

UNDERNUTRITION IS COSTING THE ASSOCIATION OF SOUTHEAST ASIAN NATIONS USD \$65 BILLION PER YEAR

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 for addressing malnutrition. In May 2025, the targets were revaluated, reset and extended to 2030. The 2030 targets aim to achieve a 40% reduction in the number of children under five who are stunted, a 50% reduction of anaemia prevalence in women of reproductive age, a 30% reduction of low birthweight among newborns and an increase in the rate of exclusive breastfeeding to 60% in the first six months. Targets have also been set on overweight and obesity, and on wasting¹. At present, most Association of Southeast Asian Nations (ASEAN) member countries are off course to meet these targets.

In the ASEAN region, more than 14 million children under five are stunted, 15 million are anaemic, 1.4 million are born with low birthweight and close to six million are being sub-optimally breastfed. Additionally, more than 47 million older² adolescent girls and women (15-49 years) suffer from anaemia².

Through the development of an online, user-friendly Cost of Inaction Tool, Nutrition International has sought to support policy makers as they assess their nutrition programs weigh their options. The tool provides an analysis of the costs of "inaction" – of allowing limited to no progress on key indicators of undernutrition and how such inaction doing so affects countries' income in both the immediate and long term. In short, the new tool demonstrates that inaction on malnutrition comes at a significant price – one that can be averted through investments in proven, cost-effective, high-impact nutrition interventions.



THE FINDINGS

The impacts of poor nutrition are wide-ranging and serious. Findings from the Cost of Inaction Tool estimate that the total global economic cost of undernutrition is more than USD \$761 billion per year. In ASEAN, at least USD \$65 billion per year could be saved with increased investments in stunting, anaemia in children, anaemia in adolescent girls and women of reproductive age, low birthweight, and the protection, promotion and support for breastfeeding.^{3,4}

When a population is undernourished, it is more vulnerable to preventable infections and diseases. With adequate nutrition, not only does a population strengthen immune systems, but healthcare costs and treatment expenses are also reduced. Ensuring proper nutrition for vulnerable groups, such as infants, young children and pregnant women is key to unlocking their potential. When children are well-nourished, they are more likely to succeed in school, which in turn helps them to live a better life, thrive and contribute to socio-economic development.

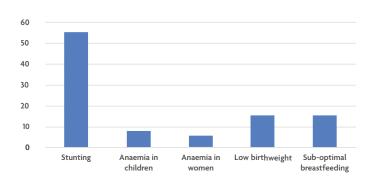
KEY FINDINGS

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

- 60,000 child deaths
- 31 million
 IQ points lost
- 11,000 maternal deaths from cancers and type II diabetes
- 5 million school years lost
- USD \$65 billion
 in economic costs (or 2.3% of the gross national income) due to cognitive and mortality losses

Exclusive breastfeeding prevalence data is unavailable for Brunei Darussalam and Singapore; this estimate reflects data from the remaining eight ASEAN countries

ECONOMIC COST OF INACTION IN ASEAN, USD \$ BILLION PER YEAR



ASEAN MEMBER COUNTRIES

The tables on the following pages present the annual health and economic costs of stunting, anaemia, low birthweight, and not supporting, protecting and promoting breastfeeding in 10 ASEAN countries.

The costs are calculated based on current prevalence levels as well as 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, mirroring the WHA target for anaemia in women. The methods, data sources and estimates for additional indicators are available for over 140 countries around through Nutrition International's online Cost of Inaction⁵ and Cost of Not Breastfeeding⁶ tools.

TABLE 1 – Annual estimates of costs of inaction in ASEAN countriesⁱ

	LAO PDR		MYANMA	R	
STUNTING					
	CURRENT	TARGET*	CURRENT	TARGET	
Prevalence	27.7%	24.7%	24.1%	19.9%	
Number of cases	43,699	38,966	215,975	178,336	
Number of deaths	1,700	1520	8,200	6,800	
Economic cost (USD \$)	537M	479M (↓ 58M)	1.3B	1.1B (√ 218M)	
ANAEMIA IN W	OMEN OF RE	PRODUCTIVE A	\GE		
	CURRENT	TARGET	CURRENT	TARGET	
Prevalence	39.5%	18.1%	18.1%	19.7%	
Number of cases	794,884	364,238	823,469	2.8M	
Economic cost (USD \$)	79M	36M (√ 43M)	184.79M	96M (√ 108M)	
ANAEMIA IN CHILDREN**					
	CURRENT	TARGET	CURRENT	TARGET	
Prevalence	41.4%	21.0%	49.6%	24.7%	
Number of cases	58,757	29,804	400,188	199,287	
Economic cost (USD \$)	79M	40M (√ 39M)	260M	130M (↓ 130M)	
LOW BIRTHWE	GHT***				
	CURRENT	TARGET	CURRENT	TARGET	
Prevalence	16.7%	12.0%	12.5%	8.9%	
Number of cases	27,629	19,853	115,829	82,470	
Number of deaths	804	578	3,700	2,600	
Economic cost (USD \$)	182M	131M (↓ 51M)	376M	268M (√ 108M)	
EXCLUSIVE BRE	ASTFEEDING				
	CURRENT	TARGET	CURRENT	TARGET	
Prevalence	44.4%	60.0%	51.2%	60.0%	
Number of cases of diarrhoea	240,283	225,286	988,013	948,408	
Number of deaths	1,031	835	3,639	3,319	
Economic cost (USD \$)	180M	133M (√ 47M)	336M	282M (√ 54M)	

- * 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
 - i The countries are organized in decreasing order by the total cost of inaction as a proportion of their Gross National Income (GNI).

TABLE 1 cont'd – Annual estimates of costs of inaction in ASEAN countries¹

	CAMBODIA		INDONES	INDONESIA		
STUNTING	NTING					
7	CURRENT	TARGET*	CURRENT	TARGET		
Prevalence	Target achieved (22.3%)		31.0%	23.2%		
Number of cases			1.38M	1.03M		
Number of deaths			26,000	19,500		
Economic cost (USD \$)			29В	21.8B (√ 7.2B)		
ANAEMIA IN W	OMEN OF REP	RODUCTIVE A	GE			
	CURRENT	TARGET	CURRENT	TARGET		
Prevalence	47.1%	23.1%	31.2%	13.5%		
Number of cases	2M	995,131	22.2M	9.6M		
Economic cost (USD \$)	107M	53M (√ 54M)	2.4B	1B (↓ 1.4B)		
ANAEMIA IN CHILDREN**						
	CURRENT	TARGET	CURRENT	TARGET		
Prevalence	11.60%	8.0%	38.4%	18.5%		
Number of cases	141,763	77,246	1.5M	743,860		
Economic cost (USD \$)	128M	70M (↓ 58M)	3.9B	1.9B (√ 2B)		
LOW BIRTHWE	IGHT***					
	CURRENT	TARGET	CURRENT	TARGET		
Prevalence	11.4%	8.9%	9.9%	7.3%		
Number of cases	36,958	28,853	447,986	330,333		
Number of deaths	708	553	7,800	5,800		
Economic cost (USD \$)	151M	118M (√ 33M)	5B	3.7B (↓ 1.3B)		
EXCLUSIVE BREASTFEEDING						
	CURRENT	TARGET	CURRENT	TARGET		
Prevalence	Target achieved	(65%)	50.7%	60.0%		
Number of cases of diarrhoea			4.3M	4.1M		
Number of deaths			12,321	11,580		
Economic cost (USD \$)			5B	4.1B (√ 861M)		

- * 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
 - i The countries are organized in decreasing order by the total cost of inaction as a proportion of their Gross National Income (GNI).

TABLE 1 cont'd – Annual estimates of costs of inaction in ASEAN countriesⁱ

	PHILIPPINES		MALAYSIA	MALAYSIA		
STUNTING						
	CURRENT	TARGET*	CURRENT	TARGET		
Prevalence	28.8%	18.0%	21.9%	10.6%		
Number of cases	689,357	430,848	112,314	86,672		
Number of deaths	16,000	10,100	770	594		
Economic cost (USD \$)	8.1B	5.1B (√ 3B)	6.3B	4.9B (↓ 1.4B)		
ANAEMIA IN W	OMEN OF RE	PRODUCTIVE A	GE			
	CURRENT	TARGET	CURRENT	TARGET		
Prevalence	12.3%	8.4%	32.0%	15.0%		
Number of cases	3.6M	2.5M	2.9M	1.4M		
Economic cost (USD \$)	213M	145M (√ 68M)	690M	324M (√ 366M)		
ANAEMIA IN CHILDREN**						
	CURRENT	TARGET	CURRENT	TARGET		
Prevalence	13.5%	9.3%	24.6%	10.2%		
Number of cases	290,248	199,949	113,644	47,121		
Economic cost (USD \$)	406M	280M (↓ 126M)	815M	338M (√ 477M)		
LOW BIRTHWE	GHT***					
	CURRENT	TARGET	CURRENT	TARGET		
Prevalence	21.1%	14.8%	13.8%	9.1%		
Number of cases	531,865	373,062	71,376	47,067		
Number of deaths	8,500	6,000	433	286		
Economic cost (USD \$)	3.3B	2.3B (√ 983M)	2.1B	1.4B (√ 709M)		
EXCLUSIVE BREASTFEEDING						
	CURRENT	TARGET	CURRENT	TARGET		
Prevalence	54.9%	60.0%	40.3%	60.0%		
Number of cases of diarrhoea	3.1M	3M	149,779	97,245		
Number of deaths	6,556	6,342	82	49		
Economic cost (USD \$)	1.4B	1.3B (↓ 135M)	1.9B	1.2B (√ 615M)		

- * 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
 - i The countries are organized in decreasing order by the total cost of inaction as a proportion of their Gross National Income (GNI).

TABLE 1 cont'd – Annual estimates of costs of inaction in ASEAN countries¹

	VIETNAM		THAILAND			
STUNTING	'					
<u> </u>	CURRENT	TARGET*	CURRENT	TARGET		
Prevalence	19.3%	16.8%	11.8%	11.4%		
Number of cases	283,140	246,464	78,802	76,131		
Number of deaths	5,400	4,701	624	603		
Economic cost (USD \$)	5.9B	5.1B (√ 766M)	3.4B	3.2B (↓ 117M)		
ANAEMIA IN W	OMEN OF REP	RODUCTIVE AGE				
	CURRENT	TARGET	CURRENT	TARGET		
Prevalence	20.6%	8.5%	24%	11.1%		
Number of cases	5.3M	2.2M	4.1M	1.9M		
Economic cost (USD \$)	637M	263M (√ 374M)	994M	456M (√ 538M)		
ANAEMIA IN CI	ANAEMIA IN CHILDREN**					
	CURRENT	TARGET	CURRENT	TARGET		
Prevalence	22.9%	10.6%	24.9%	12.2%		
Number of cases	302,956	140,233	150,340	75,472		
Economic cost (USD \$)	742M	343M (√ 399M)	808M	405M (√ 403M)		
LOW BIRTHWE	IGHT***					
	CURRENT	TARGET	CURRENT	TARGET		
Prevalence	6.3%	5.3%	10.3%	7.3%		
Number of cases	92,836	78,100	66,456	47,100		
Number of deaths	1,600	1,349	475	337		
Economic cost (USD \$)	1B	839M (√ 161M)	1.5B	1.1B (√ 428M)		
EXCLUSIVE BREASTFEEDING						
	CURRENT	TARGET	CURRENT	TARGET		
Prevalence	24.0%	60.0%	14.0%	60.0%		
Number of cases of diarrhoea	1.8M	1.6M	798,111	711,337		
Number of deaths	3,786	3,503	2,152	2,092		
Economic cost (USD \$)	2.3B	1.2B (↓ 1.1B)	3B	1.5B (↓ 1.5B)		

- * 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
 - i The countries are organized in decreasing order by the total cost of inaction as a proportion of their Gross National Income (GNI).

	BRUNEI DARUSSALAM		SINGAPORE			
STUNTING						
	CURRENT	TARGET*	CURRENT	TARGET		
Prevalence	10.9%	10.7%	3.0%	2.3%		
Number of cases	690	677	1,457	1,117		
Number of deaths	8	8	3	2		
Economic cost (USD \$)	138M	135M (↓ 2.5M)	618M	474M (√ 144M)		
ANAEMIA IN W	OMEN OF REPR	ODUCTIVE AGE				
	CURRENT	TARGET	CURRENT	TARGET		
Prevalence	16.7%	7.4%	13.0%	5.8%		
Number of cases	19,826	8785	179,970	80,294		
Economic cost (USD \$)	15M	6.4M (√ 8.6B)	269M	120 M (√ 149M)		
ANAEMIA IN CHILDREN**						
	CURRENT	TARGET	CURRENT	TARGET		
Prevalence	20%	8.6%	13.5%	5.9%		
Number of cases	1,144	492	5,983	2,570		
Economic cost (USD \$)	28M	12M (√ 16M)	325M	139M (√ 186M)		
LOW BIRTHWE	GHT***					
	CURRENT	TARGET	CURRENT	TARGET		
Prevalence	13.6%	9.2%	11.0%	7.4%		
Number of cases	843	570	5,333	3,588		
Number of deaths	8	5	6	4		
Economic cost (USD \$)	87M	59M (√ 28M)	1.1B	731M (√ 369M)		
EXCLUSIVE BREASTFEEDING						
	CURRENT	TARGET	CURRENT	TARGET		
Prevalence	Data not available		Data not available			
Number of cases of diarrhoea						
Number of deaths						
Economic cost (USD \$)						

- * 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
 - i The countries are organized in decreasing order by the total cost of inaction as a proportion of their Gross National Income (GNI).

ABOUT NUTRITION INTERNATIONAL TOOLS

The Nutrition International Cost of Inaction Tool was released in 2024 by Nutrition International. in partnership with Limestone Analytics and with funding from the Government of Canada. The Cost of Not Breastfeeding Tool was created in 2017 by Alive & Thrive, with funding from the Gates Foundation, and it was 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 using standardized data from global health and development agencies including WHO, UNICEF, and the World Bank to see the potential benefits if action is taken now. All estimates included in this brief are as of June 2025. Visit both tools on Nutrition International's website to read about the methodology and data sources and to learn more about Nutrition International.

For further support, including additional analyses, tool demonstrations and technical assistance, you can reach out to Nutrition International at healthecon@NutritionIntl.org.

Cost of Inaction Tool

Cost of Not Breastfeeding Tool.

REFERENCES

- 1 World Health Organization. (2025). World Health Assembly re-commits to Global Nutrition Targets and Marketing Regulations. World Health Organization. https://www.who.int/news/item/27-05-2025-world-health-assembly-re-commits-to-global-nutrition-targets-and-marketing-regulations#:-text=Countries%20at%20the%20oseventy-eighth%20 World%20Health%20Assembly%20have.to%20regulate%20the%20 digital%20marketing%20of%20breast-milk%20substitutes
- 2 Country-wise data is not available on anaemia rates in younger adolescent girls (10–14y)
- 3 Jain S, Ahsan S, Robb Z, Crowley B, Walters D. The cost of inaction: a global tool to inform nutrition policy and investment decisions on global nutrition targets. *Health Policy and Planning*, 2024. https://doi.org/10.1093/heapol/czae056
- 4 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.
- 5 Available at https://www.nutritionintl.org/learning-resource/cost-inaction-tool/
- 6 Available at https://www.nutritionintl.org/learning-resource/the-cost-of-not-breastfeeding-tool/

