According to the Lancet 2013 series on Maternal and Child Nutrition, nutrition sensitive interventions are those approaches and activities that address the underlying determinants of foetal, infant and child nutrition such as food security, caregiving at the maternal, household and community levels, access to health services, to safe water and a hygienic environment and to safety net programmes.

Since 2015, to support knowledge management for the SUN Movement, ENN has been actively capturing learning on nutrition sensitive experiences across the globe and so far, 87 articles have been published in ENNs two main publications, Field Exchange and Nutrition Exchange that describe nutrition sensitive activities. This synthesis distils the learning from these articles.
LEAD FROM THE FRONT

A key learning is that it is essential for nutrition sensitive plans to be driven by Governments with a strong political will and explicit commitments by leaders to ending nutrition in all its forms\(^2\), \(^1\)\(^4\). National authorities have a core responsibility to ensure the wellbeing of their population and accordingly, leadership for nutrition should be placed at the highest level\(^3\)\(^7\). This is particularly critical for nutrition sensitive interventions as it allows ownership and active participation by a wide range of sectors to address and prevent malnutrition\(^3\)\(^7\). Many articles reflect on the role that strong political will placed high on the government agenda has played in advancing nutrition sensitive interventions across all government sectors\(^2\), \(^8\), \(^11\), \(^14\), \(^29\), \(^30\), \(^32\), \(^48\), \(^56\). For example, Uganda’s, Nutrition Action Plan (2011-2016) was borne out of the 2010 United National General Assembly, where the Government of Uganda committed to tackling high rates of malnutrition and coordination for the Action Plan was situated in the Office of the Prime Minister to highlight their high level commitment to nutrition\(^48\). Likewise, The Government of Malawi ensured nutrition was one of the priorities within the Malawi Growth and Development Strategy (2011-2016). It is clear that in order to scale up nutrition sensitive activities, policy and decision makers need to prioritise and incorporate nutrition commitments into high level national policies, plans and frameworks.

A vast array of nutrition-sensitive activities are being promoted and piloted. This is partially because the empirical evidence for nutrition sensitive agriculture, WASH, gender and even social safety net’s contribution to improving nutrition and how it can be enhanced is weak\(^2\), \(^41\). The articles demonstrate a range of interventions that have been identified as having, to varying degrees, an impact on nutrition outcomes. Some examples are more ‘small scale’ although they offer important insights for scaling up. Many examples are single interventions by a sector, for example, agriculture related activities such as poultry and rabbit rearing\(^5\), kitchen or micro gardening schemes\(^10\), \(^30\), \(^38\) to increase diet diversity; the promotion of orange flesh sweet potato to promote increased micronutrient intake; or crop diversity promotion schemes\(^29\), \(^58\). WASH interventions related to improved irrigation for increasing crop yields\(^6\), \(^60\), and income generation interventions included improving value chains and access to markets as well as entrepreneurial skills training\(^27\), \(^43\). Examples of cash transfers or social safety net schemes featured prominently in the articles and often targeted the nutritionally vulnerable. Cash alone is often combined with behaviour change communication and nutrition education\(^7\), \(^13\), \(^21\), \(^22\), \(^59\). School feeding programmes featured extensively in the articles with examples focussing on fortifying rice or wheat flour within school feeding programmes\(^17\), \(^53\) or using community gardens to increase access to fresh fruit and vegetables\(^19\), \(^31\), \(^46\).

While some articles focussed on single interventions, there are more examples of multi-sector interventions, i.e. a package of nutritional sensitive interventions to improve nutrition outcomes which also provide explorations of interventions at scale\(^23\), \(^24\), \(^35\), \(^42\). One example from Pakistan is focussed on drought prevention through agriculture and livestock management, social safety net mechanisms, food security interventions, livelihoods promotion as well as a WASH response\(^35\).

A package of interventions offers opportunities to improve nutrition even when explicit nutrition objectives are not included in the programme design. This was seen in Nepal where farmers were supported to implement permaculture techniques with integrated food security, education and livelihood activities\(^42\). While nutrition was not strongly emphasised, the authors concluded that many activities have potential to impact nutrition. Furthermore, many interventions contain a combination of nutrition specific and nutrition sensitive activities\(^2\), \(^40\), \(^44\). One example of this was in Zimbabwe where the ‘Enterprize’ Programme provided nutrition specific interventions such as IYCF counselling, improving health seeking behaviour, hygiene promotion, and cooking demonstrations; while nutrition sensitive activities included strengthening value chains of nutrient dense foods, gender empowerment, support for diversified crop production, promotion of biofortified crops, farmer trainings, promotion of post-harvest management, processing and preservation methods\(^44\).
PRIORITISE ACCORDING TO THE CONTEXT

Given the wide range of activities one can employ that can be classified as nutrition sensitive, it is imperative that the activities selected are appropriate for the context. Furthermore, as every country has different nutrition institutional architecture, the scale up of nutrition sensitive interventions is highly context-specific. A variety of tools have been noted as being useful to assess what interventions to prioritise. The most prominent is the ‘Link Nutrition Causal Analysis’ Tool which aims to build evidence-based consensus around the potential causes of undernutrition within a local context and thus develop appropriate strategies to overcome the causes of malnutrition.

In Pakistan, the ‘Fill the Nutrient Gap’ tool was used to gain insights and develop strategies to address the challenge of insufficient nutrient intake within its population. This tool allowed consideration of a variety of variables relating to the nutrition situation in the country including who (vulnerable population groups), where (regions, urban/ rural), when (seasonality), why (compounding factors) and how (quality and quantity of nutrient intake). Both tools have been used in a number of different countries and offer data driven understandings of what interventions to prioritise as well as offering reflections on the complex contextual, cultural, economic and environmental factors that play a role in undernutrition. In Nigeria, a Political Economy Analysis was conducted prior to developing a social protection scheme which helped to capture constraining factors and potential barriers to integrating nutrition outcomes in the programme. In all the examples, the importance of examining the context as well as the programmes and resources already in place is critical.

THINK MULTI-SECTORALLY

A predominant trend within nutrition sensitive interventions is the combination of interventions across two or more sectors, i.e. most were multi-sectoral in design. A multi-sector approach to nutrition can be defined by coordinated action among multiple national government departments, along with local governments and non-governmental agencies, UN entities and others, to address both the direct and underlying causes of malnutrition. A multi-sector approach enables countries to address malnutrition from multiple angles and levels of causation. One article highlighted key factors identified for successful multi-sector programming. These included: ‘adaption of a shared vocabulary and agenda across all actors, designing and planning for deep engagement with communities, a portfolio approach to nutrition to maximise nutritional outcomes, clear guidance from the design stage for holding actors accountable for planned coordination and collaboration efforts, a system of robust technical support to ensure quality implementation and establishment of a strong environment for collaboration, learning and adaptation.’

Bringing a variety of stakeholders and sectors together is complex and thus coordination mechanisms to ensure a multi-sector approach is essential, particularly at...
lower levels of governance which can be more challenging than national coordination structures\textsuperscript{15, 44}. Available guidance on how to coordinate multi-sector action is mainly 'generic' and 'high level' and thus not easily transferable to the sub-national level\textsuperscript{15, 50, 56}. However some positive examples do exist. The Bangladesh 'Nutrition at Centre (N@C)' project utilised pre-existing Union Councils and Union Development Coordination Committees to coordinate work at the Union level as well Community structures at the local level\textsuperscript{2}. Given that these entities were already relatively well established with pre-existing ways of working, nutrition multi-sectoral programming was easily located within the structures' pre-existing mandates\textsuperscript{2}. Such opportunities to build on existing structures and systems and leverage existing relationships should be pursued in order to develop a truly multi-sectoral approach.

Many challenges to coordinate exist and are highlighted in the articles. For example, in Ethiopia, it was stated that ‘the time required to align, the resources needed, the fatigue associated with multiple meetings and the need to maintain momentum after workshops is very challenging’\textsuperscript{34}. A number of articles reflected on the limited incentives to coordinate as sectors have their own targets to meet so these are prioritised over nutrition goals and outcomes\textsuperscript{15, 34}. As a result, the level of multi-sector engagement is variable in most countries\textsuperscript{34}. However, when the pathways of nutrition were highlighted as having a direct impact on achieving other sector priorities, an increased sense of engagement was noted\textsuperscript{19}. For example, highlighting how hunger and poor nutrition directly impacts on children’s school attendance and performance led to the education sector in Malawi making a greater commitment to school feeding programmes\textsuperscript{19}. Thus, highlighting how nutrition directly impacts other sectors is critical. Additional mechanisms to ensure valuable coordination includes defining ways of effectively communicating, having a shared workplan where all sectors see their clear roles and responsibilities, and developing processes for follow up actions\textsuperscript{37}.

A clear challenge highlighted in the articles is the amount of time needed to set up multi-sector projects as building alliances and systems across a number of sectors means that it may take a longer time to achieve goals\textsuperscript{65}. An article reflecting on multi-sector programming in Uganda and Nepal noted the need to take a 'long view' of scale up. A number of stakeholders noted the importance of sustaining commitment to scaling up nutrition and noted that it may take decades before large-scale changes in undernutrition status are evident\textsuperscript{50}.

Furthermore, nutrition sensitive interventions need greater investment to ensure reach. Investments in many nutrition sensitive activities require ongoing commitment. For example, in a follow up study of kitchen gardens in Pakistan, it was found that while 64% of targeted people were still tending their kitchen gardens in the second season, productivity was comparatively lower compared to the first season. Given limited resources in government departments, agriculture workers were not able to provide any follow-up to those who had initially been trained which led to the drop off of productive gardens\textsuperscript{10}.

Other articles also reflect on the challenges of sustainability with continued engagement being recognised as a need in order to ensure successful programming\textsuperscript{23}. In Mauritania, a project focussing on behaviour change and WASH related nutrition activities that had been running for several years was still found to have very low coverage\textsuperscript{33}. Similarly, a multi-sector project in Pakistan found that while there was 100% coverage of nutrition-specific interventions, only 32% of the population targeted were covered by the nutrition-sensitive component\textsuperscript{35}. This, it was noted, was due to cost, as while the nutrition-specific component cost 1.6 euro per person, 10.3 euros were spent per person for nutrition-sensitive interventions\textsuperscript{35}.

It is widely recognised that local stakeholders are the key to successful nutrition sensitive
A one-year, integrated, multi-sector project targeted communities at nutrition risk in an emergency response to drought in Sindh, Pakistan. Government departments at district level were engaged throughout. Nutrition-specific interventions involved community-based management of acute malnutrition (CMAM) and infant and young child feeding (IYCF) support. Nutrition-sensitive interventions involved seasonal cash for training, livestock assistance, improvement of communal wells and rain harvesting, and community hygiene outreach. The project aimed to target 80% of households with a malnourished child with nutrition-sensitive interventions in nutritional ‘hotspot’ villages.

Positive impacts on access to CMAM treatment and IYCF support, livestock (milk production), hygiene practices and availability of safer water sources were reported. Beneficiaries increased expenditure on food and non-food items (especially agricultural inputs) and reduced use of costly, informal credit systems. Ambitious targets on water-borne disease and safe water access were not realised due to underestimated and challenging needs. Households successfully supported to build latrines (n=2,500) soon reverted to open defecation. Only one third of nutritionally vulnerable households were targeted by nutrition-sensitive interventions due to cost limitations. Informed by lessons learned, a follow-up project includes more livestock interventions, a community-led total sanitation (CLTS) approach and an exit strategy to sustain the CMAM programme led by government.

www.ennonline.net/fex/55/msdroughtemergencypakistan

programming. Communities, particularly local and traditional leaders, must be involved from the beginning of projects and be engaged throughout. For example, an article from Malawi noted that a core component of successful school feeding programmes involves actively engaging the local community. The authors recommend that during the development of the project, meetings should be held with the community to jointly identify problems and overall progress of interventions. Similarly, in Kyrgyzstan, the involvement of local communities as well as parents and grandparents was noted as being essential. Engaging communities and getting local communities to take ownership of interventions was also noted as a potential mechanism for overcoming investment challenges and limited capacity within certain sectors to be involved following initial implementation of programmes.

However, the barriers to engaging community members must be noted. For example, in Kenya, some community members were reluctant to engage with home gardening and hygiene education programmes as they preferred more immediate support in the form of food aid. In this example, regular community discussions needed to be held to highlight the importance of more sustainable interventions and to explain the impact that malnutrition has on children.

FOCUS ON TRAINING AND BEHAVIOUR CHANGE

Given that nutrition is often a relatively new concept across sectors and limited knowledge of nutrition sensitive practices is often seen at the community level, training is essential and features strongly within articles as a key consideration when examining how to scale up nutrition sensitive activities. For example, in Ethiopia, a capacity needs assessment was initially conducted to assess knowledge gaps within nutrition-sensitive agriculture and based on the results of this, appropriate and tailored training was developed and rolled out to address capacity gaps. A similar method was used in the Central African Republic where nutrition programme managers provided cross sector training to food security staff. In Nepal, a ‘Training of Trainers’ methodology was utilised for capacity building efforts in relation to multi-sector nutrition programming and in Bangladesh, training focussed on supportive supervision, mentoring and monitoring to ensure the quality of programmes. Offering training across sectors can be costly, time consuming and place additional stress on nutrition staff and thus should be adequately planned for, particularly when examining scale up plans.

Training at the community level largely focussed on behaviour change messaging. Such messaging generally focussed on basic nutrition messaging,
have oversight of nutrition budgets and funding

Understanding the financial costs of scale up plans is essential and remains challenging as it requires oversight of financial arrangements across a number of different sectors and agencies\textsuperscript{1, 34, 50}. The SUN Movement’s work around budgeting and financial tracking has made great progress in effecting transparency and documentation across nutrition budgets and expenditure however, more needs to be done to ensure sufficient cross sector tracking of finances\textsuperscript{3, 34, 50}. Despite the challenges, financial commitments to nutrition sensitive activities are increasing. After the introduction of a national policy on multi-sector nutrition programming in Nepal, Senegal and Malawi, resources for nutrition-sensitive programming have increased significantly with Malawi developing a separate budget line for nutrition, thus improving public oversight and accountability for spending\textsuperscript{1, 14, 26}. In Zambia, in order to support the national commitment to nutrition, the Ministry of Agriculture and Cooperatives budget expanded to include new budget lines to support scaling up nutrition initiatives within the Agriculture sector\textsuperscript{29}. Such mechanisms are recommended for other countries in order to ensure that sectors are held accountable to commitments made to scaling up nutrition-sensitive interventions.

However, sector inputs vary tremendously and budget allocations to nutrition remain low\textsuperscript{1, 36, 43}. For example, a study from Nepal noted that cost categories for nutrition-sensitive interventions varied from an estimated 5% to 75% contribution to nutrition\textsuperscript{1}. Estimates of nutrition budgeting at the national level ranged from 0.1% of the national budget in Guinea, to 3% in Mauritania\textsuperscript{39}. Thus, advocacy for increased spend on nutrition needs to remain a priority.

**EXPLORE WAYS TO EFFECTIVELY MONITOR AND EVALUATE INTERVENTIONS**

While there are many examples of strong M&E systems for small scale interventions\textsuperscript{9, 40, 44}, few examples exist of successful M&E systems for large-scale nutrition-sensitive activities\textsuperscript{15, 34}. This is partly because robust monitoring systems able to demonstrate the nutrition impact of multi-sector interventions are difficult to set up and require the harmonisation of multiple data sources. One success story noted was that of Malawi where a multi-sector monitoring plan and web-based reporting system was developed which at the time of publication, had been rolled out to 50% of districts in the country\textsuperscript{14}. In Ethiopia, the need for a ‘data revolution’ was recognised within their plans to reduce stunting. However, this was hampered by a lack of consistency in terms of indicators collected and frequency of data collection across the sectors\textsuperscript{34}. As a means of mitigating this, quarterly and six monthly review meetings were held that enabled sectors to jointly appraise progress\textsuperscript{34}.

A similar process was noted in Bangladesh found that regular progress-sharing was important to sustain the motivation of multi-sector committee members and hold them accountable for achieving nutrition goals\textsuperscript{2}. In Senegal and Niger, baseline, mid-term and end-term evaluations were conducted to establish nutrition progress as a means of mitigating the lack of a regular monitoring system\textsuperscript{15, 34}. While there are a few examples of progress in developing effective M&E systems, it must be recognised that measuring changes in nutritional status using anthropometry requires sophisticated evaluation design\textsuperscript{60}. Additional expertise to develop impact assessments remains a need.
REFERENCE LIST


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