

# Integrating WASH and Nutrition in practice: what works, what doesn't



## Workshop 22, SUN Global Gathering session Thursday 7 November

The goal of ending malnutrition by 2030 cannot be met while almost every SUN country struggles with inadequate provision of safe water, sanitation and hygiene (WASH) in households, communities, health care facilities and schools. The SUN and [Sanitation and Water for All \(SWA\)](#) partnership aims to support governments and partners to drive greater collaboration and integration of nutrition and WASH. Two years on since the last SUN Global Gathering, there has been exciting progress in this area, alongside a better understanding of what works and what doesn't. In this interactive session we discussed the latest evidence, alongside country experiences from Cambodia, Ethiopia, Madagascar, Mali and Nepal.

The workshop was organized by partners of the SUN-SWA Working Group on WASH and Nutrition, in particular: Action contre La Faim (ACF), German Toilet Organisation (GTO), SWA Secretariat, SUN Secretariat, WaterAid and the World Bank Group.

The specific aims of the session were for participants to:

- Co-develop and share priorities for advancing integration of WASH and nutrition, taking into account the lessons learned from the presenters and opportunities that lie in both SUN and SWA global platforms and their national networks
- Understand the implications of new research to better inform policies and programmes
- Identify practical recommendations for integration of WASH for nutrition based on what we know from the existing evidence
- Document and share countries experiences of delivering a multi-sectoral approach to nutrition with WASH
- Identify future opportunities for collaboration between SUN and SWA focal points from different countries, civil society, donors and other partners.

## Opening remarks

**Dr Meera Shekar**, World Bank Group Global Lead for Nutrition and SUN Executive Committee Chair acted as the workshop host and moderator.

**Gerda Verburg**, SUN Movement Coordinator & UN Assistant Secretary-General, opened the workshop by introducing it as a crucial session in collaboration with SUN's 'sister organisation'

Sanitation and Water for All (SWA). She said that she hopes their collaboration at the global and national levels will continue to operationalise how to take effective integrated, multisectoral action combining WASH and nutrition.



**Dr Sisay Sinamo**, Senior Program Manager - Seqota Declaration, Ministry of Health, Federal Government of Ethiopia, spoke about the importance of WASH within Ethiopia's National Nutrition Plan (2016–2020). He argued that health workers are unable to deliver effective nutrition interventions if they do not have adequate water, sanitation and hygiene services within their health care facilities. He highlighted the importance of careful management of water resources for multiple uses, including food, agriculture and household use. In his experience, WASH is an important long term investment which must be integrated and coordinated with other interventions within a country-owned and led approach. Finally, he emphasized that water and sanitation are human rights and so provision of these services should be prioritized for everyone, leaving no one behind.

## Policy and practice implications of the latest evidence on WASH-Nutrition

**Dan Jones**, Global Advocacy Coordinator at WaterAid, gave a presentation providing an overview of the existing evidence and research on the interconnections between WASH and nutrition. He began by highlighting UNICEF's updated conceptual model of nutrition as published in their new '[State of the World's Children' report](#) focused on malnutrition, pointing out that water, sanitation and hygiene are clearly incorporated within the 'underlying determinants'. He also quoted from the report that: *"For far too many children, the causes of malnutrition also include poor access to essential health services and to clean water and adequate sanitation, which can lead to illnesses that prevent the child from absorbing nutrients"* and that we need to *"Mobilize supportive systems – health, water and sanitation, education and social protection – to scale up nutrition results for all children."*<sup>1</sup>

Jones argued that progress on reducing stunting and wasting was likely to remain

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off-track while one in ten people globally do not have clean water close to home, and 2 billion people in the world – one in four – do not have a decent toilet of their own.<sup>2</sup> He noted that while Randomised Control Trials have primarily focused on the direct impact of WASH on nutrition, we mustn't lose sight of the indirect links, which are crucially important. He gave the example of women and girls being responsible for water collection in the vast majority of households without WASH on site - this is time that they are unable to spend in school learning, or caring and feeding young children, exacerbating the risk of malnutrition.<sup>3</sup> Also, many nutrition interventions are delivered in health care facilities. How can they be effective when nearly half of healthcare facilities in least developed countries, and one in four globally, do not have clean water on site? <sup>4</sup>

Relatively few studies have examined the impact of WASH on linear growth (stunting). Jones pointed to the [2013 Cochrane Review](#) of 14 studies, 5 RCTs, which found suggestive evidence of a small benefit of WASH interventions on linear growth.<sup>5</sup> Overall there were a limited number of studies found and studies were generally of low/medium quality. More recent studies, on [community-led sanitation in Mali](#) <sup>6</sup> and on [household piped water and sanitation in rural India](#),<sup>7</sup> indicated that these interventions were associated with growth impacts in children under age 2. Jones also pointed to studies indicating that recovery from acute malnutrition cases was more rapid in intervention households with WASH than those without, in studies in [Pakistan](#) <sup>8</sup> and [Chad](#).<sup>9</sup>

This year, the results of three major cluster RCTs (the '[WASH Benefits](#)' and '[SHINE](#)' trials) had been published which tested the combined and independent effects of improved WASH and improved infant feeding and which concluded that the WASH interventions had no effect on child linear growth and only mixed effects on diarrhoeal disease. Following the publication of these results, Jones explained that WHO and the Bill & Melinda Gates Foundation had convened an expert meeting to discuss the implications of these findings, involving 22 leading academics in the WASH and nutrition fields, which [concluded with 5 key 'consensus' messages](#):<sup>10</sup>

1. Despite high compliance, the evaluated WASH interventions – as delivered in these settings – had no effect on linear growth, and mixed effects on diarrhea.
2. The biological plausibility of WASH as public health interventions is not challenged by these findings.
3. Historically, large, population-level gains in child health have not been achieved without significant improvements in WASH services.
4. Current evidence suggests that basic WASH services alone are unlikely to have a large impact on childhood stunting.
5. The results of these trials do not undermine the new and ambitious SDG target of safely managed services for all.

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Jones concluded by highlighting [WaterAid's response](#) to the recent evidence in terms of implications for their programmatic and policy work on WASH-Nutrition integration.<sup>11</sup> WaterAid's four key messages were:

1. In highly contaminated environments (such as those in these studies), children may be exposed to a range of pathogens through multiple transmission routes (hands, animals, food) – so even if block one of these pathways successfully, you may get no health impact. Basic WASH interventions failed to significantly reduce environmental exposure to enteric pathogens at a level to substantially reduce diarrhoea and improve linear growth and therefore **interventions should aim to dramatically clean up the environment and block multiple transmission routes** including from animal faeces, food hygiene, community wide sanitation coverage - improving the overall environment including consideration of the full sanitation chain.
2. Achieving sustained health impact requires **sustained changes in key hygiene behaviours** (and we know this is difficult to achieve in many contexts, but as organisation we are working to understand what innovative approaches and models can be used at scale)
3. As a sector we need to move beyond basic siloed-based WASH projects delivered in isolation to investing in **systems strengthening** - comprehensive approaches working through and with government systems and integrated with other sectors - in line with ambition of SDG 6.
4. WaterAid (and other agencies delivering programmatic work on WASH and nutrition) have an important role to play in **contributing to fill critical knowledge gaps through implementation research**.

In a brief question and answer session, issues raised included: the importance of choosing the right WASH interventions (with a focus on water quality improvements); the challenge of inadequate investment in the operation and maintenance (O&M) of WASH infrastructure; the need for better data-sharing between WASH and nutrition sectors (for example between the [WHO-UNICEF Joint Monitoring Programme for WASH](#) and the [Global Nutrition Report](#)); and the importance of influencing political decision-makers to support an integrated multisectoral approach.



### Moderated panel discussion on country experiences

Next, Dr. Meera Shekar moderated a discussion with country representatives from Cambodia, Madagascar, Mali and Nepal.

**H.E. Dr Sok Silo**, Secretary-General of Cambodia's Council for Agriculture & Rural Development (CARD), highlighted the importance of high level political leadership for integration from the Deputy Prime Minister. He referred to the Deputy Prime Minister and CARD convening national government-led conferences on WASH and Nutrition in 2016 and 2018. A Sub Working Group on WASH-Nutrition has been established by CARD to bring stakeholders together and formulate common goals and vision. Dr Sok noted that challenges remain, including how to secure financial allocations for integrated approaches; coordination at the subnational level, and limitations of the data and evidence to promote this integration. A detailed case study of Cambodia's progress on WASH-Nutrition integration can be [read here](#).

**Dr. Bhim Singh Tinkari**, Director of Family Welfare Division in Nepal's Department of Health Services, referred to the incorporation of WASH within [Nepal's Multisector Nutrition Plan \(2018-22\)](#). He explained that a Coordination Commission is helping to bring together the relevant line ministries. Dr Tinkari highlighted a tangible example of an integrated WASH-Nutrition approach being delivered in Nepal – an approach integrating nutrition-relevant hygiene behaviour change within the routine immunization programme which is currently being scaled-up to nationwide (more information on this approach can be found on [WaterAid's website here](#)). Now the Government of Nepal are working at sub-national level: trying to implement training



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and coordination meetings of local authorities which need to be done regularly to gradually build up knowledge and capacity on integrated approaches.

**Lucie Solofonirina**, National Coordinator of Madagascar's Office National de Nutrition (ONN), pointed out the integration of WASH as a strategic axis in Madagascar's National Nutrition Plan, supported by operational and M&E plans. She highlighted a 10 year World Bank grant for WASH-nutrition integration in Madagascar, which explicitly plans for five years to innovate/investigate/implement and five years to scale up. Ms Solofonirina explained Madagascar's approach of integrated 'Nutrition villages' where a multisectoral approach combining several sectors is used as a model to showcase to decision makers for scale up. She noted that coordination and implementation at the sub-national level remains a challenge. A case study of Madagascar's progress on WASH-Nutrition integration can be [read here](#).

**Djoouro Bocoum**, SWA Focal Point and Directeur National Adjoint de l'Hydraulique in Mali, spoke passionately about the need for integrated approaches. He highlighted that the mid term review of Mali's previous Multisector Nutrition Action Plan (2014-18) pointed out the inadequacy of the integration of WASH. In response, a more integrated program has now started in 2019. He argued that it is often the same frontline and sub-national actors who are in fact working on WASH and nutrition and therefore that this should facilitate more joined-up approaches. The SWA platform facilitates regular multi-sector meetings and pushes governments to make commitments that civil society can then use to advocate for faster progress.



## Facilitated table discussions

After the panel discussion, the audience went in to small table discussions to reflect on what they had heard and to consider some of the key issues that had emerged as enablers or barriers to WASH-Nutrition integration. The report-backs from these table discussions highlighted a number of challenges and opportunities, such as:

- Policy integration is still lacking in many countries, and where policies themselves are integrated, there remain big challenges with financing and implementation of integrated approaches.
- Shared success stories can be used for advocacy evidence of the utility of integration.
- High level political will is very important for integrated approaches, because only the highest political leaders can bring together multiple line ministries and hold them to account.
- It is important to maximise the use of existing financial opportunities for more integrated approaches (the GFF was cited as one example).
- It takes substantial ongoing work to translate high level political dialogue on integration into improved sub-national coordination and local level delivery.
- Strong accountability is crucial to maintaining multisectoral/integrated approaches, and this requires communities and citizens to be empowered, knowledgeable and aware of their rights.
- Using existing multisectoral platforms to build more integrated approaches and to strengthen coordination.
- Achieving sustainable behaviour change related to nutrition and hygiene is challenging, long term and requires creative thinking.
- Securing budget for WASH-Nutrition integration requires the involvement of multiple ministries and identifying relevant budget lines in multiple areas.
- Cross-government coordination remains a big challenge in most countries – line ministries often function in sector-siloes and it is hard to improve cooperation and information-sharing.
- Technical capacity for WASH is limited at the sub-national level, and often WASH practitioners do not have the understanding of how to enhance the 'nutrition-sensitivity' of their interventions.
- There remains insufficient evidence on the benefits of WASH-Nutrition integration to convince donors and governments – more is needed.

## Closing remarks

**Hideya Yamada**, Vice-President for Food, Agriculture and Nutrition at Japan's International Cooperation Agency (JICA) concluded the session by saying that he believed the workshop had helped the participants to feel 're-energised' about the

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importance of multisectoral approaches, and he hoped the participants would bring this energy to the 'Nutrition for Growth' summit in Tokyo in 2020. He highlighted JICA's support to [WASH-Nutrition integration in Mozambique](#) as a practical example, and encouraged participants from countries to contact their JICA country offices for joining multisectoral actions. He also noted that WASH-Nutrition integration had been a consistent theme for Japan, including at this year's TICAD 7 (7th Tokyo International Conference on African Development) in August, which had included specific discussion of the integration between nutrition and WASH within the context of Universal Health Coverage (UHC).



<sup>1</sup> UNICEF (2019) The State of the World's Children 2019. Children, Food and Nutrition: Growing well in a changing world. <https://www.unicef.org/media/61871/file/SOWC-2019.pdf>

<sup>2</sup> WASH data is from the WHO and UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene. Full reports and interactive data available at: <https://washdata.org/>

<sup>3</sup> WHO/UNICEF JMP (2017) Progress on drinking water, sanitation and hygiene: 2017 update and SDG Baselines. <https://washdata.org/report/jmp-2017-report-final>

<sup>4</sup> WHO-UNICEF JMP (2019) WASH in Health Care Facilities: Global Baseline Report 2019. <https://washdata.org/sites/default/files/documents/reports/2019-04/JMP-2019-wash-in-hcf.pdf>

<sup>5</sup> Dangour AD, Watson L, Cumming O, Boisson S, Che Y, Velleman Y, Cavill S, Allen E, Uauy R. Interventions to improve water quality and supply, sanitation and hygiene practices, and their effects on the nutritional status of children. Cochrane Database of Systematic Reviews 2013, Issue 8. Art. No.: CD009382. DOI: 10.1002/14651858.CD009382.pub2

<sup>6</sup> Pickering A, Djebbari H, Lopez C, Coulibaly M, Alzua ML. Effect of a community-led sanitation intervention on child diarrhoea and child growth in rural Mali: a cluster-randomised controlled trial. Lancet Global Health 2015;3: e701–11.

<sup>7</sup> Reese H, Routray P, Torondel B, Sinharoy SS, Mishra S, Freeman MC, Chang HH, Clasen T. Assessing longer-term effectiveness of a combined household-level piped water and sanitation intervention on child diarrhoea, acute respiratory infection, soil-transmitted helminth infection and nutritional status: a matched cohort study in rural Odisha, India. International Journal of Epidemiology. 2019 Jul 30. pii: dyz157. doi: 10.1093/ije/dyz157.

<sup>8</sup> Doocy S, Tappis H, Villeminot N, Suk A, Kumar D, Fazal S, Pietzsch S. (2018). Point-of-use water treatment improves recovery rates among children with severe acute malnutrition in Pakistan: Results from a site-randomized trial. Public Health Nutrition, 21(16), 3080-3090. doi:10.1017/S1368980018001647



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<sup>9</sup> Altmann M, Altare C, van der Spek N, et al. Effectiveness of a Household Water, Sanitation and Hygiene Package on an Outpatient Program for Severe Acute Malnutrition: A Pragmatic Cluster-Randomized Controlled Trial in Chad. *Am J Trop Med Hyg.* 2018;98(4):1005–1012. doi:10.4269/ajtmh.17-0699

<sup>10</sup> Cumming, O., Arnold, B.F., Ban, R. et al. The implications of three major new trials for the effect of water, sanitation and hygiene on childhood diarrhea and stunting: a consensus statement. *BMC Med* 17, 173 (2019) doi:10.1186/s12916-019-1410-x

<sup>11</sup> Wilson-Jones, M., Smith, K., Jones, D. et al. Response to ‘The implications of three major new trials for the effect of water, sanitation and hygiene on childhood diarrhea and stunting: a consensus statement’ by Cumming et al.. *BMC Med* 17, 183 (2019) doi:10.1186/s12916-019-1414-6