Cross-sectoral benefits of action in sanitation

Case studies
Cross-sectoral benefits of action in sanitation

Action in sanitation can generate wide-ranging and impactful benefits across all the sectors covered by the 17 Sustainable Development Goals (SDGs).

To help maximise these synergies and opportunities, three principles have been identified (see the accompanying ‘Policy brief’ in this series). This collection of three case studies provides practical insights into: how multiple benefits are achieved through action in sanitation (Principle 1); where commonly missed opportunities exist (Principle 2); and how equitable outcomes are leveraged through action in sanitation (Principle 3).

Case studies

The case studies were jointly selected by WaterAid and UCL based on availability of information, diversity of geography and to cover interventions at the local, regional, and national level.

We used the synergies between sanitation and SDG targets mapped in the global study completed by University College London in 2019 (see Parikh et al., 2021) to analyze the case studies.

A link between the case study and SDG targets is showcased when an action matched the justification for an existing synergy in the global mapping study.
Achieving multiple benefits

**Project Malio**

Madagascar

A community-led approach to eliminating open defecation and facilitating sustained behaviour change

2014 – 2017

- **Lead organisation**
  SEED Madagascar (UK charity also known as Azafady) was responsible for project implementation, financial management, monitoring and evaluation.

- **Funders**
  UK National Community Lottery Fund (through the International Community grant programme) and Guernsey Overseas Aid and Development Commission. For public latrines, local communities raised funds for construction materials. Project Malio’s construction team provided labour to refurbish existing latrines.

- **Project partners**
  The Madagascar Ministries of Health, Water and Education and regional Diorano-WASH (water, sanitation and hygiene) network were responsible for monitoring and evaluation of WASH progress at schools. Together with the municipal council, these partners gave feedback to the local monitoring committees from each ‘fokontany’ (districts, small settlements, neighbourhoods, villages) about sanitation action planning.

- **Local partner associations**
  In three years, eight civil society associations were mentored and received financial assistance. The organisations were responsible for awareness-raising, mass mobilisation events (clean-ups and recreational events with sanitation and hygiene educational opportunities). Their participation was evaluated every year for extensions of the partnership agreement.

- **Goal**
  End open defecation and promote sustained behaviour change.

- **Location**
  Tolanaro (former Port-Dauphin) Anosy Region, southeast Madagascar.

- **More information**
  [https://madagascar.co.uk/projects/water-sanitation-and-hygiene/malio](https://madagascar.co.uk/projects/water-sanitation-and-hygiene/malio)

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Cross-sectoral benefits of action in sanitation: Case studies
Improved access to sanitation facilities

- Support construction and improvement of sanitation infrastructure for 799 households, 17 schools benefiting 7,406 students, and three public latrines with business unit coordination committee.

Awareness raising, capacity building and hygiene and sanitation education

- Community-led total sanitation (CLTS) methodology to develop contextualised community sanitation action plans: 10 developed with ongoing implementation.
- Community meetings to discuss the health benefits of improved hygiene behaviours: 527 focus groups with beneficiary and non-beneficiary households.
- Mass media campaigns (radio communications) and community events: 11 clean-ups of open defecation sites and recreational activities with 9,139 students engaged. The main messages were hand-washing, awareness of faecal-oral contamination and safe use of latrines.

Monitoring and evaluation

- Ongoing monitoring of open defecation levels by Community Sanitation Agents (COSANs) who also monitored implementation of sanitation action plans (10 fokontany monitoring committees).
- School WASH Committee: monitoring of school progress towards the status of School Friend of WASH.¹
- Peer to peer monitoring of sanitation facilities and hygiene practice, 6,567 students participated in WASH educational lessons.
- Satisfaction surveys of community events and trainings and yearly evaluation of partner associations.

Pathways

Cross-sectoral benefits of action in sanitation: Case studies

¹ Official criteria in Madagascar to evaluate quality of WASH facilities and practices at schools.
Project Malio
Madagascar

Existing and potential links of Project Malio's integrated sanitation action with SDG targets grouped by type of benefit: health, education, and climate change.

The links show project actions that match the rationale for sanitation to have synergies with a target, using the global mapping study completed by University College London in 2019 (see Parikh et al., 2021).

**Figure 1.**
Sanitation intervention with multiple benefits across health, education and climate change SDGs
Parikh et al., 2021

Cross-sectoral benefits of action in sanitation: Case studies
## Better health through improved sanitation infrastructure and behaviour change

- Improving sanitation infrastructure in households, schools and public areas has synergies with healthy lives and wellbeing (Targets 11.1, 11.3). Awareness raising and education about sanitation and hygiene contribute to these synergies.

  - 11.1 / 11.3

- Safe and hygienic sanitation facilities can lead to reduced maternal mortality and improved infant health (Target 3.1) and tackling poverty (Targets 1.1, 1.2).

  - 3.1 / 1.1 / 1.2

- Increased access to sanitation facilities can reduce premature mortality from non-communicable diseases and reduce anxiety and stress (Target 3.4).

  - 3.4

- Preventable deaths can be reduced (Target 3.2) through sustained behaviour change and improved sanitation infrastructure. Ending open defecation contributes to lower levels of pathogens in the environment.

  - 3.2

- Promoting and enabling access to sanitation infrastructure and services can reduce water and soil pollution (Target 3.9).

  - 3.9

## Access to safe sanitation facilities can improve school attendance and gender equality

- Improved access to sanitation facilities can enhance school attendance among girls (Targets 4.3, 4.5) and reduce discrimination if women and girls’ special needs are recognised (Target 5.1).

  - 4.3 / 4.5 / 5.1

- Building and improving toilets and creating awareness of safety issues can reduce violence against women e.g., in public toilets and locations of open defecation (Target 5.2).

  - 5.2

- Access to safe sanitation facilities for women is linked with potential improvements in reproductive health (Target 5.6).

  - 5.6

- Educational campaigns, focus groups and peer monitoring to end open defecation and improve hygiene practices can contribute to sustainable lifestyles and promote sustainable development (Target 4.7).

  - 4.7
### Contextualised community sanitation plans have synergies for sustainability and climate action

<table>
<thead>
<tr>
<th>SDG</th>
<th>TARGETS</th>
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<tbody>
<tr>
<td>11.5</td>
<td>6.1</td>
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- Improving sanitation facilities in households, communities and schools contributes to urban resilience (11.5) and prevent environmental contamination (Target 6.1).

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<tr>
<th>SDG</th>
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<tr>
<td>11.3</td>
<td>13.1</td>
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</table>

- Educational campaigns and capacity building to design community sanitation action plans can develop skills for participatory planning (Target 11.3) and enhance community resilience (Target 13.1). These activities can also support climate change adaptation and mitigation actions (Target 13.3).

### Links with other principles and further developments:

<table>
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<tr>
<th>SDG</th>
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<tr>
<td>5.1</td>
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- Future work should include menstrual hygiene management to ensure that women and girls’ special needs are recognised (Target 5.1)

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<thead>
<tr>
<th>SDG</th>
<th>TARGETS</th>
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<tbody>
<tr>
<td>2.4</td>
<td>11.1</td>
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- Community sanitation plans must consider climate change risks and incorporate climate change adaptation actions to improve community resilience.

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<tr>
<th>SDG</th>
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<tr>
<td>2.4</td>
<td>11.1</td>
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- Potential to explore safe re-use of human waste to reduce greenhouse gas emissions by storing carbon and by enhancing agricultural yields (Targets 2.4, 11.1, 13.b, 15.1).

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**Cross-sectoral benefits of action in sanitation: Case studies**
Identifying commonly missed opportunities

National Integrated Urban Sanitation and Hygiene Strategy (IUSHS)
Ethiopia
2014 – 2020

- **Lead organisations**

  **Key institutions in developing the IUSHS:**

- **Coordination**

  Urban Sanitation and Hygiene Technical Working Group, led by the Ministry of Health.

- **Technical and financial support**


- **Goal**

  Develop a robust and sustainable sanitation chain in urban areas not limited to behaviour change and household investment in toilets.

- **Location**

  Ethiopia’s urban areas.

- **More information**

  Federal Democratic Republic of Ethiopia (2016).
<table>
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<tr>
<th>Pathways</th>
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<tr>
<td>- Overarching integrated strategy supporting decentralised sanitation systems and sanitation-related micro-enterprises, with job creation in and outside of the public sector.</td>
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<td>- Improvement of regulation to assure quality of sanitation services, optimise private sector participation and to systematically manage environmental and public health risks.</td>
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<td>- Sanitation-related interventions should be built into and delivered through city and town development plans.</td>
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<td>- Advocacy campaigns to raise sanitation and hygiene profile and promote behavioral change.</td>
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Figure 2.
IUSHS activities guided by innovation, efficiency and the economy, identifying commonly missed opportunities
Parikh et al., 2021

Existing and potential links of IUSHS with SDG targets grouped by type of commonly missed opportunity: innovation, efficiency and the economy.

The links show project actions that match the rationale for sanitation to have synergies with a target, using the global mapping study completed by University College London in 2019 (see Parikh et al., 2021).
## Promote sustainable economic growth and improved productivity engaging micro-enterprises and creating livelihoods

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<tr>
<td>8.3</td>
<td>By opening markets for the private sector along the sanitation chain, the IUSHS creates opportunities for livelihoods within the government and beyond (Targets 1.1, 1.2, 8.1, 8.2).</td>
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<tr>
<td>8.3</td>
<td>To create a financially viable business environment the IUSHS promotes clustering of different sanitation components, support in accessing finance, tax relief period and capacity building of staff (Target 8.3).</td>
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<th>SDG</th>
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<tbody>
<tr>
<td>9.2 / 9.3</td>
<td>These actions can create synergies for sustainable industrialisation, livelihood creation and integration into value chains and markets (Target 9.2, 9.3).</td>
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## Encouraging decoupled economic growth with efficient use of resources along the sanitation chain

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<td>7.1-7.3</td>
<td>The development of a robust sanitation chain is to be based on technical solutions that enhance efficient use of resources. Proposed strategies include small-scale sludge transfer stations that also provide anaerobic primary treatment and biogas generation by local small-scale enterprises (Target 7.1-7.3).</td>
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<tr>
<td>6.1 / 6.3 / 6.6 / 12.2 / 12.4</td>
<td>The IUSHS promotes reuse of water, water efficient toilets and local closed-loop systems (Targets 6.1, 6.3, 6.6) to reduce pressure on natural resources and safeguard ecosystems (Targets 12.2, 12.4).</td>
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2 Consultancy, construction and supervision of facilities, solid and liquid waste collection, manufacturing and supply of sanitation facilities and some scope for sanitation services installation and management.

Cross-sectoral benefits of action in sanitation: Case studies
PRINCIPLE 2

National Integrated Urban Sanitation and Hygiene Strategy (IUSHS) Ethiopia

Affordable and sustainable sanitation services with innovation and use of technology

• Technical innovation, research and development are at the core of the IUSHS to address multiscale solutions for resource efficient sanitation chains (Targets 9.4, 9.5).

• IUSHS plans for specialised training for micro- and small-scale enterprises including skills development and technical innovation (Target 9.5).

• Close collaboration with universities aims to develop resource efficient technologies for latrines and faecal sludge management (FSM). These actions can be linked to waste-to-energy conversions (Target 7.1), boost productivity and cost savings (Targets 8.4, 9.5) and reduce water consumption (Targets 12.2, 12.4).

• The IUSHS stresses local treatment of faecal sludge to recover nutrients for recycling. Technologies to treat and recycle wastewater can enhance agricultural and energy production and improve soils (Targets 2.3, 2.4, 7.1, 7.2).

Links with other principles and further developments:

• The IUSHS proposes inclusive sanitation facilities that consider gender and vulnerability while ensuring affordability. Sensitivity towards gender and differently abled people in the IUSHS can leverage equitable outcomes for all (Targets 4.5, 5.1, 5.2, 5.6).

• The implementation guidelines propose engagement with youth, women associations and homeless citizens for local participation. The aim is to actively involve vulnerable groups that often have poor sanitation access (Principle 3).

• The development of robust services across the sanitation chain combined with hygiene awareness, behaviour change and household investment in toilets can have multiple benefits across health, education and climate change (Principle 1).
WASH for Public Health (WASH4PH)

Ghana

Latrine artisan training

2016 – 2019

Lead organisations


Goal

Access to clean water, decent toilets in 12 health care facilities, 32 educational institutions and 42 communities.

Location

Communities in two Upper East Region districts: Kassena Nankana West and Bongo District in Ghana.

More information

WaterAid (2021).

Installation of inclusive toilets in 13 schools and 8 health facilities.

Training 131 latrine artisans (25% female) including capacity building on Human Rights Based Approach (HRBA).

Training of 79 healthcare workers, including cleaners, on WASH-infection prevention and control and WASH facility improvement tools.

Workshops held for students on menstrual hygiene management and the making of washable/reusable sanitary pads.

Health clubs set up in 32 schools with peer-to-peer learning for good hygiene.

Using the innovative ‘Healthy Play’ model developed by Right to Play, engaging children in social and cultural activities.
Figure 3. Training to build improved sanitation facilities can support equitable outcomes for all
Parikh et al., 2021

Existing and potential links of WASH4PH’s integrated sanitation action with SDG targets grouped by gender equality and equity outcomes.

The links show project actions that match the rationale for sanitation to have synergies with a target, using the global mapping study completed by University College London in 2019 (see Parikh et al., 2021).
**Equitable outcomes leveraged through training in sanitation**

<table>
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<tr>
<td>Latrine artisan training was integral to improving inclusive access to sanitation, promoting gender equality and hygiene (Target 5.1).</td>
<td>5.1</td>
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<tr>
<td>Training of women as artisans has expanded women’s participation in decision making processes (Targets 5.5, 10.2) and created livelihood opportunities (Target 8.5).</td>
<td>5.5 / 10.2 / 8.5</td>
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<td>Training of healthcare workers, including cleaners, on safety and sanitation improvement tools can enhance the dignity of sanitation workers (Targets 8.8, 10.2).</td>
<td>8.8 / 10.2</td>
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<td>Installation of inclusive toilets in schools and vulnerable households reduces discrimination of differently abled people, women and girls (Targets 4.3, 4.5, 10.2).</td>
<td>4.3 / 4.5 / 10.2</td>
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<tr>
<td>Gender inclusive toilets can improve the safety of women and girls (Targets 5.2, 16.1).</td>
<td>5.2 / 16.1</td>
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<td>The installation of decent toilets in healthcare facilities has synergies with inclusive access to services and decent work (Targets 3.8, 3.9).</td>
<td>3.8 / 3.9</td>
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**Links with other principles and further developments:**

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<tr>
<td>The 21 gender inclusive sanitation facilities built were also environmentally sound linking to enhanced urban and community resilience (Targets 11.5, 13.1), reduction of environmental contamination and improvements in health (Target 6.1).</td>
<td>11.5 / 13.1 / 6.1</td>
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<tr>
<td>The training for latrine artisans developed skills to build climate resilient facilities linking up to urban resilience (Target 11.5) and livelihood opportunities, with synergies for the local economy (Target 8.3).</td>
<td>11.5 / 8.3</td>
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<td>Future work related to the improvement of households’ latrines could be linked to property rights to improve ownership and control of the poor and the vulnerable (Target 1.4).</td>
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3 Specifically, WASH-Infection Prevention and Control and WASH Facility Improvement Tools (WaterAid, 2019)

4 Inclusive WASH services according are those that “consider the needs of all genders, persons with disabilities and marginalized groups” (WaterAid, 2020)
Conclusions

The global mapping study showed the links of integrated sanitation actions with all SDG and multiple targets (see wheel in Figure 4).

Three principles were identified to harness the potential synergies between sanitation interventions and all the SDG (see principles in Figure 4).

This document highlights through case studies how each of the principles for sanitation interventions can deliver cross-sectoral benefits on the ground (see case studies in Figure 4).

Achieving wide-ranging benefits, picking up on missed opportunities and leveraging equitable outcomes through integrated sanitation interventions can address all SDG. The case studies offer a pathway on how this could be achieved.
Integrated sanitation actions have wide-ranging benefits, seize missed opportunities and harness equitable outcomes for all. Illustrating one principle each, the three case studies show the potential of integrated sanitation actions to achieve multiple SDG targets. Parikh et al., 2021
References


Cross-sectoral benefits of action in sanitation: Case studies
References continued


WaterAid (2017a) Safe sanitation for the vulnerable. Abubakari Issifu, CIKOD, Ghana.


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