

# Tajikistan Water Supply & Sanitation Project (Phase III)

## Policy Report

**Sanitation, Health and Hygiene in rural Tajikistan:**

Towards the development of a national sanitation strategy



Empowered lives.  
Resilient nations.

Published: May 2022

Author: Shukhrat Igamberdyev



The Tajikistan Water Supply and Sanitation (TajWSS) project is a Swiss government initiative, funded through the Swiss Agency for Development and Cooperation, and implemented by Oxfam in Tajikistan in partnership with UNDP.

## Section 1

# Executive Summary

While data show an overall improvement in access to hygiene and sanitation in Tajikistan, the reality is not consistent with this trend, especially in the rural context. The trends fail to capture the 1) poor conditions of sanitation facilities (ageing and/or obsolete infrastructure), 2) poor and unregulated design of sanitation facilities, and 3) poor operation and maintenance (O&M) of sanitation facilities (such as septic tanks and latrines). The water, sanitation and hygiene (WASH)-related health indicators show that the population of Tajikistan (both urban and rural) remains at high risk of water-related diseases with attributed mortality rates significantly higher than many other countries in the Commonwealth of Independent States region.

The present policy report suggests that improvements in sanitation and hygiene can accurately be assessed when **'quality'** requirements are taken into account across the entire **sanitation value chain** (including quality control, containment, removal, treatment, disposal, O&M and hygiene promotion). As such, improving sanitation and hygiene conditions in rural Tajikistan is no easy task because of the overwhelming number of issues that need to be addressed (see Annex 3). This policy report, therefore, highlights the following **three distinct and systemic problems** that need to be overcome to enable better sanitation services: 1) poor understanding of the 'sanitation' concept (at policy, regulatory and service levels), 2) lack of a comprehensive strategy for rural sanitation interventions, and 3) inconclusive sanitation models implemented in rural areas. Despite the reported benefits and progress made to date, the **sustainability outcomes of sanitation interventions are at large inconclusive**. The development interventions so far can be characterised by various **phases of test-and-trial exercises** (pilot demonstrations).

Unfortunately, to date the financing/funding support to rural sanitation and hygiene has been mostly provided by development partner projects (International NGOs and development partner agencies), while government support has not extended beyond district centres (maintaining centralised sewerage systems). Sanitation facilities in rural communities, in particular at household level, are treated as a private affair with intricate links to government regulations. Rural sanitation facilities remain highly unregulated and therefore lack guidance for construction design, and generally application of norms and standards across the sanitation value chain.

**The sanitation models implemented so far are yet to address the economic side of sanitation and hygiene – with affordability at its core.** Without due progress on affordability, it is difficult to ensure quality shifts to an improved sanitation and health situation in rural Tajikistan. This policy report, therefore, suggests that effective and long-term sustainable sanitation improvements in rural areas require initial financial support from both the government and development partners. For that purpose, development partners' more recent interventions, over several phases, have attempted to deal with the economic problem – a sanitation model that would be applicable in rural Tajikistan would have to be affordable and therefore cost effective. In doing so the interventions included:

- reducing the costs of sanitation products (the various materials required to construct a sanitation facility). This involved also stimulating local production of sanitation products that are cheaper than those imported, i.e. a market-based approach (sanitation marketing)
- applying community-based/decentralised sanitation solutions (master-plan approach, decentralised wastewater treatment systems)
- supporting local businesses to provide services of removal, treatment and disposal of wastes
- introducing alternative technologies for ‘improved latrines’ (squat and ventilated improved pit (VIP) latrines, flush toilets, dry toilets, EcoSan, Eco-Vapour and SaTo pans)
- taking approaches to safely reuse wastes.

This policy report stresses that formulating a vision for rural sanitation and hygiene must be based, first and foremost, on evolving rural experience. In particular, **the outcomes from the application of various sanitation models in rural communities must inform the discussions at national level to develop a comprehensive strategy.** The following summary of challenges, opportunities and policy recommendations must be at the core of the discussions.

## Challenges and opportunities

Despite achievements by a growing number of rural schemes, there are still **challenges** that can be summarised as follows:

- Development projects have introduced various sanitation models in rural Tajikistan to improve sanitation and hygiene. While experiences from these interventions have evolved with considerable improvements, they are still characterised by a test-and-trial phase. Some models (such as Eco-San toilets) have reportedly proven effective in improving on-site sanitation and hygiene conditions, however, their experience in addressing the remaining stages of a value chain approach (waste management) remains inconclusive.
- Costs related to developing improved sanitation facilities and systems remain too high for rural communities, and attempts to reduce the costs of services and products have not yet been successful. In particular, the burden of the costs involves the final stages of the value chain, namely removal, transportation, treatment and disposal of wastes. Availability of sanctioned and appropriate polygons (landfills) with any sort of treatment facility is a common development issue.
- Rural sanitation and hygiene remain unregulated which results in poor construction design and non-compliance with norms and regulations. Service provision is voluntary and non-systemic; enforcement mechanisms lack institutional support.

Consequently, there are several **opportunities** that authorities, development partners and potential service providers will need to follow to improve sanitation and hygiene in rural Tajikistan:

- Outcomes from applied models must be duly published with all their shortcomings, lessons learned and successful experiences in order to launch discussions at national level (policy dialogue). Policy reform is a lengthy process that first requires a sufficient amount of evidence from the field.

- The sanitation market remains weak and needs to be developed to support potentially increasing demand. The sanitation marketing approach needs comprehensive support from development partners, and the government should provide incentives for the private sector to promote WASH products and provide services under concessional requirements.
- The reuse of safely treated human waste is perceived as an economic product in some parts of Tajikistan, but replication requires appropriate education, promotion and support. Government service providers have the right potential to launch such an initiative.

## Policy recommendations

Despite sanitation having been part of many development projects in the past 20 years, it has become the focus of the policy agenda only recently with endorsement of noted laws and by-laws, norms and standards and relevant national programmes. In spite of this, those policies have only covered wastewater and sewerage aspects – not a prevalent part of sanitation in rural Tajikistan. In effect, national laws and programmes have not yet duly responded to the needs of rural sanitation and hygiene.

National authorities do recognise the shortcomings in the governance systems, and adequate funding from state budget and due support from development partners are crucial to achieve notable progress in quality improvements in sanitation and hygiene. The following policy recommendations derive from the above discussion:

- National authorities in close cooperation with development partners must closely monitor sanitation interventions in rural Tajikistan. Experiences must be well documented, with successful examples, lessons learned and shortcomings. Then discussions at national level must be launched and unresolved issues must be dealt with as feasible (economics, policy, legislation, norms and standards).
- Based on the rural experience, national authorities in consultation with development partners must identify a set of suitable context-based sanitation models for different regions and areas of Tajikistan, and consequently develop a comprehensive strategy and programme for replication.
- The limited public (state) funding that is currently available must be used to establish some of the models using the sanitation value chain approach at community level, once experiences demonstrate maturity for replication.
- Comprehensive state support mechanisms need to be developed that consider provision of pro-poor subsidies (direct and indirect), tax alleviation schemes and access to preferential financing, among other aspects.
- Since developing and maintaining waste polygons is a sophisticated, complex and costly undertaking, the government has the potential to promote public–private partnerships with more government responsibility for safe treatment and disposal, while private service providers would handle safe removal, transportation and reuse. Necessary business plans will need to be developed with support from development partners and with consideration of successful experiences worldwide.

- The development of a comprehensive sanitation development strategy must be based foremost on findings from demonstration activities in rural Tajikistan.
- Policy and regulatory framework improvement must take place incrementally, and on a case-by-case basis once experiences from rural settings point towards an applicable model.

From immediate to long-term perspectives, the policy agenda should promote the following priorities suggested by the presently agreed Sanitation Development Plan:

### Immediate and medium-term priorities (up to 5 years)

---

- Complete the institutional and regulatory reforms needed to implement the sanitation programme, such as clarifying the responsibilities of the government and the specific agency that would facilitate the development of the sanitation sector; approve the relevant legal documents under preparation.
- Revise the existing norms and standards and, where necessary, determine alternative structural norms and standards, strengthen sanitation governance and regulatory frameworks, and endorse the ownership and managerial responsibility of community-based schemes.
- Intensify WASH education campaigns, capacity building, behaviour change and sanitation marketing activities, including the development of the supply chain.
- Develop financing tools for on-site sanitation, including revolving funds and targeted subsidy schemes.
- Define with development partners a joint and coordinated sanitation sector support programme.
- Launch rural sanitation pilot projects focusing on safe sludge management, decentralised wastewater treatment, greywater systems and adequate school sanitation (including handwashing facilities) that could be tested in one region of the country before being translated into a national sanitation strategy and expanded countrywide.

### Long-term priorities (until 2030 and beyond)

---

- Develop the comprehensive **national sanitation strategy**, based on findings from the demonstration activities.
- Secure the appropriate financing and fund channelling.
- Replicate the successful rural sanitation pilot projects.
- Ensure proper monitoring and evaluation of sanitation activities.
- Enforce the new sanitation and environmental regulations.

## Section 2

# Purpose and rationale: context, definitions and benefits of sanitation

### ↳ Purpose and context

This policy report is primarily designed for the attention of policy makers in the national government, ministries and agencies with related mandates to 1) develop and improve policies and regulations, norms and standards, and 2) enforce application of the given service standards. The report also calls for action at the local level, by authorities, service providers and duty-bearers in general, in implementing recommendations and new policies on the ground. Simultaneously, the policy report also conveys specific messages and recommendations to development partner agencies and international financial institutions, implementers of projects in the WASH sector and development practitioners.

The policy report also provides information on the experiences and lessons learned from Swiss Agency for Development and Cooperation (SDC)-funded WASH projects in rural communities across Tajikistan (TajWSS,<sup>1</sup> RRWSSP,<sup>2</sup> RWSSP,<sup>3</sup> CoWaSS<sup>4</sup> and SWSMT<sup>5</sup>) on the part of implemented approaches, lessons learned and policy implications. For a list of key comprehensive reports, see Annex 6.

### ↳ Sanitation, health and hygiene: definitions, concepts and links

The term ‘sanitation’ is often misunderstood both among citizens and policy makers. *Sanitation* is beyond traditional availability of toilets, soap and water. Practically, many development organisations operate with a sanitation definition that places major focus on excreta management in general. Yet, in the modern context of increasing populations, outbreaks of various diseases and the recent Covid-19 pandemic, a comprehensive understanding of sanitation has become of dire importance. WHO defines the term as follows:<sup>6</sup>

*‘Sanitation generally refers to the provision of facilities and services for the safe disposal of human urine and feces. The word ‘sanitation’ also refers to the maintenance of hygienic conditions, through services such as garbage collection and wastewater disposal.’*

<sup>1</sup> Tajikistan Water Supply and Sanitation Project (TajWSS) project, implemented by Oxfam GB in partnership with UNDP.

<sup>2</sup> Regional Rural Water Supply and Sanitation Project (RRWSSP 2007–2013), implemented by the International Secretariat for Water (ISW).

<sup>3</sup> Rural Water Supply and Sanitation Project, Ferghana Valley (RWSSP FV 2014–2019, Phase II 2021–2025), implemented by the ISW in the north of Tajikistan.

<sup>4</sup> Comprehensive Water Supply and Sanitation in Rural Areas of Soughd Region (CoWaSS 2021–2024), implemented by ISW/Helvetas/CAICO consortium.

<sup>5</sup> Safe Drinking Water and Sanitation Management Project (SWSMT), implemented by the Aga Khan Development Network Consortium in Tajikistan.

<sup>6</sup> WHO (2021) *Health topics: Water, sanitation and hygiene (WASH)*. Retrieved 13 April, 2022 from: [www.who.int/health-topics/water-sanitation-and-hygiene-wash](http://www.who.int/health-topics/water-sanitation-and-hygiene-wash)

The concept of sanitation is viewed through so-called hardware (systems and technologies) and software (application approaches) components. The *systems* include excreta management systems, wastewater management systems, solid waste management systems, and drainage systems for rainwater and stormwater. And *technologies* refer to the way sanitation facilities are built and organised, such as pit latrines (basic), container-based sanitation (septic tanks), community-led total sanitation, dry and ecological sanitation and emergency sanitation. Application approaches include system of maintenance, sustainable management, public and individual education/awareness, hygiene behaviour change and health risks management.

The often-used term '**sustainable sanitation**' places emphasis on the '**sanitation value chain**' which treats collection, emptying, transport, treatment and disposal/reuse as inseparable stages of an overarching holistic sanitation system. Sanitation is also strongly **linked to multiple other sectors**: safe drinking water supply, public health, food security/nutrition, environment, poverty and economic development. For example, effective sanitation systems, whether water-based or non-water-based, still strongly depend on safe drinking water supply, when it comes to sewerage and improved hygiene (handwashing) conditions to help users avoid contact with human waste. These links are better understood through various health impacts that poor sanitation may result in (see sections below).

Moreover, in 2016, the Joint Monitoring Programme for water supply and sanitation (JMP) of WHO and UNICEF defined several sanitation 'levels', the so-called **JMP service ladders**,<sup>7</sup> used to benchmark and compare service levels across countries. The JMP ladder provides five levels of sanitation service, starting at 'open defecation' and moving upwards using the terms 'unimproved', 'limited', 'basic', with the highest level being 'safely managed'. Annex 1 provides more detailed information about each service level.

---

<sup>7</sup> WHO/UNICEF (2021). *JMP service ladders*. Retrieved 13 April, 2022 from: <https://washdata.org/monitoring/sanitation>



## Section 3

# Situation analysis and problem statement

Sanitation, health and hygiene: present state and overall improvement trends

### Overall data trends: national, rural and urban

The data on sanitation and hygiene from JMP (WHO/UNICEF) generally show a steady positive improvement over the past 20 years in Tajikistan (2000–2020).<sup>8</sup> **Table 1 in Annex 2** indicates that such improvements are seen for both the rural and urban population, but also shows upward improvements between ladders (shifts between levels of services). Access to (at least) basic sanitation has improved from 89.9 to 96.8%, including for rural – from 88.8 to 97.8%, and for urban – from 92.9 to 94.1%. The share of the population with no access to sanitation has declined steadily, and open defecation has all but vanished (from 1.3 to 0.0% – national, 1.4 to 0.0% rural, and 0.8 to 0.0% urban). The same overall improvements are seen for hygiene: an upward trend from 91.4 to 96.5% for the same period (including for rural – from 89 to 95.8%, and for urban – from 98 to 98.3%). Data on population with a handwashing facility, i.e. basic facility with water and/or soap is also showing improvements from 91.4 to 96.5% (including for rural from 89 to 95.8%, and for urban from 98 to 98.3%).

In contrast, disaggregated data on the share of the population using improved sanitation facilities such as latrines, septic tanks and sewer connections show somewhat different trends<sup>9</sup> (Table 2 in Annex 2). While the share of the rural population using ‘latrines and other’ and ‘septic tank’ has generally increased (from 89 to 94% ‘latrines and other’, and from 0.0 to 4.1% ‘septic tank’), their access to sewerage connections have actually decreased from 2.5 to 0.5%. Those trends are opposite for urban settings for obvious reasons (improved sewerage connections in cities, towns and district centres). Available data on disposal for rural settlements indicates improvements from 53 to 59%, while those for wastewater treatment indicate a decline from 1.2 to 0.2%. Whereas, data on sewerage from the SUE KMK<sup>10</sup> indicate that only 0.2% of the rural population are covered with sewerage systems and 3.6% by collection and removal of sewerage. In cities and towns, the figures are much higher – 79.8% and 85.6% for ‘sewerage’ and ‘collection/removal of sewerage’ respectively.

<sup>8</sup> WHO/UNICEF (2021). *Joint Monitoring Programme for Water Supply, Sanitation and Hygiene*. Retrieved 13 April, 2022 from: <https://washdata.org/data/household#/>

<sup>9</sup> Ibid.

<sup>10</sup> SUE KMK (2011). *The status of potable water supply and sanitation sector in the Republic of Tajikistan*.

World Bank data<sup>11</sup> from the Household WASH Survey is somewhat in line with the overall trends, indicating rural households without access to sanitation having declined from 12.6% in 2000 to 1.9% in 2016, along with smaller improvements for urban households without access to sanitation declining from 2.4 to 0.5% for the same period. Indicators on the safest form of sanitation facility show slow progress, with share of the population with flush toilets with sewer connection at around 17–20% between 2012 and 2016, having been estimated at 19% in 2015. In contrast, rural households with access to flush toilets connected to a sewer system remains chronically low at 1.7% in 2016.

## State of sewerage infrastructure, collection and removal

Looking at the technical status of sewerage systems (drainage) in Tajikistan, in rural areas only 10% of systems are in working condition, 5% partially working and 85% out of order. Technical reliability of sewerage systems at national level stands at only 25% (75% not being reliable for use).<sup>12</sup> According to the latest qualitative reports, those indicators (since 2011) have barely improved if not deteriorated further. Sewerage systems are primarily established in major cities, urban-type settlements and district centres with relatively higher number of multistorey buildings, and the few rural communities that have sewerage systems installed are normally densely populated with relative proximity to district centres<sup>13</sup> (see Table 3 in Annex 2).

For the most part, in rural areas, the process of collection and use of faeces (through sewerage networks or other) is carried out without proper organisation and on an ad-hoc basis, where such wastes are removed and buried in unsanctioned locations,<sup>14</sup> which potentially is the cause of soil and underground water contamination. Throughout the country, the ‘polygons’ (landfills), in their proper purpose do not practically exist, as most of them do not adequately comply with sanitary regulations on the maintenance of polygons for solid wastes<sup>15</sup> (see Table 4 in Annex 2).

## Health indicators linked to poor WASH practices

Inadequate water and sanitation services together with unsafe hygiene practices are important factors behind Tajikistan’s high levels of diarrheal disease and helminth infections, the major impediments to the survival and development of children. Infectious diarrhoea and other waterborne illnesses are recognised as leading causes of infant and child mortality and malnutrition. According to research based on epidemiological modelling, Tajikistan’s incidence of diarrhoea and diarrhoea-related mortality rates are among the world’s highest.<sup>16</sup>

Some data provided by the UNDP review indicate significant growth in the incidence of intestinal parasitic infections attributable to poor WASH services in the country<sup>17</sup> (see Table 5 in Annex 2). WASH-related diseases are major public health problems across the world, especially in developing countries, causing under-nutrition, anaemia, intestinal obstruction and mental and physical growth retardation.

---

<sup>11</sup> World Bank (2017). *Glass Half Full: Poverty Diagnostic of Water Supply, Sanitation, and Hygiene Conditions in Tajikistan*. WASH Poverty Diagnostic. World Bank, Washington, DC. <https://openknowledge.worldbank.org/handle/10986/27830>

<sup>12</sup> SUE KMK (2011). The status of potable water supply and sanitation sector in the Republic of Tajikistan.

<sup>13</sup> Agency for Statistics under the President of the RT (2013). Environmental protection in the Republic of Tajikistan.

<sup>14</sup> UNDP/Oxfam GB (2016). Review of sanitation policy and practice in Tajikistan (TajWSS Phase II).

<sup>15</sup> Agency for Statistics under the President of the RT (2013). Environmental protection in the Republic of Tajikistan.

<sup>16</sup> BMC Public Health (2012). Diarrhea Incidence in Low- and Middle-income Countries in 1990 and 2010: A Systematic Review.

<sup>17</sup> UNDP and Oxfam GB (2016). Review of sanitation policy and practice in Tajikistan. Report published with support from TajWSS project (Phase II).

WHO data<sup>18</sup> on the estimated mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene is 2.7 persons per 100,000 population, which is significantly higher than such countries as Azerbaijan (1.1), Kyrgyz Republic (0.8) and Kazakhstan (0.4). Moreover, the World Bank indicates that ‘Children in poorer households carry 55 percent of the cumulative share of exposure risk and overall disease risk. The 40 percent of children suffering the highest risk shoulder 95 percent of the overall risk in urban settings and 75 percent of the overall risk in rural areas. This supports the pattern that higher risk is often found in the poorest and most vulnerable communities.’<sup>19</sup> The available data<sup>20</sup> (see Table 6 in Annex 2) also indicate the extent of non-compliance of centralised WASH systems due to absence of 1) sanitation protection zones, 2) adequate treatment facilities, and 3) decontaminating installations. The extent of non-compliance with standards and norms stands at 55.4% for all centralised systems.

## Sanitation, health and hygiene: problem statement

As various reports indicate, the noted overall improvement trends in hygiene and sanitation are inconsistent with the actual situation, particularly for the rural context. The trends fail to capture 1) poor conditions of sanitation facilities (ageing and/or obsolete infrastructure), 2) poor and unregulated design, and 3) poor O&M of sanitation facilities (such as septic tanks and latrines). The WASH-related health indicators are not in harmony with reported overall trends, thereby indicating that the population of Tajikistan (both urban and rural) remains under high risk of related diseases with attributed mortality rates significantly higher than for many other countries in the Commonwealth of Independent States region.

In the attempt to address this situation, this policy report highlights the following **three distinct and systemic problems** on the path of developing an enabling environment:

### Problem 1

---

#### Poor understanding of ‘sanitation’ concept (at policy, regulatory and service levels)

Policy makers and service delivery organisations have reportedly limited knowledge about sanitation, which in part explains slow progress on the policy agenda. There is limited awareness and knowledge about the fact that *access, availability and quality* of sanitation and hygiene services are principally defined along the categories of **sustainable sanitation** and **sanitation value chain**. These categories encompass *collection, emptying, transporting, treatment and disposal (including reuse)* as inseparable stages of an overarching holistic sanitation system. Failure in any particular stage of that chain may have detrimental consequences for human health, well-being and the environment. Without adequate knowledge of sanitation and related models, it is difficult to embark on developing an enabling environment.

### Problem 2

---

#### Lack of a comprehensive strategy for rural sanitation interventions:

---

<sup>18</sup> WHO (2016). Global Health Observatory Data Repository. Retrieved 13 April, 2022 from: <https://apps.who.int/gho/data>

<sup>19</sup> World Bank (2017). Glass Half Full: Poverty Diagnostic of Water Supply, Sanitation, and Hygiene Conditions in Tajikistan. WASH Poverty Diagnostic. World Bank, Washington, DC. <https://openknowledge.worldbank.org/handle/10986/27830>

<sup>20</sup> UNDP and Oxfam GB (2016) Review of sanitation policy and practice in Tajikistan (TajWSS Phase II).

Sanitation and hygiene have long been low in priority on the national policy agenda. The **first attempt** to integrate a sanitation component in the legal framework came with the endorsement of the **New Edition of the Law<sup>21</sup> on Drinking Water and Wastewater (Sewerage) Disposal** (2019). The New Edition has integrated a block component on wastewater (sewerage) disposal, which was absent in the original version (2010).<sup>22</sup> While inclusion of wastewater disposal is an important step forward, the new law and generally the present legal framework remain incomplete in capturing all aspects of the ‘sanitation’ concept. The scope of the new law in affect is only limited to cities, towns and district centres where wastewater and sewerage infrastructure exists. Rural areas at large have no such connections or infrastructure, and building water-based sanitation systems in rural settings is a highly expensive undertaking that requires setting up all components of the sanitation value chain (organising removal, transport, treatment, reuse and landfill construction within relative proximities).

In the attempt to address this gap, i.e. addressing sanitation development challenges for the **rural context**, UNDP through the TajWSS project has advocated for development of a **vision** or a **roadmap** under the leadership of the Minister of Health and Social Protection. Such a vision was eventually adopted in the form of the **Tajikistan Sanitation Development Plan**,<sup>23</sup> which calls for immediate sets of actions from multiple constraints to the development and sustainability of sanitation infrastructure and services.

The noted Sanitation Development Plan, while representing an overall vision, calls for development of a **comprehensive national sanitation strategy with due emphasis on rural sanitation**. It principally implies a move from mere ‘stating challenges’ to ‘implementation strategy’, and highlights the need to collect and assess experiences from the rural context (development partner projects) in order to define suitable sanitation models for replication in rural Tajikistan. Therefore, on the part of policy and enabling environment, this work is far from complete.

---

### Problem 3

## Implemented sanitation models (alternative) in rural areas are inconclusive

Development partner projects and interventions in rural Tajikistan have piloted various sanitation models, technologies and approaches, however, impartial assessment of such experiences have not been well documented. This makes reform process and the development agenda difficult to evolve. National authorities have limited knowledge about suitable sanitation models beyond centralised wastewater systems, and national policy platforms have not placed sufficient attention on the subject of sanitation and hygiene. While development partners report on various successfully piloted models and/or technologies, those have not been integrated within the present norms and standards, financing strategies and development plans. Other reports indicate that such **experiences are inconclusive**, as not all stages of the *sanitation value chain* had been addressed. It is necessary that government policies and programmes reach out to rural communities in promoting alternative solutions to improve overall sanitation, health and hygiene among the rural population.

---

<sup>21</sup> The Law of RT on Drinking Water Supply and Wastewater Disposal, endorsed on 19 July 2019, #1633.

<sup>22</sup> The Law of RT on Drinking Water and Water Supply, endorsed on 29 December 2010 (#670).

<sup>23</sup> Tajikistan Sanitation Development Plan, approved by the Minister of Health and Social Protection of the RT, HE J. Abdullozoda, as of 21 September 2021.

## Section 4

# Findings and lessons learned: experiences from rural Tajikistan

This policy report suggests that without properly addressing the economic side of sanitation and hygiene – with affordability at its core, it is difficult to ensure quality shifts to improved sanitation and health situation in rural Tajikistan. While some development interventions on sanitation and hygiene there still address ‘availability’ of improved services where applicable (such as constructing sanitation facilities/toilets), others ultimately aim to bring down the costs (‘affordability’) of building and maintaining improved and sustainable sanitation systems and facilities. The interventions introduced a range of approaches that includes improved and alternative solutions to constructing and maintaining sanitation systems and facilities. These, from basic to advanced, can be listed as follows:

### □ **Improved latrines:**<sup>24</sup>

Shift away from basic sanitation facilities (‘pit latrines’ with wooden planks, primitive ‘pit holes’ or ‘hole in the ground’, ‘mechanically dug pit’ without protective lid) to those with improved structures and components (such as roofing, seats and wares, ventilation, separators and safe waste containers). The piloted types include squat and VIP latrines, flush toilets, dry toilets (including EcoSan), Eco-Vapour toilets and SaTo pans.

### □ **Decentralised sanitation solutions:**

Nature-based sustainable wastewater treatment systems with flush toilets and constructed wetlands. The systems are built from available local materials (decentralised wastewater treatment systems<sup>25</sup> and other similar approaches<sup>26</sup>) that do not need sophisticated control and maintenance.

### □ **Faecal sludge management:**<sup>27</sup>

Storage, collection, transport, treatment and safe end use or disposal of faecal sludge management approaches.

---

<sup>24</sup> Implemented by Oxfam GB, ISW and Aga Khan Foundation with SDC financial support (projects: TajWSS, RRWSSP, RWSSP and SWSMT).

<sup>25</sup> Decentralised wastewater treatment system. Implemented by Oxfam GB with SDC financial support (project: TajWSS)

<sup>26</sup> Implemented by ISW with SDC financial support (projects: RRWSSP, RWSSP)

<sup>27</sup> Implemented by Oxfam GB (Rudaki district) and ISW in Soughd region of Tajikistan (projects: TajWSS, RRWSSP, and RWSSP).

#### 🔖 **Sanitation marketing:**<sup>28</sup>

This is based on the fundamental principle that the private sector can play a critical role in providing low-income households with sustained access to improved sanitation. The approach, comprehensively implemented by Oxfam GB through the TajWSS Project, comprises two tracks: 1) on the demand side – using social marketing techniques and small business sales to stimulate household demand and increase the willingness to purchase and invest in durable, hygienic toilets, and 2) on the supply side – supporting local businesses to expand the delivery and sale of affordable, desirable toilets and related services that facilitate market development and investments.

#### 🔖 **WASH master-plan approach:**<sup>29</sup>

Piloting development and implementation of a master-plan approach to sanitation and hygiene at community level. The plan (usually a five-year plan) contains priorities for investments in water and sanitation infrastructure taking into account the available water resources, measures for awareness raising and capacity development, and measures for risk reduction (such as water protection zones, water safety planning and sanitation safety planning).

#### 🔖 **Comprehensive hygiene awareness campaigns:**<sup>30</sup>

Implementation of comprehensive hygiene promotion programmes at public institutions (schools, health facilities), at household and community levels.

Development partners have invested tremendous efforts in addressing many sanitation development challenges. Despite the reported benefits and progress made to date, the sustainability outcomes are at large inconclusive. The development interventions so far can be characterised by various phases of test-and-trial exercises (pilot demonstrations). The earlier efforts were focused more on tackling **availability** of sanitation facilities by constructing improved toilets in their simplest forms with limited sustainability and maintenance observed afterwards. The more recent interventions, though, have largely focused on the components of the entire value chain, that is waste and sewerage management, collection, removal, transport, treatment, reuse and/or safe disposal.

The experiences, successes and lessons learned from the above interventions are yet to be documented, published and discussed not only with local and national authorities but also within the development partner community in general. Before any successful model becomes suitable for replication with state or other financing at a larger scale, a consensus must be achieved as to what models are suitable for particular rural settings. Experience shows that implemented models in rural Tajikistan face the following major obstacles at various stages of the sanitation value chain, for which viable solutions are sought for replication:

## ▶ **Economic viability and financing**

Sanitation and hygiene in rural settings compared with cities and towns, and even in district centres, has similar bottlenecks on the path to economic and financial viability as the supply of safe drinking water:

---

<sup>28</sup> Piloted by Oxfam GB with SDC financial support (project: TajWSS).

<sup>29</sup> Piloted by ISW in Soughd region with SDC financial support (project: CoWaSS).

<sup>30</sup> Implemented by Oxfam, ISW, Aga Khan Foundation and others.

- Given the typical geographic terrain in various rural settlements, suppliers do not benefit much from population density within service areas ('economies of scale').
- Rural households in many settlements are organised in a chaotic manner which makes it technically difficult and, in many cases, impossible to implement centralised wastewater and sewerage systems.
- Limited access to qualified technicians and restricted management mobility have negative impacts on operational efficiency for systems located farther from district centres.
- Investment prospective and access to finance are negligent in rural communities.
- Poverty in Tajikistan is largely a rural phenomenon, hence improved sanitation costs may constitute a greater share of rural households' incomes compared with households living in cities in towns.
- Even when water supply is ensured, sewerage and disposal of wastewater becomes a greater issue.

Effective and long-term sustainable sanitation improvements in rural areas, therefore, require initial financial support from both the government and the development partners.

## Institutionalisation and regulation of rural sanitation systems

Implemented case studies indicate that a number of issues have remained unregulated by duty-bearing institutions. These issues can be listed as follows:

- Removal, treatment and disposal/discharge are not adequately regulated. Rural households hire private agents and those of SUE KMK from district centres; however, there has not been any accurate assessments of the costs and the way the wastes are treated, discharged and/or reused.
- Economic regulation of sanitation systems and facilities are not comprehensive and transparent. Costs are not properly assessed from the construction of better designed sanitation facilities and systems to final discharge and/or reuse.
- Design and construction of adequate/improved sanitation facilities and systems are not properly regulated. Households have no adequate information as to what standards to follow, especially in regions with high levels of groundwater.
- Regulatory institutions (such as the Ministry of Health and Social Protection of the Population of the Republic of Tajikistan, its Sanitary and Epidemiological Services Agency, and national authorities) have only performed some monitoring of the situation, but have no means and capacity to invest or construct new sanitation facilities beyond district centres.

## Section 5

# Policy agenda on sanitation and hygiene: are policies responding to the needs?

The governance system for sanitation and hygiene in Tajikistan comprises a comprehensive number of involved ministries and agencies, as well as numerous policies, laws and regulations (**Annexes 4 and 5**). The established view among development practitioners and specialists is that implementation on the ground has perhaps lost pace against more frequent improvements in the policy and legal frameworks. Lack of implementation has most often been attributed to weak capacities among implementing duty-bearing government agencies and ministries. Institutions chronically lack funding to operate as mandates require. Lack of implementation is also attributed to poor knowledge and awareness among the population about due norms and standards to minimise hazardous impacts on health. On the part of the governance framework, there are several development scenarios that are not necessarily solutions on their own, but constitute key discussion points in the policy agenda.

### ↳ Thesis 1

#### **Government must take a coordinated role in sanitation and hygiene**

Sanitation and hygiene involves a multitude of institutions with overlapping roles and inadequate capacities,<sup>31</sup> with no clear distinction between the regulatory functions of state authorities and their functions as providers of water and sanitation services.<sup>32</sup> The roles are also unevenly distributed<sup>33</sup> with no central body responsible for the overall water and sanitation sector at different levels of the government hierarchy. The Ministry of Health and Social Protection, as a specialised ministry with technical knowledge, bears the bulk of responsibilities for sanitation and hygiene from the health perspective, however, given the weight of the health sector in general, it requires coordinated support from other agencies. The Ministry of Energy and Water Resources is a designated responsible agency for policy development and coordination generally for the water supply and sanitation sector, and the agency leading policy reform. Given the span of issues in sanitation and hygiene, it is required that those two important ministries share leadership and coordination of the remaining platoon of ministries and agencies.

<sup>31</sup> OSCE (2020). *Sanitation situation in rural Tajikistan*. Desk study, drafted by S. Sinha.

<sup>32</sup> UNDP (2018). *Sanitation Development Plan for Tajikistan*, Draft report for national round table discussions.

<sup>33</sup> World Bank (2017). *Glass Half Full: Poverty Diagnostic of Water Supply, Sanitation, and Hygiene Conditions in Tajikistan*. WASH Poverty Diagnostic. World Bank, Washington, DC. <https://openknowledge.worldbank.org/handle/10986/27830>



## ↳ Thesis 2

### **Policies, laws, standards and norms need to be updated to fit new economic realities**

Updating the policy and regulatory framework is often justified by the need to fit within new economic realities. UNDP has advocated for development of a general vision/roadmap that did not exist, but at this stage following the adopted Tajikistan Sanitation Development Plan (the vision), the immediate step is to elaborate a comprehensive sanitation strategy that would provide step-by-step guidance on addressing challenges related to, for example, policies, sanitation norms and standards, financing strategies and replication of technical sanitation solutions.

## ↳ Thesis 3

### **Decentralised approach opens new opportunities for service providers**

A so-called ‘paradigm shift’, that is, transfer of responsibilities to local level (such as control, management, accountability, productivity, efficiency, capacity building and community involvement) is suggested by the endorsed Sanitation Development Plan.<sup>34</sup> While there is room for improvement across all governance structures and systems, the burden of issues and challenges may easily overwhelm responsible agencies if addressed simultaneously. The above scenarios are recurrent issues of the ongoing policy reform in general, and none of them are easy subjects to deal with. Given the current chronic underinvestment and lack of support from international financial institutions in rural sanitation, the experience of limited development partner projects is a starting point for an enabling environment for the rural setting.

### **▶ Major misconceptions – development needs are not well understood**

Improving sanitation and hygiene conditions in rural Tajikistan is no easy task, simply because of the overwhelming number of issues that need to be addressed. Annex 3 provides a comprehensive summary of the challenges in the rural setting, and those findings are in line with recent development partner reports. Presenting these challenges for policy makers’ attention has been a challenging task, perhaps due to a lack of proper understanding of the sanitation concept and the way trends and dynamics have been interpreted, in particular around urban versus rural sanitation. Lack of due attention within the national policy agenda and in part among development partners, is reportedly due to the following major misconceptions:

- A common misconception among national authorities is that flush toilets connected to sewerage systems are the ultimate level of improved sanitation and hygiene in rural Tajikistan. While several international financial institutions have channelled significant investments in rehabilitation of sewerage systems in a number of cities and towns, the expectation is that similar support may be extended beyond district centres to cover rural communities. While adaptations from urban sanitation systems to rural models are possible (for example – decentralised sewerage systems), those models are yet to be seen and discussed.

---

<sup>34</sup> UNDP (2018). *Sanitation Development Plan for Tajikistan*, Draft report for national round table discussions.

- Another misconception is that construction of improved toilets solves the problem. At earlier phases of sanitation interventions, the approaches were characterised by simplistic and straightforward approaches, i.e. building improved toilets, without much focus on O&M and sustainability. To date, as challenges have recurrently unfolded, there is better understanding that sustaining and scaling improvements in sanitation and hygiene can be achieved by implementing sanitation value chain approaches.
- **Finally, another recurrent myth among development partners is that policies must change to provide an enabling environment.** While the claims have rightly been noted in earlier sections of the report, the policy framework in general does provide opportunities for different sanitation models to emerge. The master legal documents, norms and standards of sanitation and hygiene are there to guide the process. The key issue here is whether applied models in rural communities have adequately informed the reform process with comprehensive proposals to change specific policies. In other words – has the rural experience matured sufficiently to influence policy change?

## ▶ Sanitation and hygiene in the policy agenda: What has changed?

Although most WASH-related initiatives in the past 20 years have placed greater emphasis on providing safe drinking water without due support to sanitation policy and infrastructure development, more recent support provides a better perspective in which sanitation is gaining greater attention. In particular, the following developments in the policy agenda prove the given development:

- Implementation of the **State Water Sector Reform Programme**<sup>35</sup> for the period 2016–2025, which among others, places emphasis on integrated water resources management-based interactions of various sub-sectors with the objective of good accessibility to high quality water and sanitation services for the population.
- New Edition of the **Law of the RT On Drinking Water Supply and Wastewater (2019)**<sup>36</sup> – the present law incorporates some of the policy recommendations accumulated in the past decade, and includes a separate chapter on wastewater/sanitation which was not part of the previous Law on Drinking Water and Water Supply (2010).<sup>37</sup>
- Newly endorsed **Sanitation Norms and Standards** on requirements for sewerage systems in rural settlements (2021).<sup>38</sup>
- Newly endorsed **Sanitation Norms and Standards** on placement, structure, operation and maintenance of public toilets (2021).<sup>39</sup>
- Newly approved national **Tajikistan Sanitation Development Plan (2021)**.<sup>40</sup>

There are a few points to highlight from the above developments. Firstly, the **national policies** now include **more elements of sanitation**, i.e. wastewater, sewerage (Ref: Law on Drinking Water Supply and Wastewater Disposal, 2019). Although improvement of stand-alone sanitation facilities at household

<sup>35</sup> Water Sector Reform Programme for the period 2016–2025, approved by the Government of the RT on 30 December 2015, #791.

<sup>36</sup> Law of the Republic of Tajikistan on Drinking Water Supply and Sanitation, as of 19 July 2019, #1633 (active).

<sup>37</sup> Law of the Republic of Tajikistan on Drinking Water and Water Supply, 29 December 2010 (#670) (replaced by the New Edition).

<sup>38</sup> SanPiN 2.1.5. 035-21, Sanitary norms and standards on Requirements for Sewerage Systems in Rural Settlements, Order of the Ministry of Health and Social Protection of the RT, as of 20 September 2021, #124.

<sup>39</sup> SanPiN 2.1.1. 036-21, Sanitary norms and standards on placement, structure, operation and maintenance of public toilets, Order of the Ministry of Health and Social Protection of the RT, as of 20 September 2021, #125.

<sup>40</sup> Tajikistan Sanitation Development Plan, approved by the Minister of Health and Social Protection of the RT, HE J. Abdullozoda, as of 21 September 2021.

level is not the explicit discussion in these policies, water-based decentralised sanitation models are now recognised as possible. Moreover, management, treatment and disposal of wastes in general, and wastewater in particular, from rural sanitation facilities is now the focus of several policy documents – 1) Water Sector Reform Programme (National Water Strategy until 2030), 2) New Edition of the Law on Drinking Water Supply and Wastewater, and 3) newly endorsed sanitation norms and standards.

The more recent policy document in discussion is the **Plan of Measures for implementation of National Water Strategy for Tajikistan until 2030**, which is the mechanism for implementation of the National Water Sector Reform Programme, now clearly indicates ‘sanitation’ is one of the priorities in the WASH sector (Items #3.28, 3.33, 3.42 of the Plan of Measures: Annex 4).<sup>41</sup> The national policies also emphasise development of **new business models**, promote public–private partnership, and generally keep avenues open for non-state actors as potential service providers in the WASH sector.

And finally, despite the positive changes noted above, the policy framework in its coverage of sanitation issues remains **limited in scope**. The new policies consistently focus on sewerage and wastewater management, which are not prevalent in rural Tajikistan. In fact, not all district centres have sewerage systems, and some that have are barely functioning with poor treatment and control capacity.

An obvious short-coming in the present policy framework is the lack of a **comprehensive sanitation strategy** on how to achieve improvements in rural sanitation and hygiene along the entire sanitation value chain. The recently endorsed Sanitation Development Plan is an attempt to provide a vision/roadmap, however, it requires further follow-up and evidence-based feedback from rural demonstration projects. The endorsed plan lacks discussions and proposals on suitable cost-effective sanitation and hygiene models and systems, and it is apparent that available experiences in the field have not been part of the discussions in the policy dialogue platforms.

---

<sup>41</sup> Plan of Measures for Implementation of National Water Strategy for Tajikistan for period until 2030 (draft), as a mechanism for implementation of the National Water Sector Reform Programme.

## Section 6

# Conclusions and policy recommendations

### Building a development vision for rural sanitation and hygiene

---

This policy report emphasises that improvements in sanitation and hygiene can accurately be assessed when **'quality'** requirements are taken into account across the entire **sanitation value chain** (quality control, containment, removal, treatment, disposal, O&M, hygiene promotion, etc.). The analysis demonstrates that overall improvement trends in sanitation and hygiene failed to capture the poor conditions in rural communities, and that WASH-related health indicators and trends were not in harmony with the overall positive trends (published JMP data).

Unfortunately, to date the financing/funding support to rural sanitation and hygiene has mainly been provided by development partner projects (international NGOs and development partner agencies), while government support has not extended beyond district centres (maintaining centralised sewerage systems). Sanitation facilities in rural communities, in particular at household level, are treated as private affairs with intricate links to government regulations. Rural sanitation facilities remain highly unregulated and therefore unguided when it comes to construction design, and general application of norms and standards across the value chain. For that purpose, development partners' more recent interventions, over several phases, have attempted to deal with the economic side of the problem – a sanitation model that would be applicable in rural Tajikistan would have to be affordable and therefore cost effective. In doing so the interventions included:

- Reducing the costs of sanitation products (the various materials required to construct a sanitation facility). This involved also stimulating local production of sanitation products that are cheaper than those imported, i.e. a market-based approach (sanitation marketing)
- Applying community-based/decentralised sanitation solutions (master-plan approach, decentralised wastewater treatment systems)
- Supporting local businesses to provide services of removal, treatment and disposal of wastes
- Introducing alternative technologies for 'improved latrines' (squat and VIP latrines, flush toilets, dry toilets, EcoSan, Eco-Vapour and SaTo pans)
- Taking approaches to safely reuse wastes.

Therefore, having dealt with noted misconceptions and challenges that are prevalent in rural communities, it can be argued that **formulating a vision for rural sanitation and hygiene must be based, first and foremost, on evolving rural experience**. In particular, the outcomes from applying various sanitation models in rural communities must inform the discussions at national level to develop a comprehensive strategy. The following summary of challenges, opportunities and policy recommendations must be at the core of the discussions.

## Challenges and opportunities

---

Despite achievements by a growing number of rural schemes, there are still **challenges** that can be summarised as follows:

- ❏ Development projects have introduced various sanitation models in rural Tajikistan to improve sanitation and hygiene. While experiences from these interventions have evolved with considerable improvements, they are still characterised to have remained in test-and-trial phase. Some models (such as Eco-San toilets) have reportedly proven effective in improving on-site sanitation and hygiene conditions, however, their experience in addressing the remaining stages of a value chain approach remains inconclusive (waste management).
- ❏ Costs related to developing improved sanitation facilities and systems remain too high for rural communities, and attempts to run down the costs of services and products have not yet concluded. In particular, the burden of the costs involves the final stages of the value chain, namely removal, transportation, treatment and disposal of wastes. Availability of sanctioned and appropriate polygons with any sort of treatment facility is a common development issue.
- ❏ Rural sanitation and hygiene remain unregulated which results in poor construction design and non-compliance with norms and regulations. Service provision is voluntary and non-systemic, enforcement mechanisms lack institutional support.

Consequently, there are several **opportunities** that authorities, development partners and potential service providers will need to follow to improve sanitation and hygiene in rural Tajikistan:

- ❏ Outcomes from applied models must be duly published immediately with all their shortcomings, lessons learned and successful experiences in order to launch discussions at national level (policy dialogue). Policy reform is a lengthy process that first requires sufficient amount of evidence from the field.
- ❏ The sanitation market remains weak and needs to be developed to support potentially increasing demand. The sanitation marketing approach needs comprehensive support from development partners and the government should provide incentives for the private sector to promote WASH products and provide services under concessional requirements.
- ❏ The reuse of safely treated human waste is perceived as an economic product in some parts of Tajikistan, but replication requires appropriate education, promotion and support. Government service providers have the right potential to launch such an initiative.

## Policy recommendations

---

Despite sanitation having been part of many development projects in the past 20 years, it has become the focus of the policy agenda only recently with endorsement of noted laws and by-laws, norms and standards, and relevant national programmes. In spite of this, those policies have only covered wastewater and sewerage aspects – not a prevalent part of sanitation in rural Tajikistan. In effect, national laws and programmes have not yet duly responded to the needs of rural sanitation and hygiene.

National authorities do recognise the shortcomings in the governance systems, and adequate funding from state budget and due support from development partners are crucial to achieve notable progress in quality improvements in sanitation and hygiene. The following policy recommendations derive from the above discussion:

- **National authorities in close cooperation with development partners must closely monitor sanitation interventions in rural Tajikistan.** Experiences must be well documented, with successful examples, lessons learned, and shortcomings. Then discussions at national level must be launched and unresolved issues must be dealt with as feasible (economics, policy, legislation, norms and standards).
- **Based on the rural experience, national authorities in consultation with development partners must identify a set of suitable context-based sanitation models** for different regions and areas of Tajikistan, and consequently develop a comprehensive strategy and a programme for replication.
- **The limited public (state) funding that is currently available must be used to establish some of the models using the sanitation value chain approach at community level,** once experiences demonstrate maturity for replication.
- **Comprehensive state support mechanisms** need to be developed that consider provision of pro-poor subsidies (direct and indirect), tax alleviation schemes and access to preferential financing among other aspects.
- Since developing and maintaining waste polygons (landfills) is a sophisticated, complex and costly undertaking, the government has the potential to promote public–private partnerships with more government responsibility for safe treatment and disposal, while private service providers would handle safe removal, transportation and reuse. Necessary business plans will need to be developed with support from development partners and with consideration of successful experiences worldwide.
- **The development of a comprehensive sanitation development strategy** must be based foremost on findings from demonstration activities in rural Tajikistan.
- **Policy and regulatory framework improvement must take place incrementally,** and on a case-by-case basis once experiences from rural settings point towards an applicable model.

From immediate to long-term perspectives, the policy agenda should promote the following priorities suggested by the presently agreed Sanitation Development Plan:

## Immediate and medium-term priorities (up to 5 years)

---

- Complete the institutional and regulatory reforms needed to implement the sanitation programme, such as clarifying the responsibilities of the government and the specific agency that would facilitate the development of the sanitation sector; approve the relevant legal documents under preparation.
- Revise the existing norms and standards and, where necessary, determine alternative structural norms and standards, strengthen sanitation governance and regulatory frameworks and endorse the ownership and managerial responsibility of community-based schemes.
- Intensify WASH education campaigns, capacity building, behaviour change and sanitation marketing activities, including the development of a supply chain.
- Develop financing tools for on-site sanitation, including revolving funds and targeted subsidy schemes.
- Define with development partners a joint and coordinated sanitation sector support programme.
- Launch rural sanitation pilot projects focusing on safe sludge management, decentralised wastewater treatment, greywater systems and adequate school sanitation (including handwashing facilities) that could be tested in one region of the country before being translated into a national sanitation strategy and expanded countrywide.

## Long-term priorities (until 2030 and beyond)

---

- Develop the comprehensive **national sanitation strategy**, based on findings from the demonstration activities.
- Secure the appropriate financing and fund channelling.
- Replicate the successful rural sanitation pilot projects.
- Ensure proper monitoring and evaluation of sanitation activities.
- Enforce the new sanitation and environmental regulations.

## References for further reading

### ▸ Reports and assessments from development partners

- ▢ Ministry of Energy and Water Resources (2017). Review of the practical application of the Law of the Republic of Tajikistan On drinking water and drinking water supply: Gaps, Limitations and Recommendations on its Improvement. Prepared with support from TajWSS Project.
- ▢ OSCE (2020). Desk Study: Sanitation Situation in Rural Tajikistan for Organization for Security and Co-operation in Europe (drafted by S. Sinha).
- ▢ Oxfam GB (2015). The level of satisfaction of customers of drinking water with the quality of drinking water and drinking water services. Baseline survey.
- ▢ Oxfam GB (2010). Water Supply and Sanitation in Tajikistan: Development Trends and Recommendations.
- ▢ Oxfam GB (2007). Water Management in Tajikistan.
- ▢ SUE KMK (2011). The status of potable water supply and sanitation sector in the Republic of Tajikistan.
- ▢ UNDP (2018). Sanitation Development Plan for Tajikistan: Draft Report for National Round Table Discussions (supported by TajWSS Project).
- ▢ UNDP (2015). Review of Sanitation Policy and Practice in Tajikistan (supported by TajWSS project, consolidated report from the members of the Inter-Ministerial Working Group on drinking water supply and sanitation).
- ▢ World Bank (2017). Glass Half Full: Poverty Diagnostic of Water Supply, Sanitation, and Hygiene Conditions in Tajikistan, WASH Poverty Diagnostic. World Bank, Washington, DC. <https://openknowledge.worldbank.org/handle/10986/27830>

### ▸ Policy documents, strategies and programmes

- ▢ Government of Tajikistan (2009). About concept of reforming housing and communal services sector of the Republic of Tajikistan for the period 2010-2025, as of 1 July 2010, #321.
- ▢ Inter-Ministerial Working Group on drinking water supply and sanitation (2019–2021). Minutes of meetings.
- ▢ The Law of RT on Drinking Water Supply and Sewerage, 19 July 2019 (#1633); replacing the previous Law on Drinking Water and Water Supply, 29 December 2010 (#670).
- ▢ The Law of the RT on Water Users Associations, New Edition, 2 January 2020 (#1668); replacing the previous Law on Water Users Association, 21 November 2006 (#213).
- ▢ Programme on improvement of safe DWS for the population of the RT for 2007-2020, as of 2 December 2006 (#514).
- ▢ Sector-related laws and regulations, norms and standards, SNIPs, GOSTs,<sup>42</sup> guidelines and manuals.
- ▢ Water Code of the Republic of Tajikistan, New Edition. Endorsed by Majlisi Namoyandagon Majlisi Oli, 12 February 2020 (#1596); Approved by the Majlisi Milli Majlisi Oli, 19 March 2020 (#756); President of the RT, 2 April 2020 (#1688).
- ▢ Water Sector Reform Programme for the period 2016–2025, approved by the Government of the RT on 30 December 2015 (#791).

---

<sup>42</sup> SNIPs are technical regulations and standards and GOST is a set of international technical standards maintained by the Euro-Asian Council for Standardization, Metrology and Certification.



## Annex 1

# The JMP ladder for sanitation<sup>43</sup>

The **JMP service ladders** are used to benchmark and compare service levels across countries. They have been updated and expanded to facilitate enhanced global monitoring of drinking water, sanitation and hygiene. The new ladders build on the established improved/unimproved **facility type classification**, thereby providing continuity with past monitoring, and introduce new rungs with additional criteria relating to service levels.

**Improved sanitation facilities** are those designed to hygienically separate excreta from human contact. There are three main ways to meet the criteria for having a **safely managed sanitation service** (Sustainable Development Goal (SDG) target 6.2). People should use improved sanitation facilities which are not shared with other households, and the excreta produced should either be:

- treated and disposed of in situ
- stored temporarily and then emptied and treated off-site, or
- transported through a sewer with wastewater and then treated off-site.

If the excreta from improved sanitation facilities are not safely managed then people using those facilities are classed as having a **basic sanitation service** (SDG target 1.4). People using improved facilities which are shared with other households are classified as having a **limited service**. The JMP also continues to monitor the population practising **open defecation**, which is an explicit focus of SDG target 6.2. These classifications of services level can also be visualised using excreta flow diagrams.

### ▶ Sanitation ladder

#### Safely Managed

Use of improved facilities that are not shared with other households and where excreta are safely disposed of in situ or removed and treated off-site

#### Basic

Use of improved facilities which are not shared with other households

#### Limited

Use of improved facilities shared between two or more households

<sup>43</sup> WHO/UNICEF (2021). *JMP service ladders*. Retrieved 13 April, 2022 from: <https://washdata.org/monitoring/sanitation>

### Unimproved

Use of pit latrines without a slab or platform, hanging latrines or bucket latrines

### Open defecation

Disposal of human faeces in fields, forests, bushes, open bodies of water, beaches and other open spaces or with solid waste

Note: Improved facilities include: flush/pour flush toilets connected to piped sewer systems, septic tanks or pit latrines; pit latrines with slabs (including ventilated pit latrines), and composting toilets

## ▶ Monitoring SDG targets related to sanitation

The 2030 Agenda for Sustainable Development comprises 17 SDGs and 169 global targets. Goal 6 aims to ‘ensure availability and sustainable management of water and sanitation for all’ and includes targets for universal access to safe drinking water (6.1), sanitation and hygiene (6.2). WHO and UNICEF, through the JMP, are the custodian agencies responsible for global monitoring of progress on SDG targets related to WASH (see [SDG monitoring](#)).

## ▶ Enhancing data collection

Household surveys and censuses remain the primary source of information on the different types of facilities used by the population but information on safe management of excreta along the sanitation chain is also collected from administrative sources and regulators (see [Data sources](#)).

The existing JMP core questions for household surveys have been widely used in national household surveys and censuses worldwide and have contributed to improvements in the quality and comparability of data collected over the past decade. The JMP has worked closely with international household survey programmes to develop new questions and indicators for enhanced monitoring of sanitation services and the sixth round of [Multiple Indicator Cluster Surveys](#) includes new questions on emptying and disposal of excreta from on-site sanitation facilities.

While many countries have data on treatment of wastewater from households connected to sewers, relatively few have data on treatment of faecal sludge emptied from on-site systems such as septic tanks and pit latrines. The JMP is supporting six countries (Bangladesh, Ecuador, Indonesia, Kenya, Serbia and Zambia) to pilot new methods and tools for routine monitoring of safe management of on-site sanitation including containment, emptying, removal and treatment of faecal sludge.

## Annex 2

# Statistical data and trends – sanitation, health and hygiene

Overall data trends: national, rural and urban (Ref: chapter 2, section on Purpose and context)

**Table 1:** Access to sanitation and hygiene services in Tajikistan, % (overall: national, rural, urban)<sup>44</sup>

A. JMP ladders		National		Rural		Urban	
B.		Years		2000		2020	
Sanitation	Improved sanitation ( <i>shared + not shared</i> )	93.2	99.4	91.6	99.6	97.5	98.9
	At least basic ( <i>improved and not shared</i> )	89.9	96.8	88.8	97.8	92.9	94.1
	Limited ( <i>improved and shared</i> )	3.2	2.6	2.8	1.8	4.6	4.8
	Unimproved sanitation	5.6	0.6	7.0	0.4	1.7	1.1
	Open defecation	1.3	0.0	1.4	0.0	0.8	0.0
Hygiene	Observed ( <i>limited + basic</i> )	91.4	96.5	89.0	95.8	98.0	98.3
	Limited ( <i>facility lacking water or soap</i> )	19.0	23.6	22.5	28.2	9.3	11.6
	Basic ( <i>facility with water and soap</i> )	72.4	72.9	66.5	67.6	88.6	86.7

Note: Data on hygiene are recorded from 2006 onwards.

**Table 2:** Access to sanitation and hygiene services in Tajikistan, % (types, disposal and treatment)<sup>45</sup>

<sup>44</sup> WHO/UNICEF (2021). *Joint Monitoring Programme for Water Supply, Sanitation and Hygiene*. Retrieved 13 April, 2022 from: <https://washdata.org/data/household#!>

<sup>45</sup> Ibid.

JMP ladders	National		Rural		Urban		
	Years	2000	2020	2000	2020	2000	2020
<b>Population using improved sanitation facilities (including shared)</b>							
Latrines and other		79.3	79.9	89.0	94.9	52.2	40.5
Septic tank		0.4	3.2	0.0	4.1	1.7	0.6
Sewer connection		13.4	16.2	2.5	0.5	43.7	57.7
<b>Population using improved sanitation facilities (excluding shared)</b>							
Disposed of in situ		-	-	53.7	59.0	-	-
Emptied and treated		-	-	0.0	0.0	-	-
Wastewater treated		-	-	1.2	0.2	-	-

State of sewerage infrastructure, collection and removal (Ref: chapter 2, section on Purpose and context)

**Table 3: Sewerage systems in Tajikistan<sup>46</sup> (by region)**

Indicators	Unit	Total	GBAO	DRD	Dushanbe	Soughd	Khatlon
Number of sewerage systems	item	106	1	13	1	75	16
Designed capacity of treatment facilities	thousand m <sup>3</sup> /day	583.6	2.4	35.4	294.5	132.7	118.6
Volume of sewage waters passed through the systems	thousand m <sup>3</sup>	81,222.7	652.48	11,551.3	42,398.0	13,425.0	13,196.0
Volume of sewage waters passed through treatment facilities	thousand m <sup>3</sup>	73,981.0	652.48	11,551.3	42,398.0	12,875.4	6,503.9
Including passed for complete treatment (physical and chemical)	thousand m <sup>3</sup>	71,069.0	363.60	11,551.3	42,398.0	12,631.8	4,124.3

**Table 4: Polygons for solid waste in Tajikistan<sup>47</sup> (by regions)**

Oblast, city	Number of polygons (sites)	Overall size of the polygons (ha)	Average size of one polygon (ha)	Percentage quantity of polygons by regions (%)	Percentage size of polygons by regions (%)
Soughd	24	131.28	5.47	33.80	44.15
Khatlon	25	101.53	4.06	35.21	34.14
GBAO	8	9.06	1.13	11.27	3.05
DRD	13	35.5	2.73	18.31	11.94
Dushanbe	1	20.0	20.00	1.41	6.73
<b>Overall</b>	<b>71</b>	<b>297.37</b>	<b>4.19</b>	<b>100.00</b>	<b>100.00</b>

<sup>46</sup> Agency for Statistics under the President of the RT (2013). *Environmental protection in the Republic of Tajikistan*.

<sup>47</sup> Ibid.

**Table 5:** Intestinal infections among the population (Tajikistan),<sup>48</sup> for every 100,000 population

Years	Lambliasis	Enterobiasis	Ascariidiasis	Gemino-lepidiasis	Echinococcosis
2005	21.9	99.6	76	53.2	2.3
2006	29.9	116.1	104	72	2.4
2007	48.1	156.1	142.9	82.7	2.6
2008	68.2	163.9	154.3	88.6	2.3
2009	94.4	204.7	193.3	85.8	2.4
2010	93.2	175.4	198.8	85.9	1.9
2011	106.7	231.4	286.6	94.5	2
2012	117.7	196.5	218.7	88	2.5
2013	139.1	221.2	217.9	90	3.2
2014	106.2	157.3	175.2	77.1	2.3

**Table 6:** Number of centralised water supply systems in the country as of 2014<sup>49</sup>

WASH systems	Total	Not compliant with standards and norms, due to:			
		Total	Absence of sanitary protection zones	Absence of a complex of treatment facilities	Absence of decontaminating installations
<b>Water supply systems</b>	762	422	253	53	<b>238</b>
<b>Communal systems</b>	110	33	20	15	<b>24</b>
<b>Agency systems</b>	652	390	233	26	<b>340</b>
<b>Overall</b>	<b>1,524</b>	<b>845</b>	<b>506</b>	<b>94</b>	<b>602</b>

<sup>48</sup> UNDP and Oxfam GB (2016). Review of sanitation policy and practice in Tajikistan. Report published with support from TajWSS Project (Phase II)

<sup>49</sup> UNDP and Oxfam GB (2016). Review of sanitation policy and practice in Tajikistan (TajWSS Phase II).

## Annex 3

# Summary of challenges for sanitation interventions and their impact in rural areas

(Ref: chapter 2, section on Sanitation, health and hygiene: definitions, concepts and links)

**Table 7:** Challenges for sanitation interventions and their impact in rural areas<sup>50</sup>

Category	Challenges	Impacts
<b>Governance</b>	<ul style="list-style-type: none"> <li>→ Multiple agencies/fragmented responsibilities</li> <li>→ Expectation from external agencies to solve sanitation issues</li> <li>→ Weak enforcements laws</li> <li>→ Water supply not linked to sanitation</li> <li>→ O&amp;M of water supply and sanitation system</li> <li>→ Ad-hoc solutions instead of village-level plans</li> <li>→ Focus on water supply</li> <li>→ Resource constraints at institutional level</li> <li>→ Lack of data and collective sector knowledge</li> </ul>	<ul style="list-style-type: none"> <li>→ Poor quality and lacking accountability</li> <li>→ Implementation not sustainable after withdrawal of donors/international NGOs</li> <li>→ Poor sanitation implementation due to lack of responsibility</li> </ul>
<b>Economic</b>	<ul style="list-style-type: none"> <li>→ Lack of tariff structures and involvement of private sector</li> <li>→ Sanitation products (for construction) are imported/higher costs</li> <li>→ Grant-driven programmes; contributions from government and people could be difficult</li> <li>→ Poverty and financial abilities of rural population</li> </ul>	<ul style="list-style-type: none"> <li>→ Higher coping costs</li> <li>→ Slowing down of development</li> <li>→ Limited economic development</li> <li>→ Reduced liveability of rural areas</li> <li>→ No follow-up as lacking resources</li> </ul>

<sup>50</sup> OSCE (2020) Desk Study: Sanitation situation in rural Tajikistan. Drafted by S. Sinha.

## Technical

- Land accessibility and terrain
- Availability of construction material
- No replication of EcoSan toilets
- Inadequate water supply for water-based systems
- Availability of trained professionals/masons
- With water supply, wastewater management essential
- Cost-effective and technically suitable options for a rocky terrain
- Poor construction quality
- Loss of resources in human waste
- Soil, surface and groundwater contamination
- Limited choice of systems due to difficult terrain and less water
- Drinking water contamination

## Social-cultural

- Low priority for sanitation
- Acceptance and experience of using dry pit latrines
- Awareness and knowledge levels about benefits of sanitation and use of sanitation systems
- Sanitation not an easy topic for open discussions
- Reluctance for reuse of treatment by-products
- Willing to change but no means (need versus demand)
- Poor health and higher health costs
- Social exclusion
- Unwillingness to contribute to sanitation improvements
- Lower standard and quality of life

## Environmental

- Environmental standards not suitable for rural areas
- Discharge of wastewater into open channels ultimately leading to rivers
- Impact of climate change/water shortage
- Infiltration of blackwater into soil
- Higher vulnerability to climate change
- Disturbances to the ecological balance
- Disease outbreaks
- Contamination of natural resources

## Annex 4

# List of government agencies, ministries and authorities responsible for sanitation and hygiene

Government agency	Primary role
<b>Ministry of Energy and Water Resources of the RT</b>	Conducts national water policy, regulates activities of assigned state bodies and local executive authorities on the ground for management and rational use of water resources based on the principles of integrated water resources management.
<b>Ministry of Health and Social Protection, through the following subsidiary bodies:</b>	Defines country's policy for ensuring sanitary and epidemiological safety of population. The agency coordinates the activities of local executive bodies of state power, organisations, enterprises and institutions, regardless of their form of ownership, in terms of implementing state surveillance to ensure sanitary and epidemiological safety of population, carry out production and public control over compliance with sanitary standards and regulations, and implement sanitary and anti-epidemic activity.
<b>Agency for State Sanitary and Epidemiological Surveillance</b>	
<b>Healthy Life Style Centre</b>	Carries out activities related to awareness raising and knowledge sharing on the subjects of hygiene and sanitation culture, health improvement and, carries out information and educational campaigns among the population.
<b>Ministry of Finance of the RT</b>	Allocates public funds to sector agencies. Sewerage systems are operated by state enterprises, which are under the subordination of municipal authorities.



<p><b>Committee for Environmental Protection under the Government of the RT</b></p>	<p>Responsible for implementing the following key government resolutions among many other laws and regulations: 1) Resolution of the Government of the RT on endorsement of rules for operation and maintenance of communal water supply and sewerage of the RT as of 30 April 2011, #234; and 2) Resolution of the Government of the RT on endorsement of the Order, condition and methods of collection, use, decontamination, transportation, storage and burial of industrial and household wastes in the RT as of 2 June 2011, #279.</p>
<p><b>Committee for Architecture and Construction under the Government of the RT</b></p>	<p>Provides state control and supervision on compliance with construction standards and regulations for placement, design, construction, reconstruction and O&amp;M of water supply sites, while following the regimes of territorial zones on the functional use of residential areas and other administrative and territorial units.</p>
<p><b>Committee for Emergency Situations and Civil Defense under the Government of the RT</b></p>	<p>Protects the population and territories from consequences of emergency situations of natural and technological character, as well as for civil defence. Among other duties, the committee is responsible for carrying out the state policy for disaster risk reduction, early warning on disasters and implementation of activities to reduce the negative impacts of disasters,, assessment of socio-economic consequences of emergency situations and providing humanitarian aid to affected populations and others.</p>
<p><b>State Committee on Statistics under the Government of the RT</b></p>	<p>Ensures collection, recording and dissemination of data on drinking water supply and sewerage on the basis of mandatory reporting procedures through the forms 'I-water supply' and 'I-sewerage'.</p>
<p><b>Antimonopoly Agency under the Government of the RT</b></p>	<p>Sets tariffs for water supply and wastewater services.</p>
<p><b>Geology Agency under the Government of the RT</b></p>	<p>Implements state policy as well as coordinates and manages geological explorations, rational use, reproduction of subsoil, and protection of mineral and groundwater resources.</p>
<p><b>Agency for Standardization, Metrology, Certification and Trade Inspection under the Government of the RT</b></p>	<p>Provides state control and supervision on compliance with established technical regulations for standardisation, mandatory certification and metrological requirements for drinking water and sanitation.</p>
<p><b>SUE KMK</b></p>	<p>Carries out unified policies for RT, development and coordination of housing and communal services and effective use of state property, coordination of economic and financial activities of the enterprises aimed at generating profit from providing services to consumers.</p>
<p><b>District administrations/<i>hukumats</i> and <i>jamoats</i> (sub-district administrations)</b></p>	<p>Develops and implements local sectoral programmes and action plans for construction, maintenance and development of drinking water supply and sanitation systems.</p>

## Annex 5

# List of policies, laws and regulations on sanitation and hygiene

### Policies, laws and regulations on sanitation and hygiene

Constitution of the RT

Water Code of the RT, as of 29 November 2000, with changes introduced on 16 April 2012, #821

Civil Code of the RT (1999)

Housing Code of the RT (1999)

Law of RT on Drinking Water Supply and sanitation, as of 19 July 2019, #1633

Law of RT on Water Users Associations, as of 2 January 2020, #1668

Law of RT on Protection of Health of Population, as of 15 May 1997, #419

Law of RT about Provision of Sanitary Epidemiological Safety of Population, as of 8 December 2003, #49

Law of RT on Environmental Protection, as of 2 August 2011, #760

Law of RT about Ecological Expertise, as of 22 April 2003, #20

Law of RT on Production and Consumption of Wastes, as of 10 May 2002

Law of RT on Consumer Rights Protection (2004)

Law of RT on Natural Monopolies (2007)

Law of RT on Architecture, Town Planning and Construction Activities (2008)

Construction standards and regulations 3.05.04-85. External systems and structures of water supply and sewerage (canalisation). Endorsed by the resolution of the State Committee of USSR on Construction as of 31 May 1985, #73

Construction standards and regulations 2.06.01-86. Hydro-technical structures. Main regulations for design. Endorsed by the resolution of State Committee of USSR on Construction as of 28 May 1986, #71

**SanPiN 4630-88. Sanitary standards and regulations for protection of surface waters from contamination**

**SanPiN 3.02.003.04. Sanitary and epidemiological requirements for protection of surface waters from contamination**

**SanPiN 2.1.4.004-07. Drinking water. Hygienic requirements for quality of water and centralized drinking water supply systems. Quality control**

**SanPiN 2.1.4.005-07. Quality requirements for non-centralized drinking water supply systems. Sanitary protection of sources**

**SanPiN 2.1.4.006-07. Zones of sanitary protection of sources of water and water supply of household and drinking purposes**

**SNiP MKS RT 40.01.-2008. Water supply. External systems and structures**

**SNiP MKS RT 40.01.-2008. Sewerage. External systems and structures**

**SanPiN 2.1.7.020-09 Regulations for collection, storage and disposal of wastes of medio-prophylactic institutions**

**SanPiN 2.1.5. 035-21, Sanitary norms and standards on Requirements for Sewerage Systems in Rural Settlements, Order of the Ministry of Health and Social Protection of the RT, as of 20 September 2021, #124**

**SanPiN 2.1.1. 036-21, Sanitary norms and standards on placement, structure, operation and maintenance of public toilets, Order of the Ministry of Health and Social Protection of the RT, as of 20 September 2021, #125**

**Order, conditions, methods of collection, usage, disinfection, transportation, storage and burial of production and domestic wastes in the RT, endorsed by the Resolution of the Government of the RT, #279, as of 2 June 2011**

**Tajikistan Sanitation Development Plan, approved by the Minister of Health and Social Protection of the RT, HE J. Abdullozoda, as of 21 September 2021**

**Water Sector Reform Programme for the period 2016–2025, approved by the Government of the RT on 30 December 2015, #791**

## Annex 6

The following key comprehensive reports, that were produced by development partners, provide the key sources of information and findings used by this policy report:

- Organization for Security and Co-operation in Europe (OSCE) (2020). *Sanitation Situation in Rural Tajikistan*. Desk study, produced by S. Sinha, engaged by the Organization for Security and Co-operation in Europe.
- UNDP (2018). *Draft Sanitation Development Plan*. Produced by J. Drozd, International Consultant, engaged by the UNDP in the framework of the TajWSS project.
- UNDP (2016). *A Comprehensive Review of Sanitation Policy and Practice*. Produced in the framework of the Project Tajikistan Water Supply and Sanitation (TajWSS).
- World Bank (2017). *Glass Half Full: Poverty Diagnostic of Water Supply, Sanitation, and Hygiene conditions in Tajikistan*. WASH Poverty Diagnostic. World Bank, Washington, DC. <https://openknowledge.worldbank.org/handle/10986/27830>

## Annex 7

# Abbreviations

<b>CoWaSS</b>	<b>Comprehensive Water Supply &amp; Sanitation in Rural Areas of Sughd Region project, funded by the SDC and implemented by the consortium of Helvetas, ISW and CAICO</b>
<b>ISW</b>	International Secretariat for Water
<b>JMP</b>	E (WHO/UNICEF)
<b>O&amp;M</b>	Operation and maintenance
<b>OSCE</b>	Organization for Security and Co-operation in Europe
<b>Oxfam GB</b>	Oxfam Great Britain
<b>RRWSSP</b>	Regional Rural Water Supply and Sanitation Project, funded by the SDC and implemented by the ISW
<b>RT</b>	Republic of Tajikistan
<b>SWSMP</b>	Safe Drinking Water and Sanitation Management Project, funded by the SDC and implemented by the Mountain Societies Development Support Programme
<b>RWSSP FV</b>	Rural Water Supply and Sanitation Project, Ferghana Valley, Tajikistan), funded by the SDC and implemented by the ISW
<b>SDC</b>	Swiss Agency for Development and Cooperation
<b>SDG</b>	Sustainable Development Goal
<b>TajWSS</b>	Tajikistan Water Supply and Sanitation Project project, funded by the SDC, and implemented by Oxfam GB in partnership with UNDP in Tajikistan
<b>VIP</b>	Ventilated improved pit
<b>WASH</b>	Water, sanitation and hygiene

# Tajikistan Water Supply & Sanitation Project (Phase III)

## Policy Report



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Swiss Agency for Development and Cooperation SDC  
Швейцарское Управление по Развитию и Сотрудничеству SDC  
Раёсати Швейтсария оид ба Рушд ва Ҳамкорӣ SDC



**OXFAM**



Empowered lives.  
Resilient nations.