

Malawi's Nutrition Status: Unpacking the Burden, Drivers, and Pathways to Transformation

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1.0 Introduction

Malawi faces a double burden of malnutrition with persistent undernutrition (37% stunting and 12% wasting) at the same time rising rates of overweight and obesity, which contribute to diet-related non-communicable diseases. The Malawian government recognises nutrition as a key enabler for human growth and development that contributes significantly to the social and economic development of the country. Therefore, good nutrition is fundamental. Well-nourished individuals are more productive, learn more effectively, and are healthier, which propels the nation's development forward. On the other hand, malnutrition, especially in early childhood, imposes significant economic challenges, including decreasing national productivity, increasing healthcare costs, and perpetuating poverty from one generation to the next. Undernourished children grow up to be adults with reduced cognitive and physical abilities, limiting their earning potential and affecting national competitiveness. According to the Cost of Hunger in Africa study (2012), child undernutrition costs Malawi around US\$597 million annually, which is about 10.3% of the country's GDP, due to lost workforce potential and increased disease burden.

The Malawi Vision 2063 (the country's long-term development blueprint) highlights the crucial role of nutrition in achieving inclusive wealth and self-reliance, underscoring that malnutrition today will result in an underperforming economy tomorrow. Nutrition is therefore one of the key focus areas contributing to human capital development, which is one of the enablers alongside other key pillars that would catalyse the 3 key pillars and actualise the Malawi 2063 agenda. Urgent action is needed to combat all forms of malnutrition, as it will continue to hinder Malawi's journey towards becoming a middle-income country. Malnutrition presents both a public health crisis and a strategic opportunity for universities to position themselves as solutions for transformative nutrition.

1.1 Malawi Nutrition Complexities Situation Analysis

Malawi faces a severe nutrition crisis that threatens human capital development and economic progress. Chronic undernutrition remains widespread, with 37% of children under five stunted, 11% are underweight (MDHS 2024), with approximately 1.2 million children suffering irreversible physical and cognitive impairments. Micronutrient deficiencies are also high in Malawi, with anaemia at 33% in women of reproductive age (MDHS 2015/16), contributing to babies born with low-birth-weight hence vulnerable to growth faltering. While national wasting rates appear relatively low at 2% (MDHS 2024), acute malnutrition spikes to 5% in disaster-prone areas (SMART Survey 2024), with wasted children facing 11 times higher mortality risks from common infections.

The country's infant feeding practices reveal alarming gaps. Despite 68% of newborns being breastfed within the first hour, exclusive breastfeeding (giving an infant only breast milk from birth to six months, with no other foods or liquids) rates reduced from 81% at 0-1 month to just 34% by 4-5 months, with only 60% of infants under six months exclusively breastfed nationally (MDHS 2024). This decline originates from maternal undernutrition, work demands, and cultural misconceptions, compounded by only 45% of health facilities providing adequate breastfeeding support (WHO 2023). Complementary feeding practices are equally concerning, with a mere 24% of children aged 6-23 months receiving minimum dietary diversity (MDHS 2024). Most people eat

diets that are low in nutrients and high in maize porridge and leafy vegetables. Only 12% of people eat foods from animals.

This inadequate dietary diversity fuels widespread micronutrient deficiencies, especially among under-five children and pregnant and lactating women. Malawi made substantial progress in reducing some of the micronutrient deficiencies, also referred to as hidden hunger. For instance, Vitamin A reduced from 22% to 3.6%, and Iron deficiency among women decreased from 51% to 22%. However, despite these efforts, Iron (22% in women of reproductive age), Zinc (60% across all demographic groups) and Selenium (63% in women of reproductive age) deficiencies continue to be of major public health concern despite efforts by the government and partners to improve the situation.

Suboptimal care and feeding practices also contribute significantly to rising malnutrition levels. High population pressure has led to short birth intervals, reducing the capacity of mothers and carers to practise optimal infant and young child feeding. Exclusive breastfeeding is often compromised, and the early introduction of inappropriate complementary foods is common. These practices are often driven by limited awareness and inadequate support systems for mothers and carers, both at the facility and community levels. The result is poor nutritional outcomes among children, particularly in the critical first two years of life. The situation is further worsened by limited dietary diversity. Most households rely heavily on monotonous maize-based diets that are energy-dense but lack essential nutrients. Access to animal-source foods, legumes, and fresh fruits and vegetables is minimal, especially among the poorest households. These poor dietary patterns contribute to both acute and chronic forms of malnutrition.

Compounding these challenges is the limited availability of food and nutrition education and counselling. Many caregivers lack access to accurate, culturally relevant, and practical guidance on appropriate feeding practices, food preparation, and hygiene. Primary care health service providers frequently experience overstretch, which restricts the quality and frequency of nutrition counselling sessions. As a result, even in situations where food is available, poor knowledge and behaviour around food choices persist, undermining efforts to improve child nutrition outcomes.

2.0 Drivers of Malnutrition in Malawi

Malnutrition in Malawi is fueled by a complex interplay of factors that undermine household nutrition security and the well-being of vulnerable groups. These drivers can be broadly categorised as malnutrition being a central role of poverty, household food insecurity, poor feeding practices, inadequate dietary intake and diversity, lack of nutrition knowledge in food utilisation, climate change and environmental degradation, harmful cultural practices, and limited access to health services.

2.1 The Central Role of Poverty in Malnutrition

Malnutrition in Malawi is driven by a complex web of social, economic and environmental factors, yet poverty remains the most powerful underlying determinant that compounds nearly every other driver of undernutrition. National statistics consistently show that poverty limits household capacity to access adequate food, health care and essential services. According to the Malawi National Statistical Office, over half of Malawian households live below the national poverty line, with rural poverty rates even higher (NSO, 2021). This economic vulnerability shapes the nutritional landscape by restricting dietary diversity, reducing purchasing power for nutrient-rich foods, and weakening resilience to shocks such as drought, floods, and rising food prices.

In rural areas, where subsistence agriculture remains dominant, limited resources prevent households from growing or purchasing diverse foods. As a result, many depend heavily on maize, which, although filling, lacks the range of micronutrients required for optimal growth and development. The 2022 Malawi Demographic and Health Survey highlights that children from the poorest wealth quintile are significantly more likely to be stunted compared to those from wealthier households (NSO & ICF, 2023). Poverty is equally linked to seasonal hunger, inadequate agricultural inputs, and limited access to livestock or high-value crops, all of which reinforce chronic undernutrition.

Poverty severely restricts access to essential preventive and curative health services in Malawi, making it a major driver and perpetuator of undernutrition. Low-income households struggle to reach health facilities for antenatal care, child illness management,

growth monitoring, and micronutrient supplementation, while rural communities often contend with long distances to clinics, shortages of trained health workers, and inconsistent availability of critical services. These constraints undermine early detection and timely management of undernutrition and weaken maternal and child health support systems that are vital for optimal breastfeeding, complementary feeding, and child growth. Poor access to safe water and sanitation, conditions disproportionately affecting the poor, further exposes children to recurrent diarrhoea and environmental enteric dysfunction, reducing nutrient absorption and deepening vulnerability to malnutrition (UNICEF, 2020).

Addressing malnutrition in Malawi, therefore, requires more than food-based interventions; it demands economic empowerment and sustainable livelihood opportunities. This is where the TAGDeV 2.0 programme is particularly transformative. By equipping young people with agribusiness, entrepreneurship, and innovation skills, TAGDeV 2.0 contributes to strengthening economic resilience, targeting poverty as a foundational cause of undernutrition. As young people improve their income-generating potential, they not only enhance their own food and nutrition security but also influence broader community diets through food production, value addition and market participation.

In essence, Malawi's fight against malnutrition cannot be sustained without confronting the entrenched poverty that drives it. Initiatives like TAGDeV 2.0 demonstrate how linking nutrition objectives with economic empowerment creates pathways for lasting, nutrition-sensitive development. Addressing poverty is not merely complementary to reducing malnutrition; it is central to achieving long-term nutrition security.

2.2 Household Food Insecurity

Food insecurity is a major contributor to malnutrition in Malawi. Many households depend on rain-fed agriculture, fetch low yields and have limited access to nutritious food, especially during the lean season. According to the World Bank (2025), Malawi ranks among the four poorest countries in the world, with 71.3% of its population projected to live below the USD2.15 per day poverty line. These high levels of poverty are rendering households unable to access food through buying from markets. World Bank (2025) also

states that the prevailing rise of food prices will exacerbate poverty. These environmental disruptions severely limit food production and availability, further exacerbating the risk of malnutrition among already vulnerable populations.

2.3 Poor Child Feeding Practices

Suboptimal care and feeding practices play a significant role in the rising levels of malnutrition in the country. Not giving a child breastmilk early (not within 30 minutes of birth) deprives infants of colostrum, which is the first milk rich in antibodies and nutrients to fight infections. Exclusive breastfeeding rates are notably low, with fewer than 72% of infants being exclusively breastfed. Additionally, optimal complementary feeding among children under five is a persistent challenge. These practices compromise the nutritional status of young children and increase their vulnerability to both acute and chronic malnutrition.

2.4 Inadequate dietary intake and diversity

Most households in Malawi depend on a single staple to meet their daily calorie needs. Thick porridge made from maize flour and water is almost 95% of staples in the country, which limits their food choices and limits nutrients that the bodies could get from other staples such as rice, plantains, cassava, potatoes and other staples. And most households in Malawi do not have access to animal-sourced foods, fruits and legumes, which results in insufficient energy, protein and other micronutrients

2.5 Climate Change and Environmental Degradation

Recurrent droughts, erratic rainfall patterns, and the drying of rivers and streams continue to threaten food production and availability in Malawi. The country's heavy reliance on rain-fed agriculture, with over 80% of smallholder farmers depending solely on seasonal rainfall, makes its food system extremely vulnerable to climatic fluctuations (World Bank, 2021). Unlike irrigation-based production, which allows for controlled water supply and more stable yields, rain-fed agriculture offers limited resilience when rainfall becomes unpredictable. Malawi has experienced increasingly erratic rainfall from the 2020/2021 to the 2024/2025 seasons, including late onset of rains, prolonged dry spells, and sudden

excessive downpours. These climatic inconsistencies have repeatedly damaged farmers' crops at critical stages of growth, resulting in significantly reduced household food production. Evidence from the Malawi Vulnerability Assessment Committee (MVAC) indicates that droughts and delayed rains have been among the leading contributors to annual food insecurity over the past five years (MVAC, 2023). Consequently, many households face recurrent food shortages and diminished dietary diversity, amplifying the risk of malnutrition, particularly among children, pregnant women, and other vulnerable groups (FAO, 2022).

2.6 Harmful Cultural Practices

Several harmful cultural beliefs and practices further drive malnutrition in Malawi. Certain foods are prohibited for specific groups; for example, pregnant women are advised against consuming eggs, sugarcane, pepper, and certain types of meat. Additionally, when children become severely malnourished, some families turn to traditional healers, believing in causes of undernutrition that extend beyond biomedical explanations. This often leads to a delay in seeking formal care and, in some cases, the use of practices that put children at increased risk or harm, leading to fatalities that could have been prevented with timely medical intervention.

3.0 ROLE OF UNIVERSITIES IN NUTRITION PROGRAMMING IN MALAWI

Given the current trajectory, the nutrition situation is likely to worsen through various interconnected factors, including persistent food insecurity, harmful coping strategies affecting child feeding practices, poor environmental health, and limited access to essential health services. These challenges are expected to exacerbate existing nutrition vulnerabilities, particularly among individuals living with chronic conditions such as HIV and AIDS and NCDs, in the context of inadequate dietary practices and poor food consumption patterns.

In response, the Government of Malawi, through its respective line ministries, continues to implement both nutrition-specific and nutrition-sensitive interventions aimed at reducing the growing burden of malnutrition. These efforts prioritise vulnerable groups such as pregnant and lactating women, adolescents, and children under five. However, the

effectiveness of these interventions relies heavily on the availability of evidence-based strategies, along with standardised, accessible, and up-to-date knowledge and skills. These are essential for enhancing understanding, supporting informed decision-making by both implementers and communities, and ultimately driving impact, operational efficiency, and strategic direction.

In light of this, there is a critical need for universities to strengthen both nutrition-sensitive and nutrition-specific actions to ensure improved nutrition and health outcomes. Due to their scientific credibility and research infrastructure, universities are key in providing evidence-based interventions that will lead to reduced prevalence of stunting, reduced morbidity and mortality due to malnutrition, increased knowledge in nutrition among households, increased household dietary diversity, improved diet quality, increased minimum acceptable diet, increased minimum meal frequency, and reduced child wasting (moderate acute malnutrition, severe acute malnutrition).

4.0 ROLE OF THE UNIVERSITY IN TERMS OF ACTIVITIES

4.1 Curriculum Development

The universities in Malawi play a key role in nutrition curriculum development by designing relevant programs, integrating evidence-based content, and collaborating with stakeholders in education. To equip graduates to address current and emerging nutrition challenges, they train educators and regularly update curricula. They also contribute to the integration of nutrition education into non-nutrition fields, equipping students with scientific knowledge on nutrition. This method not only reduces the knowledge gap in health workers but also cascades the knowledge to the key implementers who directly implement the nutrition programmes in respective institutions and the nation at large.

4.2 Social Behaviour Changes and Communication

Universities play a key role in social behaviour change and communication by researching community behaviours, identifying barriers to healthy practices, and designing evidence-based interventions. They train health workers and educators, engage communities through outreach and campaigns, and evaluate the effectiveness of strategies. Their work

informs policies and programs, ensuring that nutrition and health messages lead to sustainable behavior change.

Additionally, universities play a key role in community-based research by engaging communities to identify local nutrition and health needs. They design participatory studies, collect data, build local capacity, and translate findings into practical interventions. Their work fosters collaboration with communities, government, and NGOs to improve health and nutrition outcomes.

4.3 Digitalisation Sensitisation

Universities play a key role in digitalisation sensitisation by educating and training students, health workers, and communities on digital tools. They promote the adoption of technology, conduct research on digital solutions, and provide guidance for integrating digital tools into health and nutrition programs

4.5 Training of Health Workers

Universities provide training and capacity building for health workers to enhance nutrition knowledge at all levels. They train healthcare workers about nutrition by providing formal education, specialised courses, and practical skills. They ensure health professionals are knowledgeable, competent, and able to deliver evidence-based nutrition services effectively in communities.

4.6 Implementation Research

Universities develop, pilot, and evaluate nutrition programmes (e.g., school feeding, micronutrient supplementation, or community-based nutrition education). They test strategies to improve the adoption, effectiveness, and sustainability of nutrition interventions. Through research, universities generate scientific evidence on dietary patterns, nutritional deficiencies, and effective interventions that guide both policy and practice.

4.7 Operations Research

Universities play a vital role in operational research by identifying gaps and challenges in nutrition and health programmes, designing practical solutions, and evaluating programme performance. They train staff and health workers in research methods, build local capacity, and collaborate with governments, NGOs, and communities. Their research informs evidence-based policies and programme improvements, ensuring that interventions are efficient, effective, and impactful.

5.0 HARNESSING MALAWI'S YOUTH TO END MALNUTRITION: A STRATEGIC IMPERATIVE FOR Malawi Vision 2063

Malawi has over 7.5 million youth aged between 15 and 35 (UNFPA, 2024). This population segment presents a latent force that can transform the nutrition landscape. MW2063 calls for inclusive wealth creation and human capital development. To achieve this, youth must be repositioned not merely as beneficiaries but as architects of nutrition-sensitive transformation.

Although unemployment and undernutrition disproportionately affect the youth in Malawi, they are the most agile, innovative, and connected demographic. The youth live within our communities; they are digitally savvy and have an entrepreneurial spirit. A little shift in programming could unlock this potential.

At the onset, the youth must be embedded in the agricultural value chain. They must be treated not as mere workers but as agribusiness owners. The youth can invest in producing biofortified crops, aquaculture, and fortified foods. Such activities can address income and nutrition gaps. The National Planning Commission [NPC] (2023) recognizes that agribusiness incubation and youth agriprenurship offer scalable models. Schools and local markets can connect these programmes to establish circular nutrition economies.

As already highlighted earlier, modern youth are digital and technology savvy. Youth can develop mobile platforms for dietary tracking, e-extension services, and nutrition education. According to the Malawi Communications Regulatory Authority [MACRA] (2024), Malawi has over 40% digital access. This provides an avenue for low-cost yet high-

impact behavioural change. Youths can become influencers around maternal nutrition, food diversity, and child feeding practices.

Again, transforming the education systems can lead to tangible gains in combating malnutrition. Introducing nutrition-sensitive curricula in secondary schools and vocational colleges can equip youth with the knowledge to lead community-based nutrition interventions.

One more important issue when it comes to the youth is to structurally integrate them into governance. District Nutrition Coordination Committees and MW2063 implementation platforms should include youth quotas. The youth have lived experience and grassroots networks, which make them indispensable when designing responsive and context-specific solutions.

Last but not least, public-private partnerships must be youth-centric. When designing interventions, donors, the government, and the private sector must ensure that youth are involved. We must align funding, mentorship, and market access with youth-led innovation.

Almost everyone participating in today's discussion is mortal. By 2063, the current youth will become the nation's leaders, entrepreneurs, and parents. Positioning them now to combat malnutrition is not just strategic; it is also about their existence. MW2063 will be won or lost based on how the youth are positioned.

6.0 CONCLUSION

Malnutrition in Malawi is a profound development challenge rooted in chronic poverty, weak food and health systems and the growing pressures of climate change, but it is also one of the greatest opportunities for national transformation. Breaking this cycle requires more than nutrition-specific interventions; it demands bold, multisectoral action that empowers communities economically, strengthens resilience, and positions young people at the centre of change. Initiatives like the TAGDev 2.0 demonstrate that investing in youth skills, agribusiness and innovation directly addresses the structural drivers of undernutrition

while building a more food-secure future. Universities, as engines of research, technology, and capacity development, must lead this shift by generating evidence, shaping policy and preparing a skilled workforce capable of driving Malawi toward MW2063 goals. With strategic investment, strong partnerships and youth-driven solutions, Malawi can reverse decades of nutritional stagnation and unlock the human capital needed to propel the nation into a healthier, more prosperous and resilient future.

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