



Figure 1: Children at their mid-day meal. Picture: Nitya Jacob

Synthesis Document

## Convergent Actions for Improved WASH and Nutrition

Nitya Jacob, Coordinator, SuSanA India Chapter, 30 September 2021

This Thematic Discussion examined the linkages between improved WASH and Nutrition and points of convergence in policy and practice. It attempted to tease out what prevents them from working together.

## Contents

Convergent Actions for Improved WASH and Nutrition .....	1
Introduction.....	3
Summary of Discussions.....	7
Webinar on Convergent Actions for Improved WASH and Nutrition .....	9
Responses in full.....	11
Respondents .....	15
Further Reading .....	16
The Thematic Discussion Series Host .....	17

## Introduction

The role of water, sanitation, and hygiene in preventing disease is not new, yet the attention this critical determinant of health has received from the health sector is underwhelming. Almost 170 years ago, Ignaz Semmelweis (the “Saviour of mothers”) found that high rates of infection and consequent deaths among new mothers in a Vienna hospital could be significantly reduced if health care providers washed their hands with a chlorinated lime solution. Louis Pasteur postulated we drink 90 per cent of our diseases. In London (1848) John Snow drew attention to the role of contaminated water and poor waste management systems in fuelling a deadly cholera outbreak.

India continues to face pressing health issues. High rates of maternal mortality, as well as diarrheal diseases, pneumonia, and undernutrition among children make India one of the global leaders in maternal and child morbidity and mortality. The common risk factors across these conditions are unsafe WASH practices. Handwashing, the basic hygiene practice, is only practised by 60 per cent of Indians, a figure that has remained unchanged since 2015 while 66 per cent have access to an improved water source and 46 per cent to safely managed sanitation.

So how does WASH affect such a diverse range of health conditions? Economist Dean Spears articulates a strong connection between open defecation and stunting among Indian children - faecal pathogens ingested by children (through any of the pathways) cause diarrhoea and environmental enteropathy, which inhibits the intestines from absorbing essential nutrients. As a result, children fail to grow and thrive.

Equally important is the presence, quality and use of WASH in health care facilities. Hygiene practices, especially handwashing by health care providers and physical cleanliness of patient care and clinical areas, relates to hospital-acquired infections. WHO and UNICEF 2015 report on the status of WASH in health care facilities in low- and middle-income countries highlights that only 72 per cent of health facilities in India have water and 59 per cent have sanitation facilities. But these figures refer only to the presence of facilities, not to their quality and use.

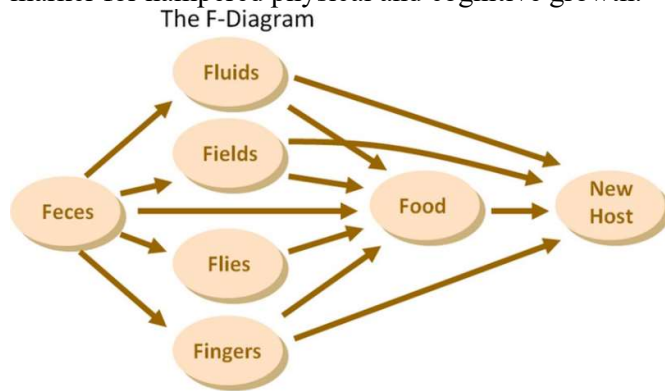
Health facility assessments by WaterAid in four states (2014-2015) highlight that while WASH infrastructure may exist in health facilities, the quantity and quality of water is grossly deficient, toilets are in bad condition and often unusable, and handwashing stations are dysfunctional (e.g., no soap to wash hands, no running water in taps). Particularly alarming are the varying levels of awareness and low levels of practice among health facility staff of hygiene behaviour and infection control and prevention practices.

Women and girls are vulnerable to certain health conditions when they lack access to safe WASH facilities. Research in Odisha found that pregnant women who defecated in the open were at significantly higher risk for adverse pregnancy outcomes and preterm birth. Furthermore, girls and women reported feeling fearful and anxious that they might experience sexual harassment or violence when they defecate in the open, must walk a distance to access a toilet, or when available toilets are unsafe. There are two aspects to the issue.

The first, the preventive aspect, deals with good WASH practices by the public to prevent faecal-oral transmission, whereby germs (from open defecation and poor hygiene) are

transmitted through five pathways. Incidentally, transmission via fingers is a high-risk factor for COVID-19 as well.

The latest National Family Health Survey (NFHS – 5, Fifth Round, 2019-2020) indicates that in 22 states for which data is available, the incidence of diarrhoea in children has increased compared to the last NHFS in 2015-16. Simultaneously there has been an increase in the number of stunted children in nearly all the states. This is despite an increase in access to toilets in the country in the same period. With 38.4 per cent of children under the age of five stunted, India has among the highest number of children who are short for their age in the world, a marker for hampered physical and cognitive growth.



Source: Wagner and Lanois, 1958

Figure 2: The F-Diagram

The second, curative aspect, deals with the WASH infrastructure and behaviour in health centres. The WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP 2019) indicates WASH services in health care facilities are sub-standard in every region. This is a major contributor to maternal mortality.

Even though WASH and Health are inextricably linked, the policies and programmes of the two are usually

unconnected. The COVID-19 pandemic has highlighted the need to bring these two sectors together given the central role of good hygiene practices such as handwashing with soap and WASH in health care facilities in preventing infections. If they converge and reach children, they offer greater efficiencies and impact. The same is true for joint advocacy.

The health sector must take heed of the wide-ranging impacts of WASH on health in terms of promoting good health, preventing disease, curing conditions, and complementing palliative and rehabilitative services. During SBM, toilet coverage increased substantially in India. The Swachhata Guidelines for health facilities (also known as Kaya Kalp Guidelines) launched in 2015 were another effort to address WASH in health care facilities, having the potential to fill a critical, though largely ignored, infrastructure gap in the delivery of health services.

Yet this effort must go beyond building or improving WASH infrastructure in health facilities to include concerted action on enhancing hygiene behaviour, especially handwashing by health care providers and caregivers, and maintaining cleanliness in clinical and patient care areas in facilities.

A human-centred approach to understanding reasons for poor hygiene practices and how they can be improved will be of more help than conventional approaches centred on IEC or IPC. This places people at the centre of the problem and works out possible solutions from that perspective, rather than a WASH or health practitioner’s perspective. It also considers the user experience of all concerned – doctors, nurses, attendants, patients and their relatives – to help design an intervention method.

During the COVID-19 pandemic key hygiene practices that are an integral part of WASH has been promoted as the first line of defence against infection. Handwashing is the most important

of such practices followed by disinfection of surfaces, safe storage of water and the usage of toilets. These reduce the chances of picking up the infection by cutting the transmission pathways from the host in much the same way as shown in Figure 1. Earlier this month, SuSanA conducted a [thematic discussion and webinar](#) on promoting COVID appropriate behaviour.

These practices acquire more significance in health centres that see a high footfall of people with COVID-19 infections. Not only are they critical to reducing HAIs, but they also prevent transmission to health staff. Health staff and administrators must ensure these behaviours become ‘sticky’.

This discussion attempted to understand linkages between the preventive and curative aspects of health and WASH and tease out what prevented them from working together. It explored ways to converge programmes in these two areas.

In her opening comments, Arundati Muralidharan, Manager, Policy with WaterAid India, said the NHFS – 5 starkly underscored that despite efforts on multiple fronts, there had been limited improvements in child malnutrition in several states. This came on the heels of significant investments in two country-wide initiatives. The POSHAN Abhiyan, the Government of India’s flagship initiative, aimed to improve health and nutrition status among children, adolescent girls and women. SBM catalysed action on safe sanitation in the country and resulted in India being declared open defecation free in October 2019, with critical implications for public health, particularly child health.

Why had improvements in undernutrition been limited? One lens to examine this puzzle may be through the lens of convergence. Development programmes of the Government and non-Government interventions stressed convergence to achieve outcomes related to health, nutrition, education, among other issues. Yet, operationalization and financing of convergence had been weak. Perhaps one reason for the lack of operational convergence was the need for more guidance on how convergence could be brought about, with a focus on different levels or intensities of convergence.

A useful framework to interpret and actualize convergence was in terms of integration. Integration could occur along a continuum:

- 1) The most basic level of integration was Co-locating or co-targeting – overlapping delivery of WASH and nutrition activities in the same geographical area and with the same populations, towards a common objective, but with a separate implementation. This involved sharing information across programmes and ministries, which require some coordination and sharing of information or data to inform planning and targeting of services. In terms of who to reach or target, groups who had poor nutritional status, including pregnant women, mothers, adolescents and children under five (especially the 1,000-day window from conception to age two years), but ensuring an approach to reach universal access. For WASH, ensuring universal WASH in a community would be critical for widespread and sustained benefits.
- 2) At a second, deeper level, integration involved enhancing the sensitivity of programs to the links between WASH and nutrition. This could be done by incorporating elements of nutrition into WASH programmes (e.g., hygiene promotion in schools WASH interventions to emphasize hygiene behaviour related to health and nutrition such as handwashing, safe disposal of child faeces, safe drinking water), and/or by

incorporating elements of WASH into nutrition programs (e.g., nutrition interventions like mid-day meal, or de-worming to promote toilet use, safe management of child faeces, and handwashing with soap with relevant target groups).

- 3) At the deepest level was integrated or joint programming, whereby hygiene promotion (handwashing, food hygiene, safe disposal of child faeces, environmental hygiene) was embedded in the delivery of nutrition programs at various levels (individual, household, community, institutions). Nutrition programmes must ensure access to safe water, sanitation, and hygiene services to target populations through close collaboration with relevant departments.

The COVID-19 pandemic had deeply affected populations, particularly those who have pre-existing socio-economic vulnerabilities. The time for integrated service delivery for health, nutrition and WASH was now to combat the adverse impacts of the pandemic and to promote and safeguard the health of millions of young children, girls and women.

She invited SuSanA members to share information on how they had fostered convergence or integration, emphasizing the programmatic approaches, budgetary allocations, institutional mechanisms deployed; how they had informed policy at the state or national level towards integration, and how they had assessed/evaluated integrated programs on nutrition and WASH.

## Summary of Discussions

Even as India's performance on sanitation, measured in terms of the number of toilets made, had gone up in the past few years, its progress on reducing malnutrition among children has been limited.

Main points of convergence of policies

- 

The National Family Health Surveys in 2015-16 (Round 4) and 2019-2020 (Round 5) has shown an increase in stunting in 19 of 22 states for which data is available. This appears counter-intuitive if viewed in relationship to sanitation alone. Other factors influence the nutrition status.

Despite an array of programmes providing for food security and improved maternal and child health and nutrition, the uptake of services has remained low. Only 51 per cent of pregnant women attend a minimum of four antenatal clinics and only 30 per cent consume iron-folic acid (IFA) tablets. The uptake of supplementary nutrition varies from 14 to 75 per cent among children and is 51 per cent and 47.5 per cent among pregnant and lactating women respectively. Only 50 per cent of pregnant and lactating women are enrolled in the maternity benefit scheme across states.

Correct infant and young child feeding practices remain low. Timely initiation of breastfeeding is only at 42 per cent, despite 79 per cent deliveries being institutional. Exclusive breastfeeding for six months is just 55 per cent, and timely introduction of complementary feeding fell from 52.6 per cent in 2015 to 42.7 per cent in 2016 (Shobha Suri and Kriti Kapur, 2020)

Stunting has lasting effects – a World Bank study suggests that a one per cent shortening in adult height because of childhood stunting is associated with a 1.4 per cent loss in economic productivity.

In this discussion, participants provided points of convergence between WASH and nutrition policies and programmes. One way of integration was Co-locating or co-targeting – overlapping delivery of WASH and nutrition activities in the same geographical area and with the same populations, towards a common objective, but with separate implementation where information is shared across programmes.

Since universal access to improved WASH is such an important determinant of better nutrition, communities that do not have adequate sanitation can be provided with 'controlled open defecation' facilities. Ajit Seshadri said in this preventive approach two places are designated in communities where not everybody has a toilet and community/public toilets are missing. One area is used for open defecation for 3-4 weeks. Once that is over, the other area is used for OD while the first is allowed to 'rest. Men and women have separate areas. These practices have been used in Kerala, at the Mahakumbh in Allahabad, etc., as reported by CEPT.

To improve hygiene, information education and communication through individual contact would be needed to reach influencers – teachers, medical staff, local leaders and sanitation workers. In turn, they would propagate these practices in their communities, schools and health centres.

In Cambodia, a project run by SNV Cambodia called NOURISH took a multi-sectoral approach integrating health/nutrition, WASH and agriculture, wrote Sunetra Lala. It aimed to

improve market functioning so that WASH services were available for many consumer needs and preferences at affordable rates. In Cambodia, a third of children under the age of five were stunted according to a 2014 survey. NOURISH strengthened community delivery platforms to support integrated nutrition, created a demand for health, WASH, and agriculture practices, services, and products, expanded the supply of health, WASH and agriculture products using the private sector, and enhanced government and civil society capacity in integrated nutrition.

By focusing on improved WASH behaviour and nutrition through improved diets during pregnancy NOURISH reduced stunting by 19 per cent among children in its intervention areas. This underscores the importance of a convergent approach in India.

However, government statistics for WASH in anganwadis, one of the bulwarks against child malnutrition, shows that a third lack toilets said Nitya Jacob. A quarter does not have drinking water. As many as 90 per cent of children of migrants lacked access to anganwadis and thereby, to the integrated child development services (ICDS). This is a significant population given the high number of internal migrants, estimated at 600 million (local and inter-state) people annually. While policies of both the Poshan Abhiyan, under which anganwadis provide meals to children, and WASH, speak about convergence, field implementation remains below par.

Persistent open defecation is one of the reasons behind stunting, wrote Tejas Deshmukh. In geographies where there is no open defecation, children are taller. This is the case in states where toilet use has been higher in comparison to those with high open defecation rates. However, there are external factors such as female literacy than open defecation when looking at child stunting rates. Children of better-educated mothers were found to be only half likely to be stunted than children of poorly educated mothers. Therefore, merely building toilets will not be effective unless sufficient attention is also paid to other factors such as female literacy.

A suggestion for policy-makers was that they must focus on an integrated approach that includes increasing awareness of women on health, nutrition, and hygiene to improve WASH and child stunting.

Underscoring the importance of convergence, Nripendra Sarma wrote the nutrition sector should not include sustained WASH practices to get the maximum out of such calorie food values. For example, the advantages that could accrue from the Mid-day Meal Programme in School are lost due to poor WASH conditions in schools. These are because of poor maintenance or the absence of hand-washing facilities. Additionally, a nutritious menu could help tackle the ill effects of certain water contaminants such as fluoride.

Under the Swachh Vidyalaya programme of the Ministry of Human Resources Development, all schools were to get separate toilets for boys and girls. The Ministry's site, said Nitya Jacob, showed 95.82 per cent of schools had a boy's toilet and 95.86 per cent had a girl's toilet while 97 per cent had drinking water. However, the [Annual Status of Education Report](#) figures indicated coverage was lower, at 74 per cent, 66 per cent and 75 per cent, respectively.

The responses emphasised there are additional determinants for improving nutrition levels. WASH is a major determinant. The literacy levels of mothers and nutritious menus for mid-day meals in anganwadis and schools are some of the others. These need to go beyond policy into practice to make an impact on falling nutritional levels, as highlighted by the latest NFHS.



## Webinar on Convergent Actions for Improved WASH and Nutrition

There is new and ample evidence of how convergent action has helped reduced malnutrition in India. A multi-state study that used decomposition analysis to isolate the contribution of different factors indicates that in Punjab, improved water and sanitation has reduced malnutrition by 13 per cent. This study is being conducted in West Bengal, Telangana, and Karnataka as well, where malnutrition has declined significantly, to draw lessons for the rest of India.

One of the significant determinants is the socio-economic and educational status of women, said Rajesh Kumar, Executive Director of State Health Systems Resource Centre in the Department of Health & Family Welfare, Govt. of Punjab, at a webinar on Convergent Actions for Improved WASH and Nutrition. It was organised on 6<sup>th</sup> August 2021, by UNICEF, IRC, India Sanitation Coalition, WaterAid and the SuSanA India Chapter.

Underlining the need for community-led programmes, Sujoy Mojumdar, WASH Specialist with UNICEF, said a Swabhimaan, a UNICEF initiative across Bihar, Odisha and Chhatisgarh, shows that processes cannot be rushed. To engage the community, prior investments are needed to build capacity, facilitate access to finance and social protection schemes and ensure the uptake of WASH interventions. These collectively reduce the risks of food and nutrition insecurity. The key hygiene practice of handwashing with soap had helped bring the Ebola epidemic under control, and there was some evidence of its impact on the COVID-19 pandemic as well.

He said developing and promoting champions further strengthened the process. Swabhimaan covered all stages of a woman's life-cycle especially the times when the nutritional vulnerability was high, during adolescence, pre-pregnancy (newlyweds), pregnancy and lactation (mothers of children under two). Its activities are aimed at improving nutrition through group discussions to engage women and adolescent girls, provide loans for promoting WASH enterprises through village organizations and mobilize target groups for village health sanitation and nutrition day (VHSND) services. It engaged women's groups such as self-help groups to create the demand generation for services. As a result, there has been a three-fold increase in the use of toilets, a doubling in the use of sanitary napkins and SHGs have become active in the COVID-19 response.

The closure of schools and anganwadis due to the COVID-19 pandemic has affected the supply of nutrition, through mid-day meals, to children. Sujoy said UNICEF had appealed to state governments to reopen schools, especially primary schools.

The Ministry of Health and Urban Affairs (MoHUA) is developing a dashboard with support from the World Health Organization (WHO). This dashboard, said Benazir Patil, Chief Executive Officer of Schools4Dev, will provide decision-makers as many as 40 indicators on public health. The data will come from databases maintained by the Central and local governments. This is an example of convergent action between several ministries, including Health and Family Welfare, Women and Child Development, National Health Mission and Jal Shakti.

While there are many drivers for urban health, both national and international, the ability of urban local bodies (ULBs) to effectively deliver programmes varies very widely. Some states in the western region have strong ULBs, while many in the eastern region have weak ULBs. Convergent action is especially challenging at all levels because the different departments work

in silos. She said the dashboard that will be in the public domain soon will be a powerful tool for presenting data from multiple sources that will also facilitate convergent action.

Tackling urban malnutrition is beset by multiple challenges, said Dr Kalyan Ashish Das, a practising paediatrician with public health experience working in various international and national organizations. Water and sewage systems mix leading to contamination of drinking water. More than 60 per cent of the sewage is released untreated into the environment. Health service providers do not follow handwashing protocols, and even during the COVID-19 pandemic, the use of sanitisers has not been widespread or proper.

WASH is low-hanging fruit for improving nutrition, he said. Its contribution to soil-transmitted helminths (STHs) is well-established but there are few convergent actions. India has two National Deworming Days where children are administered deworming tablets. Even though the promotion of WASH is one of the important actions these days, he said in most anganwadis or schools the hygiene practices by mid-day meal providers were extremely poor.

Participants highlighted the need to tackle malnutrition in poor rural areas. The universal use of toilets reduces diarrhoeal disease by 50 per cent. Coupled with better food intake, this can be an important way to reduce malnutrition.

The link to the webinar is available here - <https://drive.google.com/file/d/1N8vJiturCQNMgs935KRaqbKCUFpf8Ntz/view?usp=sharing>.

## Responses in full

In response to the query, Ajit Seshadri wrote there are two aspects to convergence. The first is preventive, where communities have not become ODF because of infrastructural or other issues with toilet construction. In these places, a via media approach could be planned called Controlled Open Defecation. Under this, open defecation is carried in one site and another space is allocated near the earlier one. These two spaces are demarcated for men and women and used alternately. One is used for three to four weeks and the other is used for cleaning, upkeep and maintenance. Excreta is co-composted on-site. This has been tried out in Kerala during floods, and the Mahakumbh in Prayag (Allahabad).

Additionally, he wrote is essential to ensure handwashing and personal hygiene through effective IEC / IPC in communities, starting from the school level. School children need to be made aware of good practices on personal hygiene and the upkeep of infrastructure in schools.

Sunetra Lala wrote the Cambodia Demographic and Health Survey in 2014 showed that one out of three (32%) children under the age of five were stunted. The prevalence of stunting was 10% higher among children born to mothers from the lowest wealth quintile (42%) (CDHS, 2014). The Cambodian Government had committed to address the nutrition and stunting challenge and reverse its effects by focusing on the most vulnerable and poor food-insecure households.



Figure 3: Outline of NOURISH interventions

SNV through a project called NOURISH (June 2014 – June 2020) aimed to reduce stunting by focusing on key determinants of chronic malnutrition. NOURISH took a multi-sectoral approach integrating health/nutrition, WASH and agriculture. NOURISH aimed to improve market functioning, so that WASH and agriculture products and services were available for a variety of consumer needs and preferences and accessible and affordable to significantly more customers in the

project-supported geographical areas.

NOURISH used four strategies:

- Strengthen community delivery platforms to support integrated nutrition
- Create demand for health, WASH, and agriculture practices, services, and products
- Expand supply of health, WASH and agriculture products using the private sector
- Enhance government and civil society capacity in integrated nutrition

NOURISH developed a social and behaviour change communication (SBCC) campaign called ‘Grow Together’, based on formative research, that united WASH and nutrition behaviours under a single brand. The campaign connected rural families, health workers, community WASH and health volunteers, leaders, and local businesses for child growth with tailored messages for them, across WASH and health/nutrition.

It focused on 13 aspects of behaviours WASH, nutrition and health with “first 1,000 days” families at its core. Grow Together aimed to improve nutrition during pregnancy through improved diet and antenatal care. For children, the campaign promoted attendance at monthly nutrition services, exclusive breastfeeding for the first 6 months continuing for up to 2 years, along with optimal feeding from 6-23 months.

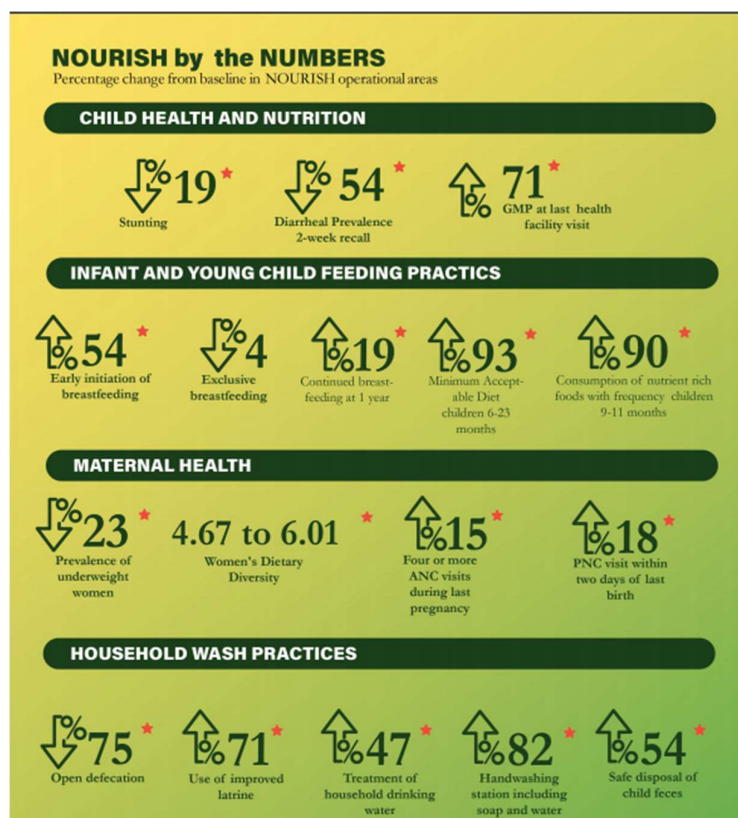


Figure 4: Summary of results of NOURISH

To boost food and nutrition security, the campaign encouraged methods to increase access to nutritious foods year-round by setting up micro-gardens, collecting nutritious food around the home, and preserving and storing fish for children and pregnant women. With WASH, the campaign promoted drinking clean water (using water filters), construction of improved latrines (through CLTS campaigns and supply chain support), washing hands with soap at critical times, as well as separating animals from small children and properly disposing of infant faeces.

To assess its overall impact, NOURISH implemented a baseline survey (November 2015) and an endline survey (November 2018). The results are in Figure 3. The assessment showed many positive results across key health, nutrition, WASH, and agriculture indicators as enumerated in the figure.

There was overwhelming evidence that the prevalence of malnutrition among children up to age 5 had not declined over the past decade, wrote Nitya Jacob. This was also borne out by the Rapid Survey of Children (RSOC) in 2013-14 by the Ministry of Women and Child Development. If anything, the RSOC detected higher rates of underweight and stunted children than the National Family Health Surveys (32 per cent stunted in RSOC against 23.3 per cent in NFHS 4 and 22.5 per cent in NFHS 5).

Government figures show that even now, about a third of the total 1.36 million anganwadi centres have neither toilets nor drinking water facilities, according to a Parliamentary panel report tabled in March 2018. Nearly 25 per cent of the centres don't have drinking water facilities and 36 per cent don't have toilets.

The lowest percentage lacking drinking water is in Manipur where only 21 per cent AWCs have drinking water facilities followed by Arunachal Pradesh (28.51 per cent), Uttarakhand (29.04 per cent), Karnataka (38.76 per cent), Telangana (40.21 per cent), Jammu and Kashmir (48.18 per cent) and Maharashtra (53.47 per cent) as per the report. In Telangana only 21.30 per cent AWCs have toilets, followed by Manipur (27.05 per cent), Jharkhand (38.74 per cent), Andhra Pradesh (43.93 per cent), Jammu and Kashmir (44.11 per cent), Assam (47.51 per cent), Arunachal Pradesh (48.73 per cent) and Odisha (52.64 per cent).

90 per cent of migrant children do not have access to ICDS and Anganwadi services (Status of 90 per cent migrant children do not have access to ICDS and Anganwadi services).

There are many points of convergence already laid out in the policies that govern the nutrition, anganwadi and WASH programmes. But clearly, their implementation in the field is below par. Perhaps one reason is that a third of anganwadis are in rented buildings and the government is reluctant to invest in building infrastructure in these buildings

SBM was launched on 2nd October 2014. Tejas Deshmukh wrote the mission's activities include construction of toilets in private, community, and public spaces, as well as solid and liquid waste management. Furthermore, the campaign tried to achieve a change in hygiene practices of urban and rural stakeholders through information, education, communication (IEC) activities, and public awareness programs (SBM-G 2014).

Human excreta acted as a host for various pathogens and can cause several diseases including cholera, typhoid, hepatitis, and polio ([www.euro.who.int/data/assets/pdf\\_file/0013/102316/e79822.pdf](http://www.euro.who.int/data/assets/pdf_file/0013/102316/e79822.pdf)). Several reports have shown a positive association between open defecation and poor health of children.

The occurrence of open defecation is one of the reasons behind stunting. In households without open defecation, children grow taller, as they do in villages with higher toilet use in comparison to children growing in an environment with high open defecation in private and community spaces. Even when the household itself has a toilet, any other person in the village defecating in the open may harm the overall welfare of the community by exposing them to pathogens and diseases. The bacteria in human faeces caused intestinal infections, which leads to diarrhoea and was one of the leading arguments explaining the relationship between stunted child growth and open defecation ([www.ncbi.nlm.nih.gov/pmc/articles/PMC3774764/](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3774764/)).

An external factor, female literacy is a more relevant influencing parameter compared to open defecation when looking at child stunting rates. Children of mothers with high maternal health literacy were found to be only half likely to be stunted than children of mothers with poor health literacy ([academic.oup.com/jn/article/146/7/1402/4585750](http://academic.oup.com/jn/article/146/7/1402/4585750)).

SBM focused on building toilets while its IEC activities aimed to bring about behavioural change in health and hygiene practices to trigger greater demand for sanitary facilities. A huge amount of funding had gone towards IEC. Out of the three components of IEC, “Information” and “Communication” activities were short-term and easy to implement but the third component, “Education” is an outcome that cannot be achieved in shorter time intervals.

The efforts of SBM and related programmes towards constructing toilets would not be effective unless sufficient attention was also paid to female literacy. Being an important factor in the reduction of open defecation, policymakers must focus on an integrated approach that includes increasing awareness of female stakeholders and educating them as part of such programs. Such a focus on educating women, especially on health, nutrition, and hygiene, was likely to assure a reduction in the incidence of OD and child stunting simultaneously in India.

Concerted efforts are missing for emphasis on WASH and Nutrition Linkage, said Nripendra Sarma. Still, there was a need to formulate an action plan to ensure meaningful and participatory involvement of all stakeholders for the eventual effectiveness of WASH activities to facilitate Nutrition.

An important aspect in this regard was inter-sectoral convergence. For example, stakeholders in the nutrition sector should not consider only food and their respective calorie values alone, but also the importance of sustained WASH practices to get the maximum out of such calorie food values. As an instance, mid-day meal programme in schools was sponsored by the government in schools given the importance of adequate nutrition, but the conditions in the schools due to poorly maintained WASH facilities or the handwashing stations, should not be ignored which could eventually hamper the desired impacts from the mid-day meal programme.

Additionally, necessary emphasis on food varieties (along with nutrition aspects) was also not linked with the importance of the selection of food menu based on location-specific issues with water quality.

Nitya Jacob responded that the Swachh Vidyalaya campaign drew attention to school toilets and drinking water. As per the [dashboard](#), coverage is very high. A key feature of the campaign was to ensure that every school in India has a set of functioning and well-maintained WASH facilities. WASH in schools referred to a combination of technical and human development components that were necessary to produce a healthy school environment and to develop or support appropriate health and hygiene behaviours.

As many as 95.82 per cent of schools had a boy's toilet and 95.86 per cent had a girl's toilet. 97 per cent had drinking water. These were official figures. The [Annual Status of Education Report](#) figures indicated coverage was lower, at 74 per cent, 66 per cent and 75 per cent, respectively. Nevertheless, there had been a significant increase from 2010.

These figures did not tell us if the toilets and drinking water facilities worked. Or if the water was safe to drink. It was hard to draw conclusions based on the hardware numbers.

He said part of the reason why malnutrition continued to persist, and even increase, in India despite large national programmes was the way they were executed. Another was the fall in incomes from 2015. But conspicuous by its absence was WASH which was an important contributing factor for better nutrition. All the supplementation of food would be of no avail if nutrients cannot be absorbed. And repeated episodes of diarrhoea, or infestation by intestinal worms (soil-transmitted helminths), compromise the ability of the body to absorb nutrients. And poor WASH is the main cause of both.

## Respondents

Name	Organization	Country
Arundati Muralidharan	WaterAid India	India
Ajit Seshadri	Vels University	India
Sunetra Lala	SNV Nepal	Nepal
Tejas Deshmukh	UNICEF Consultant	India
Nripendra Kumar Sarma	PHED Assam	India
Paresh Chhajed	IIT Mumbai	India
Sujoy Mojumdar	UNICEF	India
Benazir Patil	Schools4Dev	India
Rajesh Kumar	State Health Resource Centre, Punjab	India
Kalyan Ashish Das	Paediatrician	India

## Further Reading

Despite Various Government Programmes On Malnutrition, Why Is India Missing Its Nutrition Goals. Available at [swachhindia.ndtv.com/poshan-maah-2021-de...=home-ndtv\\_campaigns](http://swachhindia.ndtv.com/poshan-maah-2021-de...=home-ndtv_campaigns).

Maternal Health Literacy Is Associated with Early Childhood Nutritional Status in India: [www.euro.who.int/\\_data/assets/pdf\\_file/0013/102316/e79822.pdf](http://www.euro.who.int/_data/assets/pdf_file/0013/102316/e79822.pdf)

Open Defecation and Childhood Stunting in India: An Ecological Analysis of New Data from 112 Districts. Available at [www.ncbi.nlm.nih.gov/pmc/articles/PMC3774764/](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3774764/)

Nourish Project endline survey report available at [https://pdf.usaid.gov/pdf\\_docs/PA00TQ5Q.pdf](https://pdf.usaid.gov/pdf_docs/PA00TQ5Q.pdf)

Nourish Project baseline survey report available at [https://pdf.usaid.gov/pdf\\_docs/PA00MM9F.pdf](https://pdf.usaid.gov/pdf_docs/PA00MM9F.pdf)

Annual State of the Education Report available at [https://pdf.usaid.gov/pdf\\_docs/PA00MM9F.pdf](https://pdf.usaid.gov/pdf_docs/PA00MM9F.pdf)



## The Thematic Discussion Series Host

The Thematic Discussion Series on Innovations in WASH was organised and hosted by the Sustainable Sanitation Alliance (SuSanA) on the SuSanA Discussion Forum Platform. It was facilitated by the India Sanitation Coalition. The discussion is part of a series of online discussions taking place under the umbrella of the SuSanA India Chapter.

To view the whole discussion, please go to the SuSanA Forum: <https://forum.susana.org/285-advocacy/24964-thematic-discussion-on-the-susana-india-chapter-convergent-actions-for-improved-wash-and-nutrition?start=12>

© **Sustainable Sanitation Alliance** All SuSanA materials are available under the open-access licence [CC-BY SA](#). Proper acknowledgement of the source should always be given when materials are used