



A publication of The National Council for Population and Development

SCALING UP NUTRITION EMBU, THARAKA-NITHI AND MERU COUNTIES-A FRAMEWORK FOR ACTION

Kenya's high rates of undernutrition are particularly due to poor maternal micronutrient status and consequent low birth weight, poor infant feeding practices, lack of access to adequate water and sanitation and safe hygiene practices¹. Insufficient "awareness and knowledge on nutritionally adequate diets and limited resource allocation and capacity to support the implementation of comprehensive nutrition programs"² are additional factors.

On larger scale, undernutrition in Kenya has been blamed on food insecurity problems attributed to frequent droughts, high costs of domestic food production, displacement of farmers during election violence, high global food prices, and low purchasing power for a large proportion of the population. However, in some of the Counties, food security is assured for the greater part of the year since they have plenty of rain and their economy largely depend on agriculture.

In Central Eastern Cluster Counties of Embu, Tharaka Nithi and Meru are considered food sufficient during the greater part of the year. The region, as part of agricultural regions produces milk, eggs, cereals, and grows seasonal fruits, which are available for most of the year. However in such a food rich setting undernutrition remains a challenge.

In Central Eastern Cluster Counties of Embu, Tharaka Nithi and Meru are considered food sufficient during the greater part of the year. The region, as part of agricultural regions produces milk, eggs, cereals, and grows seasonal fruits, which are available for most of the year. However, in such a food rich setting undernutrition remains a challenge.

The policy brief seeks to communicate evidence as provided by 2014 KDHS, by looking at the household where these children come from in terms of socio-demographic profiling and further to highlight some of the challenges that have emanated resulting into this situation from literature. It is hoped that the brief would be able to help provide a policy direction for the three counties and further impact on their programming to help address identified challenges and lower malnutrition.

Background

Malnutrition is defined as a condition that occurs when people consistently do not consume or absorb the right amounts and types of food and essential nutrients. Globally, it contributes to more than 3 million children death each year³. The main indicator of childhood malnutrition is stunting. This happens when children are too short for their age due to inadequate intake of the required nutrients over a long period of time. Stunted children have poor physical growth and brain development, preventing them from thriving and living up to their full potential.

Global statistics for surviving undernourished children indicate that approximately 171 million children are chronically undernourished (stunted), 60 million are acutely undernourished (wasted), and 100 million are underweight⁴. De Onis in a paper he wrote in 2000 attributes undernutrition to not only being linked to child mortality but also to poor functional development of the child. He further noted that undernourished children are highly susceptible to common childhood ailments like diarrhoea, respiratory infections and worm infestations. Recurrence of such ailments falters a child's physical, behavioural, motor and cognitive development, and also compromises her/his health and functioning in adulthood⁵. The burden of child undernutrition is unsurprisingly greatest in the world's poorest countries, especially in sub-Saharan Africa and Asia.

In 2012, the World Health Assembly (WHA) approved the Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition (WHO, 2014a) with six Global Nutrition Targets to be achieved by 2025,

including reductions in young child stunting and wasting and no increase in overweight, as well as reducing maternal anaemia and low birth weight whilst increasing breastfeeding.

In September 2015, the United Nations General Assembly (UNGA) adopted the Agenda for Sustainable Development (UN, 2015) with 17 Sustainable Development Goals (SDGs), committing the international community to end poverty and hunger and achieve sustainable development by 2030. The SDG2 is to end hunger, achieve food security and improve nutrition and promote sustainable agriculture. The SDG3 is to ensure healthy lives and promote well-being for all at all ages. In April 2016, the UNGA proclaimed 2016 to 2025 the United Nations Decade of Action on Nutrition (UN, 2016).

Malnutrition among Kenya's children is a serious problem and exists throughout the country. Each year, more than 70,000 Kenyan children die before their 5th birthday. Malnutrition contributes to about half of these deaths. The Kenya Demographic and Health Survey (KDHS) 2014 indicates that about one quarter of children (26%) under five are stunted in Kenya today. Eleven percent of children are underweight, meaning they don't weigh enough for their age, while 2 percent of children are severely underweight. Four percent of children are wasted⁶. Similarly, only 22 percent of children are fed in accordance with the three recommended infant and young child-feeding practices.

Kenya's commitment to improving nutrition is established in Vision 2030, the country's development blueprint, and is aligned to the government's broader Medium Term Development Plan. The 2010 Constitution of Kenya recognizes adequate food and nutrition as a human right. It states that every person has the right to be free from hunger and the right to adequate food of acceptable quality (Article 43) and that every child has the right to basic nutrition (Article 53). Furthermore, the Government of Kenya's 2011 Food and Nutrition Security Policy states that nutrition is central to human development in the country (Government of Kenya, 2011). The implementation framework was developed and published in 2017 outlining the priority interventions, implementation approaches and result areas.

The Government of Kenya approved a National Nutrition Action Plan in November 2012. Its plan was to roll out 11 evidence-based High Impact Nutrition Interventions (HiNi) and set the following nutrition targets for between 2010 and 2030: reduce severe and moderate stunting by one-third, eliminate iodine deficiency, and reduce anaemia by 30 percent. The overall impact expected is a 30 percent reduction in

child mortality and an increase in GDP of up to 3 percent, if implemented to scale.

To implement the policy, the developed framework emphasizes enhanced collaboration, mutual accountability and strengthening coordination of all actors to ensure greater coherence, desired momentum and synergy of all food and nutrition security programmes. The framework recommends an institutional coordination structure that will facilitate high level commitment, leadership by the Government, collaboration and joint planning by all sectors and stakeholders at all levels. This is expected to be achieved through the establishment of the Food and Nutrition Security Council and Steering Committee.

In 2012, Kenya joined Scaling Up Nutrition (SUN), a global movement that unites national leaders, civil society, bilateral and multilateral organizations, donors, businesses and researchers in a collective effort to improve nutrition⁷. The government has further demonstrated commitment to agricultural development, signing a CAADP (Comprehensive Africa Agriculture Development Programme) Compact in 2010. CAADP is an African-led program bringing together governments and diverse stakeholders to reduce hunger and poverty and promote economic growth in African countries through agricultural development. In the same year, the government launched a new Agricultural Sector Development Strategy, which is aligned with the CAADP.

With the health function being largely in the domain of the county governments, it was expected that nutritional programmes and especially the HiNi would be taken up by the County Governments to bring about the national reduction in malnutrition by 30 percent. To what extent the County Governments have taken up this challenge still remains to be seen as the KDHS 2014 although indicating improvements overall, still contents with County outliers that are not expected.

Adequate nutrition is critical to children's growth and development. The period from birth to age 2 years is especially important for optimal physical, mental, and cognitive growth, health, and development. Unfortunately, this period is often marked with nutrient deficiencies that interfere with optimal growth and may cause common childhood illnesses such as diarrhoea and acute respiratory infections⁸.

A woman's nutritional status has important implications for her health as well as for the health of her children. Malnutrition in women results in reduced productivity, increased susceptibility to infections, slowed recovery from illness, and a heightened risk of adverse pregnancy outcomes. For example, a woman with poor nutritional status, as indicated by a low body mass index (BMI), short stature, or micronutrient deficiencies,

has a greater risk of obstructed labour, of having a baby with a low birth weight, of death from postpartum haemorrhage, and of morbidity for both herself and her baby.

Key Findings

According to Food and Agriculture Organization, food security is defined as “When all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life. In Kenya, 51 percent of people lack sufficient food, the majority of them being the poor⁹.

In the interest Counties of Embu, Tharaka Nithi and Meru, Table 1 shows nutritional status computed from the 2014 KDHS data by child’s background characteristics. The findings indicate that about three out of ten (27%) children in the three counties are stunted, while three and ten percent are wasted and underweight respectively.

The findings further reveal that children between 24-35 months (36%) are more stunted compared with their counterparts in other age cohorts. Similarly, children between 9-11 months experience high rates of underweight (16%). Interestingly, children whose mothers education level is at primary level (30%), are from poor background (34%), and raised in rural areas (27%), experience high rates of malnutrition.

Table 1:Percentage of children under five years nutritional status for the Central Eastern North Cluster by background characteristics			
Background Characteristics	Stunting	Wasting	Underweight
Sex of child			
Male	29.9	4.4	12.3
Female	22.4	3.8	10.0
Child's age in months			
<6 months	10.1	3.8	4.2
6 - 8 months	13.9	7.5	9.4
9 - 11 months	16.7	6.7	8.7
12 - 17 months	26.4	5.5	11.0
18 - 23 months	35.6	4.8	11.8
24 - 35 months	33.8	3.1	12.7
36 - 47 months	28.8	3.4	12.7
48 - 59 months	23.6	3.7	12.2
Mother's education level			
No education	30.7	10.4	20.8
Primary level	29.8	3.4	11.7
Secondary	19.0	3.3	6.4
higher	12.4	1.9	4.1

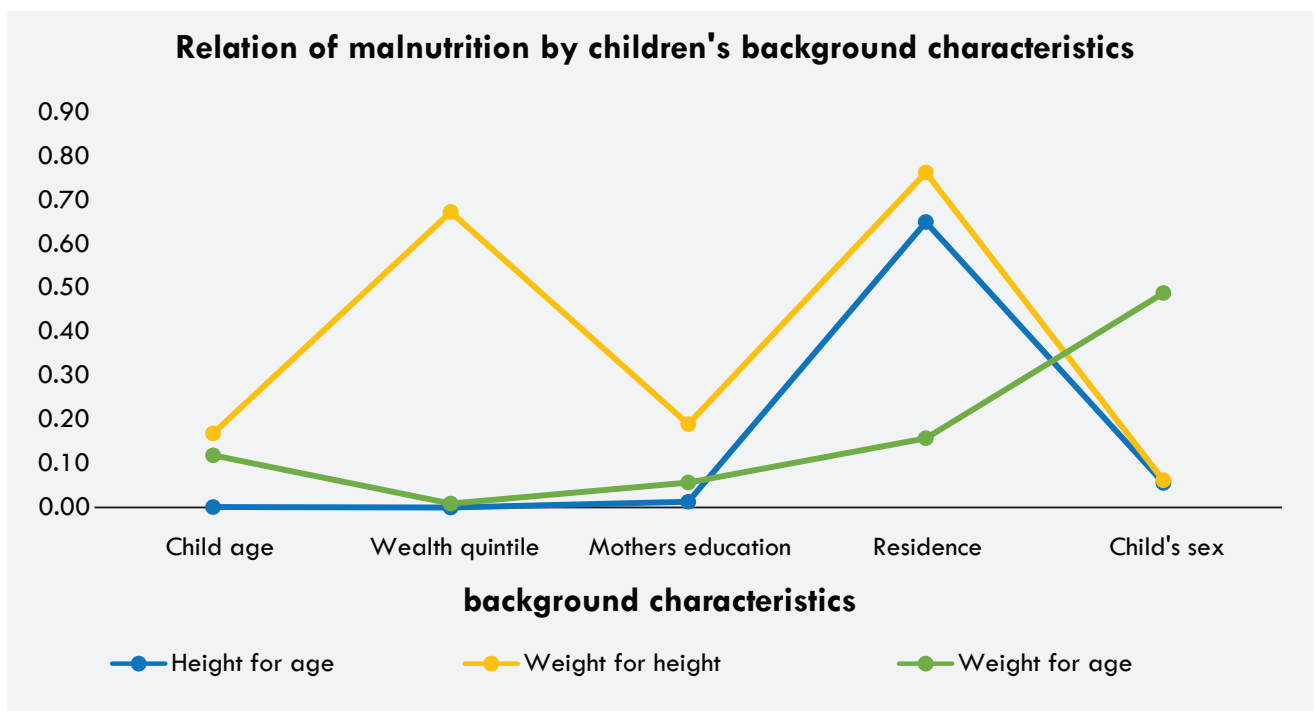
Wealth Quintile			
Poor	33.4	5.4	16.2
Middle	25.7	3.7	9.1
Rich	17.1	2.6	5.7
Residence			
Urban	20.0	3.4	7.3
Rural	29.2	4.4	13.1
County			
Meru	25.4	2.8	8.6
Tharaka-Nithi	33.4	3.2	10.7
Embu	27.0	2.9	10.8

Source: Computed from 2014 KDHS

The graph derived from KDHS 2014 data indicates a significant relationship between stunting and the child's age, the wealth quintile and the mother's education. Being underweight was also found to have a significant relationship with the wealth quintile.

Children between 24-35 months were more likely to be stunted and those in the age cohort 36-47 months

were less likely to be wasted but more likely to experience underweight. In addition, children from middle class families are more likely to be wasted and underweight. Surprisingly, children from rich families are more likely to be wasted. The graph further shows that children whose maternal education level is secondary and higher are less likely to experience stunting and underweight.



Source: Computed from 2014 KDHS

Policy Implications

In 2012, the 194 member states of the World Health Assembly (WHA) endorsed the first ever-global targets to improve nutrition focusing on six areas: stunting, exclusive breastfeeding, wasting, anaemia, low birth weight, and overweight. While some of the targets were enshrined within Sustainable Development Goal 2, which commits to end malnutrition in all its forms by the year 2030, the world is not on track to achieve any of the six nutrition targets¹⁰.

Consequently, child undernutrition is a multi-dimensional problem that defies simple solutions. There is a fundamental need to better understand the public health dimensions of the problem, to provide a foundation for precisely targeted interventions in local contexts.

The analysis underscores the need to scale-up interventions that directly impact the nutritional status of women and children. Many of the highest-impact interventions are found in the 1,000day window and several contribute to achieving multiple targets. Investments in nutrition interventions alone are not enough to reach the targets; improvements in water and sanitation, agriculture, women's health and education, and other areas are necessary to accelerate progress against malnutrition.

It is of critical importance that the Counties map out the policies, strategies and plans that would be needed to focus on improving nutrition and promoting healthy diets. Other areas of policy direction would be on the following;

- Coordination mechanisms at the County and sub County levels involving a technical working group for monitoring and follow up on programmes implementation
- Nutrition capacity in the County in terms of professionals and health personnel who can be able to help combat the challenges existing at the County level
- Map out the nutrition programmes, actions and measures that are being implemented, who are the target groups and what is the delivery mechanism being employed

Recommendations

For any impactful programme, all areas of intervention to ensure that all the targeted population are reached need to be mapped out. The three Counties and indeed most in the Country that are facing nutritional challenges, need to look broadly at the following areas:

- i. Monitor and act on programmes related to improving maternal, infant and young child nutrition
- ii. Actively promote programmes related to school health and nutrition
- iii. Promote programmes related to healthy diet and preventing obesity and diet-related non communicable diseases

Nutrition is no longer just a health problem, but a social and development problem that needs to be addressed collaboratively by different actors, including the government ministries (health, agriculture, gender, sports, culture and social services, finance, education, and water, among others), the private sector, civil society, researchers, and development partners. To accompany the multi-sectoral action on nutrition, there should be an effective coordination mechanism, only possible in the presence of strong political good will. As recommended in the Food and Nutrition Policy Framework, fast track the setup of the recommended National Food Security Council and Steering Committee

Conclusions

In the three counties of the Central Eastern North Cluster, the rate of childhood malnutrition is very high. These are attributed to various individual, household and community level characteristics such as maternal education level, child's age, socio-economic status and place of residence. By focusing on these subgroups of children the health departments, Programme managers, healthcare providers, NGOs and policy makers can bring down the constant high rates of stunting, wasting and underweight in children under the age of five years.

NCPD is a semi-autonomous government agency that formulates and Promotes population policy and coordinates related activities for sustainable development in Kenya.

NCPD
National Council
for Population and
Development

P.O Box 48994 - GPO,
Nairobi 00100, Kenya
Tel: 254-20-271-1600/01
Fax: 254-20-271-6508
Email: info@ncpd.go.ke

www.ncpd.go.ke

References

1. Kenya National Bureau of Statistics (KNBS) and ICF International: Kenya Demographic and Health Survey, 2014.
2. Republic of Kenya, 2008. Food Security and Nutrition Strategy
3. Robert E. Black et al. 2013, "Maternal and Child Undernutrition and Overweight in Low-Income and Middle-Income Countries," *Lancet* 382, no. 9890 (2013); 427-51
4. De Onis M, Blossner M & Borghi E, 2011. Prevalence and trends of stunting among pre-school children, 1990–2020. *Public Health Nutr* 2011, 1(1):1–7.
5. De Onis M: Measuring nutritional status in relation to mortality. *Bull World Health Org* 2000, 78(10):1271–1274.
6. Kenya National Bureau of Statistics (KNBS) and ICF International: Kenya Demographic and Health Survey, 2014
7. Republic of Kenya. National Nutrition Action Plan 2012-2017. Available from: <http://scalingupnutrition.org/wp-content/uploads/2013/10/Kenya-National-Nutrition-Action-Plan-2012-2017-final.pdf>
8. Kenya National Bureau of Statistics (KNBS) and ICF International: Kenya Demographic and Health Survey, 2014
- 9 : Kimani-Murage EW, Muthuri SK, Oti SO, Mutua MK, van de Vijver S, Kyobutungi C, 2015. Evidence of a Double Burden of Malnutrition in Urban Poor Settings in Nairobi, Kenya. *PLoS ONE* 10(6):e0129943. doi:10.1371/journal.pone.0129943
10. WHO 2013. Essential nutrition actions: improving maternal, new-born, infant and young child health and nutrition. Geneva, World Health Organization.