

The cost of inaction:

The price of unmade progress towards the global nutrition targets

UNDERNUTRITION IS COSTING AFRICA \$153 BILLION PER YEAR

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BACKGROUND

The interrelated crises of the COVID-19 pandemic, climate change and cost of living have put unprecedented pressure on social sector accounts and caused governments to consider diverting investments in public health and prevention programs to bolster short-term responses to urgent needs.

In 2012, the World Health Assembly (WHA) set global nutrition targets to spur action and investment into addressing malnutrition. These targets aimed to achieve a 40% reduction in the number of children under five who are stunted, a 50% reduction of anaemia in women of reproductive age, a 30% reduction in low birthweight and an increase in the rate of exclusive breastfeeding in the first six months to 50% by 2025. At present, the African continent is off course to meet targets related to stunting, anaemia and low birthweight.

In Africa, every year, more than 12 million children under five are stunted, 21 million are anaemic, 5 million are born with low birthweight and more than 23 million are being sub-optimally breastfed. Additionally, more than 132 million older¹ adolescent girls and women (15–49y) are suffering from anaemia.

Through the development of an online, user-friendly “Cost of Inaction” tool, Nutrition International has sought to support policy makers as they weigh their options. The tool provides an analysis of the costs of “inaction” — of allowing limited to no progress on key indicators of undernutrition to be made, and how doing so affects countries’ income in both the immediate and long term. The model also estimates anticipated economic gains that can be expected from progress on these indicators. In short, the new tool demonstrates that inaction on malnutrition comes at a significant price — one that can be averted through investments in proven, low-cost, high-impact nutrition interventions.





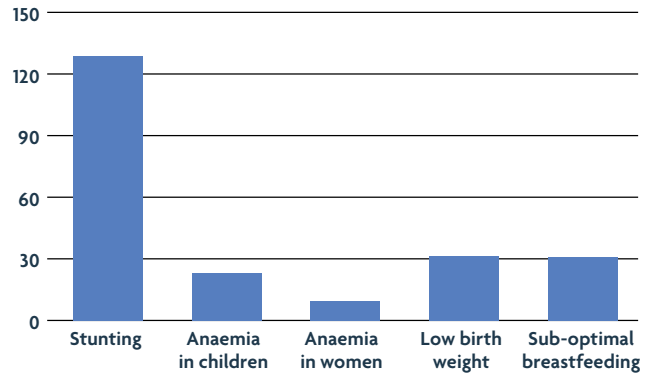
THE FINDINGS

The Nutrition International Cost of Inaction Tool estimates the health and economic consequences of stunting, low birthweight and anaemia. The health and economic impacts of suboptimal breastfeeding are calculated by the Nutrition International Cost of Not Breastfeeding Tool. For each nutritional deficiency, the tools calculate health and human capital impacts at current prevalence rates, and the current and future economic costs due to mortality and productivity losses.

Findings from the tool estimate that the total global economic cost of undernutrition is more than US \$761 billion per year.² In Africa alone, undernutrition costs US \$153 billion per year in economic losses associated with stunting, anaemia in children, anaemia in adolescent girls and in women of reproductive age, low birthweight, and a lack of protection, promotion and support for breastfeeding.³

The impacts of poor nutrition are wide-ranging and serious. When a population is undernourished, they are more vulnerable to preventable infections and diseases, leading to increased spending on healthcare and treatment. Persistent malnutrition in at-risk populations – including infants, young children and pregnant women – can also be life-threatening. Malnutrition impacts school performance and educational attainment, in turn affecting workforce capabilities and performance. Nutrition is foundational for human capital and economic development.

ECONOMIC COST OF INACTION IN AFRICA, US\$ B PER YEAR



CASE STUDY COUNTRIES: ETHIOPIA, KENYA AND NIGERIA

The table on the following page presents the annual health and economic costs of stunting, anaemia, low birthweight and not supporting, protecting and promoting breastfeeding in three large African countries. The costs are calculated based on current prevalence levels and the WHA target prevalence levels for comparison of the potential health and economic gains. For anaemia in children, a 50% reduction in prevalence is assumed, similar to the WHA target for anaemia in women. The methods, data sources and estimates for other indicators can be found for over 140 countries around the world in the online Nutrition International [Cost of Inaction](#) and [Cost of Not Breastfeeding](#) tools.

KEY FINDINGS

Each year, in Africa, the current levels of stunting, low birthweight, anaemia and not protecting, promoting and supporting breastfeeding result in an estimated:

- **824,000** child deaths
- **127 million** IQ points lost
- **12,800** maternal deaths from cancers and type II diabetes
- **US \$153 billion** in economic costs (or **5.3%** of the gross national income) due to cognitive and mortality losses

TABLE 1 – Annual estimates of costs of inaction in Ethiopia, Kenya and Nigeria

| | ETHIOPIA | | KENYA | | NIGERIA | |
|-----------------------------------|----------|------------------------|---------|------------------------|---------|----------------------|
| STUNTING | | | | | | |
| | CURRENT | TARGET* | CURRENT | TARGET | CURRENT | TARGET |
| Prevalence | 34.40% | 21.10% | 18.40% | 15.60% | 34.20% | 18.00% |
| Number of cases | 1.23M | 759,493 | 254,815 | 216,039 | 2.40M | 1.26M |
| Number of deaths | 52,018 | 32,018 | 9,495 | 8,095 | 248,961 | 130,961 |
| Economic cost (US \$) | 7.49B | 4.59B (↓ 2.90B) | 2.85B | 2.41B (↓ 433.00M) | 48.20B | 25.20B (↓ 23.00B) |
| ANAEMIA IN WOMEN AND GIRLS | | | | | | |
| | CURRENT | TARGET | CURRENT | TARGET | CURRENT | TARGET |
| Prevalence | 23.90% | 11.20% | 28.70% | 14.20% | 55.10% | 27.40% |
| Number of cases | 7.23M | 3.39M | 4.00M | 1.98M | 27.54M | 13.70M |
| Economic cost (US \$) | 352.54M | 165.21M (↓ 187.33M) | 305.52B | 151.16M (↓ 154.36M) | 3.16B | 1.57B (↓ 1.59B) |
| ANAEMIA IN CHILDREN** | | | | | | |
| | CURRENT | TARGET | CURRENT | TARGET | CURRENT | TARGET |
| Prevalence | 52.10% | 25.30% | 42.80% | 19.65% | 68.90% | 36.00% |
| Number of cases | 1.68M | 815,003 | 532,026 | 244,881 | 4.32M | 2.26M |
| Economic cost (US \$) | 1.10B | 533.60M (↓ 565.24M) | 648.25M | 298.38M (↓ 349.87M) | 7.78B | 4.06B (↓ 3.71B) |
| LOW BIRTHWEIGHT*** | | | | | | |
| | CURRENT | TARGET | CURRENT | TARGET | CURRENT | TARGET |
| Prevalence | 13.20% | 9.24% | 10.00% | 8.20% | 7.30% | 5.11% |
| Number of cases | 527,394 | 367,578 | 149,575 | 122,651 | 592,146 | 413,691 |
| Number of deaths | 20,088 | 13,988 | 4,204 | 3,447 | 32,899 | 22,999 |
| Economic cost (US \$) | 1.81B | 1.26B (↓ 547.00M) | 887.18M | 727.18M (↓ 160.00M) | 6.24B | 4.34B (↓ 1.90B) |
| EXCLUSIVE BREASTFEEDING | | | | | | |
| | CURRENT | TARGET | CURRENT | TARGET | CURRENT | TARGET |
| Prevalence | 58.80% | 70.00%**** | 61.40% | 70.00%**** | 28.70% | 50.00% |
| Number of cases of diarrhoea | 3.30M | 3.11M | 1.39M | 1.34M | 12.32M | 11.62M |
| Number of deaths | 13,916 | 12,004 | 4,469 | 3,869 | 97,318 | 81,186 |
| Economic cost (US \$) | 961.70M | 733.50M (↓ 228.20M) | 713.90M | 568.70M (↓ 145.20M) | 12.50B | 9.40B (↓ 3.10B) |

NOTES:

* Target prevalence is from WHA target tracking tool.

** Anaemia in children uses same target as anaemia in women (50% reduction in prevalence).

*** For countries missing low birthweight data in the WHA tool, Demographic and Health Survey estimates are adapted.

**** For countries that have reached 50%, an extended target scenario of 70% is proposed.



CALL TO ACTION

The cost of inaction on nutrition continues to be significant for people, communities and countries. Investing in preventing undernutrition can save lives and improve the health, human capital and economic development of individuals and countries.

- 1 FOR ADVOCATES:** Use the online Nutrition International [Cost of Inaction](#)⁴ and [Cost of Not Breastfeeding](#)⁵ tools to:
 - Share the tools' results via social media **#NutritionNow**
 - Engage journalists to write articles with the country-level cost of inaction data
 - Include the tools' results in policy briefs, strategic plans, or investment cases to governments or donors
 - Coordinate and support collective advocacy of the WHO Anaemia Action Alliance, Global Breastfeeding Collective and Scaling Up Nutrition Movement in your country
- 2 FOR POLICY MAKERS IN AFRICA:** Regional, national and sub-national policy makers can use the data from the tool to justify further analyses and increase budget allocations towards nutrition interventions. While the cost of inaction on undernutrition is high, there are many proven interventions, policies and programs that have multi-sectoral benefits for the health and human capital of economies in Africa.
- 3 FOR GOVERNMENT AND PHILANTHROPIC DONORS:** Greater nutrition investment is critically needed from governments and donors to prevent additional health, human capital and economic costs from undernutrition, and to meet WHA nutrition targets in Africa. Investments in nutrition are cost-effective, smart and sustainable and support Africa's economic growth and independence.

ABOUT NUTRITION INTERNATIONAL TOOLS

The Nutrition International Cost of Inaction Tool was developed in 2023 by Nutrition International in partnership with Limestone Analytics with funding from the Government of Canada. The Cost of Not Breastfeeding Tool was created in 2017 by Alive and Thrive with funding from the Bill & Melinda Gates Foundation and updated by Nutrition International and Alive & Thrive in partnership with Limestone Analytics in 2022 with funding from Government of Canada. Both tools present results for over 140 countries to see the potential benefits if action is taken now. All estimates included in this brief are as of September 2023. Visit both tools on Nutrition International's website to read about the methodology and data sources, and learn more about Nutrition International.

ENDNOTES

- 1 Country-wise data is not available on anaemia rates in younger adolescent girls (10–14y)
- 2 Jain S., Ahsan S., Walters, D. "The Cost of Inaction on the Global Nutrition Targets for Stunting, Anemia, Breastfeeding, Low Birthweight: Results from new modelling tools." Forthcoming. 2024
- 3 The total economic cost is lower than the sum of each individual cost. This estimate avoids double counting of costs associated with co-occurrence of stunting, anaemia and low birthweight.
- 4 Available at <https://www.nutritionintl.org/learning-resource/cost-inaction-tool/>
- 5 Available at <https://www.nutritionintl.org/learning-resource/the-cost-of-not-breastfeeding-tool/>