

Cost of Undernutrition on Health, Education and Productivity in Kenya

1. Effects on Health



Undernutrition increases the risk of illness and death among children

Out of **7.22 M** children under five years

Nearly **1.8 M** (26%) children are stunted
290,000 (4%) children are wasted
767,927 (11%) Children are underweight

Undernourished children have a higher risk of illness and death often associated with incidences of:

- Diarrhea
- Acute respiratory infections
- Pneumonia
- Malaria
- Anaemia

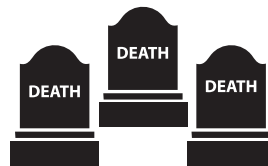


Undernutrition increased risk of

Diarrhea by **4.1%**

& **Fever / Malaria** by **1.8%**

among children **less than 5 years**



192,397 deaths

(among children in Kenya)

=

19.4%

of all the child deaths were directly associated with **undernutrition**



2.1 M episodes (90.4%) of illnesses among children were associated with **underweight**

which costed **KSh 13.1 Bn** (70.1%) to the health sector



52,194 episodes (2.2%) of all episodes of childhood illnesses were related to **low birth weight**

and utilized **KSh 4.75 Bn** (25.5%) of the total cost for treatment of childhood illnesses



176,277 episodes (7.4%)



of the other diseases estimated at **KSh 808.5M** (4.4%)

= **2.4M episodes**



Overall, the economic impact of child undernutrition on the health sector was equivalent to

KSh 18.6 Bn (0.3%) of the GDP



44% of the total costs associated with treatment of undernutrition were **Borne by families**

KSh 8.1 Bn

56% of the remaining costs were covered by the **Public health system**

KSh 10.5 Bn

2. Effects on Education



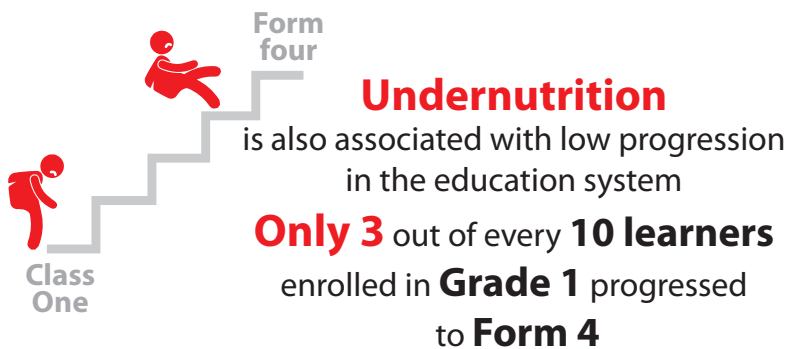
Children who are stunted before the age of 5 are more likely to under-perform in school



Stunted children had **3.5% less grades** attained in school



Compared to non – stunted children



Stunted children had a higher risk of repeating, **(6.7%)**

compared to non stunted children **(2.8%)**



It is estimated that only **16.9%** of stunted people (of working age) in Kenya completed primary school

compared to **62.2%** of those who were never stunted



17.6% of all repetitions were associated with stunting (94,708 stunted repeaters)

Distribution of the repetition costs attributed to stunting borne by families and government



Families
KSh1.8 Bn
(57%)

+



Government
KSh1.4 Bn
(43%)

The total cost of repetition attributed to stunting in the education sector was estimated to be

0.06%
of GDP

This costed a total cost of **KSh 3.2 Bn** to the education system

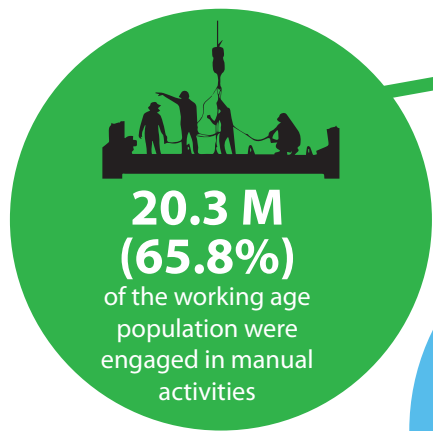
3. Effects on Productivity



Undernutrition in children, specifically stunting, has a negative impact on their productivity at later stages in life

It was estimated that working age population comprised of **31M** people

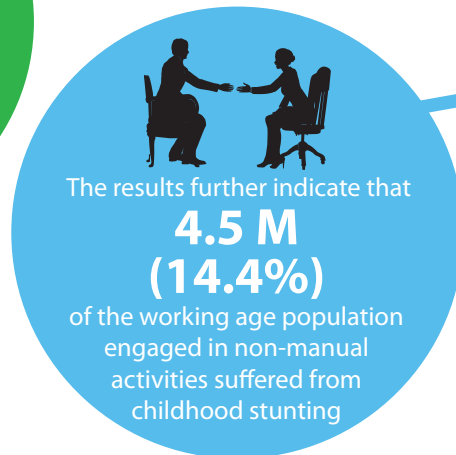
It was estimated that **12.9 M** people (**41.4%**) of the working age population was stunted as children



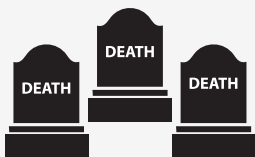
8.4 M (41.2%) of this population were stunted as children



Productivity losses in manual activities attributed to stunting are estimated to be **KSh 96.7 Bn (1.8%) of the GDP**



Productivity losses in non-manual activities attributed to stunting are estimated to be **KSh 66.6 Bn (1.2%) of GDP**



1.2 M (3.8%)

people who would have been part of the current workforce **died** from child **undernutrition**



This resulted in loss of **KSh 188.8 Bn** in potential income equivalent to **3.5% of GDP**

Undernutrition related mortality contributed to the largest share of productivity losses **(53.6%)**

The total losses in productivity were estimated at approximately

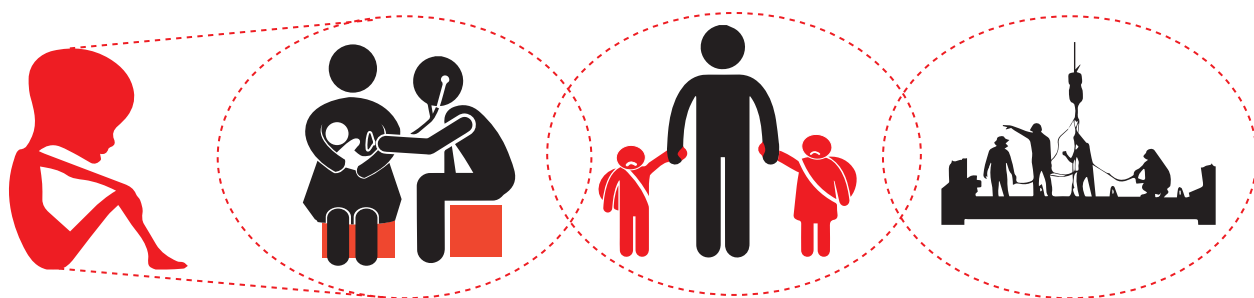
KSh 352.1 Bn



which is equivalent to **6.5%** of GDP

4. Effects on Health, Education and Productivity

The economic impact associated with underweight and stunted children is quite significant with far reaching effects on Health, Education and Productivity



The country is estimated to have lost an equivalent of about
KSh 373.9 Bn
(6.9%) of GDP

Health
related costs were estimated to be
KSh 18.6 Bn
(0.3%) of GDP

Education
related losses were estimated to be
KSh 3.2 Bn
(0.06%) of GDP

Productivity
related losses contributed the largest costs at
KSh 352.1 Bn
(6.5%) of GDP

This huge loss implies that there is need for concerted multi-sectoral efforts to address
undernutrition

All research findings made based on the year 2014 (KDHS 2014)

