

WASH and nutrition: why and how to integrate

This note sets our practical guidance for WaterAid country programmes on joint WASH and nutrition programming, implementation, monitoring and advocacy.

The problem

Around the world millions of children suffer from undernutrition – an outcome of insufficient food intake or nutrient absorption, and of repeated infectious diseases. Although undernutrition is often considered to be an issue of food security – defined as sufficient, safe and nutritious food available at all times – evidence shows that availability of sufficient, quality food does not necessarily result in improved nutrition. Other health and environmental factors, including poor water, sanitation and hygiene (WASH), result in repeated infections, which affect how nutrients are absorbed and used within the body. Poor nutrition status further increases susceptibility to disease, thereby creating a vicious cycle. Through this pathway poor WASH significantly contributes to undernutrition.

Globally, 156 million children under five are stunted (low height-for-age) and 50 million are wasted (low weight-for-height).¹ The consequences are devastating – malnutrition contributes both directly and indirectly to almost half of all deaths in children under five. Of the children who survive, one in four are left stunted, which irreversibly impairs their long-term physical, cognitive and emotional development. As a result, they are more susceptible to disease and ill health, have lower school attainment and ability to learn, and lower economic productivity later in life. The economic consequences of malnutrition for a country are therefore significant, with estimated losses of 11% of gross domestic product (GDP) seen every year in Africa and Asia.¹

Interventions to improve nutrition are classified into two types:

- **Nutrition-specific interventions** – target the immediate causes of poor growth and development (for example, micronutrient supplementation or fortification, or breastfeeding promotion). These are usually, but not always, delivered through the health sector.
- **Nutrition-sensitive interventions** – address the underlying causes of malnutrition, and incorporate nutrition goals and actions (for example, WASH, education, agriculture).

Improving nutrition requires action across several sectors including health, WASH, agriculture, education, and social protection. Evidence shows that scaling up the ten high-impact nutrition-specific interventions, such as micronutrient supplementation, to 90% coverage in the countries with the highest burden of undernutrition would only reduce stunting by 20% globally.² Action across multiple sectors is critical to

overcome the underlying and indirect causes of undernutrition and greatly reduce stunting.

A growing body of evidence suggests the links between poor WASH and nutrition are stronger than previously thought. **WHO estimates that 50% of undernutrition is associated with infections caused by poor WASH.**³ These include diarrhoeal diseases, intestinal worms, and environmental enteric dysfunction (EED) – a sub-clinical condition in which the structure and function of the small intestine are impaired by constant faecal-oral transmission of pathogens, leading to poor absorption of nutrients.

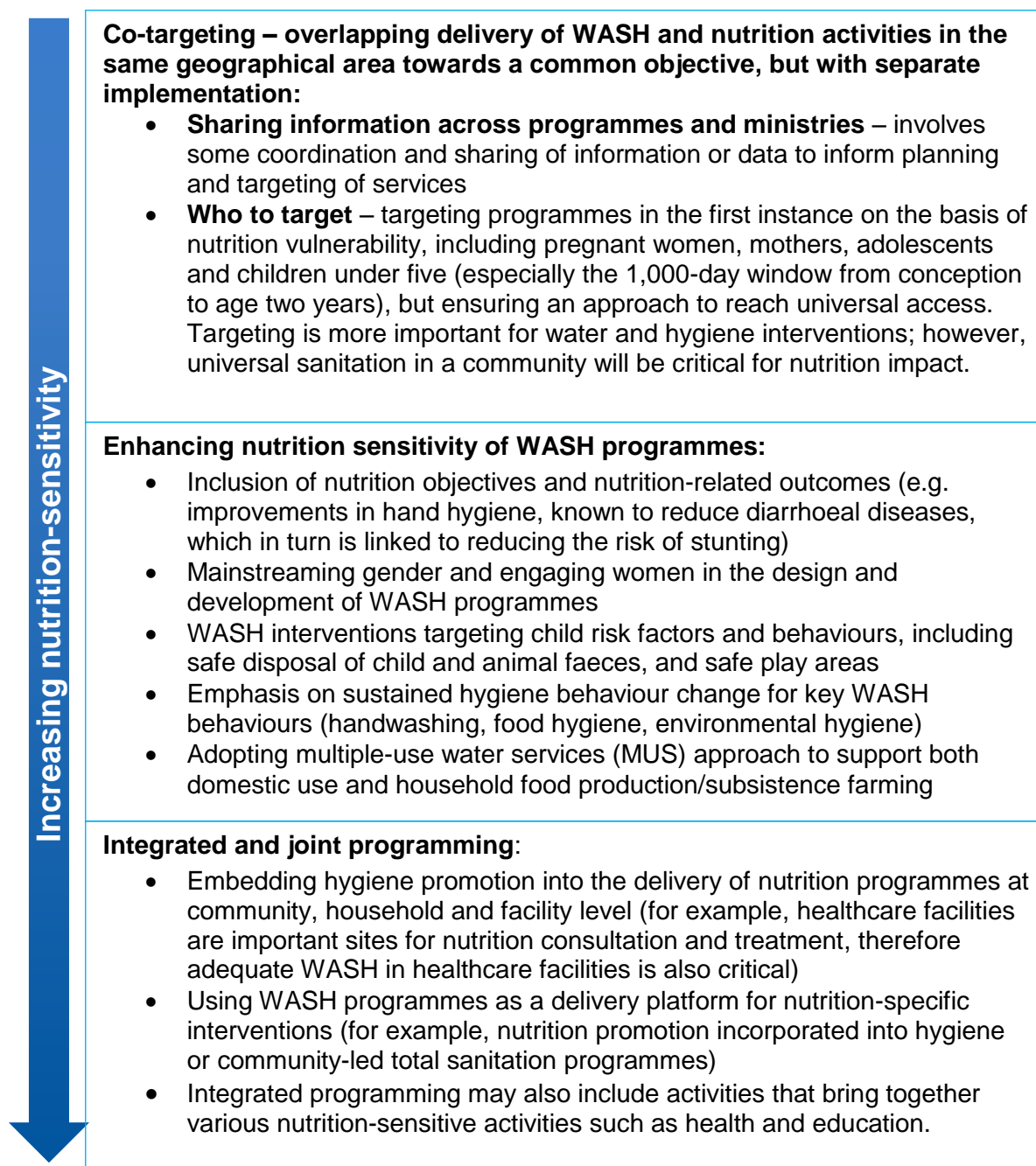
Recent estimates suggest that unimproved sanitation is the second leading cause of stunting worldwide.⁴ The health and nutrition benefits of improved sanitation are thought to come from increased community coverage rather than individual use, since the environment remains contaminated until improved sanitation becomes almost universal in a community.

What this means for WaterAid

Although WASH programmes are defined as ‘nutrition-sensitive’,⁵ designing them through a ‘nutrition lens’ can enhance their impact on health and nutrition outcomes. This does not necessarily require a dramatic shift in how WaterAid operates, but could mean some changes to the way in which WASH programmes are planned, designed, delivered and monitored.

Working through a nutrition lens, WaterAid could:

- Plan WASH interventions in areas with high rates of undernutrition.
- Make its own programmes more nutrition-sensitive to achieve greater impact and attract more health or nutrition-related funding (see figure 1).
- Develop integrated approaches by working hand-in-hand with health and nutrition partners and ministries.
- Support and build national capacity by inputting into nutrition and WASH policies, planning and programme design.

Figure 1: A continuum approach to nutrition-sensitive WASH programmes


Key considerations across the different elements of WaterAid’s ‘Programmatic Approach’ⁱ can inform how to increase our focus and impact on nutrition, whether through increasing the nutrition sensitivity of a WASH programme or delivering joint WASH and nutrition programming.

ⁱ WaterAid’s Programmatic Approach is a coherent package of service delivery and advocacy activities which defines and guides how we work at all levels, from local to international.

WASH and nutrition through the Programmatic Approach

1. Analysing the context

No 'one-size-fits-all'. There is no single blueprint for a 'nutrition-sensitive' WASH programme or for an integrated WASH–nutrition programme. Instead, the different ways of collaboration should be considered along a continuum (as in Figure 1). This should be informed by the nutrition and WASH status and challenges, existing programmes, stakeholders involved, and the needs of the communities (for example especially vulnerable groups such as adolescent girls or children), recognising that it may not always be useful or necessary to deliver joint programming in all circumstances. Understanding the benefits of working together across sectors can help clarify and align goals across WASH and nutrition programmes, and increase the added value of each.

- **Assessing WASH status** is important to understand the key pathways through which poor WASH is leading to undernutrition in a particular setting.
- **Assessing nutrition and WASH data.** Understanding the particular WASH and nutrition challenges in a setting is a critical first step. Nutrition data can help inform where to target WASH programmes. This requires analysing existing data such as stunting prevalence, diarrhoea prevalence, anaemia prevalence, and deworming coverage. In some settings, prevalence of severe acute malnutrition, moderate acute malnutrition, intestinal parasite prevalence, and skeletal fluorosis may also be important, and will depend on context. Nutrition data can sometimes be challenging to find. It can usually be accessed from a variety of sources, including:
 - o Health management information system (HMIS), available from the Ministry of Health
 - o Demographic health surveys (DHS), every four to five years. Available online (dhsprogram.com/data/available-datasets.cfm).
 - o Multiple indicator cluster survey (MICS) – UNICEF assists country governments in collecting data (mics.unicef.org/)
 - o National or regional child health and nutrition surveys
 - o Annual global nutrition report (www.globalnutritionreport.org/)
- **Assessing status of other underlying drivers of nutrition.** Integrated programmes may also include other sectors (for example bringing together multiple partners to deliver different aspects under one joint programme funding structure and management), such as agriculture, health, and social protection. Therefore it is important to understand existing programmes and gaps in a particular setting in order to adequately respond to the problem. Adopting a multiple-use water services (MUS) approach may be appropriate in some settings to take into consideration the different needs of users, including domestic and agricultural uses, as a starting point for designing infrastructure, and for management and maintenance.

2. Working in partnerships, coalitions and networks

- **Analyse institutional systems.** Understand the institutional structures for delivering WASH and nutrition to identify synergies, mechanisms for coordination, resources, and sector bottlenecks for WASH and nutrition.
- **Remain the WASH experts.** As WASH experts, you are not expected to become nutritionists and deliver nutrition-specific interventions. Your expertise can contribute significantly to ‘nutrition-sensitive’ thinking and planning. Therefore, aim to partner or collaborate with organisations specialised in nutrition programming, to ensure the nutrition-specific components and other nutrition-sensitive components are delivered effectively.
- **Map stakeholders.** Nutrition is not a single ‘sector’ – it is a complex issue with many government ministries involved and a host of different actors including civil society organisations (CSOs) and private sector across health, agriculture, education and social protection. Map interest groups and potential partners to know who is doing what at local, national and global levels, to limit duplication, identify gaps, strengthen existing efforts, and access resources. The different objectives of nutrition and WASH programmes need to be considered to ensure a mutually beneficial partnership.
- **Participate in nutrition platforms.** Many countries where WaterAid works are members of the Scaling Up Nutrition (SUN) movement. Each member of the movement has a SUN government focal pointⁱⁱ and multi-stakeholder platforms, which bring together different sectors and stakeholders across government, CSO and private sectors. These are useful entry points and platforms to engage – start by joining these and attending their meetings. A number of SUN countries also have SUN civil society alliances, which bring together diverse civil society members working on nutrition. Countries that are not members of the SUN movement may also have relevant cross-sectoral platforms and coalitions working on nutrition (for example, the Zero Hunger Challenge) that would be useful for WaterAid to join and are a starting point for high-level coordination on joint programming. Coordination should occur through existing structures, but where these are not available, seek allies or networks to establish a new nutrition-WASH working group or taskforce with clearly defined terms of reference. This coordination should occur ideally at both national and provincial levels to ensure translation of national policy and implementation of joint programming.

3. Delivering services

- **Planning.** Joint planning should be supported by the analysis and in coordination with partners (as outlined in steps 1 and 2). There are different modalities to working together, including convergence (overlapping delivery of WASH and nutrition programmes in the same area but implemented separately) and integration (unified programme with joint delivery and significant coordination and communication across nutrition and WASH actors). Challenges may arise around site selection and targeting since

ⁱⁱ www.scalingupnutrition.org/sun-government-focal-points

nutrition interventions tend to target specific households or individuals (for example pregnant women or new mothers and newborns) whereas WASH interventions tend to require community and universal access, therefore understanding everyone's objectives and ensuring clear communication are critical.

- **Phased approach.** Nutrition and WASH joint programming should take a phased approach to prevent disruption to existing activities and structures. This could begin with convergence in the same geographical region and become more integrated over time, beginning with identifying 'quick wins', such as opportunities to integrate hygiene promotion into government priorities for nutrition and existing programmes – for example through vitamin A and deworming campaigns, or the Infant and Young Child Feeding (IYCF) programme.
- **Implementation platforms.** Integrated WASH and nutrition programmes can be delivered at different levels depending on the context, service providers and enabling environment. These levels include household or community, healthcare facilities (a critical platform for nutrition messaging and interventions, therefore a useful entry point for integrated programming), education facilities (including early childhood development programmes and schools), and social and mass media communications.
- **Emphasis on hygiene behaviour change.** Ensuring sustained and effective hygiene behaviour change is essential for the nutritional benefits of WASH programmes to be realised. Hygiene promotion can be an entry point to work with nutrition stakeholders. A comprehensive nutrition-sensitive hygiene behaviour change promotion package can be creatively designed and informed by formative research targeting key related behaviours. The key behaviours include exclusive breastfeeding, food hygiene, handwashing with soap at critical times, milk and household water treatment and storage, and safe disposal of child faeces.

4. Developing capacity:

- **Capacity, knowledge and accountability.** Staff and other stakeholders from nutrition and WASH programmes often lack the technical expertise of the other, so short briefings, meetings, training, and seminars that bring nutrition and WASH actors together can be good opportunities to build this knowledge and understanding. Ensuring stakeholders from each sector are responsible for delivering progress on the other, for example through including this in job responsibility and objectives, can support greater cross-sector working. Strengthening the capacity of WASH and nutrition stakeholders both within and outside government is critical to developing joint programming, including the structures needed to facilitate dialogue and sharing of information. All our work should support and build the capacity of existing systems and staff structures, for example strengthening community health worker outreach programmes.

5. Influencing and advocacy:

- **Enabling environment.** Integration and collaboration needs to be mandated within national policies, strategies and frameworks. This requires cross-sectoral and cross-ministerial coordination structures and mechanisms at different levels of government to support joint planning, budgeting, delivery, and monitoring. A key challenge to joint programming is separate and insufficient funding, from both governments and donors. Building the evidence for the effective delivery of integrated programmes will be critical to influencing donor and government behaviour, and ensuring funding aligns and supports multi-sectoral national nutrition action plans. However, funding doesn't need to be for a joint programme, it can be from different sources but aligned to the multiple areas of a joint programme.
- **Integrated policies.** Analysing national nutrition plans and policies for the inclusion of WASH can help inform the gaps (see WaterAid's report '[The missing ingredients](#)'). A strong national multi-sectoral nutrition policy and plan that recognises the importance of WASH for nutrition outcomes paves the way for the development of integrated programming at all levels. In addition, ensuring WASH sector plans and policies consider the impact on nutrition and identify opportunities to collaborate will also be important. Nutrition-sensitive sectors should be actively involved in development of nutrition policies and plans, and involved in national and district coordination committees and platforms for nutrition. Ideally, sectors should coordinate and align their planning and monitoring and evaluation systems, along with developing joint accountability mechanisms across key cross-cutting elements.

6. Continuous analysis, learning and reflection

- **Monitoring and evaluation.** Developing baselines with both nutrition (for example stunting and diarrhoeal prevalence data) and WASH components (for example access and use data) will allow assessment of progress. Therefore, where possible, nutrition surveys should seek to include WASH indicators, and, similarly, WASH surveys and baselines should include nutrition measurements. In addition, developing specific monitoring and evaluation indicators on integrated activities creates incentives for working together.
- **WaterAid programme reporting.** Measuring the extent to which nutritional outcomes are a result of a WaterAid WASH programme is almost impossible, given that the multitude of factors that influence nutrition are outside the control of a WASH programme. Therefore, do not commit to measuring impact on nutrition or health outcomes. Monitoring outcomes beyond access to WASH services – such as usage, maintenance of infrastructure and behaviour change – will be important to understand the impact on nutrition (see WaterAid example log-frame for health and nutrition). For example, measuring changes in behaviour at outcome level is recommended for reporting on whether WASH programmes are contributing to reductions in undernutrition and diarrhoeal diseases, since there is evidence from other

studies that key hygiene behaviours, such as handwashing with soap, impact on diarrhoeal and nutrition outcomes.

- **Learning.** As WASH and nutrition integration is a relatively new concept, and examples of high-quality integrated programmes and nutrition-sensitive WASH programmes are rare, efforts should be made to document experiences and good practice in order to contribute to learning and influencing in this area, along with documenting what didn't work. Innovative approaches should be trialled, along with different ways of working to develop new and creative ideas.

Useful resources

- UNICEF, USAID and WHO (2015). *Improving nutrition outcomes with better water, sanitation and hygiene: practical solutions for policies and programmes*. Geneva, Switzerland: WHO.
- CONCERN Worldwide (date). *How to better link WASH and nutrition programmes*. Available at www.susana.org/resources/documents/default/3-2150-7-1422027992.pdf (accessed 16 January 2017).
- Global Nutrition Report (2016) *From Promise to Impact* www.globalnutritionreport.org/the-report/ Table differentiating a nutrition-sensitive WASH programme from a conventional WASH programme (p71). The GNR have also produced short country nutrition profiles, which include statistics on key nutrition measures as well as water and sanitation coverage. www.globalnutritionreport.org/the-data/nutrition-country-profiles/
- ACF, ECHO and UNICEF (2016). *WASH Nutrition Operational Manual: A practical guidebook on increasing nutritional impact through integration of WASH and nutrition programs*. http://www.actioncontrelafaim.org/sites/default/files/publications/fichiers/manuel_wash_nutrition_online.pdf
- WaterAid and SHARE (2016). *The missing ingredients: are policy-makers doing enough on water, sanitation and hygiene to end undernutrition?* www.wateraid.org/themissingingredients
- Chase and Nguru (2016). *Multisectoral Approaches to Improving Nutrition: Water, Sanitation, and Hygiene?* World Bank Report. Available at <http://documents.worldbank.org/curated/en/881101468196156182/pdf/102935-WSP-Box394845B-PUBLIC-ADD-SERIES-Water-and-Sanitation-Program-WSP.pdf>
- UNICEF (2016). *Nutrition–WASH Toolkit. Guide for practical actions*. East Asia and Pacific Regional Office (Bangkok, Thailand). June 2016.

Would you like additional support?

If you would like strategy documents or plans reviewed, or to discuss your planning on nutrition-sensitive WASH in more detail, please feel free to get in touch with the following people:

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¹ WHO, UNICEF and World Bank (2016). *Joint child malnutrition estimates – levels and trends*. Available at www.who.int/nutgrowthdb/estimates2015/en/ (accessed 29 March 2017).

² Bhutta Z A et al (2013). *Evidence-based interventions for improvement of maternal and child nutrition: what can be done and at what cost?* The Lancet 382(9890): 452–477.

³ WHO (2008). *Safer water, better health: Costs, benefits and sustainability of interventions to protect and promote health*. Available at: http://whqlibdoc.who.int/publications/2008/9789241596435_eng.pdf (accessed 29 March 2017).

⁴ Danaei G et al (2016). *Risk Factors for Childhood Stunting in 137 Developing Countries: A Comparative Risk Assessment Analysis at Global, Regional & Country Levels*. PLoS Medicine 13(11): e1002164. DOI:10.1371/journal.pmed.1002164

⁵ Black RE, Victora CG, Walker SP, et al (2013). *Maternal and child undernutrition and overweight in low-income and middle-income countries*. Lancet. 382(9890):427–51.