

CONCERN WORLDWIDE'S APPROACH TO THE PREVENTION OF UNDERNUTRITION

A Concern Worldwide Briefing Paper





Acknowledgements

This publication draws on ten plus years of experience from Concern Worldwide's nutrition programming. This publication outlines Concern's work in the prevention of undernutrition and is intended for anyone working in or with an interest in programming to reduce undernutrition both internally and externally to Concern.

The success of our programmes is largely due to the invaluable insights and commitment of thousands of programme participants, community leaders, local government officials and other community members. It is our great honour and privilege to partner with local organisations, communities and ministries. We would also like to acknowledge Concern's dedicated field staff, who have devoted countless hours ensuring that our programmes are constantly striving to reach the most vulnerable with the highest quality of programming possible. Special thanks are due to devoted teams leaders, programme managers, advisers and country directors that have championed Concern's work on nutrition.

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Cover Image

Mary Banda, 37, at her home and with her children in May 2014. Mary has received training and a goat from Concern's Realigning Agriculture to Improve Nutrition programme in Zambia. © Gareth Bentley/Concern/Zambia/2014

Glossary

Glossary terms are highlighted upon first use in the text	
1000 days (Window of Opportunity)	Period from a woman's pregnancy until a child reaches its second birthday. It includes 270 days of pregnancy and 2 x 365 days (first two years) = 730. 270 + 730 = 1000.
Chronic Malnutrition	Inadequate nutrition over long period of time leading to failure of linear growth resulting in stunting.
Malnutrition	A global problem that encompasses undernutrition and overnutrition
Micronutrient Deficiencies/ Micronutrient malnutrition	A form of undernutrition where intake of vitamins and minerals is too low to sustain good health and development due to poor diet or disease. Also referred to as hidden hunger
Nutrition Sensitive Programmes	Programmes that address the underlying determinants of foetal and child nutrition and development
Nutrition Specific Programmes	Programmes that address the immediate determinants of foetal and child nutrition and development
Overnutrition	A form of malnutrition caused by overconsumption of nutrients. Includes obesity.
Stunting	Low height for age. A child is stunted when s/he is < 2 standard deviations (SD) from the median height for age
Undernutrition	The outcome of insufficient food intake and repeated infectious diseases. Includes both acute and chronic malnutrition
Underweight	A combination of acute and chronic malnutrition which can occur as a result of wasting, stunting, or both
Wasting/Acute Malnutrition (1-3)	Low weight for height.
Global acute malnutrition	A measurement of the nutritional status of the population. The proportion of children 6-59 months who are < -2 SD from the median weight for height.
Moderate acute malnutrition	When a child is between -2 and -3 SD from the median for weight for age
Severe acute malnutrition	When a child is < -3 SD from the median for weight for age and/or oedema

Introduction

Over the last decade and a half, from the early 2000s, Concern Worldwide developed a reputation around its work in the treatment of **acute malnutrition**. Over the past five years, in addition to continuing this work, we have increasingly been involved in programming to prevent **undernutrition**.

Malnutrition is a term that encompasses both undernutrition and **overnutrition**. Our work to date, based on the needs of the poorest, has not identified overnutrition as a priority and thus we have not programmed in this area. Undernutrition is defined as the outcome of insufficient food intake and repeated infectious diseases. It includes being too short for one's age (**stunted**), too thin for one's height (**wasted**), too thin for one's age (**underweight**) and deficient in vitamins and minerals (**micronutrient malnutrition**).¹ These conditions often overlap. For example, a stunted child may also be wasted and have micronutrient deficiencies (see glossary box for more information).

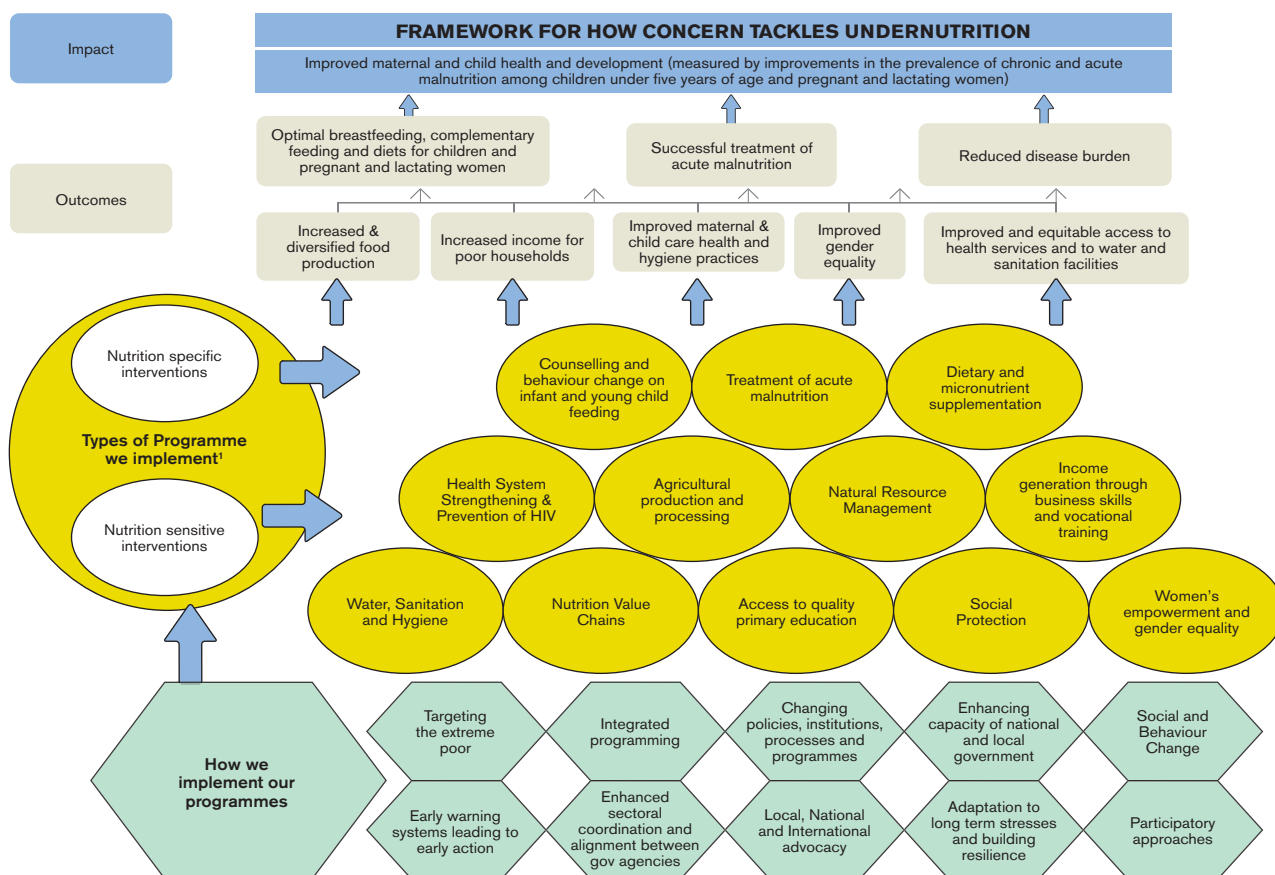
Concern recognizes that undernutrition is multi-causal and hence a multi-sectoral approach is required to sustainably reduce undernutrition, and by extension morbidity and mortality in children, particularly those less than five years of age. The overall goal of our undernutrition programming is improved nutrition security as measured by a reduction in the prevalence of acute and **chronic malnutrition** of children under five.

Programming to prevent and or treat **undernutrition** can be divided into two broad areas of activity; **nutrition specific** and **nutrition sensitive**, although in practice both sets of activities are frequently implemented together. Nutrition specific activities address immediate foetal and child nutrition and development needs i.e. adequate food and nutrition intake, feeding, caregiving and parenting practices. Nutrition sensitive activities address the underlying causes of foetal and child nutrition and development such as food security, resources at maternal, household and community level, women’s empowerment, access to health services and a safe and hygienic environment.

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Concern’s Framework for preventing Undernutrition

Figure 1 outlines Concern’s framework for tackling undernutrition which is loosely based on UNICEF’s causal framework of undernutrition.² The framework contains a number of multi sectoral nutrition sensitive and specific programme components that are combined depending on the needs and priorities of the particular context. This framework embeds Concern’s Understanding of Extreme Poverty,³ which consists of three dimensions of poverty; assets and return on assets, equality, and risk and vulnerability. Good health is an asset that needs to be maintained. Having productive land, the resilience to maintain a livelihood and recover quickly from shocks and stressors, having access to clean water, a good education, and knowledge about optimal feeding practices are all assets. Our programmes work to provide and develop these assets. Equality, particularly gender equality, is a key part of all Concern’s programmes with women’s empowerment being particularly important for tackling undernutrition. Reducing risk and vulnerability of the extreme poor will impact on nutrition and this is done through disaster risk reduction approaches, social protection, HIV prevention, early warning systems and several other approaches that are embedded into our development and resilience programmes.



¹ Chosen based on a sound contextual analysis that focuses on the three dimensions of poverty: assets, inequality, risk and vulnerability

The Global Context

Concern's work in undernutrition has been influenced by our experience in the poorest countries of the world and by the global attention that has been given to this issue in recent years. A group of leading economists, the Copenhagen Consensus, has consistently confirmed that taking action on undernutrition is the single most important, cost-effective means of advancing human well-being.⁴ Evidence, such as that produced by the Lancet nutrition series, has highlighted the contribution of undernutrition to mortality and morbidity in children under five years of age and has informed the nutrition specific activities that Concern promotes.⁵ Thanks to the Scaling Up Nutrition (SUN) movement the understanding that the solution is not just in the health sector but that there is interdependence between various sectors has increased. Governments, UN agencies and NGOs have committed to accelerate progress in reducing maternal and child undernutrition by combining their efforts across sectors and by promoting interventions from household level through to national level.⁶ SUN is founded on the principle that all people have a right to food and good nutrition. Concern are a partner of the **1,000 Days** partnership which promotes targeted action and investment to improve nutrition for mothers and children in the 1,000 days between a woman's pregnancy and her child's 2nd birthday. Better nutrition during this **'window of opportunity'** can have a life-changing impact on a child's future and help break the cycle of poverty.⁷

Concern's Nutrition Specific Activities

The main nutrition specific activities that Concern conducts are promotion of optimal infant and young child feeding (IYCF) and management of severe and moderate acute malnutrition. Our IYCF programmes are delivered in a number of settings from camps for internally displaced persons to rural development programmes through both individual and group counselling. Frequently they are delivered through peer to peer mother groups such as the Care Group approach⁸ but are also delivered through community health workers and health facility staff. We have found approaches such as Care Groups allow a large reach using mainly volunteers and a cascading training system. The approach is to achieve sustained behaviour change in the individual and the community. The key messages are typically around exclusive breastfeeding, appropriate weaning and complementary feeding with attention paid to the quality and quantity of the diet. However, our messages are tailored to the key barriers preventing a particular practice being adopted and these are identified, where possible, through barrier analysis studies.



Lillian and Catherine Shachinda participants of Concern's agricultural and nutrition programme. Zambia 2014. Gareth Bently/Concern

Community management of acute malnutrition (CMAM) is a key part of our work in emergency, recovery and development settings although the approach taken varies depending on the context. Where possible services are integrated into the existing health system from the beginning but this is not always possible where health services are too weak or the emergency too acute. Although not a preventative activity there are preventative elements embedded in the CMAM approach such as early referral, for example, to prevent a child who is moderately malnourished becoming severely malnourished. We also try to link IYCF counselling for mothers with our programmes to prevent a recurrence of acute malnutrition. Our health system strengthening frequently implemented in conjunction with CMAM works to break the nutrition infection cycle that contributes to acute malnutrition.

Other nutrition specific activities Concern is involved in include timely scale up of nutrition interventions in emergencies, food supplement for women of reproductive age and pregnant and lactating women, iron supplementation during pregnancy, vitamin A and zinc supplementation for children, deworming, improved preconception nutrition and health such as supporting child spacing, and other disease prevention and management such as promotion of hygiene and prevention of malaria.



Concern's Nutrition Sensitive Activities

For clarity, Concern's nutrition sensitive activities will be presented according to the two main contexts in which we work; fragile contexts and developing contexts. The activities cannot be strictly differentiated according to this division as there is a lot of overlap but it helps in outlining the different approaches according to context. The key theme in both sets of activities is integration as there is increasing evidence that direct actions to address the immediate determinants of undernutrition can be further enhanced by action on some of the more distal or underlying determinants.⁹

Developing country contexts

Concern works in a number of developing contexts where there is relative political stability and government capacity that allow implementation of longer term programmes that aim to be sustainable. In these contexts the main nutrition problem among children is stunting. In addition to the nutrition specific activities outlined above such as IYCF counselling, Concern implements a number of nutrition sensitive activities in these contexts. These interventions required a significant amount of time to set up, start, expand and have an impact. It is estimated that at least four to five years are required to see an impact on stunting, particularly if this is to be sustained. The primary activity we are engaged in in rural areas is nutrition sensitive agriculture. This includes improving the diversity, quality and quantity of foods for year round consumption. The diversity may be achieved through diversity of the main crops, use of biofortified crops, improved processing and storage, supporting a vegetable garden, supporting small animal husbandry, and promoting spending of additional finance from agriculture production on a more diverse diet. The latter point requires good access to well-functioning markets. In urban areas there is likely to be more of a focus on increased income for poor households with business skills and vocational training programmes frequently implemented.

We also know that where women have decision making power they make decisions that are beneficial to the household and for nutrition.¹⁰ Therefore, supporting women's empowerment and working with men to allow their wives to be involved in decisions around how money can be spent is positive for nutrition. Our work in this area takes the form of social and behaviour change activities such as community conversations, gender trainings, specific programmes around engaging men and boys, and promoting women's involvement in positions of responsibility in the community.

“...where women have decision making power they make decisions that are beneficial to the household and for nutrition.”

In both urban and rural areas a key area of our work is in supporting access to clean water, sanitation facilities, and hygiene promotion (WASH). These activities are very important given the well documented links between WASH and nutrition.¹¹ Water is not only important for human health but also for crop production and maintaining animals so this needs to be taken into account when providing access to safe water. Environmental enteropathy, caused by an unsanitary environment, is increasingly being recognized as a contributing factor to undernutrition highlighting the importance of continued promotion of sanitation and hygiene promotion.

In addition to IYCF counselling which is essential to ensure the child is benefiting from the improved diversity, quality and quantity of food, promotion of other health related behaviours is important such as health seeking behaviour and recognition of danger signs for illness. This requires intensive work at the individual and community level to achieve positive behaviour change. Access to quality primary education, particularly for girls, is another key activity that we know will have an impact on nutrition in the longer term. In addition, we believe it is critical to have enhanced sectoral coordination and alignment between various government ministries. This will lead to more effective interventions and to increased sustainability and scale up. Our work on Realigning Agriculture to Improve Nutrition in Zambia has a strong coordination and alignment element which is now being replicated by the government.



Poor vulnerable contexts

Concern characterises 'poor-vulnerable' as being first the existence of widespread extreme poverty combined with elements of: poor governance, weak institutions and lack of rule of law; potential for or existing conflict or violence; proneness to emergencies; high vulnerability to shocks and stresses; the existence of pronounced inequalities; and widespread environmental degradation. Although the prevalence of both acute malnutrition and stunting tend to be high in poor-vulnerable contexts programmes are usually geared towards the treatment and prevention of acute malnutrition. However, activities to prevent acute malnutrition will have an impact on stunting. Concern's approach to prevention of acute malnutrition in these contexts is through resilience programming. Concern understands resilience as *the ability of a country, community or household to anticipate, respond to, cope with, and recover from the effects of shocks and to adapt to stresses in a timely and efficient manner without compromising their long-term prospects of moving out of poverty.*¹² Resilience calls for more integrated programming between sectors particularly due to the complexity of underlying problems. This includes interventions such as improving agriculture production and diversifying livelihoods and assets, improving access to health services and strengthening health systems increasing access to safe water and improved sanitation and hygiene behaviours and working with the community to develop capacity, women's meaningful involvement, disaster risk reduction, and better governance. Social protection and cash transfers are frequently part of resilience programmes and are frequently warranted to ensure that the poor and vulnerable in society are protected from hunger.

Our resilience programmes generally include the development of early warning systems (EWS) that identify thresholds on key indicators that signal the need for an emergency response. The EWS enables the delivery of an early emergency response package that can be rapidly scaled up for effective delivery. The long term aim of resilience programming is to build local government capacity so that they can provide supports required to the communities directly without external support. Through our resilience-building approach we expect that shocks, and the resulting spikes in cases of acute malnutrition, would be much lower, occur later and that the recovery will happen more quickly.

Monitoring and Evaluation

Undernutrition is usually measured by anthropometric indices (taking a girl or boy's weight and height and age) and comparing them to standardized reference population. Measuring micronutrient deficiencies is more difficult as it frequently involves measuring blood biomarkers. Programmes that aim to reduce the prevalence of acute malnutrition need to target children less than five years of age and pregnant and lactating women. Programmes that aim to reduce stunting need to target pregnant women and children less than two years of age i.e. women and children within the first 1,000 days. This may be different to the traditional targeting used for agricultural or livelihoods programmes where frequently the most vulnerable people in the community are targeted such as the elderly or female headed households. The prevalence of acute malnutrition is measured through Standardized Monitoring and Assessment of Relief and Transitions (SMART) surveys which are a population based cluster survey. They are typically done annually at the same point in time often pre- and post-harvest or intervention. The prevalence of stunting can also be measured using SMART surveys or other population based cluster surveys. A large sample size is required to measure a reduction in stunting due to the relatively small expected impact of the interventions.

It is not possible to measure whether an activity is nutrition sensitive unless a nutrition indicator is included as a programme outcome. Although a programme might not explicitly set out to reduce stunting it might aim to achieve results along a project impact pathway towards the prevention of stunting. Making programmes more nutrition sensitive requires developing a theory of change. If we take agriculture programmes as an example, we know that good agriculture programmes can improve the quality and quantity of the diet of the household. However, often it has little impact on the nutritional status of children and we still see stunting in food secure areas. This is because child nutrition is affected by a growing list of factors that affect the quality, safety, absorption and utilisation of food. Diet diversity is frequently used as a proxy indicator for undernutrition.

Conclusion

The effective prevention of undernutrition requires a multi-sector approach. There is a lot of promising practice emerging in Concern's work and an increasing recognition across the organization that for sectoral activities to be nutrition sensitive we need to include nutrition indicators in our results frameworks. We need to continue to use our learning to advocate on the local and global stage to keep the emphasis on prevention of undernutrition using evidence based, cost-effective strategies. Concern is committed in its own work to continue to develop our expertise in the prevention of undernutrition and work towards a world where every child can reach his/her full potential.

Endnotes

- ¹ Unicef: http://www.unicef.org/progressforchildren/2006n4/index_undernutrition.html
- ² Unicef: <http://www.unicef.org/nutrition/training/2.5/4.html>
- ³ The paper 'How Concern Understands Extreme Poverty' available at: <https://concern2com.sharepoint.com/sites/KExchange/Publications/How%20Concern%20Understands%20Extreme%20Poverty.pdf#search=how%20concern%20understands%20extreme%20poverty>
- ⁴ Copenhagen Consensus: <http://www.copenhagenconsensus.com/>
- ⁵ The Lancet: <http://www.thelancet.com/series/maternal-and-child-nutrition>
- ⁶ SUN: <http://scalingupnutrition.org/about>
- ⁷ <http://www.thousanddays.org/about/>
- ⁸ <http://caregroups.info/>
- ⁹ World Bank 2013. Improving Nutrition through Multi-sectoral Approaches. Washington, DC.
- ¹⁰ World Bank. 2011. World Development Report, 2012: Gender equality and development. Washington, DC.
- ¹¹ WaterAid <http://www.wateraid.org/uk/~media/publications/Undernutrition-and-WASH.ashx>
- ¹² Shocks are single events with negative consequences, such as natural disasters or some types of conflict. Stresses are gradual changes with negative consequences, such as climate change, or slow changes in the economic or political context.

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