

# CHILD STUNTING AND OVERWEIGHT: INSIGHTS AND POLICY RECOMMENDATIONS FROM 12 COUNTRY ANALYSES

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## KEY MESSAGES

- This brief shares an analysis of trends in stunting and overweight among children under five – two of the six Global Nutrition Targets set by the World Health Assembly (WHA) for achievement by 2025 – in 12 focus countries.
- Of the 12 countries analysed, only one (Kenya) is currently on track to meet the 2025 stunting reduction target. In contrast, progress on the child overweight target is more promising, with nine out of 12 countries on track to achieve it by 2025.
- Deep dives into likely drivers of progress highlight the need for multi-sectoral approaches, strong political commitment, and targeted interventions. A shift towards integrated, data-driven, and context-specific solutions is crucial.



## THE PROBLEM:

Malnutrition remains one of the most significant public health challenges globally, particularly affecting children under five years of age. Undernutrition – manifesting as stunting, wasting, micronutrient deficiency – and the rising burden of childhood overweight and obesity coexist in many low- and middle-income countries, undermining child survival, growth, and development. In response to this global challenge, the World Health Assembly (WHA) in 2012 endorsed the Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition through Resolution 65.6 (1,2). The WHA identified, six Global Nutrition Targets to be achieved by 2025<sup>1</sup>.

<sup>1</sup> The six global nutrition targets of the WHA related to low birthweight, exclusive breastfeeding, child growth (ie, wasting, stunting, and overweight), and anaemia among women of reproductive age.

In 2015, the United Nations General Assembly reaffirmed its commitment to sustainable development by endorsing the 2030 Agenda for Sustainable Development, and its 17 Sustainable Development Goals (SDGs). Goal 2 'Zero Hunger' includes Target 2.2 with Indicators 2.2.1 (stunting), 2.2.2 (childhood wasting / overweight), and 2.2.3 (anaemia among women of reproductive age), thus overlapping with four of the 2025 Global Nutrition Targets.

Approaching the end of the 2025 WHA target year, this analysis looks at progress made between 2012 and 2022 in two of the six WHA nutrition targets (child stunting and child overweight) for 12 focus countries. Globally, progress on stunting and child overweight has been mixed.

 *The global stunting burden decreased marginally from 177.9 million children in 2012 to 148.1 million in 2022 – a reduction of just 16.7%, far short of the 40% target set for 2025 (106.7 million children) (3).* 

The prevalence of child overweight has remained stable globally, rising slightly from 5.5% in 2012 to 5.6% in 2022, suggesting that this target is likely to be achieved at a global level (3). However, significant regional and country-level disparities persist in terms of performance on both targets.

The Global Alliance for Improved Nutrition (GAIN) operates in 12 countries across Africa and Asia<sup>2</sup>. In all of these countries, child stunting remains a malnutrition challenge of political concern, while overweight and obesity pose a growing challenge. This brief provides highlights from the analysis of stunting and overweight trends among children under five years of age across these 12 countries. It evaluates progress toward WHA goals, identifies lessons learned, and discusses future policy implications, aiming to inform GAIN's work and contribute to the broader dialogue on ending child malnutrition.

## URGENCY

Addressing the gaps in achieving the WHA Nutrition Targets is critical, as undernutrition and poor diet-related nutrition outcomes continue to pose serious public health challenges. Linear growth in early childhood is a strong marker of healthy growth given its association with morbidity and mortality risk, non-communicable diseases in later life, and learning capacity and productivity (4). Childhood overweight increases the risk of obesity, non-communicable diseases, premature death, and disability in adulthood (5).

All forms of malnutrition share common drivers such as early life nutrition, dietary diversity, food environments, and socioeconomic factors, which can be leveraged to improve impact (6). Promoting access to affordable and healthy diets is central to tackling malnutrition in all its forms and to achieving universally desired global nutrition targets. Yet, for an estimated 2.8 billion people around the world, healthy diets remain unaffordable (7).

Meeting the WHA Nutrition Targets will not only save lives but also contribute to long-term social and economic gains. The economic benefits of addressing child stunting are significant; potentially increasing a country's GDP by up to 11%, lowering healthcare costs, and generating high returns on investment (8). The global cost of overweight and obesity among people of all ages was estimated to be USD 1.96 trillion in 2020 (9). The recently released Investment Framework for Nutrition 2024 underscored the economic returns of addressing undernutrition, with a return of USD 23 for every dollar invested. It also emphasised that the economic benefits associated with these interventions far outweigh the costs of inaction, which would amount to USD 41 trillion over ten years (10).

<sup>2</sup> Bangladesh, Benin, Ethiopia, India, Indonesia, Kenya, Mozambique, Nigeria, Pakistan, Rwanda, Tanzania, and Uganda.

# WHERE DO COUNTRIES STAND WITH RESPECT TO CHILD STUNTING AND OVERWEIGHT?

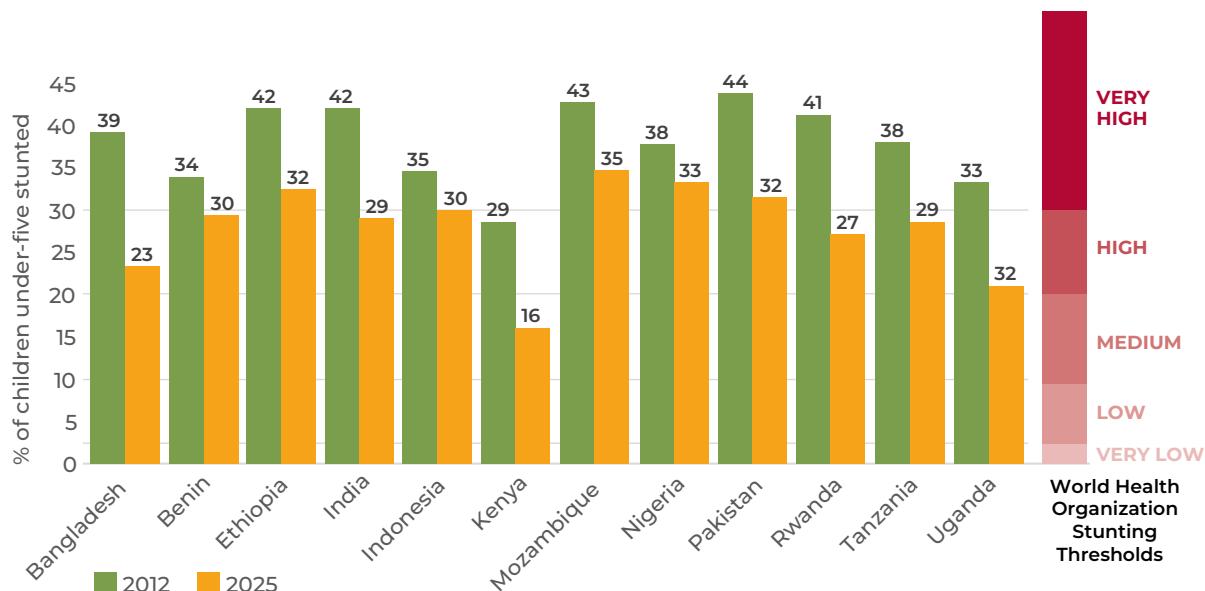
To track progress against WHA targets on stunting and overweight for each of the 12 countries, the model-based estimates from Joint Malnutrition Estimates (JME) were used.

Based on the data analysis for the period 2012-2022, each country's Average Annual Rate of Reduction (AARR) was calculated. This was then used to classify country progress following the methodology developed by WHO-UNICEF Technical Expert Advisory Group on Nutrition Monitoring (11)<sup>3</sup>. Projections of stunting and overweight prevalences in 2025 were also calculated (see **Figures 1** and **3**).

All 12 countries are projected to reduce the proportion of children under-five who are stunted between 2012 and 2025, but projected prevalences remain *High* or *Very High* in all cases except for Kenya, where it is *Medium*.

Despite progress, these countries still account for **58% of the global burden** in terms of numbers of stunted children. Between 2012 and 2022, the absolute number of stunted children decreased in nine of the cases, but increased in Benin, Mozambique, and Tanzania due to a combination of modest decline in stunting prevalence and high under-five population growth. As in the baseline year (2012), India, Nigeria, and Pakistan continue to bear the highest burden of stunted children among the 12 countries.

**Figure 1:** Change in stunting rates – 2012 to 2025 (projection) in 12 countries



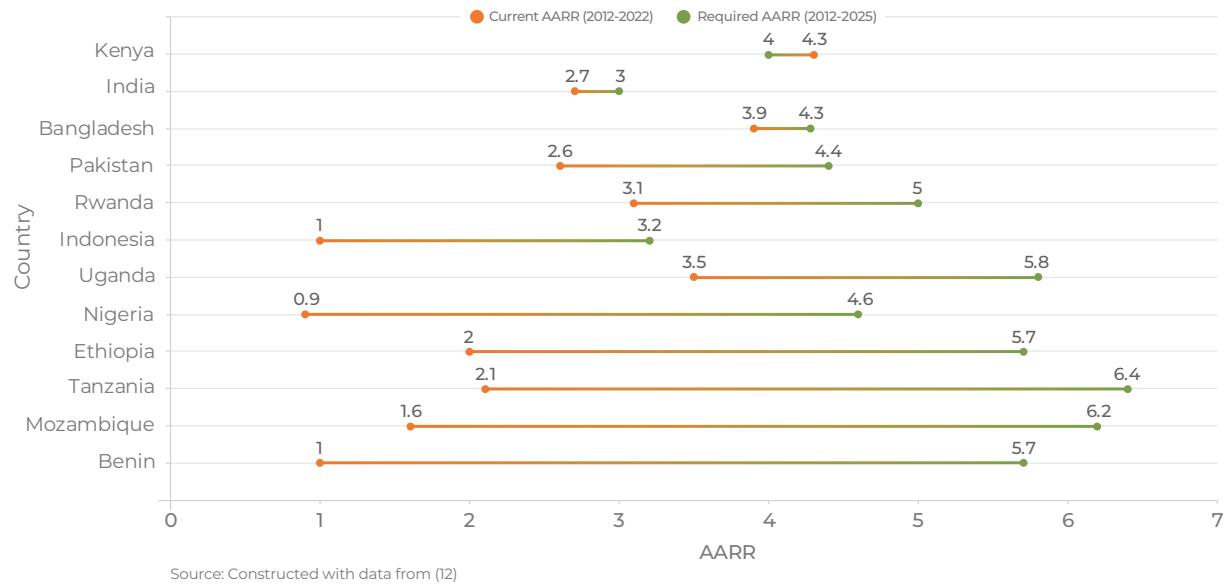
Source: Constructed with data from (12)

As far as achieving the WHA stunting target is concerned, Kenya is the only country where the current AARR is more than the required AARR, indicating that the country is “on track” to achieve the 2025 WHA stunting target. The other 11 countries are classified as “off track – some progress” (**Figure 2**).

For Bangladesh and India, current AARRs are close to required AARRs, indicating that these countries have a high chance of achieving the stunting target by 2025 if they accelerated progress between 2022 and 2025. Even though Pakistan and Rwanda have experienced a significant decline in stunting prevalence from 2012 to 2022, the AARR needed to achieve the 2025 stunting target remains substantially higher. For the remaining seven countries, the substantial gap between the current AARR and the required AARR suggests a very low likelihood of achieving the 2025 stunting target.

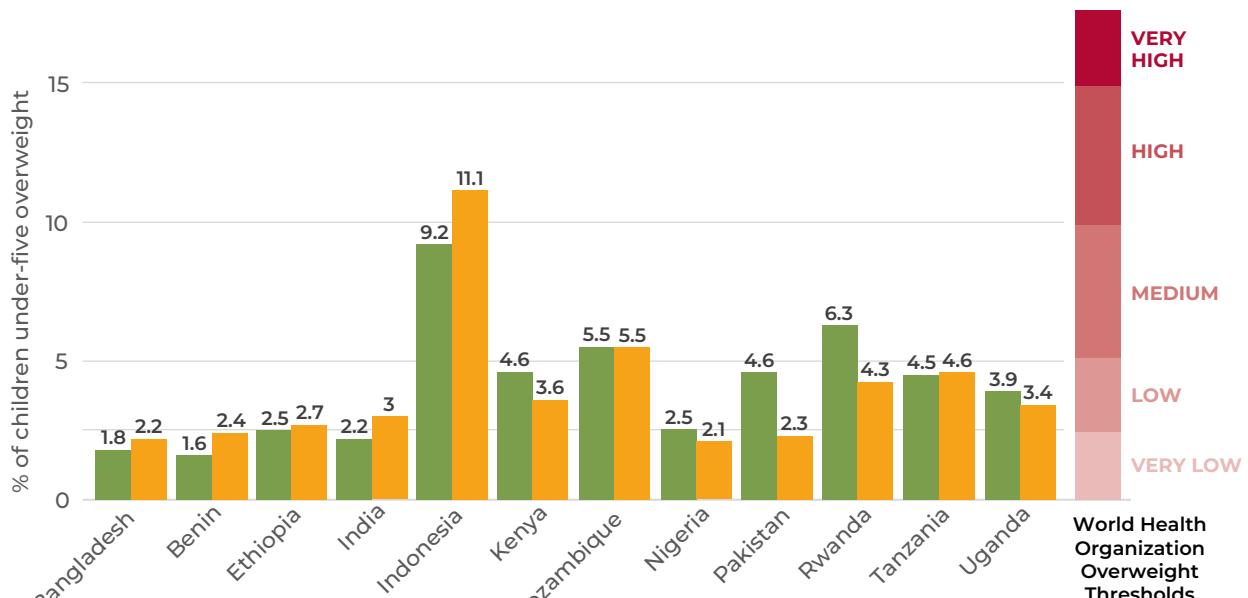
<sup>3</sup> This methodology for monitoring progress on the stunting target classifies a country as on track if the current AARR > required AARR; off track- some progress if the current AARR < required AARR but > 0.5; and off track- no progress or worsening if current AARR < required AARR and < 0.5. This methodology for monitoring progress on the overweight target classifies a country as on track if current AARR > -1.5 and off track if current AARR < -1.5.

**Figure 2: Child stunting – comparison between current AARR and required AARR in 12 countries**



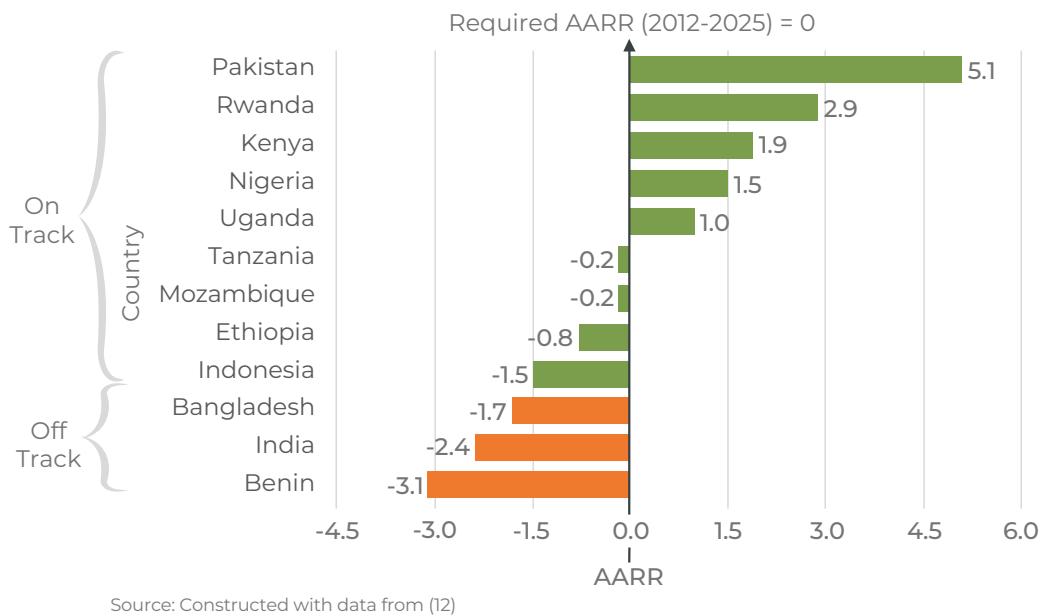
In terms of child overweight, the country cases show either small projected increases (6 cases), small projected declines (5 cases), or no change (1 case). Projected 2025 prevalences remain Low or Very Low except in two cases – Indonesia, which is High, and Mozambique, which is Medium.

**Figure 3: Change in overweight rates – 2012 to 2025 (projection) in 12 countries**



Nevertheless, of the 12 countries, nine (Ethiopia, Indonesia, Kenya, Mozambique, Nigeria, Pakistan, Rwanda, Tanzania, and Uganda) are on track to achieve the WHA target on child overweight by 2025. The remaining three countries (Bangladesh, Benin and India) are off track to achieve the WHA target on child overweight by 2025 (Figure 4).

**Figure 4: Child overweight – comparison between current AARR and required AARR in 12 countries**



## DISCUSSION: LIKELY DRIVERS OF PROGRESS IN CHILD STUNTING AND OVERWEIGHT

Eight country deep dives<sup>4</sup> were undertaken, with a review of the literature used to reveal factors likely contributing to meaningful reductions in child malnutrition (12). Multi- or cross-sectoral approaches, strong political commitment, and targeted interventions to address both immediate and underlying determinants have driven meaningful reductions in stunting across several of the studied countries, including Kenya, India, Bangladesh, Uganda, and Rwanda (13–15). Having national plans that include targets aligned to global targets may also boost accountability and political buy-in (16,17). Socioeconomic advances as well as policy reforms to make services such as healthcare and nutrition available to mothers and infants, more inclusive have been noted as contributing, for instance in Bangladesh and India; the slower progress in Nigeria could imply more care needs to be taken to ensure advances are equitable and social spending reaches vulnerable groups (18–21). Indeed, economic growth alone did not guarantee better outcomes on stunting: inequality, affordability of healthy diets and diet quality remained barriers in selected cases, particularly Nigeria (7,22). Decentralised and localised actions, for instance in Bangladesh, India, Rwanda and Kenya, have helped tailor interventions to regional needs (23,24). The strong progress in Kenya highlights how continued investments in nutrition-sensitive programs, data-driven decision-making<sup>5</sup>, and strengthened social protection systems will be needed to continue reaping nutrition gains.

Considering overweight, national policies and programmes, such as those promoting healthy diets, increased physical activity, and reduction of risk factors including excessive sugar and fat intake, can help effectively control rising trends of childhood overweight (25–27). Community-driven and multisectoral approaches also play a key role, as described in Pakistan and Indonesia. Preventive strategies like promoting healthy diets, physical activity and early screening for childhood obesity in primary healthcare facilities contributed to the success of child overweight decline in Rwanda (28). The case of Indonesia is of particular interest, given it is the only studied country where a once-

4 In-depth studies were conducted for eight countries. Stunting was the focus in six: Bangladesh, India, Kenya, Nigeria, Rwanda, and Uganda. Overweight was examined in four: Indonesia, Nigeria, Pakistan, and Rwanda. Nigeria and Rwanda were included in both focus areas.

5 Key health and nutrition platforms in Kenya include the Kenya Health Information System (KHIS), District Health Information System 2 (DHIS2), and the Kenya Health Observatory (KHO). The KHO dashboard integrates indicators on service demand, supply, and quality, allowing policymakers to monitor gaps and respond with timely, evidence-based decisions.

increasing trend of childhood overweight has reversed. It is also a challenging context of easily available ultra-processed food and high urbanisation (29). Recent success has been attributed to policy and governance reforms, including public health campaigns (25,30). Emphasis has also been placed on the need for greater government intervention in the future, for instance through taxes and labelling on unhealthy options<sup>6</sup>, and in implementing school-based interventions (29).

Across all cases and impacting both stunting and overweight, the challenge of good dietary diversity persists. High proportions of young children across the sample countries lack a minimum acceptable diet<sup>7</sup> (31,32) (Figure 5).

**Figure 5:** Examples of dietary inadequacies in children 6 to 23 months



These findings highlight the need for continued investments in food systems transformation, behaviour change communication, and policy enforcement.

6 Such as foods and drinks high in fat, sugar, and salt.

7 This indicates children 6-23 months of age who consumed a minimum acceptable diet during the previous day. The minimum acceptable diet is defined as: for breastfed children: receiving at least the minimum dietary diversity and minimum meal frequency for their age during the previous day, for non-breastfed children: receiving at least the minimum dietary diversity and minimum meal frequency for their age during the previous day as well as at least two milk feeds.

## CONCLUSION

Some countries have demonstrated effective strategies for reducing child stunting and overweight, but the overall pace of improvement, particularly on stunting which poses a large public health concern in almost every case, remains slow in most contexts. Countries like Kenya, India, Bangladesh, Uganda, and Rwanda have illustrated how multi-sectoral approaches, strong political commitment, and targeted interventions have driven meaningful reductions in child stunting. Similarly, Rwanda, Nigeria and Pakistan provided deeper insights into how national policies and programmes can help to control rising trends of childhood overweight.

To accelerate progress toward the 2025 WHA Global Nutrition Targets and looking forward to 2030 and meeting the SDGs, countries must urgently adopt integrated, data-driven, and context-specific interventions to effectively address child stunting and overweight. This includes strengthening multi-sectoral coordination and investing in food system transformation. Equally important is establishing strong accountability mechanisms to ensure policies are effectively implemented and responsive to changing needs. Without decisive action, many countries risk falling short of their global nutrition targets.

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