	37.4	42.7	76.2	58.8	60.5
Mahoba	44.6	42.3	23.9	25	47.7	33.4	64.5	70.7	77.6	70.1
Mainpuri	46.5	44.3	11.5	14.6	32.5	33.6	55.7	75	41.7	70.4
Mathura	40.8	31.6	12.9	11	27.7	21.3	51.3	73.6	56.5	77.2
Mau	40.9	25.4	19.7	21.2	35.1	30.9	46.4	59.1	61.3	62.7
Meerut	35.3	32.1	15.8	10.2	35.2	23.7	62.8	82.5	71.9	55.2
Mirzapur	49.1	43.4	20.8	12.5	46.5	27.6	46.5	68.3	63	59.8
Pilibhit	51.5	38.9	21.8	20.1	44.1	39.4	71	92.3	77.5	57.3
Pratapgarh	41.3	35.5	23.8	10	42.6	27.7	49.5	75	61.6	58
Prayagraj	43.8	37.9	20	15.1	43.4	32.6	37.9	55.8	60.7	50.5
Raebareli	36.2	47	31.4	13	41.3	28.8	61.8	71.4	50.2	76.4
Rampur	45	40.4	20.6	17.6	44.4	32.1	68.3	79.4	77	69.6
Saharanpur	36.9	28.8	15.5	22	36.1	26.7	62.6	89.2	75.5	68.1
Sant Kabir Nagar	50.5	42.3	10.3	19	36.5	34.2	43.3	80.2	69.1	71.6
Sant Ravidas Nagar (Badhohi)	51.4	42.7	21.5	9.1	49.1	26.5	43.1	62.2	62.3	59.2
Shahjahanpur	49.3	44.5	23.6	17	54.3	34.7	65.3	76.5	76.6	75.4
Shravasti	63.5	50.9	10.1	20.3	39.2	40.8	17.3	59.6	69.6	61.2
Siddharthnagar	57.9	37.2	13.7	24.8	43.5	36.3	35.3	65.1	65.1	75.8
Sitapur	56.4	47.8	14	18.2	48.6	37.9	44.8	65.9	52.6	66.4
Sonbhadra	45.9	38.3	22.5	26.8	45.4	46.5	30.3	72.7	58.1	63
Unnao	46.5	39.2	13.1	12.1	34.3	29.3	57.4	58.6	43.6	76
Varanasi	44.7	37.4	25.3	21	45.4	39	55	79.3	58.5	65.2

AD EDUXIAN JOURNAL
A Quarterly Multidisciplinary Blind Peer Reviewed & Refereed Online International Journal
Google Scholar Indexing PIF:1.048(I2OR) & 3.125 (IIFS)
Vol (2), Issue (3), Oct-Dec 2025 ISSN: 3048-7951

APPENDIX A-2: TABLE 3 – CHILD STUNTING

District	Poverty reduction	Poverty reduction percentage
Agra	-8.6	-24.71264368
Aligarh	-11.9	-31.15183246
Ambedkar Nagar	1	111.1111111
Auraiya	-13.8	-29.74137931
Azamgarh	-5	-15.15151515
Baghpat	-7.3	-21.92192192
Bahraich	-6	-13.63636364
Ballia	11.4	36.65594855
Balrampur	-6.3	-14.48275862
Banda	8.3	20
Barabanki	-8.3	-20.64676617
Bareilly	-6.9	-16.38954869
Basti	5.9	17.71771772
Bijnor	-19.9	-47.6076555
Bulandshahr	-7.3	-21.59763314
Chandauli	-4.9	-14.08045977
Chitrakoot	-10.7	-20.38095238
Deoria	7.8	24.6835443
Etah	-1.6	-4.968944099
Etawah	-8.3	-25.4601227
Faizabad	-17.4	-38.75278396
Farrukhabad	-0.3	-0.955414013
Fatehpur	-2.4	-5.940594059
Firozabad	-2.3	-8.243727599
Gautam Buddha Nagar	-6.5	-22.88732394
Ghazipur	6.6	20.82018927
Gonda	-10.6	-27.4611399
Gorakhpur	-1.5	-4.261363636
Hamirpur	-3.5	-8.793969849
Hardoi	-6.9	-17.29323308
Jalaun	-13.1	-26.62601626
Jaunpur	-22.4	-42.50474383
Jhansi	-0.2	-0.506329114
Jyotiba Phule Nagar	-7	-16.50943396
Kannauj	0.6	1.823708207
Kanpur Dehat	-3.3	-9.141274238
Kanpur Nagar	-14	-33.49282297
Kashiram nagar	2.7	8.231707317
Kaushambi	-16	-30.3030303
Lalitpur	-14	-28.68852459
Lucknow	-19	-42.69662921
Mahamaya Nagar	-7.2	-22.71293375
Maharajganj	0.3	0.808625337
Mahoba	-14.3	-29.97903564
Mainpuri	1.1	3.384615385
Mathura	-6.4	-23.10469314
Mau	-4.8	-13.67521368
Meerut	-11.5	-32.67045455
Mirzapur	-18.9	-40.64516129
Pilibhit	-4.7	-10.65759637
Pratapgarh	-14.9	-34.97652582
Prayagraj	-10.8	-24.88479263
Raebareli	-12.5	-30.26634383
Rampur	-12.3	-27.7027027
Saharanpur	-9.4	-26.03878116
Sant Kabir Nagar	-2.3	-6.301369863
Sant Ravidas Nagar (Badhohi)	-22.6	-46.02851324
Shahjahanpur	-19.6	-36.09576427
Shravasti	1.6	0.040816327
Siddharthnagar	-7.2	-16.55172414
Sitapur	-10.7	-22.01646091
Sonbhadra	0.1	0.215517241
Unnao	-5	-14.57725948
Varanasi	-6.4	-14.0969163

AD EDUXIAN JOURNAL
A Quarterly Multidisciplinary Blind Peer Reviewed & Refereed Online International Journal
Google Scholar Indexing PIF:1.048(I2OR) & 3.125 (IIFS)
Vol (2), Issue (3), Oct-Dec 2025 ISSN: 3048-7951

PPENDIX A-3: TABLE4- CHILD WASTING

District	Poverty reduction	Poverty reduction percentage
Agra	-8.8	-19.68680089
Aligarh	-14.1	-28.71690428
Ambedkar Nagar	-11.9	-27.6744186
Auraiya	-3.9	-8.944954128
Azamgarh	-6.6	-16.5
Baghpat	-10.3	-28.77094972
Bahraich	-13	-19.96927803
Ballia	4.2	10.60606061
Balrampur	-21.6	-34.39490446
Banda	4.3	9.207708779
Barabanki	-9.6	-18.6407767
Bareilly	0.3	0.657894737
Basti	-13	-26.58486708
Bijnor	-6.4	-15.02347418
Bulandshahr	-5.6	-12.96296296
Chandauli	-3.8	-8.775981524
Chitrakoot	-3.4	-6.679764244
Deoria	-4.4	-10.67961165
Etah	-42.2	-82.74509804
Etawah	-14.4	-27.06766917
Faizabad	-19.3	-38.67735471
Farrukhabad	-1.3	-2.647657841
Fatehpur	-1.3	-2.480916031
Firozabad	2.9	6.590909091
Gautam Buddha Nagar	-6.7	-20.80745342
Ghazipur	-2.1	-5.072463768
Gonda	-11	-19.33216169
Gorakhpur	-12.5	-29.6912114
Hamirpur	9.5	24.67532468
Hardoi	-6	-11.88118812
Jalaun	-0.5	-1.096491228
Jaunpur	-7.5	-15.625
Jhansi	4.8	-21.70022371
Jyotiba Phule Nagar	-2.5	-5.592841163
Kannauj	-7.4	-14.68253968
Kanpur Dehat	-1.8	-3.921568627
Kanpur Nagar	-9	-20.64220183
Kashiram nagar	-6.4	-12.42718447
Kaushambi	-9.9	-19.76047904
Lalitpur	5.9	14.4963145
Lucknow	-5.4	-14.4
Mahamaya Nagar	-5.1	-11.53846154
Maharajganj	-12.8	-24.01500938
Mahoba	-2.3	-5.156950673
Mainpuri	-2.2	-4.731182796
Mathura	-9.2	-22.54901961
Mau	-15.5	-37.89731051
Meerut	-3.2	-9.065155807
Mirzapur	-5.7	-11.6089613
Pilibhit	-12.6	-24.46601942
Pratapgarh	-5.8	-14.04358354
Prayagraj	-5.9	-13.47031963
Raebareli	10.8	29.83425414
Rampur	-5.6	-12.17391304
Saharanpur	-8.1	-21.95121951
Sant Kabir Nagar	-8.2	-16.23762376
Sant Ravidas Nagar (Badhohi)	-8.7	-16.92607004
Shahjahanpur	-4.8	-9.736308316
Shravasti	-12.6	-19.84251969
Siddharthnagar	-20.7	-35.75129534
Sitapur	-8.6	-15.24822695
Sonbhadra	-7.6	-11.39896373
Unnao	-7.3	-15.69892473
Varanasi	-7.3	-12.60794473

APPENDIX A-4: TABLE-5- CHILD UNDERWEIGHT

District	Poverty reduction	Poverty reduction percentage
Agra	1.5	10.06711409
Aligarh	-3.7	-25.34246575
Ambedkar Nagar	-4.9	-21.58590308
Auraiya	-7.1	-26.79245283
Azamgarh	-2.5	-14.79289941
Baghpat	-4.6	-30.87248322
Bahraich	0.7	5.109489051
Ballia	7.8	55.31914894
Balrampur	14.6	141.7475728
Banda	7.7	42.77777778
Barabanki	5.9	48.36065574
Bareilly	-3.4	-18.08510638
Basti	10.1	71.63120567
Bijnor	-13	-58.03571429
Bulandshahr	-2.2	-13.75
Chandauli	-0.4	-2.247191011
Chitrakoot	-8.5	-25.52552553
Deoria	12.4	87.94326241
Etah	5.4	56.25
Etawah	2.5	21.92982456
Faizabad	-6.9	-35.75129534
Farrukhabad	5.9	70.23809524
Fatehpur	2.9	19.46308725
Firozabad	-2.2	-18.8034188
Gautam Buddha Nagar	-4.2	-25.92592593
Ghazipur	8	45.19774011
Gonda	2.3	23.46938776
Gorakhpur	3.4	17.08542714
Hamirpur	-11.7	-36.22291022
Hardoi	7.6	51.70068027
Jalaun	-12.7	-39.44099379
Jaunpur	-12.5	-45.78754579
Jhansi	-2	-7.352941176
Jyotiba Phule Nagar	-0.3	-1.315789474
Kannauj	9.3	76.2295082
Kanpur Dehat	-2.9	-18.83116883
Kanpur Nagar	-2.7	-11.2033195
Kashiram nagar	7.7	66.37931034
Kaushambi	-11.6	-38.79598662
Lalitpur	-20.3	-52.05128205
Lucknow	-22.1	-65.77380952
Mahamaya Nagar	2.3	23.71134021
Maharajganj	9.3	74.4
Mahoba	1.1	4.60251046
Mainpuri	3.1	26.95652174
Mathura	-1.9	-14.72868217
Mau	1.5	7.614213198
Meerut	-8.6	-45.74468085
Mirzapur	-8.3	-39.90384615
Pilibhit	-1.7	-7.798165138
Pratapgarh	-13.8	-57.98319328
Prayagraj	-4.9	-24.5
Raebareli	-18.4	-58.59872611
Rampur	-3.2	-15.38461538
Saharanpur	3.5	18.91891892
Sant Kabir Nagar	8.1	74.31192661
Sant Ravidas Nagar (Badhohi)	-12.4	-57.6744186
Shahjahanpur	-6.6	-27.96610169
Shravasti	10.2	100.990099
Siddharthnagar	11.1	81.02189781
Sitapur	4.2	30
Sonbhadra	4.3	19.11111111
Unnao	-1	-7.633587786
Varanasi	-4.3	-16.99604743

AD EDUXIAN JOURNAL
A Quarterly Multidisciplinary Blind Peer Reviewed & Refereed Online International Journal
Google Scholar Indexing PIF:1.048(I2OR) & 3.125 (IIFS)
Vol (2), Issue (3), Oct-Dec 2025 ISSN: 3048-7951

APPENDIX A-5: TABLE6 – CHILD IMMUNIZATION

District	Poverty reduction	Poverty reduction percentage
Agra	13.2	21.67487685
Aligarh	2.2	3.24005891
Ambedkar Nagar	13.9	22.7124183
Auraiya	48.5	142.6470588
Azamgarh	29.3	83.23863636
Baghpat	14.1	20.20057307
Bahraich	42.4	451.0638298
Ballia	18.4	42.00913242
Balrampur	50.3	708.4507042
Banda	20.1	46.96261682
Barabanki	24.3	60.59850374
Bareilly	21.8	44.76386037
Basti	16.3	28.34782609
Bijnor	20.5	29.24393723
Bulandshahr	10	17.45200698
Chandauli	12.1	20.68376068
Chitrakoot	-4	-5.908419498
Deoria	0.4	0.626959248
Etah	7.5	15.625
Etawah	23.9	44.42379182
Faizabad	20.2	41.64948454
Farrukhabad	29.9	77.4611399
Fatehpur	7.3	15.08264463
Firozabad	8.3	14.11564626
Gautam Buddha Nagar	2.7	4.122137405
Ghazipur	20.6	51.24378109
Gonda	23.1	62.77173913
Gorakhpur	2.3	3.516819572
Hamirpur	24.6	46.85714286
Hardoi	24.2	61.89258312
Jalaun	11.5	21.023766
Jaunpur	22	41.43126177
Jhansi	-18.2	-29.02711324
Jyotiba Phule Nagar	-1.3	-1.752021563
Kannauj	7.1	14.57905544
Kanpur Dehat	-5.8	-9.339774557
Kanpur Nagar	21.9	43.02554028
Kashiram nagar	22	46.61016949
Kaushambi	28.6	77.08894879
Lalitpur	9.7	15.87561375
Lucknow	10.1	17.17687075
Mahamaya Nagar	10.4	16.99346405
Maharajganj	34.5	82.73381295
Mahoba	6.2	9.612403101
Mainpuri	19.3	34.64991023
Mathura	22.1	42.91262136
Mau	12.7	27.37068966
Meerut	19.7	31.36942675
Mirzapur	21.8	-46.88172043
Pilibhit	21.3	30
Pratapgarh	25.5	51.51515152
Prayagraj	17.9	47.22955145
Raebareli	9.6	15.53398058
Rampur	11.1	16.25183016
Saharanpur	26.6	42.49201278
Sant Kabir Nagar	36.9	85.21939954
Sant Ravidas Nagar (Badhohi)	19.1	44.31554524
Shahjahanpur	11.2	17.15160796
Shravasti	42.3	244.5086705
Siddharthnagar	29.8	84.41926346
Sitapur	21.1	47.09821429
Sonbhadra	42.4	139.9339934
Unnao	1.2	2.090592334
Varanasi	20.3	34.40677966

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AD EDUXIAN JOURNAL
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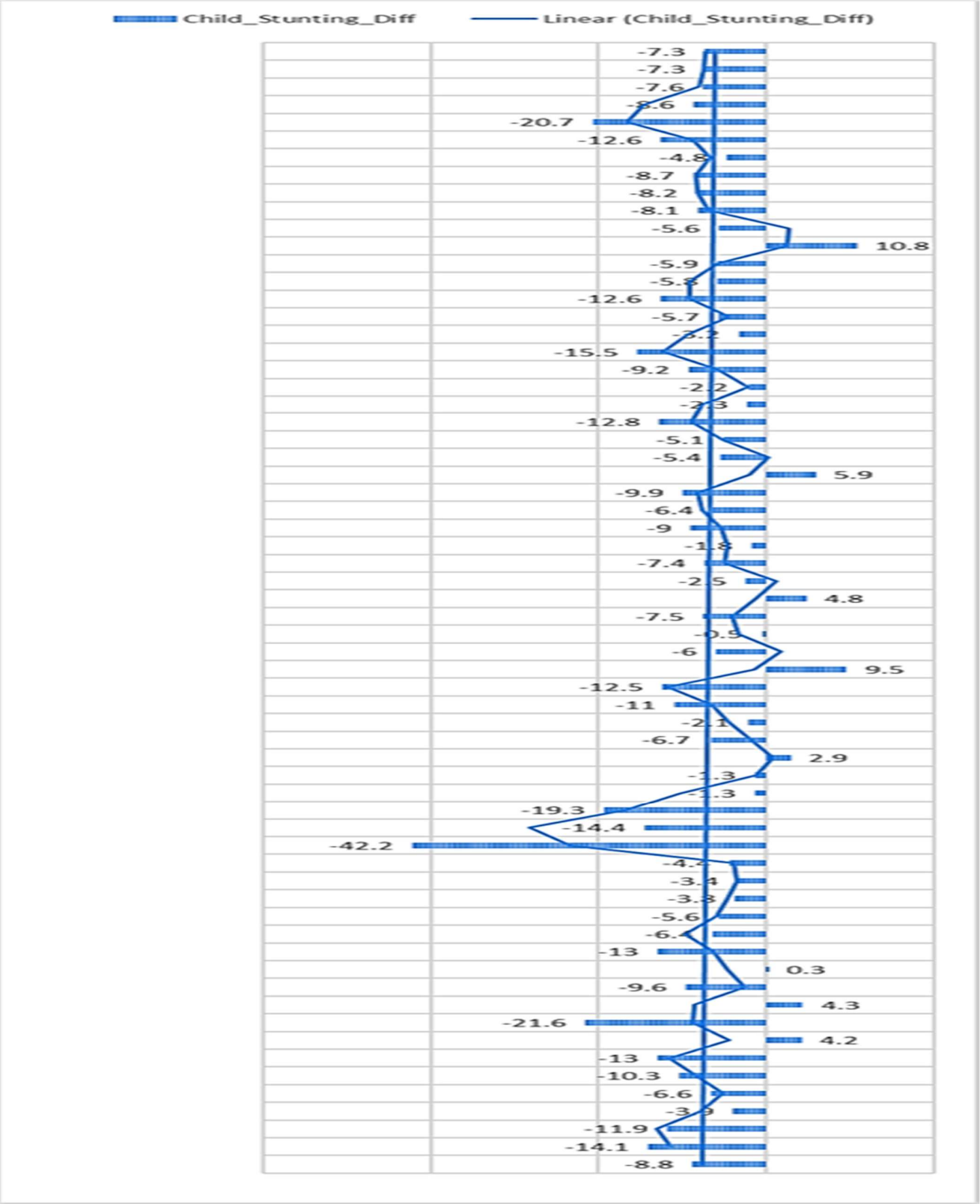
Google Scholar Indexing PIF:1.048(I2OR) & 3.125 (IIFS)
Vol (2), Issue (3), Oct-Dec 2025 ISSN: 3048-7951

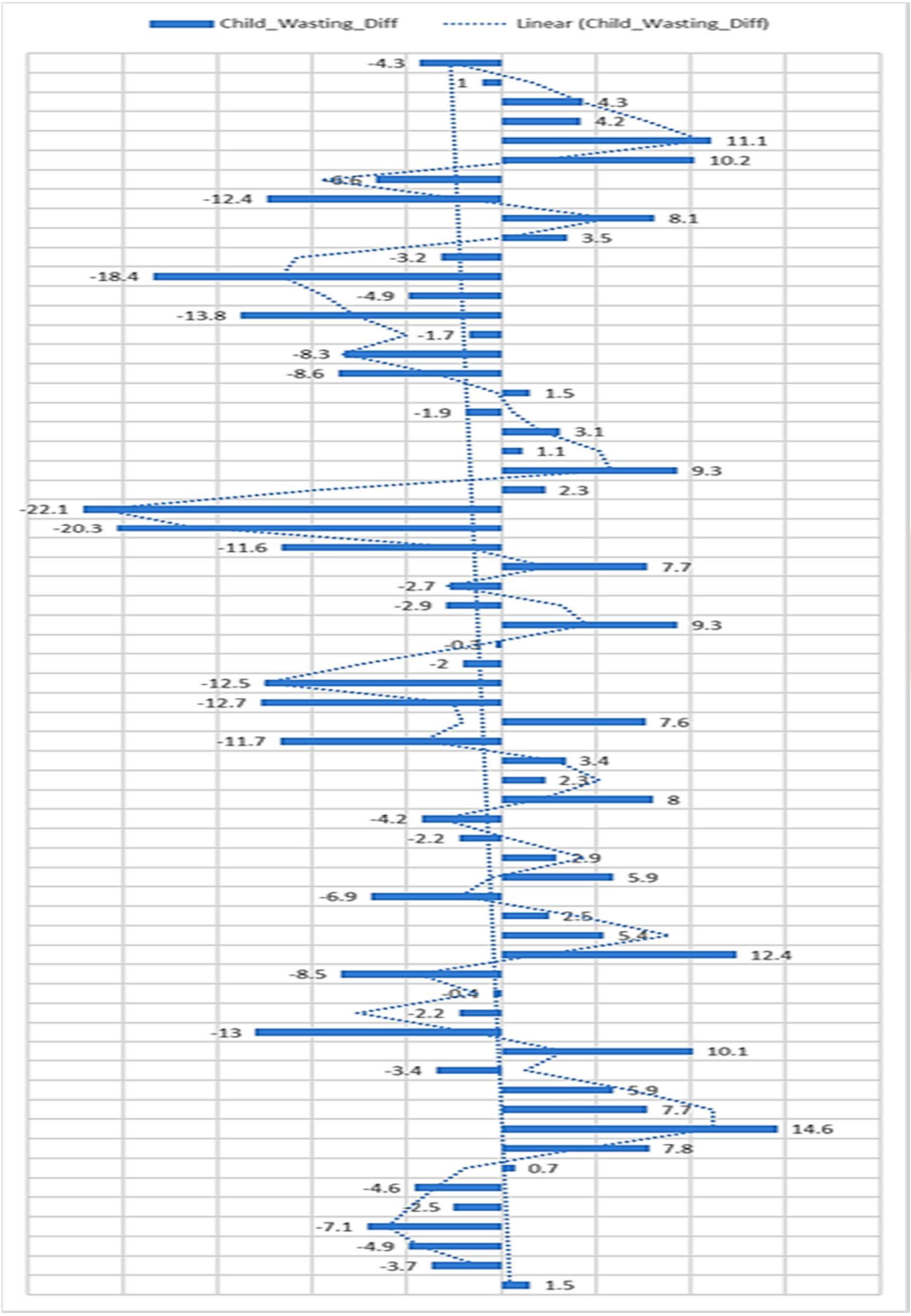
PENDIX A-6: TABLE 7- CHILD ANANEMIA

District	Poverty reduction	Poverty reduction percentage
Agra	21.3	41.19922631
Aligarh	-4.2	-6.28742515
Ambedkar Nagar	-7.1	-11.4516129
Auraiya	-15.9	-19.85018727
Azamgarh	-2.9	-4.692556634
Baghpat	-18.6	-23.60406091
Bahraich	-1.8	-2.448979592
Ballia	11.4	18.93687708
Balrampur	3	4.143646409
Banda	19.5	31.10047847
Barabanki	21.6	49.20273349
Bareilly	-6.6	-8.882907133
Basti	-13.2	-18.43575419
Bijnor	-11.5	-15.8839779
Bulandshahr	-1.7	-2.583586626
Chandauli	-1.8	-2.710843373
Chitrakoot	-17.2	-23.72413793
Deoria	-13.4	-19.6193265
Etah	37.2	92.53731343
Etawah	34	85
Faizabad	-5.8	-9.133858268
Farrukhabad	38.4	99.2248062
Fatehpur	34.1	77.5
Firozabad	26.7	56.56779661
Gautam Buddha Nagar	-5.4	-7.906295754
Ghazipur	3	4.373177843
Gonda	-10.6	-14.60055096
Gorakhpur	7.5	12.52086811
Hamirpur	13	23.42342342
Hardoi	31.5	70.62780269
Jalaun	-29.6	-34.90566038
Jaunpur	7.3	12.5862069
Jhansi	-7.5	-9.640102828
Jyotiba Phule Nagar	-5.7	-7.569721116
Kannauj	38.1	91.80722892
Kanpur Dehat	3.4	5.167173252
Kanpur Nagar	2.7	3.668478261
Kashiram nagar	39.9	97.55501222
Kaushambi	-1.9	-2.818991098
Lalitpur	-19.8	-26.12137203
Lucknow	-19.1	-26.52777778
Mahamaya Nagar	23.2	47.44376278
Maharajganj	1.7	2.891156463
Mahoba	-7.5	-9.664948454
Mainpuri	28.7	68.82494005
Mathura	20.7	36.63716814
Mau	1.4	2.283849918
Meerut	-16.7	-23.22670376
Mirzapur	-3.2	-5.079365079
Pilibhit	-20.2	-26.06451613
Pratapgarh	-3.6	-5.844155844
Prayagraj	-10.2	-16.80395387
Raebareli	16.2	26.910299
Rampur	-7.4	-9.61038961
Saharanpur	-7.4	-9.801324503
Sant Kabir Nagar	2.5	3.617945007
Sant Ravidas Nagar (Badhohi)	-3.1	-4.975922953
Shahjahanpur	-1.5	-1.950585176
Shravasti	-8.7	-12.44635193
Siddharthnagar	10.7	16.43625192
Sitapur	13.8	26.23574144
Sonbhadra	4.9	8.43373494
Unnao	32.4	74.31192661
Varanasi	6.7	11.45299145

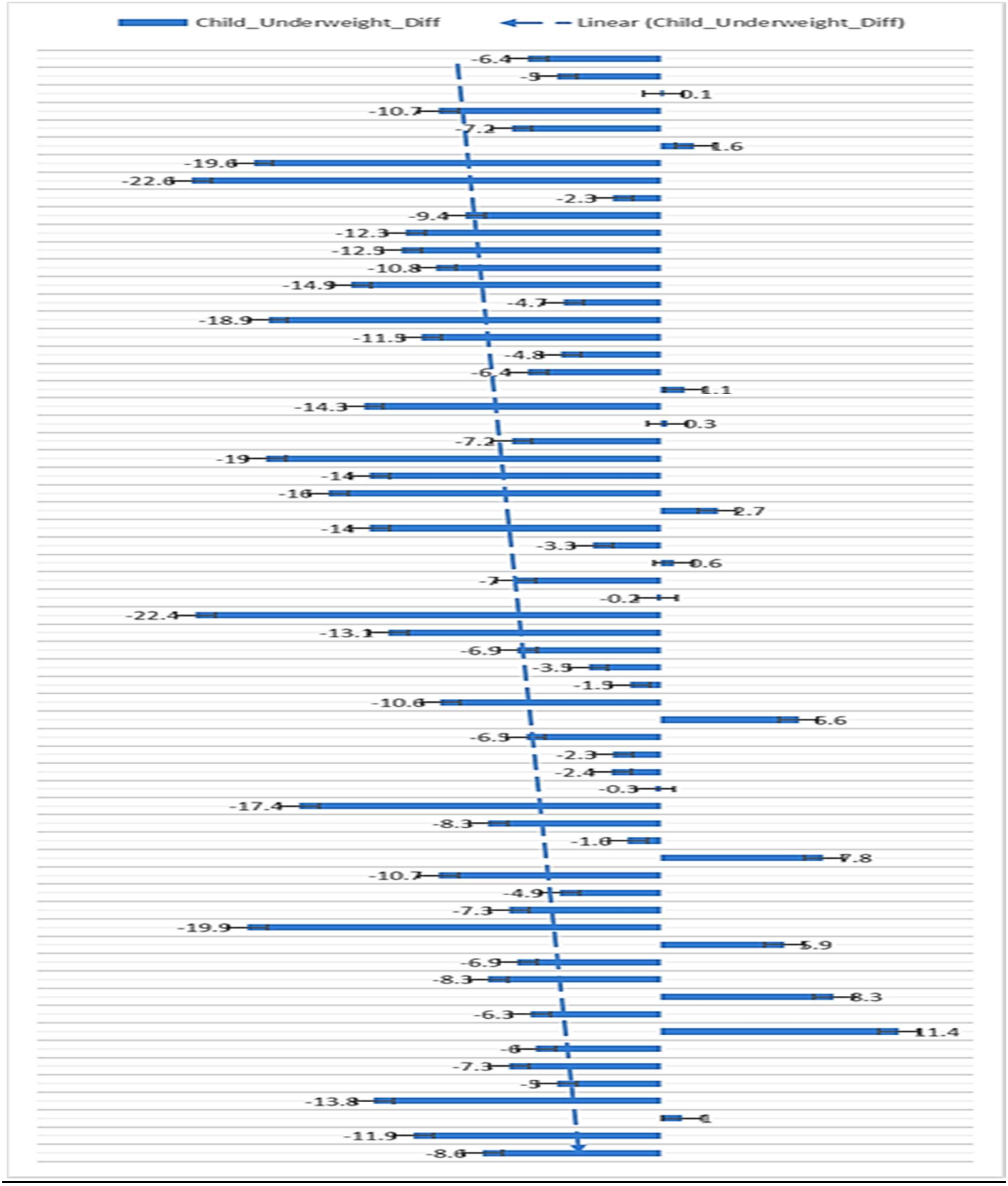
APPENDIX B-1: FIGURE 1- CHILD STUNTING



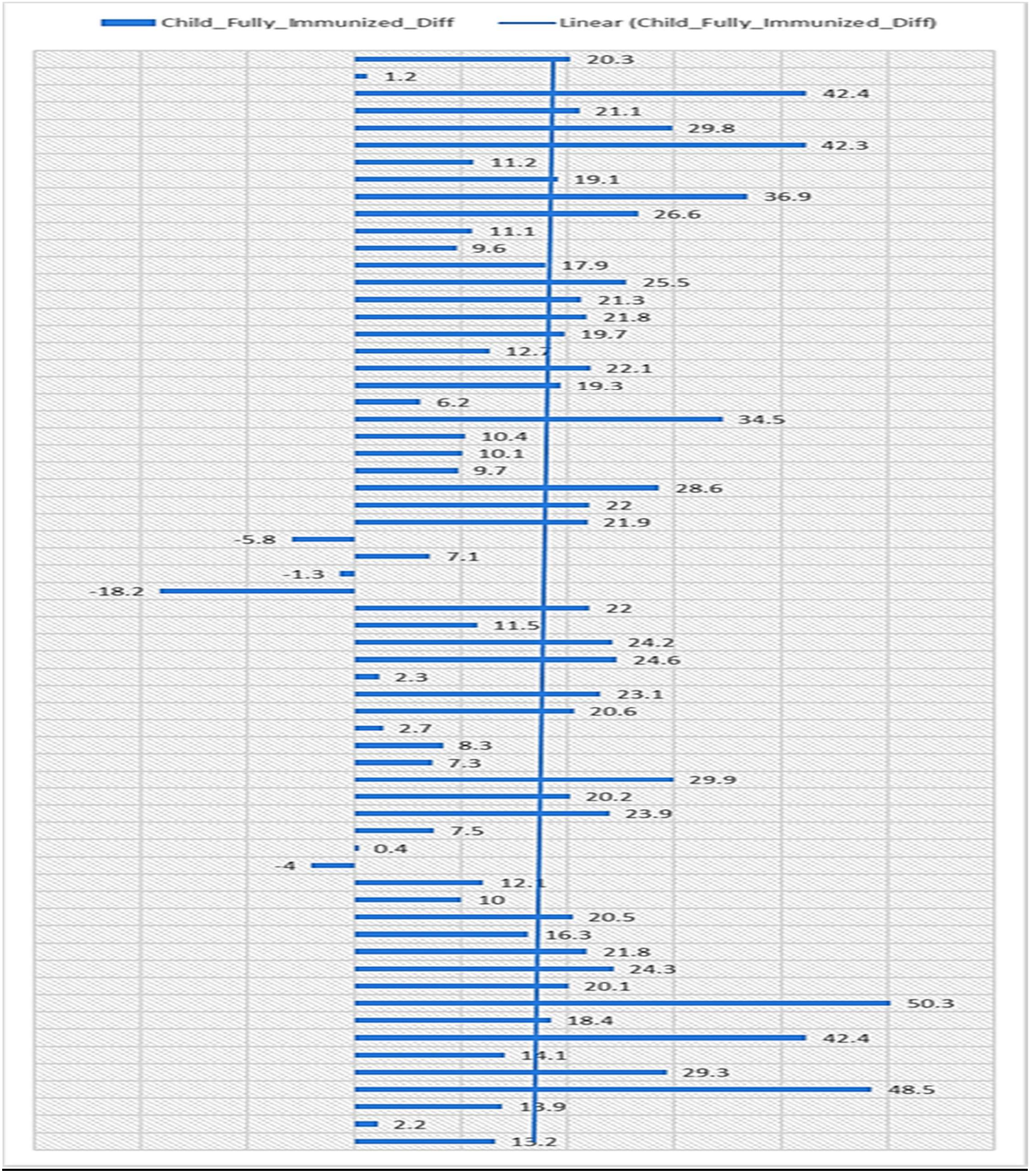
APPENDIX B-2: FIGURE 2- CHILD WASTING



APPENDIX B-3: FIGURE3- CHILD UNDERWEIHGHT



APPENDIX B-4: FIGURE4- CHILD IMMUNIZATION



APPENDIX B-5: FIGURE 5- CHILD ANAEMIA