

Integrating safe water, sanitation and hygiene with nutrition to prevent stunting



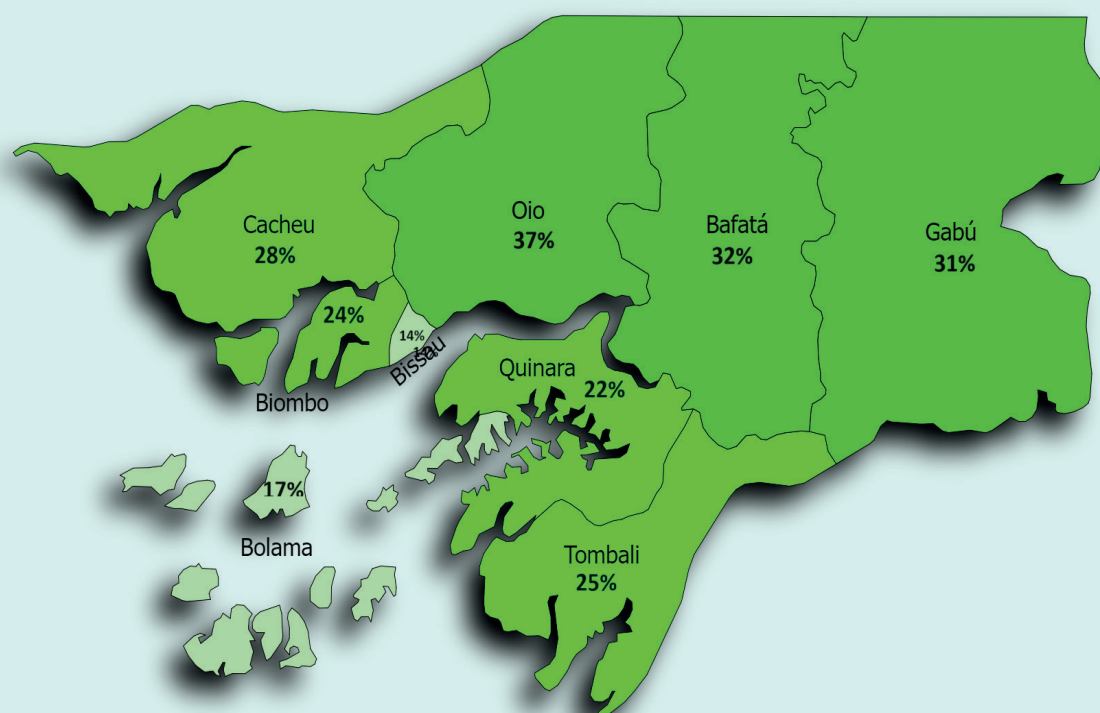
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Stunting in Guinea-Bissau

In Guinea-Bissau 28 per cent of children under 5 years of age are stunted (have low height-for-age) and 5 per cent are acutely malnourished or wasted (have low weight-for-height ratio)¹.

Over a quarter of children under the age of 5 are irreversibly physically and cognitively stunted caused by chronic malnutrition during the first 1,000 days of their life (conception up to 2 years of age). These children will underperform in school and have low levels of productivity in adult life. This is a tragedy for the children and undermines the development of the country, one of the world's poorest. Around 69 per cent of the population live on less than US \$2 per day and one-third live in extreme poverty, on US\$ 1.25 or less a day.²

Percentage of Stunting



Source: MICS6, Guinea-Bissau, 2018 - 2019

Stark disparities in stunting levels persist. While the capital city of Bissau has the lowest stunting prevalence at 12.2 per cent, the north-central region of Oio has the highest level at 40.9 per cent. The region of Bafatá has a prevalence of 34.9 per cent and Gabú has 33.1 per cent, reaching the World Health Organization (WHO) gravity threshold. Tombali, Cacheu, Quinara and Biombo regions have precarious levels of stunting with a prevalence between 20 per cent and 30 per cent while in Bolama-Bijagós and Bissau levels are better with a prevalence of less than 20 per cent.

Overall, malnutrition prevalence has not improved since the 2012 Nutrition SMART Survey. The stunting prevalence then was 27.4 per cent at national level, 35.4 per cent in Oio, 32.3 per cent in Bafatá, 30.3 per cent in Gabú and 16.0 per cent in Bissau. Considering the population growth, malnutrition prevalence has worsened in absolute numbers and if the current trend continues, the country will be far off achieving the World Health Assembly target of a 40 per cent reduction of stunting by 2025.

¹ MICS 2019

² World Bank, 2020



An opportunity to stop stunting and improve development prospects

By 2024, children aged 0-8 will make up almost a quarter of the country's estimated 1.8 million inhabitants (MICS, 2018/19), so stepping up interventions in an innovative way to prevent stunting will pay huge dividends in the future.

Much research shows strong links between water, sanitation and hygiene (WASH) and stunting, this investment case aims to mobilize resources to integrate WASH with nutrition interventions. WHO estimates that 50 per cent of malnutrition cases are associated with repeated diarrhoea or intestinal worm infections due to unsafe water, inadequate sanitation or insufficient hygiene.

Parasitic Infections, such as soil-transmitted helminths (worms), caused by a lack of sanitation and hygiene, infect around 2 billion people globally, leading to anaemia and reduced physical and cognitive development. Evidence also suggests stunted children often suffer from environmental enteropathy/environmental enteric dysfunction (EE/EED), a chronic disease of the small intestine characterised by gut inflammation caused by continuous exposure to faecal contaminated food, water and fomites.

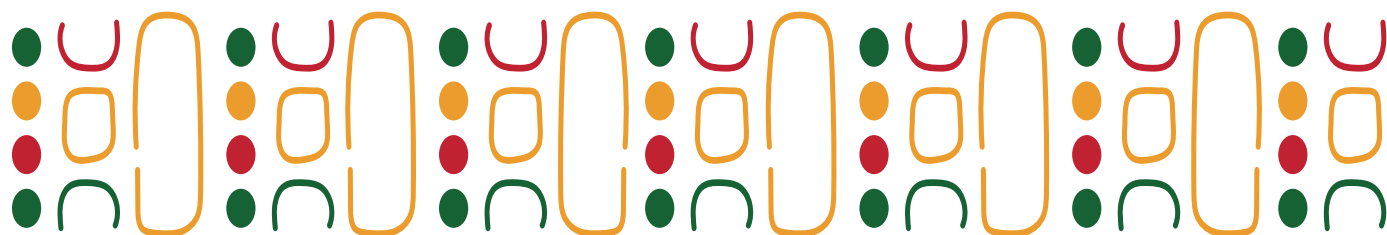
The inflammation prevents nutrients from being absorbed into a child's body. These studies suggest that unless there is some level of 'cleanliness' in the environment, a significant reduction in cases of diarrhoea, and subsequently stunting, is unlikely.



³Watanabe K . & Petri W (2016). Environmental Enteropathy: Elusive but significant Subclinical Abnormalities in Developing Countries. [https://www.thelancet.com/article/S2352-3964\(16\)30339-5/fulltext](https://www.thelancet.com/article/S2352-3964(16)30339-5/fulltext)

Some studies also have recently highlighted the need for proper attention to neglected sanitation risks such as animal faeces and soil ingestions as causes of undernutrition. Considering this research, WASH interventions need to be stepped up to block all pathways of environmental contamination and systematically prevent exposure to faecal pathogens. These WASH interventions should be integrated into nutrition interventions, such as promoting early initiation of breastfeeding and exclusive breastfeeding for six months, ensuring appropriate young child feeding practices, screening for and treating malnutrition, capacity building of health staff at all levels and social and behaviour change.

We can build on the significant progress Guinea-Bissau has made towards improving sanitation. Open defecation has reduced sharply in recent years in the country with only 11 per cent of the households nationwide practising it compared to 18 per cent in 2014 . Now Guinea-Bissau is one of the few countries in the region that are on track to meet the Sustainable Development Goal (SDG) 6.2. for sanitation, that is if the current pace of 300 new open defecation-free (ODF) villages per year can be maintained. Yet there are still huge challenges that need to be overcome if we are successfully going to put an end to stunting, particularly through Nutrition and WASH interventions.



Main Challenges

Low levels of early initiation of breastfeeding: About 59.3 per cent of children are exclusively breastfed in the first six months of life and only 12.5 per cent of children aged 6-24 months benefit from an adequate minimum diet. Breastfeeding levels are particularly low in Bafatá (38 per cent), Gabú (33 per cent), and Tombali (44 per cent) which are also the regions with the highest prevalence of severe acute malnutrition among young children (6 to 8 per cent, higher than internationally acceptable levels). Early initiation of breastfeeding within one hour after birth stands at just 46.3 per cent. However, the country is on track for the WHO target on exclusive breastfeeding (at least 50 per cent of children breastfed) while the national target is 70 per cent by 2025.

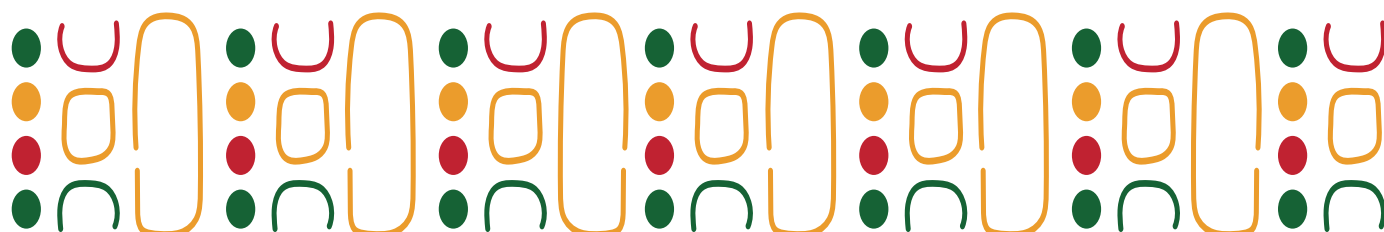
Impact of the COVID-19 and Russia-Ukraine conflict: The impact of COVID-19 and the Russia-Ukraine conflict have hit the most vulnerable hardest with food price hikes undermining their food security and affecting all sectors.

Poor infrastructure: Roads make it difficult to access populations in remote rural areas, particularly during the rainy season from around August to November. Also, health centre and nutritional recovery centre infrastructure need urgent rehabilitating and many lack WASH facilities.

Lack of data: Nutrition data and the Health and Nutrition information System is weak hindering the development of critical evidence-based programmes and policies, including communication for behaviour change interventions

Low motivation and lack of training of health personnel in nutrition: New community health strategies and recruits mean that many health workers (health technicians, volunteers and community workers) need to be trained in nutrition particularly in community counselling sessions, screening and referrals. At health facility level, screening for malnutrition is not taking place and treatment is poorly managed. In 2023, out of the 78 nutrition recuperation centres, only 52 are functional. There is no follow-up of outpatients and children released from treatment are prone to frequent relapses.

Lack of access to WASH: MICS 2019 data suggests a decreased access to water, down to 67 per cent in 2019 from 75 per cent in 2014 is possibly due to a lack of infrastructure investment and increased demand as the population continues to grow. Poor hygiene is also widespread as many caregivers lack knowledge of safe hygiene and sanitation practices.



Why partner with UNICEF in Guinea-Bissau?



UNICEF is a leading humanitarian and development agency working globally for the rights of every child. UNICEF's programmes take a child rights approach and recognize the importance of the life cycle approach, beginning with pre-natal care.

UNICEF's convening authority enables the creation of multi-stakeholder alliances involving both government and civil society actors. UNICEF offers strong technical expertise on nutrition and benefits from additional technical capacity through the UNICEF Regional and Headquarter offices.

In addition, UNICEF has supported the Government and other stakeholders with a multisectoral approach to nutrition in Guinea-Bissau for many years. This includes preventing and treating malnutrition – awareness raising, training on treatment, screening and referrals, provision of supplies (therapeutic food, medicines and anthropometrics) and WASH interventions. The focus has been on the first 1,000-day window of opportunity, school children, pregnant women and lactating mothers, particularly in the three priority regions of Oio, Bafatá and Gabú.

In addition, to promote ownership and sustainability, UNICEF has assisted with the integration of nutritional services in healthcare provision as well as strengthening central-level capacity and reinforcing regional-level decentralized services. UNICEF is aware of the challenges and has many years of experience working to overcome them.

The change your investment can make

The strength of the WASH-Nutrition articulation is to maximize the impact of programmes to combat malnutrition, while at the same time improving access to safe drinking water, basic sanitation and good hygiene, an essential, fundamental and universal human right, indispensable for life with dignity. Our focus will be on the most vulnerable: children under the age of 5, especially during the first 1,000 days of life, pregnant women and lactating mothers.

General Objective: Contribute to the prevention and reduction of all forms of malnutrition-related morbidity and mortality.

Specific objective (SO) 1: Reduce malnutrition-related mortality and co-morbidities through integrated nutrition, water, hygiene and sanitation interventions

• **Output 1.1:** Children and their families in targeted communities benefit from increased early and systematic nutritional screening in schools and referral to nutritional centres for appropriate care and treatment.

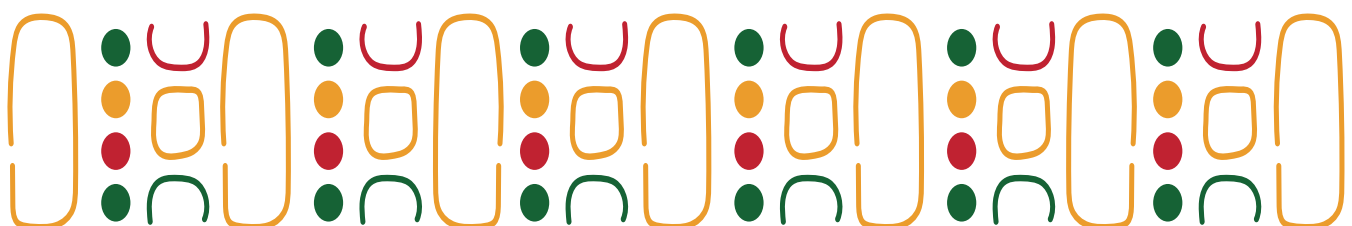
• **Output 1.2:** Children benefit from improved WASH and nutrition services in households, schools, communities, and nutritional recovery centres as a result of reduced exposure to risk-prone areas and environmental contamination.

Specific objective (SO) 2: Reduce the risk of malnutrition through awareness raising, training and prevention around both nutrition and WASH risk factors

• **Output 2.1:** Parents, caregivers and volunteers integrate and share good WASH and nutrition practices in communities, schools and nutritional centres.

• **Output 2.2:** Nutritional recovery centre workers, community health workers, and volunteers have improved competencies in the Community-Led Total Sanitation (CLTS) approach, allowing efficient early detection and screening of children in target areas.

• **Output 2.3:** Mechanisms established to provide support, monitoring and household follow-up for outpatients and inpatients released from treatment.



We need your support to do this!

For example:

With US \$ 800

we can support a community to be certified Open Defecation Free.

With US \$ 27,600

we can have a solar-powered water system for a school and have it piped into the community.

With US \$ 27,600

we can have a solar-powered water system for a school and have it piped into the community.

With US \$ 9,740

we can provide a unit of fully functional and sex-separated and inclusive school latrines.

With US \$ 65,500

we can monitor the reintegration and recuperation of malnourished children.

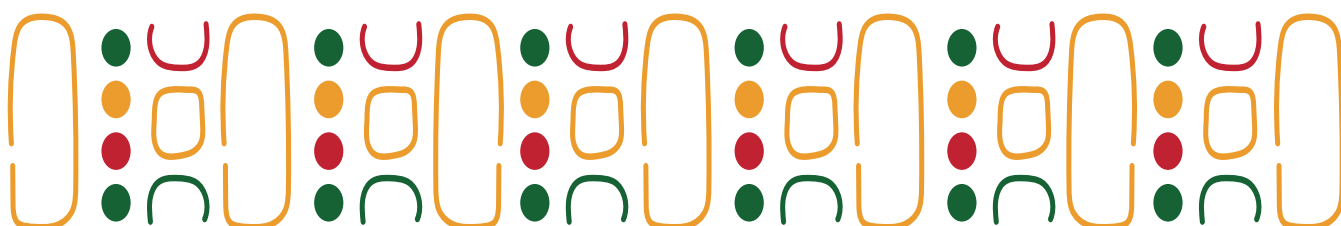
With US \$ 42,500

we can support early and systematic screening and referral of children in WASH-targeted communities, schools and nutritional centres.

Monitoring and Evaluation

The monitoring and evaluation system will include the following complementary tools and methods:

- Monitoring field visits by UNICEF programme staff and government partners to follow up on the implementation of the project and identify bottlenecks in the implementation of activities;
- Quarterly reporting to UNICEF on Programme results;
- Regular consultations with the implementing partners through joint meetings at national and provincial levels;
- An online monitoring tool that displays, monitors and analyses geographical and statistical data on implementation progress. A personalized online dashboard for the project will be created in mWater for monitoring purposes and it will be possible for interested partners to monitor progress.



Risks

Guinea-Bissau is susceptible to the climate crisis including rapid erosion with loss of land and erratic precipitation patterns which leads to sinking groundwater levels and groundwater salinization. This will have a detrimental impact on the country's key economic sectors and food security. However, all UNICEF-supported programmes in Guinea-Bissau provide energy from low fossil-impact alternatives, such as solar.

All water-provision is accompanied by pumping tests per the Guinea-Bissau protocol to ensure sufficient water availability in the aquifer but also to carefully chose the options that will have the lowest impact on the surrounding ecosystems. Food production is encouraged to rely on local varieties, which are more like to be resistant to local climate flow and sustainable. Local food production remains traditionally made. UNICEF Guinea-Bissau is also closely supporting the Government with water resource management and water level monitoring and plans to reinforce mainstream resilient and sustainable water and sanitation solutions.

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